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The Management of Creative Design Professionals

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfillment of the requirements for the degree of Master of Business Administration.

11 November 2013

Abstract

One of the challenges for a manager in a creative profession is how to turn the creative energy of the designers into profitable energy for the company. Creativity and productivity are frequently seen as opposing forces, therefore trying to simultaneously nurture both the innovation and the efficiency of a creative design team can become a frustrating balancing act for managers of these organisations.

This research demonstrates how the performance of creative people can be aligned to the commercial goals of a design organisation, and that the perceived clash between creativity and productivity is a result of an incompatibility between the creative style of the company and the management techniques being employed.

Executives and employees from fifteen organisations of varying levels of success and creativity, across a spectrum of creative design professions, were interviewed regarding how they accommodate a range of productivity and creativity indicators. In analysing the findings qualitatively, it was discovered that rather than one fixed answer to this question, a range of management techniques are applied and many different creative styles are employed.

The research findings show that identifying the creative style of the organisation and the appropriate management technique to match is critical in overcoming this perceived paradox. It provides a diagnostic tool for the creative design organisation to enable them to establish where they are on a spectrum of creativity, or decide where they want to be strategically, and then either adapt or adopt an appropriate management technique to complement rather than constrain their creative style.

Keywords

creativity, productivity, design professionals, management techniques

Plagiarism Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Signature

A handwritten signature in black ink, appearing to read 'Nicole Mason', written in a cursive style.

Nicole Mason

11 November 2013

Acknowledgements

Many thanks are due to my supervisor, Dr Charlene Lew. Her enthusiasm for this research was inspiring.

I am immensely grateful to all those I interviewed who graciously gave me so much of their time and who were so generous with their insights.

Thank you to my editor, Jennifer Renton, for her patience and precision.

Dedication

This research dissertation is dedicated to Peter, “The Sponsor”.

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The Management of Creative Design Professionals

An exploration of the techniques required to manage the apparent paradox between nurturing creativity and promoting productivity in creative design organisations.

1. Introduction

“How do we harness the power of creativity, which refuses to do anything well except for its own selfish gratification to the drive train of the profit motif, which refuses to do anything at all except for its own selfish gratification?” (Torr, 2008): p.119).

The challenge in organisations that are devoted to creative work is how to manage the apparently conflicting forces of creativity and productivity.

Miron, Erez and Naveh (2004) described this paradox as the “Bright and Dark Side of Creativity” (p.194), where the adherence to rules conflicts with the imperative to innovate, and the personal and cultural factors that promote innovation end up being counterproductive when it comes to quality and efficiency. Innovators are required to be revolutionary, but performance and quality require an attention to detail more compatible with conformance. This paradox applies strongly to companies which define themselves as Creative Design Professionals. Without high levels of innovation they cannot compete, but without a strong practical streak, they cannot survive.

1.1 The Nature of Design

Oscar Wilde stated that, “All art is quite useless” (Wilde, 1985), possibly meaning that art exists purely for its own sake and therefore has only the value that we ascribe to it, depending on its effect on us. Creativity, on the other hand, was defined by Amabile (2012) as something that is both innovative and useful; the useful part presumably being the bit out of which one can make some money.

The activity that transforms art into something useful is design. The design is not the solution itself but the instructions or “blueprint” on how to achieve it. The designer does not require the skill to create the object, but rather the ability to represent the solution graphically in a plan or pattern form, for instance an architect does not need to lay bricks and an engineer does not necessarily have to know how to weld. The creative design professional is the person who conceives of original solutions to problems and documents the instructions on how to solve them. Unlike an artist who executes their idea themselves, the designer is only an intermediary between the client’s requirement and the finished product.

In the context of a professional environment that involves demanding clients, tight deadlines and project budgets, it becomes a challenge to indulge the inner artist without sacrificing productivity and profitability. Managers become apprehensive about demanding productivity from their creative professionals for fear of stifling a seemingly delicate process they do not understand (Amabile, Hadley, & Kramer, 2002).

Bilton (2010) identifies the two sides of this problem as “heroic” creativity, a process that is irrational, sudden and individualistic and “structural” creativity, an activity that is deliberate, incremental and interdependent and suggests that the only way forward is to leave the dramatic heroics behind and insist that creative people adapt to being more “manageable”. However, the creative person is, according to the volume of research devoted to them, a highly tricky person to manage and those assigned to their case are usually framed as villains who misunderstand the fragile and mysterious creative process. According to Bilton, “The creative genius” and “the bureaucratic manager” assume the archetypal roles of the opposing halves of a bad marriage (Bilton & Leary, 2002).

This research proposes to investigate the best techniques for cultivating an environment in which creative people can thrive without disrupting the organisational equilibrium. The nature of this research would be to take up the challenge of building a model in which productivity and creativity work together rather than undermining each other.

1.2 The Creative Personality

In order to understand what makes creative people so difficult to manage it is important to understand why they consider themselves to be so misunderstood and why they do not respond to conventional management techniques.

In a meta-analysis of the literature surrounding what constitutes a creative personality, Feist (1998) collected a total of 17 Creative Personality Traits that result from an emphasis on divergent primary thought. They can be clustered as follows:

Openness to experience, norm doubting and questioning and non-conformity:

This cluster suggests that creative people pay little heed to conventional boundaries, preferring to look beyond what others have accepted as normal. While this ensures that there are no barriers to entry for interesting and possibly useful creative influences and ideas, it also makes it hard to regulate their behaviour

Fantasy orientation and imagination: This involves a childlike ability to see the world afresh and imagine possibilities and scenarios which may or may not have an application in reality. The ability to extract the useful outcome from the interesting possibility is the challenge here.

Impulsivity and lack of conscientiousness: Creative people often crave excitement and novelty because that is where the stimulus for new ideas originates, but they frequently prefer the thrill of discovery to the drudgery of finishing things off.

Drive and ambition: Paradoxically, although the previous personality traits imply that creative people are flighty, they possess an enormous motivation to create and a huge need for recognition.

Independence, Hostility, Aloofness, Introversiveness, Lack of Warmth: The best ideas are not born in groups; they need solitude to hatch, and once out they need fierce protection by their creators. This could, of course, just be a way for creative people to protect their self-importance or ensure that by being defensive they receive no hurtful feedback.

Anxiety, affective illness, emotional sensitivity: “The essence of artistic creativity is the expression of deep emotion” (Feist, 1998). It is therefore unsurprising that being closely in touch with the affective emotions spills over as a deep attachment to their creative work. Unlike other professions where the outputs are unrelated to personality, creative people feel enormous anxiety about what their work says about them.

Since 1998, the emphasis has moved to encompass the recent advances in neuroscience and this field goes further than before in demystifying creative thinking. Left and right brain thinking used to be a fashionable, but scientifically unsubstantiated, model, to explain the phenomenon of why creative people are different to those who use a more structured thought process. Brain imagery has subsequently found that it is in fact the number of connections between the left and right brain that determine creativity and how well they work together rather than which side is dominant (Dietrich, 2007).

There are two issues at play here; the nature of primary and secondary thought processes and the role of the frontal lobe. Divergent thinking - when the brain casts the net wide for ideas - happens in the primary phase, and convergent thinking - when all the ideas are plaited together - happens in the secondary phase. Creativity is associated with the first and productivity with the second. The frontal lobe acts as the traffic manager between the two (Heilman, Nadeau, & Beversdorf, 2003).

The more active the frontal lobe, the further into secondary thinking the subject moves. This is called cortical arousal and happens as a result of the release of the stress hormone cortisol. The function of cortisol is to help us focus and concentrate and therefore deal more effectively with stressful situations such as deadlines (Cropley, 2006).

In states of low cortical arousal we can go into primary thinking, which is where we can access our memories, daydreams and fantasies and come up with new ideas (Csikszentmihaly, 1996). However, just as truly effective people use both sides of their brain together, effective designers need to be able to switch between these two states at will, going into primary or defocused thought when required to come up with an idea and then switching back to test it, make it work and make it happen. This makes design work cognitively demanding (Torr, 2008).

The aim of this research was to find out how to manage these two mental states, bringing out the best and most useful of each way of thinking at the most appropriate moment.

1.3 The Creative Process

Great artists claim not to overthink the creative process, but rather submit to it. Mozart maintained that he simply wrote down the music he heard coming from heaven, while Michelangelo merely released his figures from the stone (Boorstin, 1993). However, managers need to have this tacit knowledge made explicit and demystified because they are selling it as a commodity. At any given and very expensive moment, how can they tell if their reports are just messing around or if they are listening to God? Part of the problem of managing creative people is that they feel so misunderstood by those who are not involved in design.

Amabile described the creative process as going into a maze (Amabile, 1998). With a bit of experience you learn the easiest way through, and if under real pressure you can rush through and emerge at a predetermined exit. Given a little time you could wander around in the maze, explore the hidden corners, make mistakes, back track, come up against dead ends and eventually emerge somewhere entirely unexpected. One could also argue that, given a lot of time, one could get lost altogether and either emerge having found nothing useful, or worse, never emerge at all. So while Amabile's metaphor is useful to describe what goes on in a creative person's head, it is not useful to the manager circling the maze on the outside and wondering what to tell the client.

In his book 'Managing Creative People', (Torr, 2008) suggested locking the managers away and giving the space over to the creative team. He then unhelpfully also says that organisational disinterest kills creativity and good project management in companies means doing everything to help people "get to exit five", which is the most original outcome of Amabile's maze (Amabile, 1998).

If the maze is not a useful metaphor, what model should managers be using to ensure that they allow their creative staff the freedom to explore without providing harmful interference? This research endeavours to answer this question.

1.4 Productivity

Both Torr (2008) and Amabile (1998) agreed that the effect of deadlines, programmes, interference, quality control and all the mechanisms for managing for productivity could kill the magic, shutting down the creative process and alienating the creative personality. They both suggest a management style that advocates tiptoeing around these personalities, however it is not always desirable or practical to allow a handful of egos to hold a company hostage.

The challenge for creative design firms is in defining quality and productivity. One way to define quality in creative work is to benchmark it against work of a similar scope, but then unless it is different to the benchmark, it is not innovative. Therefore the quality may lie in how it was done, how quickly and profitably it was completed, or in how beautiful and original it was. If the core values are both quality and productivity, there may be a trade-off between originality and speed. If it comes out of a mould it is fast and financially effective, but it will not be original (De Bruijn, 2011).

Along with professional management come the attempts to codify quality, as well as the procedures and protocols that give the management the comfort that the messy, magic design process is under control. De Bruijn (2011) argued that the language of design is tacit knowledge to designers; they can speak it perfectly but do not know all the rules of the grammar. Someone learning a language as an adult relies on syntax, as a lack of tacit knowledge forces them to rely on a structure. According to De Bruijn, tacit knowledge is part of the hidden intelligence of an organisation that could be damaged if brought into the light, examined and made explicit.

1.5 Design Professionals

It is this inability to codify the quality of creative work that frustrated Drucker so deeply. He stated that in terms of understanding how to improve the productivity of the knowledge worker, “we are in the year 2000 roughly where we were in the year 1900 in terms of the productivity of the manual worker” (Davenport, Thomas, & Cantrell, 2002; Drucker, 1999: p.272).

Creative people are notoriously difficult to manage. Mintzberg (1998), in his article "Covert Leadership: Notes on Managing Professionals", proposed that managing professionals is primarily the co-ordination of highly talented, but rather impossible individuals. He quoted Zubin Mehta, conductor of the Israel Philharmonic Orchestra, as saying, "I'm the only Indian, they are all the chiefs" (p.144).

One could also argue that professionals do not need managing. They have the codes provided by their professional organisations, they are highly qualified and should therefore be trusted to perform without interference (De Bruijn, 2011). In most small to medium sized firms the creative professionals are also the custodians of the firm and they therefore wear two hats, switching between designer and manager as required or as desired. As the firms get bigger the creative professional needs to choose which role to focus on as he or she cannot do both as the burden of design and administrative work grows. We then have a situation where the "suits" are brought in to do the management so that the professionals can focus on what is important to them without the distraction of running the company.

De Bruijn (2011) described the reality of professional practice as a multi-faceted mosaic of conflicting demands: productivity vs. creativity, speed vs. quality, creative ego vs. client requirements and innovation vs. standardisation. In addition there is the problem of defining quality when each project is required to be original and custom-made for a different set of requirements.

According to Lorsch and Tierney (2002), "The strength of a firm ... lies in its ability to shape the behavior of its individual professionals such that, on average, they put the interests of the firm above their own needs." (p.32). In order for a professional services firm to be more than the sum of its parts, its members must collaborate and co-operate around the firm's strategic goals. They cannot do this if they are stuck in a maze, but on the other hand the managerial priorities might be keeping them out of the maze altogether or eroding the time that they get to spend in it; the most valuable people may end up doing administrative tasks.

1.6 Research Objectives

The aim of this research was to propose a model that encourages and enables creative people to co-operate with the overall aims of the company. The research aimed to discover what techniques are being used, what works well, and conversely what encourages dysfunctional and unproductive behaviours.

A selection of professional design companies were chosen as subjects for study in order to examine the way they respond to organisational and management challenges. By comparing the effectiveness of these techniques, this research aimed to discover how to overcome the paradox that occurs when creative people, who are supposedly highly intelligent, do not use their considerable abilities in the service of profitability.

2. Literature Review

2.1 Introduction

The literature on the management of creative people is extensive, but tends to be fragmented into themes that discuss either productivity or creativity. Where the two themes do come together they tend to focus on confirming the paradox, but few make any suggestions on what to do about it.

Liikkanen, Laakso and Björklund (2011) came close to addressing the issue in what they called the “practice of design”. The basis of their argument was that, “the empirical research on creativity in design is detached from the realities of the design profession and is therefore unable to contribute much to the development of the discipline” (p.309). They were quite scathing about the academic research done to date on creativity techniques, accusing it of having a “diminishing effect on professional design,” (p.309) as it did not address issues of practical value for the design practice.

This, they argued, is because the research on creativity focused on single aspects of the activity and did not approximate the complex design problems that professional designers encounter. It also did not address the formal organisational principles that support the process of creativity, such as design techniques, processes and instructions, nor did it address the emotional and motivational states of the employees involved in design (Liikkanen et al., 2011).

They termed their approach “integrative practice”, which is in contrast to “dispersed practices”, which is the isolated study of componential elements of creativity such as personality, idea generation or brainstorming (Liikkanen et al., 2011).

However, having so accurately identified the gap in design research literature, they concluded that this is the direction that future research should take in order to make design research more meaningful for actual design practices. This research project took them up on this challenge.

2.2 Neuroscience

No study on creativity would be complete without a discussion on the science of the creative brain. Recent advances in brain imaging such as MRIs and PET scans have proved much of the mythology around creative thinking wrong. Dietrich (2007), proposed that we give these “deepseated and cherished, but ultimately misbegotten and mistaken notions, their proper neuroscientific funeral” (p.23), and proceeded to debunk four misconceptions, including, to a degree, those of two authorities on creative thinking, Mumford and Cropley, which he dismisses as either dated or too simplistic to withstand scientific scrutiny.

Firstly, Dietrich (2007) attacked the concept of creativity as divergent thinking. He argued that while divergent thinking can generate novel and interesting ideas, it is convergent thinking that brings these ideas out of the realm of fantasy and into reality. Cropley (2006) warned that “unfettered divergent thinking holds out the seductive promise of effortless creativity but runs the risk of generating only quasicreativity or pseudocreativity if it is not adapted to reality” (p.391). Therefore, creative thinking seems to involve 2 components: generation of novelty (via divergent thinking) and evaluation of the novelty (via convergent thinking) (Cropley, 2006).

Secondly, Dietrich took a shot at the long held and popular belief that creativity is a right brain activity that has been replaced by the knowledge that it is the connection between the two hemispheres and the degree to which they work together that is the true measure of creativity. Therefore the part of the brain most responsible for creativity is the corpus callosum, the tissue that connects the two hemispheres, because it facilitates interhemispheric communication that results in the combination of knowledge and skills that are important for creative innovation (Heilman et al., 2003). These authors suggested that it is the corpus callosum that facilitates the most advanced and elaborate activities of the brain, such as creativity.

The third myth that Dietrich discredited is that creativity occurs only in a state of defocused attention. A lower degree of cortical arousal may well allow unusual associations to become manifest, but Heilman et al. (2003) argued that although high cortical arousal, as induced by stress, might suppress the emergence of remote associations, it is also associated with conscious attempts at problem solving; the very thing we need creativity for.

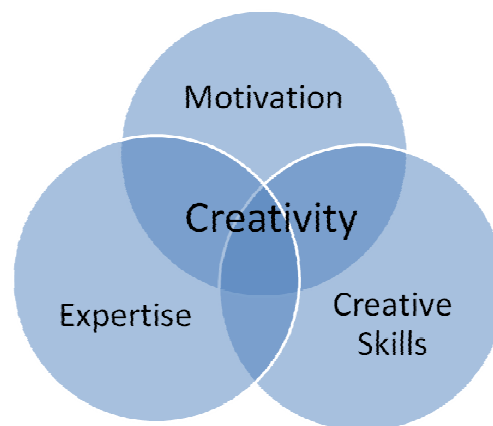
Finally, Dietrich argued against the theory that altered states of consciousness, such as drugs or mental illness, facilitate creativity. After the article by Feist (2010), it should come as a relief for the manager of creative people in the workplace that there is no scientific connection between creativity and drug use, psychosis or depression. Dietrich argued that drugs (alcohol, opium and marijuana) do not “bring out the muse”, but might chemically suppress prefrontal cortex activity. An active prefrontal cortex acts as an inhibitor to divergent thought and therefore helps us concentrate and focus, but when stifled by chemicals it allows the mind to wander off unsupervised by normal inhibition (Heilman et al., 2003). However the outcome of such irresponsible wanderings is more likely to be what Dietrich scathingly calls “neurological junk” rather than flights of genius (Dietrich, 2007).

Creative thinkers have long been associated with all sorts of mental illnesses: psychosis (the inability to control where they are in the primary and secondary continuum), schizophrenia (being stuck in primary thinking and secondary thinking simultaneously), and autism (being stuck in one or the other state permanently) (Martindale, 1999). However it is usually their managers who are closest to a state of mental breakdown.

2.3 Creativity

The current literature surrounding the topic of creativity is broad and varied, but can be categorised into the following enduring themes based on the famous Component Model of Creativity (figure 1) by Amabile below:

Figure 1: Component Model of Creativity (Amabile, 2012)



Creative Skills - The ability to think creatively is related to a certain cognitive style and a selection of personality traits that promote creative skills.

Expertise - The factor entitled 'expertise' deals with the employee's specific area of design experience and training and his ability to use it.

Motivation – This refers to the motivation required to complete a task, described by Amabile and Pillemer (2012) as being either intrinsic - the perceived value of engaging in the task because it is interesting, enjoyable, satisfying or positively challenging, or extrinsic - the promise of rewards or praise, or the threat of failing to meet a deadline or receiving a negative evaluation.

2.3.1 Creative Skills

There are a plethora of personality tests designed to test creativity; Donahue's Big Five Inventory and Saucier's Big Five Model, Hocevar's Creative Behaviour Inventory, Gough's Creative Personality Scale, Domino's Creativity Scale and Kelly's Scale of Creative Attributes and Behaviour (Kelly, 2006).

The personality traits described in the above tests encompass impulsivity, excitement seeking, tolerance, flexibility, the ability to fantasise, curiosity, openness to experience, risk taking, unconventional behaviour, autonomy, cognitive complexity, self-confidence, and dominance. In addition to the above, creative people are also motivated by achievement, so they can be highly conscientious and productive when it suits them (Byrne, Mumford, Barrett, & Vessey, 2009).

Any management strategies that try to promote innovation must take cognisance of the above factors or they run the risk of suppressing creativity. However, even from the abbreviated list above one can anticipate the difficulties that can occur.

Feist (2010) developed what he termed the “Functional Model of Personality and Creativity”, which called upon the most recent research into creativity rather than personality tests in order to define what constitutes a creative personality. His model started with the genetic influences that shape the brain and the brain characteristics that influence personality and intelligence. The brain characteristic theories correspond to neuroscientific research, which was discussed earlier in this section, in attributing the higher functions of the brain, such as creativity, to the prefrontal cortex and the connectivity within the brain rather than hemispheric activity (Kaufman, Kornilov, Bristol, Tan, & Grigorenko, 2010). These determine the cognitive, social, motivational-affective and clinical traits that combine to form creative thought or behaviour.

Cognitive traits refer to how an individual processes information. Of all the personality traits mentioned in the tests above, the only one that statistically correlated with creative behaviour was “openness to experience” (Feist, 2010). The theory was that open people are more imaginative and curious and have a greater acceptance of unconventional ideas and ambiguity, which provides, “a breadth, depth, originality and complexity of an individual’s mental and experiential life” (John, Naumann, & Soto, 2008).

Social Personality Traits involve relationships with other people. According to the tests in this genre, creative people are generally not sociable and outgoing but they are independent, confident and assertive and are obliged to reject conservatism and authoritarianism as being stifling to new and unusual ideas (Feist, 2010). This should set off some alarm bells in autocratic management circles.

Motivational traits refer to the persistence, ambition and drive to create something new and worthwhile. This is also referred to as intrinsic motivation and can be described as the inner compulsion to pursue the satisfaction and the excitement inherent in creative work.

The final trait on his list was rather sinister – **Clinical Personality Traits** refer to the connection between personality disorders, mental health and creative thought and behaviour. Feist (2010) referred particularly to psychoticism and schizotypy, which manifest in latent inhibition and primordial thinking which are also present in creative thinking. Latent inhibition is the ability to tune out irrelevant information and is particularly weak in psychotics and creative thinkers. It is this irrelevant information which enriches the well of ideas and allows creative people to make interesting connections which their more inhibited colleagues will filter out. Primordial thinking is thought to be a result of an overactive right brain hemisphere and results in odd, magical thoughts and beliefs, unusual experiences, hallucinations and delusions. This could be useful in surrealist art but is not likely to be tolerated in a professional design environment. In moderation both of these traits could produce interesting creative results, but in excess are very disruptive (Kaufman et al., 2010).

The literature on creative thinking frequently mentions the divergent nature of this type of thought. It is described as being the thinking process that produces multiple or alternative answers in unexpected combinations and surprising ways. It requires that the brain defocuses attention and allows ambiguity, memories, fantasies, dreams and intuition to take over (Kaufman et al., 2010). It is risky and exciting and is related to releases of dopamine (which makes it addictive), therefore those prone to divergent thinking would much rather spend a lot of time there than drag their brains back to convergent thinking, which is described as the analytical, logical and accurate derivation of the single best answer (Cropley, 2006).

Convergent thinking, however, would help them decide what to do, how to do it and help them get it done by the prescribed deadline. According to both Cropley (2006) and Mumford (2000), creativity sits in the divergent zone and productivity lies in the convergent zone, which is why one could argue that the challenge for the management of creative firms is how to get these two to work together.

Dietrich (2007) rather proposed that creativity should be viewed as a Darwinian process whereby ideas are generated all the time, but a rigorous selection process distinguishes between those that have value and those that are merely new. In order to do this we need to use our brain in its entirety and abandon the view that creativity is confined to a single part or process. Neuroscience has proved that creativity does not occur in sudden magic flashes while the brain is not paying attention but rather when the subject is applying intentional focus to the task at hand.

The recent literature about creativity tends to agree with the above: creativity does not come from nowhere. The “bolt from the blue” is a logical extension of what the person already knows. The foundation of creativity is knowledge and processing knowledge is a convergent thinking process (Cropley, 2006). Cropley quoted Ericsson and Lehmann (1999) on the “10 year rule”, which stated that an apprenticeship of at least 10 years is necessary for acquiring the fund of knowledge and skills, also called expertise, necessary for creativity.

2.3.2 Expertise

There is some heated debate in the literature about whether creativity is domain specific or not. The contested topic is whether creativity is a general, transcendent set of skills and aptitudes that can be productively deployed in any domain or whether it depends on underlying skills, knowledge and talent that are different for different domains. Leonardo da Vinci is frequently used as a case study, with some parties arguing that he is proof that it is possible to be an all-rounder while others argue that this ability is uncommonly rare (Baer, 2010).

Amabile and Pillemer (2012) put it in perspective by stating that expertise is an individual's "natural resources or raw materials", referring to a person's inherent talent and subsequent training. She called these "domain-relevant skills", which include knowledge, expertise, technical skills, intelligence, and talent. However, Amabile is adamant that these can only be drawn upon in the particular domain where the problem-solver is working.

John Baer argued that until we can define the domains we cannot test if this is true. He suggested the following "General Thematic Areas" (Baer, 2010):

- Performance
- Maths / Science
- Problem solving
- Artistic – Verbal
- Artistic – Visual
- Interpersonal
- Entrepreneurial.

By looking at the above list it is obvious that a person with expertise in maths is not necessarily going to be good at drawing, no matter how creative they are, and the visual artist may be too shy to have any skill at performance art. There are hugely creative people who cannot play a musical instrument - through lack of interest, talent or opportunity.

In the context of this research, Amabile's (2012) theory is the most relevant as the research topic refers to highly trained professionals who have deliberately pursued one area of expertise and describes this expertise as the raw materials that the individual draws upon during the creative process and then uses to judge the final product.

2.3.3 Task Motivation

The final element of Amabile's model deals with motivation and the positive effects of intrinsic motivation vs. the destructive effects of extrinsic motivation.

This theory was re-enforced in a study by Prabhu, Sutton and Sauser (2008), which found that extrinsic motivation may actually undermine creativity, but intrinsic motivation promotes perseverance because creative people are "motivated by the challenge and the pleasure of the work itself" (p.62). This sees them through the obstacles and failures of the initial design stages.

The positive result of intrinsic motivation is that the subject has fully engaged their expertise and thinking skills in the service of creative performance. However, extrinsic motivators and extrinsic constraints in the social environment could alter a motivational state from intrinsic to extrinsic, thus undermining creative behaviour (Amabile, 1998).

On the other hand, Amabile (1998) proposed that certain, carefully selected extrinsic motivators may promote creativity, such as recognition for creative ideas and frequent constructive feedback. These are "enabling extrinsic motivators" as opposed to "controlling extrinsic motivators" (p.45) which are detrimental to creativity, such as deadlines, performance criteria and project budgets.

For instance, Amabile and Pillemer (2012) referred to an experiment conducted by Shalley and Perry-Smith in 2001, in which both intrinsic motivation and creativity were significantly higher in an informational evaluation (an evaluation that gives useful performance information) than in a controlling evaluation (an evaluation that participants see as solely intended to monitor their behaviour).

From the above it can be concluded that the motivation that lies behind creative work is notoriously elusive. (Bilton & Leary, 2002) claimed that the external rewards of artistic and cultural production remain so pitifully small and unpredictable that no other explanation (other than intrinsic motivation) seems possible.

Having explored creativity on the one hand, it is important to explore the other side of the paradox which is productivity.

2.4 Productivity

One of the suggested reasons why it is so difficult to manage productivity in a service industry such as the creative professions, is because productivity is difficult to define and measure in an environment where the product is not an intangible result of manufacturing. Nachum (1999) described the measurement problems in a professional services firm as “Very severe ... because the factors at work are notoriously hard to measure” (p. 942). He explained that traditional productivity measures are based on manufacturing models with a tangible set of measurable inputs and outputs. While his article is useful in the sense that it acknowledges that conventional forms of managerial control based on manufacturing fail to control performance in a services firm, he still insisted on trying to address the nature of the input and outputs that could be used to calculate productivity in a professional firm. This is where the study failed, because in trying to define these factors he came to the conclusion that they are unquantifiable (Nachum, 1999).

Even though Nachum’s (1999) calculations were unsuccessful, he did provide some useful insights into the nature of a professional services firm. The core resource of a service firm is in the expertise of its employees and how they manipulate that knowledge in the service of a client. Therefore the inputs can, to a certain extent, be quantified by what they are paid, as salaries differ on the grounds of education, training and experience. However there are numerous problems in this model as the quality of this expertise can differ wildly from person to person due to their intelligence, motivation and the nature of the project. There is also the quality of the client input which is hard to control, and much of the work done is abstract and conceptual which defies measurement. There is also no accurate way of assessing the outputs of a service firm as the results cannot be reduced to tangibles. All outputs are custom made for clients with specific needs and are therefore different and cannot be compared to each other for quality or quantity, so even internal benchmarking becomes difficult. In the creative professions it becomes even more difficult as the need to be inventive means that the quality of the product lies in the originality and not on an adherence to standardisation.

Nachum (1999) listed the inputs as labour, expertise, capital and client involvement, but described the output as “a major conceptual difficulty” (p.11). He attempted to establish the performance of his chosen case study by calculating their productivity by whether their output exceeded their input in a cost / turnover ratio. However in many services firms the fees upon which turnover were based were a percentage of the total project cost and not per deliverable, which differ from project to project anyway. He eventually suggested that the validity of his argument needed further research.

Even more discouraging is the multi-factor productivity measurement model for service organisations proposed by Sahay (2005). He warned that problems can result from using output to define productivity and suggested that the attention of employees should rather be focused on the objectives and overall results of the organisation instead of on individual activities. He then proposed the following complicated equation as a Total Productivity Index.

$$PI_{DI} = \sum_{i=1}^n W_j \cdot P_{DIj} / P_{DITj} + \sum_{j=n+1}^m W_i \cdot P_{Sli} / P_{ST} + \sum_{K=m+1}^0 W_k \cdot P_{SKTk} \quad (\text{Sahay, 2005})$$

The three indices above indicate profitability, value for the customer and quality of service levels. However the complexity of the above equation could alarm even the engineering firms for which it was designed, and having quantified the productivity index there is no suggestion on how to improve it.

The two articles above are not specific to creative firms, and when the literature is examined for productivity in the creative professions a very different picture emerges. Beeftink, Van Eerde, Rutte and Bertrand (2012) used an introspective model that focused not on input or outputs, but on three measures of individual effectiveness. The first is described as an innovative cognitive style, which is defined as an individual’s preferred way of gathering, processing and evaluating information. The second is self-regulating behaviour, which is defined as the prioritising, planning, executing, monitoring and evaluating of the execution process. Finally comes design self-efficacy, which is described as the confidence that the designer feels for the task. These three factors are far more accessible as practical measures that can be influenced than difficult equations and complex calculations, because they speak to what is important to the creative person.

In addition, Beeftink et al. (2012) identified two aspects of performance that define professional success for those in the creative industries. They acknowledged two measures; one was success as a designer and the other as a business person. Each one can exist without the other, for instance design success in the form of awards does not necessarily mean profitability, and success in business does not necessarily mean being recognised for the creativity of your design. The research focused on the relationship between the three measures of effectiveness and the two measures of success mentioned above, and found that although innovative cognitive style and design self-efficacy were positively related to success as a designer, self-regulation related positively to success in business and to success in design. The practical implications of this study on a model for managing creative people is promising, as not only are there clear indications of how an effective creative person should be thinking, but there are also achievable management functions such as prioritising, planning, execution, monitoring and evaluating that can be accomplished. Self-efficacy can also be positively influenced and supported by a good leader, just as it can be destroyed by an insensitive manager (Beeftink et al., 2012).

Miron et al. (2004) went a step further with the hypothesis that personal and cultural factors that promote innovation are destructive when it comes to quality and efficiency. Innovators are required to do things differently, but performance quality requires an attention to detail more compatible with conformance. Having explored this paradox they confirmed it quantitatively, but offered no practical advice on managing it.

Chang and Birkett (2004) also theorised that creativity (success in design) and productivity (success in business) place different, and frequently opposing, types of cognitive demands on professionals. The challenge to management is how to balance them without sacrificing either. They offered a surprisingly familiar model (figure 2) - a partner to Amabile's Component Model of Creativity. Under each of the three sections is a list of attributes that either facilitates or constrains productivity or creativity.

Figure 2: The Professional Competence Model (Chang & Birkett, 2004)



Individual Attributes – these are described as cognitive and behavioural abilities such as time management, motivation and knowledge (an amalgamation of Amabile’s Component Model), that determine the person’s ability to perform the task required.

Task Performance - This involves Skill Variety, Task Identity and Autonomy. It is an indication of what professionals are expected to do and how they go about it.

Organisational Context – This refers to the conditions under which the professional is expected to work, such as socio-emotional conditions, performance measures and organisational culture.

However, Chang and Birkett (2004) chose a quantitative analysis on the above factors, so that although they establish whether or not each factor constrains or facilitates either productivity or creativity, they offer no insights into what to do next. The article does, however, provide valuable clues on what to look for when evaluating a management style.

The literature had the following to say on each of the above factors:

2.4.1 Individual Attributes

In addition to motivation and expertise as discussed in the previous section, Chang and Birkett (2004) put forward time management as a critical element of creativity. Opinions as to whether loose or tight constraints should prevail abound, but very little empirical research appears to have been done on the subject. Zampetakis, Bouranta and Moustakis (2010) maintained that original ideas are usually found far away from the original problem or initial idea and it takes time to make this journey.

Zampetakis et al. (2010) also referred to “metacognition”, which is described as being an “executive system” overseeing and supervising the operations of cognition. Individuals whose “inner executives” are not paying attention fail to manage this mental time and are therefore not in control of their processing resources. Creative individuals who are able to manage their mental time are better at turning on their creativity when it is required and are therefore more likely to meet their deadlines. Planning and prioritising daily activities and treating creativity as product-oriented is more useful to the effective production of novel and useful ideas than the creative personality construct. The article explores the possibility that although time pressure is detrimental to creativity, the feeling of having control over the process will assist with creativity.

However it is important to distinguish between managing someone’s time for them and their ability and motivation to manage their own time. Zampetakis et al. (2010) found that creative individuals need the latitude to choose which tasks to plan and schedule and how to complete them, because an important factor for creativity is not only intriguing and motivating projects, but the freedom to execute them in the most intriguing and motivating way that can be found.

Amabile (1998) suggested that the key lies in, “defining the creative goal whilst not attempting to prescribe the means”. She also proposed that time constraints should be cushioned as “strategic targets” so as not to inhibit creativity. In contrast, in their article of 2002, Bilton and Leary quoted a theatre producer as using the phrase, “deadline magic” to describe how hard limits can speed up the creative process.

2.4.2 Task Performance

The literature regarding task performance is broken into two camps: those who believe in the magic of divine inspiration and those who hold the more prosaic view that practice and experience make perfect.

Herring, Jones and Bailey (2009) provided a model for the creative process based on a very early, but still applicable, model proposed by Wallas in 1926. His model, which has been adopted and adapted many times since, divided the creative process into four phases. Since it has survived for 90 years it is worth reproducing here:

Preparation – gathering knowledge and understanding and defining the problem until the person is thoroughly familiar with the content of the problem.

Incubation – allowing the subconscious to mull over the problem. Without the person being aware of it, the ideas stew and ferment in their head.

Illumination – an answer pops up, apparently out of the blue. The idea is suddenly there, seemingly coming from nowhere.

Verification – evaluating the newly formed idea.

(Herring et al., 2009)

Cropley (2006) warned that this model can give the illusion that creativity is effortless, as after incubation the idea appears apparently from nowhere. This is misleading because without preparation the subconscious could be working on the wrong thing which will not stand up to the last stage of verification. He proposed that if incubation and illumination are the divergent stages of creativity which ensure that novelty and innovation occur, one should also ensure that the convergent stages are in place, which establishes the usefulness and appropriateness of the solution. Cropley added three further stages to Wallas' four:

After 'verification' he added 'communication', which is the presentation of the ideas to others for feedback, and then 'validation', which is by outside parties who judge the effectiveness of the solution. Other than 'incubation' and 'illumination', all stages are a result of convergent thinking (Cropley, 2006).

Before 'preparation' he added 'information', which refers to the learning and specialist knowledge that is required before the creative process can even begin. This is the domain specific knowledge that is necessary for creativity (Heilman et al., 2003).

Bilton and Leary (2002) were prosaic about Wallas' process, refusing to indulge the belief that the moment of illumination is a result of subconscious dreaming or visionary genius. They preferred to believe that creative people are "intellectual beachcombers", relying on accumulated experiences, precedent and memories from their past to provide solutions to problems in the present. They also referred to domain specific expertise as the unacknowledged source of creative ideas, which tied back into Amabile's 2012 model.

The above stages are not linear but iterative cycles of idea generation. The value in Herring et al.'s (2009) findings is that creative work does not stop with the generation of an idea but continues into a 3 stage design cycle of idea generation, encompassing the four stages above plus implementation, where the winning idea is taken forward and developed, and evaluation, where it is tested to see if it really works or needs to go back into the cycle for refinement. Herring proposed that understanding the process of design management can ensure that the product is delivered on time by imposing time limits on each stage (Herring et al., 2009).

2.4.3 Organisational Context

The literature on Organisational Context either refers to the psychological or the physical environment that creative people find themselves in. The psychological context refers to organisational design or the psychosocial aspects of the organisation, and the physical context describes the actual workspace. Part of the successful management of creative people would be to ensure that the work environment is conducive to creativity, so that valuable energy is not expended by trying to overcome psychological and physical obstacles.

Mumford (2000), in his attempts to study the nature of creative work and the high cognitive demands it makes on participants, suggested interventions in order to support them. For instance, giving individuals the time (but not too much) to think; protecting them from distractions; the availability of inspirational information; constructive peer review; and acknowledgment of the iterative nature of design. However, the focus of this article is on the Human Resources interventions that are required and Mumford himself admitted that his suggested practices “only make innovation more likely” (p.340). He is also overly sympathetic to the creative worker, suggesting that management tiptoe around the creative worker in order not to disturb their sensitive equilibrium.

Puccio and Cabra (2010) referred to a number of factors that influence the creativity of an organisation. The first is national culture, where they proposed that a high power distance, uncertainty avoidance, and a focus on conformity rather than individuality, will stifle creativity, whereas a more western approach that encourages team members to take risks, think independently and put their ideas forwards with confidence is more conducive to creative thinking. On the scale of organisational culture, the authors identified five factors that promote creativity: Innovation as part of the company strategy, flexible and co-operative team structure, support mechanisms such as reward and resources, behaviour that encourages innovation such as tolerance of failure and continuous learning, and open communication.

Puccio and Cabra defined culture as what organisational members value, but organisational climate is what members experience. The culture would translate into the following creative climate: Dynamism, Challenge, Freedom, Trust and Openness, Idea Support, Conflict, Debate, Idea Time, Playfulness, Humour and Risk Taking (Puccio & Cabra, 2010). These are all noble goals, but the study does not give practical advice on how to achieve them.

Puccio and Cabra also offered examples on how to organise the physical space in a creative organisation. They suggested that management either leaves the creative staff to organise their own spaces, or creates spaces that are malleable and can be broken down and reconfigured at a moment's notice. They also argued that spaces should be hybrid and be able to accommodate group and individual work as well as divergent and convergent processes (Puccio & Cabra, 2010).

One of the current explorations of physical space as an influence in creative design is the “Innovation Lab”, which works on the basis that in order to concentrate on design, groups should be given time away from the workplace in a pleasant and pressure free spatial environment that is rich in visual clues and free of interruptions (Magadley & Birdi, 2009). The research revealed that being away from the usual work environment encouraged employees to think differently about what they were doing and saved time, because their efforts were concentrated and there was time for reflection which does not happen at the office.

One may argue that although the Innovation Lab is an appealing idea, it is not practical for a firm of design professionals to keep leaving the office to do something which is actually their core function. However, there is something to be learnt from removing distractions and creating a visually stimulating environment and forcing designers to interact for a protracted period of uninterrupted time.

In an ordinary office communication and creative interaction is achieved using an open plan office, but this has to be balanced with controlling the disruptions, interferences and noise that interrupt the flow of creative thinking (Martens, 2011). Flow is described as the “experience of timelessness and oneness with the activity in which one is engaged in to the extent that they forget everything around them”. When this is interrupted it takes 20 to 30 minutes to refocus, so the concept of an open plan office is dependant on the ability to balance communication and concentration. He suggests that many of the peculiarities attributed to creative persons mentioned in the personality section are really just ways to maintain concentration and lose themselves in the creative process

Another intervention would be physically isolating the creative department from distractions. The danger is that in being “protected” from managerial responsibilities, the creative person works in a vacuum and having information about their projects or the company for which they work withheld makes them vulnerable to exploitation. Their managers can deceive them about deadlines and financial matters in order to keep them compliant. It also means that they have no control over their career or their intellectual property, which is ultimately disempowering and de-motivating (Bilton & Leary, 2002).

If the creative department is isolated from the rest of the organisation the role of the manager becomes one of a go-between, communicating the needs of the organisation and the client to the creative team. The effectiveness of the creative team then depends on the communication skills of the manager. If managers are not part of the creative team themselves, they may be, according to Bilton and Leary (2002), unsure of how to intervene in an area of the business that is seen to be, “temperamentally, intellectually and culturally,” foreign to them. Consequently managerial interventions are often deferred until something goes horribly wrong.

If managers insist on viewing creative people as somehow exceptional and needy of protection from managerial responsibilities and harsh economic realities, they also, by default, exempt them from conforming to the organisational culture and rules. In fact, a refusal to conform to organisational culture may be tolerated, even encouraged, as being representative of “creative behaviour”. However organisational rules are usually set up to ensure that deadlines and targets are met, so this permissiveness only ensures a clash with management down the line (Bilton & Leary, 2002).

Bilton and Leary (2002) suggested instead that managers shift from a “person centred” view that focuses on the creativity of an individual to a “process-oriented” theory of creativity. This means that instead of wasting energy pandering to a personality, the company uses its resources to create an environment conducive to creativity instead. They proposed that one factors in the time and resources for the designer to experiment and take risks. This creates a “safe haven” for creativity, which Bilton and Leary advocated over the isolation mentioned above.

2.5 Creative Knowledge Workers and Design Professionals

Knowledge workers are defined as workers who work with intangible resources, or as high-level employees who apply theoretical and analytical knowledge acquired through formal education, to develop new products or services (Ramirez & Nembhard, 2004).

Or to put it bluntly, workers’ brains and not their hands comprise the means of production, as their job is not to convert materials from one form to another as on an assembly line, but to convert knowledge from one form to another, for example the knowledge of the planning principles for a shopping centre into a design for a retail mall.

According to Mládková (2011), design professionals can be classed as knowledge workers because “their main work tool is their brain” and “they are well educated or experienced, create their own work standards and make decisions independently” (p.827). However, the last two factors make them difficult to control. Mladkova believed that conventional strategies fail with knowledge workers and they prefer a different kind of management as they do not work or think in traditional ways. She undertook quantitative research and came to the conclusion that knowledge workers do need to be managed in a different way, but disappointingly, did not say how (Mládková, 2011).

Ramirez and Nembhard (2004) conducted research into all the ways that one can measure what they prefer to call knowledge worker “effectiveness”. After several attempts at different ways of measuring, they found an approach by Gordon (1997) that was broad enough to speak to a variety of disciplines. In this framework, someone scoring well on all of the four criteria below would be considered effective.

- Quantity (how much gets done);
- Quality (how well it gets done);
- Timeline (when it gets done); and
- Multiple priorities (how many things can be done at once) (Ramirez & Nembhard, 2004).

In addition, Ramirez and Nembhard (2004) mentioned Drucker’s six factors that determine productivity in a knowledge worker:

- Knowledge workers must identify the task themselves;
- Knowledge workers need to have autonomy;
- Innovation has to be part of knowledge work;
- Knowledge work requires continuous learning and teaching;
- Knowledge worker productivity is primarily a matter of quality, not just quantity; and
- Knowledge workers should be seen as an asset instead of a cost (costs need to be controlled and reduced and assets need to be made to grow) (Drucker, 1999).

In addition to the above measures, Ramirez and Nembhard (2004) added in the following from other models explored to complete their list of what makes a productive knowledge worker.

- Costs and/or profitability: The ability to run a profitable project.
- Efficiency and effectiveness: “Doing things right” and “doing the right things”.
- Customer satisfaction: The product needs to add value to the customer.
- Innovation/creativity: The ability to create new ideas as well as ideas on how to improve productivity.
- Project success: The overall result of the work as a result of decision-making, team interaction, communication, crisis management and documentation.
- Responsibility/importance of work: The ability to perform well at critical times

When consolidated, this is a substantial and demanding list and a lot to ask of any one person. To quote Drucker from 1968, “Making Knowledge Workers productive will be the great management task of this century, just as to make manual work productive was the great management task of the last century” (Ramirez & Nembhard, 2004).

Because of the complexity of the task at hand, Ramirez and Nembhard suggested that knowledge workers themselves should determine how to best measure their productivity, as they have the best and sometimes the only understanding of the tasks that they perform.

In his article regarding IT professionals, Seidel (2011) disagreed and suggested stricter supervision, describing this type of management as “creative supervision”. The supervisor is a stakeholder manager and intermediary between the client organisation and the creative organisation. They are responsible for the process and the product and therefore have a stake in both the quality of the creativity and the productivity of their team. They also need to be able to keep the one focused on the other.

Seidel suggested two strategies to cope with the above. Firstly ‘internal breakdown’, where the creative processes are broken down into sub processes and tasks, resources are allocated, time and budgets identified, and the creativity channeled down the right path and matched with the team’s capabilities, and secondly ‘internal review’, to ensure that creative risk is mitigated by ensuring that the client’s needs are being met at all points (Seidel, 2011).

All the above may seem obvious to anyone who has not worked with creative personalities before, but present a real challenge when working with people who are divergent thinkers, who prefer to work autonomously (or secretly), and who are motivated by internal factors unrelated to the client's satisfaction (creative risk) or the profitability of a project (operational risk) (Seidel, 2011).

Given that professionals and knowledge workers do not like to be managed, what is the role of an organisation leader in a design firm? Byrne et al. (2009) came the closest to an integrated model of what is important in creative management, which encompassed much of what has been discussed above:

Creative Expertise: This allows the leader to identify with the group and have some credibility when trying to influence them.

Mission Definition: Guiding and channelling the work of creative people into efforts that are actually required by the project.

Support: Providing the resources and organisational culture that support idea generation.

Structure: Giving order to the ill-defined nature of creative work, facilitating communication, putting together teams and ensuring time and budget constraints are not ignored by planning and process management.

Feedback: Evaluating the ideas in order to facilitate their development and improvement.

Organisational Outreach: Understanding how the creative work integrates with the rest of the practice and ensuring that creativity is part of the firm's strategy.

The above factors combine the setting of boundaries and objectives with the encouragement of creative practices, so that innovation can occur within the confines of good management without being stifled.

2.6 Conclusion

In summary, the most recent literature does not uphold the myth that creativity depends on the unique mysterious qualities of specially gifted people, but rather on how they choose to use these gifts and what supports or constrains these abilities.

After much debate and analysis on creativity, very few researchers have come to grips with what managers can practically do. Bilton and Leary (2002) came the closest with the concept of “brokering creativity”, by suggesting that managers examine their organisations for procedures and systems that either encourage or discourage creativity, such as hierarchies and traditions that prevent individually creative people from using their abilities for the good of the organisation (Bilton & Leary, 2002).

From much of the above literature it becomes evident that most creative organisations do not struggle with the concept of “thinking out of the box”. The challenge is rather that of defining the box, and once that is done, staying in it. In order for creativity to be useful to an organisation there need to be rules and boundaries within which creative ideas can take shape (Bilton & Leary, 2002).

The literature tends to study one aspect of creative people at a time, however there are a multitude of these factors acting on a designer at any one time, frequently pulling in conflicting directions and cancelling each other out, for example creativity vs. productivity, extrinsic vs. intrinsic motivations, and individual vs. collaborative work. In addition the studies usually focus on just one type of professional and then generalise the findings for all creative people.

This results in much conflicting information. For instance in one source creative people are described as being introverts, but in another source as extroverts. Design has been described as both an individual and a team activity. Managers are implored to either leave their designers alone or to manage them closely.

This only adds to the belief that creative people are difficult to manage and increases the need for a study that takes into account the contrasting demands of different creative professions and the subtleties and nuances required for creative work.

3. Research Objectives

3.1 Introduction

The two models by Amabile (2012) and Chang and Birkett (2004) that were used as a foundation for the literature review proposed six aspects of creativity that between them impact on productivity. They are:

- Creative Personality
- Expertise
- Motivation
- Self Management
- Design Process
- Organisational Context – Psychological and Physical

In addition the literature addressed two further issues: The definition of productivity in the creative professions and the nature of professionals and knowledge workers.

The research question and objectives focus on how these factors come into play in professional organisations that have design as their central activity. The research investigates the different ways that these factors are acknowledged and managed and attempts to evaluate which techniques are considered successful.

3.2 Research Topic

What management techniques and mechanisms are required to balance the paradox between nurturing creativity and promoting productivity successfully in a professional creative design environment?

3.3 Research Objective

The research endeavours to find a model for 'Creative Performance' that can be used by managers in order to exploit the creative energy of their design professionals creatively, productively and profitably.

3.4 Research Questions

3.4.1 Research Question 1 – Creative Personality: Should the creative personality be nurtured and protected from the business realities?

This question sought to investigate whether protecting the creative personality from the demands made by the business has a positive or detrimental effect on creativity, and if it promotes or hinders productivity. It would further seek to investigate what the effect of pandering to the concept of a 'Creative Personality' would be on the quality of their creative work (Martens, 2011).

3.4.2 Research Question 2 – Design Process: Is there a systematic approach to design that can be used to promote productivity or does the analysis of the design process stifle creativity?

The purpose of this question was to discover if managers need to understand the creative process so that they can give support to their creative teams that is appropriate and appreciated (Herring et al., 2009). This issue is critical to time management as an understanding of where the designers are in the process and how long it takes to get there assists with the prioritising, planning, executing and monitoring of projects (Mumford, 2000). The outcome of this question would be to establish how managers can formally support the design process in a creative organisation in order to improve performance.

3.4.3 Research Question 3 - Motivation: What sort of rewards do creative designers require in order to produce their most creative work?

Creative people need to be motivated with regular, tangible and frequent recognition for creative ideas and designs (Amabile, 1997; Prabhu et al., 2008). This part of the research investigates the nature of these rewards and the effects they have on performance.

3.4.4 Research Question 4 – Organisational context: What sort of organisational design and structure is most conducive to the simultaneous promotion of creativity and productivity?

The role of the creative manager is to create an environment that is conducive to creative thinking while simultaneously driving production and managing the projects. The following two factors would explore what interventions are required in order to achieve it.

3.4.5 Research Question 4a - Psycho-social environment: What company culture and values would promote both creativity and productivity simultaneously?

This subsection investigated whether the organisational culture impacts the levels of productivity and creativity within the organisation, focussing primarily on the division between management and the creative staff and how the firm should be structured internally in order to give the design professionals the type of organisational support they require (Segal-Horn, 1987).

3.4.6 Research Question 4b - Physical Work Environment: What configuration of physical space would work to promote both the levels of creativity and productivity among design professionals?

This subsection investigated whether the way the office is physically organised impacts on either creativity or productivity, and what sort of spatial organisation is best to support both of these processes (Martens, 2011).

3.4.7 Research Question 5 - Management and Leadership Style: What is the best management style that brings out the best creatively and productively in creative professionals?

According to Segal-Horn (1987), design professionals prefer to be given direction and then be left alone to determine the best way of achieving their goals. This allows them to exercise their individuality, however this could compromise the overall objectives of the organisation if they are not aligned with the company strategy (Raelin, 1989).

The purpose of this section was to determine the extent and nature of the management intervention that would be the most effective in promoting creativity, whilst ensuring that that is profitable.

4. Methodology

4.1 Introduction

Qualitative and exploratory analysis was chosen as the methodology for this research in order to adequately capture the complex and difficult nature of the relationship of creativity to productivity. The quality of creative work is difficult to quantify, as each instance has to present a unique and novel solution and therefore a case by case based investigation was considered more appropriate than a quantitative method, which would have produced answers that did not represent the subtlety and variety of the situation under discussion.

4.2 Methodology

The following techniques were chosen for the research:

4.2.1 Qualitative Approach

The intention was to develop an integrated theory on how to manage design professionals effectively. This was achieved from observations and interviews. Even though the outcomes of the successful management of creativity are quantifiable in terms of profitability, and there are ways to measure productivity, the intention of the research was to produce a management model that would overcome the paradox between creativity and productivity. Attempting to measure this quantitatively would not have been enormously meaningful, as demonstrated in the literature review.

4.2.2 Inductive Approach

Inductive reasoning starts with the collection of specific observations and moves onto the identification of patterns and then onto hypotheses and theories as opposed to deductive reasoning which works the other way round, moving from the general theory to the more specific, confirming the hypothesis through observation (Thomas, 2006). The literature review was unhelpful in identifying any such rules or laws, instead it highlighted many contradictions and differing opinions, therefore inductive reasoning was chosen for this research.

Thomas (2006) proposed that the primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies. Therefore an inductive approach was more appropriate for this research as the intention was to formulate a theory based on the current practices observed in design companies.

4.2.3 Interpretive Philosophy

The management of creative design professionals is a subjective issue that is very much dependant on situation and circumstance, as well as how people behave in relation to each other. Therefore a research philosophy that attempts to measure, predict or quantify it without looking at it through the eyes of the different individuals involved would not be appropriate (Saunders & Lewis, 2012). According to Willis (2007), social phenomena cannot be studied like physical objects and it is not possible to quantify the subjectivity and individuality of human beings, their thoughts, ideas and perceptions. Therefore an interpretive research philosophy was adopted for this research as opposed to a positivist or realist one which would result in insufficient complexity.

4.2.4 Grounded Theory

The intention of the research was to formulate a theory of management of creative people around the themes that have been identified in the literature review and included in the research propositions. Thomas (2006) proposed that the generation or discovery of a theory using themes or categories to describe it is the foundation of Grounded Theory. In addition, Saunders (2012) described grounded theory as a research strategy in which theory is developed from data generated by a series of ... interviews principally involving an inductive approach". Interviews were therefore conducted with the intention of formulating a management model around the themes identified. In order to overcome the researcher's own bias towards a certain industry, interviews were conducted across a range of creative professions in order to establish if the theories were applicable to all or most design circumstances.

4.3 Assumptions

Starting from the premise established in the literature review that creative design professionals are indeed special and difficult to manage, no personality tests were conducted on the subjects or diagnostics undertaken on their work methods. The intention was to examine management practices currently being used and to determine which ones are effective and which ones are detrimental to the organisation and the design process. The assumption was made that if the organisation was involved in design they were sufficiently creative.

Since the definition of success is difficult to pin down, a successful management practice was, for the purposes of this exercise, defined as one that results in an innovative product being produced on time and within budget.

The distinction is made between people who are merely artistic and who produce work that exists only for its own sake, such as painters and sculptors and those who are creative - who produce work that has the additional requirement of being useful, such as fashion designers. A further distinction is made between designers who respond only to the useful requirement of the problem, such as engineers and creative designers who are required to respond to the innovative and attractive aspects as well, such as architects.

“Design” has been defined as followed: In the case of architects and interior, industrial and landscape designers, the deliverables are the plans that initially demonstrate what the product will look like and ultimately serve as the instructions for others to build or manufacture. Fashion designers similarly need to produce sketches and patterns before their designs can be cut and sewn, and graphic designers and advertisers produce sketches, illustrations and storyboards before their ideas go into production.

4.4 Population and Sampling

4.4.1 Universe

The universe for this study was all creative people who work in a design field, such as architecture, interior design, landscape design, fashion design, graphic and industrial design and advertising.

4.4.2 Population

The population for this study was all people in organisations who are involved in creative design work in a professional capacity. It excluded people who work for and by themselves, as the study is about the management of people in an organisation and not self-management.

4.4.3 Sample

A non-probability judgemental sample was used to start off the process, because the research was qualitative and there was no sampling frame of all the above people. This expanded as each respondent offered referrals (Saunders & Lewis, 2012).

4.4.4 Sample Size

Six professional design fields that employed creative designers were identified as candidates for interviews. The largest firms within each of these fields were approached for interviews. These firms may not have been the best examples of good or considered management in their fields, but it was important to get examples of successful and unsuccessful respondents.

Fifteen interviews were conducted, some from management and some from the designers within the companies. The professional design industry in South Africa is not large, with only a few big and notable firms in each category. Saturation point was reached after twelve interviews.

4.5 Scoping

The six creative design professions listed below were chosen because the nature of their work requires them to accept a brief from a client, formulate a response, and present a design that can be realistically and practically implemented by others. Design professionals are not usually responsible for the implementation of their design; the presentation of the creative concept and the instructions on how to assemble it are the limits of their involvement in a project.

- Architecture
- Fashion Design
- Interior Design
- Landscape Design
- Branding Design
- Advertising

The nature of the deliverables is what distinguishes creative design professionals from other professions such as IT, law and medicine. In these other professions the immediate implementation of the professional's expertise is required in the form of electronic code, written advice, contracts or prescription and surgery. The principle upon which the creative professions above were chosen is that the deliverables are an intangible piece of intellectual work that has to be presented graphically first in order to communicate it.

4.6 Control Group

In order to investigate whether there is a significant difference between creative design professionals and other types of creative people, two groups of control interviews were arranged. If creativity is defined as the intersection between what is innovative and what is functional, one control group was purely functional and the other purely artistic. Structural engineers were interviewed on the purely functional side, because although they are involved in the design for the structural systems of buildings, their work is usually hidden and is therefore not required to have an artistic component. The directors of a ballet company and an orchestra were interviewed as a control of a purely artistic nature, as there is no functional component of dance or music, only art.

4.7 Validity

In order to ensure internal validity, only organisations that exceeded 15 staff members were used. This was a sufficient size to ensure that some members of staff could be considered management, others could be considered creative, and a few could be assigned to administrative positions. If the company was too small the problems arising from the management of creative staff would not be evident as the delineation between roles was likely to be blurred.

In order to ensure that the researcher's personal bias did not affect the findings, a variety of design companies were approached. This ensured that the findings were of a sufficiently general nature that the theories generated could be used across design companies and not only for one profession (Saunders & Lewis, 2012).

4.8 Research Design

The research worked towards a theory and did not start with one (an inductive approach) (Saunders & Lewis, 2012), so the process started with semi-structured, in-depth interviews. Both the managers of creative professionals were interviewed and some creative designers who were being managed. Without both parties it would have been difficult to assess the effect of the one on the other.

4.9 Research Instrument

An interview guide rather than a questionnaire was employed because the research required interpretation and explanation rather than information. The interviews were semi-structured so the questions acted as a guide and prompt for the researcher, who initiated a conversation about each topic rather than asking specific questions. In this way the respondents talked freely about the topic rather than being constrained by the need to provide a specific answer.

This semi-structured approach encouraged respondents to think about what is important to them and did not restrict them to specific ideas. Their own viewpoint and management practices emerged and they answered the questions as they went along, with minimal prompting by the researcher. The responses were therefore thoughtful, analytical and frequently transcended the questionnaire in the depth of their explanations. The material gathered was, as a result, rich in detail, anecdote and insight. Examples of quotes for each question grouping are provided in Appendix 3.

The questions were grouped into themes so that the respondents could talk generally about the subject without having to answer each question rigidly. These themes were identified from the Literature Review as being important issues to the management of creative people. They correspond with the categories of analysis used in examining the data and these categories appear in Table 1.

The questionnaire was first tested on a colleague and was then re-arranged so that the topics flowed into each other more intuitively, so that the likelihood of subsequent questions being answered as part of the conversation was higher.

The questions were open-ended and deliberately phrased so that there was no suggestion of how it should be answered. The intention was to get the respondents to describe how their companies worked and how they respond to the challenges of managing their design staff.

The interview guide can be found in Appendix 2.

4.10 Data Collection

The list of people interviewed appears in Appendix 1.

A total of 15 people were interviewed in semi-structured sessions that lasted between 45 minutes and an hour. The parties approached were very amenable to being interviewed and generously gave of their time and their insights. Creative people are usually highly intelligent, well-educated and articulate. They are also frequently very entertaining and very quotable, hence the large number of quotes that appear in Appendix 3.

The interviews were recorded on an iPad and transcribed by the researcher. The transcriptions were then imported into Atlas.ti and coded according to the categories of analysis in Table 1. Each quote was then extracted and copied into a table so that the answers to the questions could be compared (see Appendix 3).

Because of the unstructured nature of the interviews not everyone answered every question. The researcher ensured that she included at least eight to ten examples for each category of analysis, and if they respondent did not answer a particular question the space allocated for them was left blank.

4.11 Data Analysis Method

The method proposed for analysing the data was the “Constant Comparative Method” as formulated by Glaser and Strauss (2009). In this method the data is coded and analysed simultaneously. Glaser and Strauss argued that coding the data is an adequate technique if the researcher is only testing a proposition, but it can become a formulaic exercise that results in a “thin” summary of the data. If this data is not interrogated it can result in “superficial and naively realistic findings” (Henning, 2004). Conversely, if the researcher does not code the data but merely categorises and documents the themes that emerge, he runs the risk of not integrating the theory with the data and allowing personal opinion to creep into the findings (Glaser & Strauss, 2009).

The Constant Comparative Method was chosen not only because it is an inductive method of theory development as required by the research design, but because according to Glaser and Strauss (2009), the analyst will develop ideas on a higher level of generality than the material being analysed. Since the researcher anticipated a diversity in the material gathered, a technique was required that could compare the data in order to reveal the concept behind it rather than just the crude evidence.

The Constant Comparative Method (Glaser & Strauss, 2009) called for an iterative four step approach:

1. Each incident in the data (Unit of Analysis) is put into a category of analysis. The categories are either generated by the literature review or emerge as the data is reviewed.
2. The contents of each category are analysed in order to identify common or conflicting themes that emerge that can be integrated into a theory.
3. The theories are then “delimited” in order to establish the higher level concepts that can be applied in all circumstances. Henning (2004) described this as “the inductive refinement of categories to more abstract levels.” (p.124)
4. The theory is then documented in a form that can be used by those who require guidance in that field.

Each quote extracted from the transcript was used as a Unit of Analysis and was arranged in the tables in Appendix 3 according to what category of analysis they addressed. These quotes were then each reduced to a brief summary in an adjacent column and the summaries were then compared to see if any common themes or ideas emerged and identify patterns, similarities and differences between the responses.

The categories of analysis that were identified from the literature review are described in Table 1. The number of the interview question from the interview guide in Appendix 2 appears in the right hand column.

These themes were then “delimited” from the descriptive to the conceptual according to the third stage of the Method of Constant Comparison. These concepts were presented in Chapter Five in a simplified table form, along with any particularly revealing quotes.

The final stage of the Method of Constant Comparison was to document these findings into a theory which is presented in Chapters Six and Seven.

Henning (2004) described the process of analysing the contents of each category as “the process of converting concrete realities to conceptual understandings” (p.127). In order to achieve this, each category was analysed in terms of what management practices (concrete realities) were perceived as being either harmful or helpful to productivity or creativity by the research participants. These practices were then used to formulate a theory, which is the ultimate goal of grounded theory, described by Bloomberg and Volpe (2012), as the “generation or discovery of a process grounded in the views of the research participants” (p.137) (Bloomberg & Volpe, 2012).

4.12 Categories of Analysis

Table 1: Categories of Analysis

Category	Description	Question No:
Creative Personality	The impact of a creative personality on the productivity and creativity of an organisation.	1
Cognitive Style	The suitability of creative people to administrative and management roles.	2
Expertise	The effect of training and experience on creative work	3
Creative Process	How ideas are generated and developed.	4
Time Management	How creative people manage their time in relation to the creative process.	5
Collaboration	Whether creative work is better achieved by individuals or in a group.	6
Motivation	Factors that enhance the will to create.	7
Organisational Structure	The internal organisation of a company and how the members interact with other.	8
Creative Culture	How the organisation thinks about creativity and how it is nurtured and promoted.	9
Psychosocial Environment	How people are supported, encouraged and given confidence in their creative work.	10
Productive Culture	How productivity is ensured and promoted.	11
Physical Space	The impact that the physical environment has on the creative worker.	12
Design Brief	How to brief creative people and present them with the required task.	13
Client Involvement and Relationship	How the relationship between the client and the designers affects creative risk.	14
Management and Leadership Style	The nature of management intervention required to insure that design professionals are both creative and productive.	15

4.13 Limitations in Research Design

The organisations chosen for interviews were all well known design firms in Johannesburg. It was not known at the time of choosing whether or not they would be the best candidates to offer insights into the research question or if they were typical of their industry. They were chosen because, having a reputation for being among the largest and more successful companies, it was assumed that they would have some experience in profitability and growth.

No attempt was made to diagnose problems within these organisations and establish what each one could be doing better or how they would be different if they adopted other management techniques. The interviews only addressed how they currently do things and how that works for them.

The sample is slightly skewed towards the graphic design and advertising industries and is less well represented on the side of industrial design and engineering. This did not manifest itself as a problem until much later in the research, when the analysis of the data had already been done.

4.14 Conclusion

It was anticipated that, in choosing qualitative and explorative techniques for this research, the results would reveal a depth and richness of insight and anecdotal detail into a complicated, layered and nuanced subject.

5. Results

5.1 Introduction

A review of the interviews revealed that, for each research question there, was either a constant thread running through the answers or there was a range of responses, which differed in nature depending on how much the company prioritised creative or productive work.

It became evident that firms of a similar design scope generated similar arguments. The responses from the firms where the required output was more technical were frequently different to those of the more artistic organisations. The responses from the two control groups were diametrically opposed. The engineering firm appeared to be on one end of the scale and the ballet company and orchestra on the other, with the other companies ranked in between. The higher the technical component of the work such as architecture, the closer the style of management was to the engineering company, and the more purely graphic the nature of the work, such as in advertising, the closer to the ballet company they were in management style.

5.2 Presentation

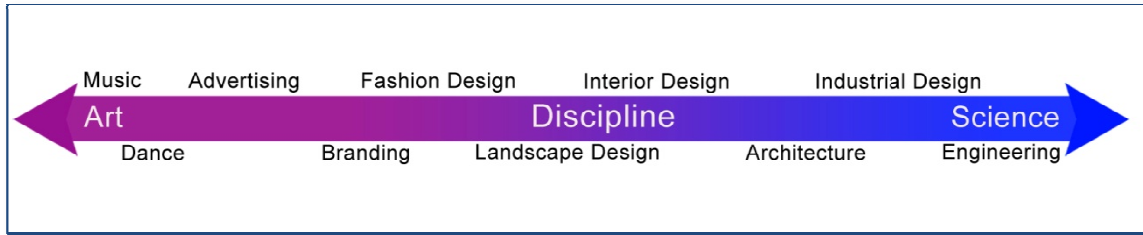
According to Amabile (2012), the definition of creativity is something which is both innovative and functional, therefore the spectrum of creative organisations should range from the purely innovative on the one hand to the purely functional on the other (see figure 3).

5.2.1.1 Figure 3: The "Creativity Spectrum"




For the purposes of presenting the findings, the companies studied were placed on a "Creativity Spectrum", with the purely artistic organisations (the ballet company and the orchestra) on the left, and the purely functional design company (the structural engineers) on the right (see figure 4).

Figure 4: Range of Disciplines on the Creativity Spectrum



In order to test and analyse this assumption further, the tables in Appendix 3 were re-arranged from the most artistic to the most technical, and the units of analysis were re-examined to see if there was a progression from one to the other. This was found to be the case, so the method of presentation described below was designed to highlight the differences between the responses and to demonstrate the progression from one discipline to the next. These tables as demonstrated in Table 2, were not meant to demonstrate the frequency of the different answers, but rather to show range and development.

Table 2: The Respondents on the Creativity Spectrum

Spectrum	Respondent	Discipline
Artistic  Technical	1	Ballet Company
	2	Orchestra
	3	Advertising
	4	Advertising
	5	Branding
	6	Branding
	7	Branding
	8	Fashion Design
	9	Interior Design
	10	Landscape Design
	11	Architecture and Interiors
	12	Architecture
	13	Architecture
	14	Engineering

Therefore the tables presented in this chapter are a contraction of the quotes from the transcripts presented in Appendix 3, which revealed that different types of creative firms managed their organisations in different ways across the categories of analysis. The tables in Appendix 3 have been included as they provide evidence to substantiate the trends revealed in this chapter.

The quality of the interviews was such that a method had to be devised to capture the depth, richness and insight of the respondents, as well as the nuance and subtlety of their responses. For this reason a substantial number of quotes were included in this chapter as the respondents chose their words well and expressed themselves succinctly.

The subject matter is highly subjective and conceptual so the results have not been quantified because not only would a sample size of fourteen be inadequate for meaningful statistical analysis, but the researcher decided it was more useful to identify the similarities and differences rather than the quantities.

5.3 Research Question 1 – Creative Personality: Should the creative personality be nurtured and protected from business realities?

This question investigated the impact of the “Creative Personality” on the quality of creative work and productivity in the office. It further investigated whether protecting the creative personality from the demands made by the business and from administrative tasks has a positive or detrimental effect on creativity, and if it promotes or hinders productivity for creative employees to work outside of their area of expertise.

The three categories of analysis used to investigate the above question were Creative Personality, Cognitive Style and Expertise.

5.3.1 Category of Analysis - Creative Personality

This question investigated whether creative people behaved differently from those involved in less creative work and what their impact on the organisation is. The important points made in the interviews are in Appendix 3 – Table 16.

5.3.1.1 Interview questions relating to this category of analysis:

- How do you think the creative ego manifests itself in your environment? What are the positives and negatives of dealing with creative personalities?
- Do you feel that a creative personality needs to be nurtured and protected in order for them to perform creatively?

5.3.1.2 Creative Personality – Themes:

The two parties at the technical end of the spectrum did not tolerate the creative personality at all, labelling them as “prima donnas” and “divas”.

“No, We don’t hire prima donnas designers. It’s not good for our culture and it’s not good for their career development. They are not valuable.”


“[We] get rid of precious people. If I do an interview and someone is intense they don’t get the job. Intense means I’ve spoken to them for five minutes and I’m tired. That’s intense and you don’t want anyone like that, it’s not good for team spirit. It wears everybody down.”

“Creative behaviour” in the middle of the range was tolerated but all of these respondents qualified it as childish, destructive, tedious or a strain on other parties and stressful to manage. Some respondents suggested that there was a trade-off; if the level of creative work is high then managing the person may be the price you have to pay. One excused it by saying that creative people are passionate about what they do and the intense caring can come across as being difficult.

“It is the hassle and the stress that that type of personality brings to me, because I am the one that manages it. Is it worth all that and the answer is definitely yes.”

How the respondents ranked on the Creativity Spectrum is shown in Table 3.

5.3.1.3 Table 3: Tolerance of Creative Personality

Spectrum	Respondent	Response
Artistic  Technical	1	Acknowledged and stroked
	2	One leading diva. Other personalities subservient.
	3	N/A
	4	Difficult but worth it
	5	Tolerated but considered childish
	6	Tolerated but considered stressful
	7	N/A
	8	Tolerated but managed
	9	Tolerated but managed
	10	Tolerated but considered stressful
	11	N/A
	12	Considered destructive
	13	Not tolerated
	14	Not employed

5.3.1.4 Conclusion

The common thread appeared to be a certain acceptance that creative people are going to be difficult to manage and that the artistic temperament may be the price you pay for talent. The variance was evident in the degrees of tolerance displayed.

5.3.2 Category of Analysis - Cognitive Style:

Cognitive Style describes the way an individual approaches their work and how their individual attributes affect the way it is done. This part of the question sought to determine whether creative people should be involved in the administration and management of the business, or whether they should be protected from these distractions in order to protect their creativity. Conversely, does the involvement in practice matters improve their productivity?

5.3.2.1 Interview questions relating to this category of analysis:

- Do you involve your creative teams in issues of profitability and productivity? How do you actively involve them in practice matters?
- How much administrative work are creative professionals expected to do? How do you support them so that they concentrate on creative work?
- Do you try to protect your creative staff from distractions by isolating them or do you like them to be involved in everyday office life?

5.3.2.2 Cognitive Style – Themes

The full range of answers to the above questions appears in Appendix 3 – Table 17.

Three distinct camps were identified by the 12 people who responded to this question.

- The first camp said that due to a lack of expertise, interest or aptitude, creative people should not be involved in the running of the practice. Their creative time is valuable and they should not be bothered with business decisions.

“We pay creatives to do what they are good at. They shouldn’t be running around doing the admin side. Let the suits do that. That’s what they get paid for ... to make sure the admin is happening. So we typically get BComm type marketing people as potential suits and we get your worst hippies sitting in the studio, getting lost in things.”

- The second camp suggested that although they do not need to be actively involved in practice matters, they must have sight of the business objectives in order to operate in the interests of the company.

“More and more there is this blur, they have to understand the business needs, so they might not ... understand a flow chart, but more and more they understand what the need is. So even if you are a pure creative artist you have to understand the client’s business otherwise you don’t have any relevance.”

- The third camp suggested that creative people should bring their creativity into the functioning of the practice so that the administration of the practice is in service of their creativity. This is considered to be very demanding, but very effective.


“Our creative people are definitely involved in practice matters because we are hiring all round people.”

The engineering firm did not see a division between being a good engineer and doing your administrative and management work.

“The more senior the engineers get, the more admin they will do. I mean we all have to do a fee proposal and a time sheet and the contractual matters. It is the engineers doing that. The admin staff can’t do that. The engineers must do that themselves.”

Table 4 demonstrates how the respondents fit onto the Creativity Spectrum.

Table 4: Cognitive Style

Spectrum	Resp.	Response
Artistic  Technical	1	In a different world
	2	Not involved due to lack of expertise
	3	Not involved but made to understand the business need
	4	Separate departments, separate floors, but made aware.
	5	Made aware of what is happening in the business
	6	N/A
	7	Creative time valuable – not wasted on admin
	8	Lack of interest and aptitude
	9	Creative time valuable – not wasted on admin
	10	Lack of interest and aptitude
	11	Involved in everything – finds it exhausting
	12	Must be able to quantify your contribution
	13	Creative people integrated into business side
	14	Fully responsible

5.3.2.3 Conclusion

The common thread appears to be that creative people generally find the administrative roles boring and outside their area of interest and that it is a real trial to get them to participate. Generally, at the technical end of the spectrum there is some effort made with administration, but at the creative end there is real avoidance.

The next category of analysis, expertise, explored this concept a bit further.

5.3.3 Category of Analysis - Expertise: This question investigated whether creative people are only able to function in their specialised area of expertise or if they are capable of extending their creativity to other disciplines. (See Appendix 3 – Table 18.)

5.3.3.1 Interview questions relating to this category of analysis:

- How do you balance the demands made by creative work and the demands made by business?
- What sort of demands do you make on your staff beyond the creative role?

5.3.3.2 Expertise – Themes:

Further to the evidence presented in the previous category of analysis, there was some disagreement about whether creative people should be pushed out of their comfort zones into areas that are not strictly their areas of expertise.

Of the 15 companies visited, only two had creative people in a financial role; one was doing spectacularly well and the other spectacularly badly. The other thirteen had all outsourced the financial function to an accountant, but all retained a creative professional as the head of the company. This person was invariably in charge of the strategic and creative direction of the company. There were no instances, even in the bigger companies, where the creative professionals were supervised by a purely management partner who had not come through the profession as a designer. Although the orchestra director was not an active musician, he had been involved in the music industry for most of his career and the director of the ballet company had also been a dancer.

There was some doubt amongst the respondents about whether creative people are either suited to, or educated for, business administration. Those who are were considered “all-rounders”, and it was acknowledged that these people are hard to come by.

Some of those interviewed believed that high degrees of specialisation were appropriate and it was unreasonable to expect people to perform beyond the set of skills for which they trained.

“The vested interest is one thing, the skills are another. The skills required for management, does that necessarily sit in the same skill set as someone who is a musician? Unlikely.”

“Personally, it is not my field. I would rather leave it to someone who knows what they are doing.”

“We really believe in division of labour and using the right skills for the right job”.

However, in accordance with the previous category of analysis, the more integrated the employees are into the management of the practice, the more they are expected to be able to master skills outside of their area of training and experience.

“When you are young and you haven’t got obligations you need to drive your skill set above your peers and you need to get there before you are 30. The harder you work the more skills you get and then you get better jobs and you get into a reinforcing cycle.”

“The guys here get very frustrated because they are architecturally trained and that’s where they want to be and that’s what they know and now they get thrown into this and that.”

Experience and training were also mentioned as part of this category, with the more artistic organisations putting an emphasis on talent while the more technical firms favoured experience.


“I don’t care how senior you are or not, if I think you are phenomenal dancer you can come from anywhere and perform the lead. I don’t care. I don’t want you to have to wait six years, by then you have lost your talent, and by then you have lost your inspiration. That doesn’t work for me.”

As opposed to:

“We try to distill into the people who work in our practice that before they are 30 they need to have done 10 000 hours, like that Malcom Gladwell book, if you want excellence you have to drive hard.”

Table 5 demonstrates how the responses to this question differed over the creativity spectrum.

Table 5: Expertise

Spectrum	Resp.	Response
Artistic  Technical	1	Highly specialised in one area only
	2	Talent over experience
	3	Separation of functions
	4	Disparate skills across functions
	5	Experience not considered necessary
	6	No desire to operate out of skill set
	7	Division of labour
	8	Likely to mess up if no aptitude for the task at hand
	9	N/A
	10	Do what you show aptitude for – stretch your skill set.
	11	N/A
	12	Need to be multi-disciplined
	13	Need to build up multiple skills in order to be effective
	14	Wider skill sets come with experience.

5.3.3.3 Conclusion

The evidence reveals that there is a tendency to specialisation in the more artistic fields, but as one moves towards the more functional organisations there is an expectation that one will be more multi-disciplined and have an ability to adopt a wider set of skills. Experience was more highly valued at the more technical end of the spectrum and talent and freshness at the artistic end. The type of person who can be both creative and participate fully in the running of an organisation is rare, but very valuable if you can find them.

5.4 Research Question 2 – Design Process: Is there a systematic approach to design that can be used to promote productivity or does the analysis of the design process stifle creativity?

The purpose of this question was to discover if managers need to understand the creative process so that they can give support to their creative teams that is appropriate and appreciated. Time management is critical to this issue, as is an understanding of where the designers are in the process and how long it takes to get there. The outcome of this question would be to establish how managers can formally support the prioritising, planning, executing and monitoring of projects in a creative organisation in order to improve performance, and whether it is more productive to work collaboratively or individually.

The three categories of analysis for this question are Creative Process, and Time Management and Collaboration.

5.4.1 Category of Analysis - Creative Process:

This category explored whether or not the design process has been broken down into stages in order to understand what the creative team is doing, and if this process is factored into the project programme. This determines how well time and money is managed in the company and to what degree the creative staff are appropriately supported.

5.4.1.1 Interview questions relating to this category of analysis:


- Have you broken down the design process into stages in order to understand what your creative team is doing?
- Is the process of design factored into the project programme?
- Do you monitor your design team as they are working or do you wait for the big unveiling at the end?

The full responses to this question are in Appendix 3 – Table 19.

5.4.1.2 Creative Process – Themes:

The respondents to this category were divided into two camps; the first spoke about a reliance on intuition and “magic”, while the second group described a logical pathway that they pursue in order to come up with an idea. However there was no clear grouping between how the more technical professions and the more creative professions come up with their ultimate ideas. An equal number of each group relied on intuition and magic, as relied on a logical pathway. The spread of answers appear below in Table 6.

Table 6: Creative Process

Spectrum	Respondent	Response
Artistic  Technical	1	N/A
	2	N/A
	3	Wait for the “Aha” moment
	4	Good foundation, then critical pathway
	5	N/A
	6	Logical process
	7	No magic without a good foundation
	8	Good foundation, then inspiration
	9	Logical, structured process
	10	Good foundation, then wait for the magic
	11	No magic, logical structured process
	12	Good foundation, then discipline
	13	Good foundation, then intuition
	14	Good foundation, then discipline

What emerged as being most important were the two common threads of laying a good foundation and iteration. Of the 11 respondents to this question, most spoke about a discovery process that was essential before creative work could begin. This is the process of discovery, laying the foundation for ideas, generating the basic understanding of the problem and doing research.

“We don’t just jump to dessert without the peas and the cauliflower.”

After this stage one respondent spoke poetically about planting a seed and letting it germinate, another spoke about time in the crucible and a third about sleeping on it overnight.

“So some days I’ll wake up and it won’t be there, so I’ll go to sleep and it will be there in the morning.”

Other respondents spoke about a series of logical steps or a critical pathway that it is necessary to follow in order to ensure that the idea is robust enough to stand up to scrutiny.

“The creative process has a number of logical steps. We are fairly structured as opposed to just going off to find the magic and try to post rationalise what we have done. We don’t do that, we pre-rationalise why we are going to do something, and that’s how we give it meaning.”

However the other respondents suggested that there is indeed magic, but it is fragile and cannot be forced.

“The more you drill down into it, the more you want it to happen, the more it goes away.”

Most respondents spoke about the iterative nature of design and how it needs to be relooked at several times to ensure that the idea can last the distance.

“The thing about design is that it is iterative... I think that designs are more honed than dug out of a treasure box somehow.”

5.4.1.3 Conclusion

The results here were fairly unanimous – the generation of a good idea may or may not be a magic event, but either way it will never happen without a good foundation and a process of definition and discovery, and several iterations to refine it.

5.4.2 Category of Analysis - Time Management: – How does it impact on creativity and productivity?

This question investigated how the creative team manages their time, with an emphasis on whether they manage their time themselves or require outside intervention to allow for and impose time limits on each of the design stages. This category established whether designers need to be left alone to do their best creative work or if they need to be closely monitored.

5.4.2.1 Interview questions relating to this category of analysis:

- How does your creative team manage their time? Do you give them pre-set programmes or do you let them organise themselves?
- Do you find that the creative team are self-regulating (organising) or need outside control to keep them on target?
- Do you allow for and impose time limits on each of the design stages?

Quotes from the answers to the above questions appear in Appendix 3 - Table 20.

5.4.2.2 Time Management - Themes

Of the ten respondents to this question, only half stated that “time is money”. There need to be time constraints to keep the projects within budget as the more time is taken the more the fees are eroded. The others saw the deadline as more threatening to their creativity and productivity than the spectre of running out of fees.

Only three said that they could not always turn the creativity up on demand, but six said there was nothing quite like a deadline to focus the mind.

“I did it to myself, I had a house to design but I couldn’t get myself to start. So I phoned the client and said, “I’m ready,” when shall we meet? They said Friday, so now I knew I had a deadline and I had to present them with something, so all of a sudden the creative juices get switched on. You need to light a fire under people otherwise nothing is going to happen.”

Some respondents talked about discipline and structure as a way to drive the process forward.

“We work out how many drawings we do and we will put together all our deliverables and work out how long we have to do it and what we have to do to achieve it. I then co-ordinate all those things into a very structured format and a structured project programme.”

Most respondents acknowledged that design is an iterative process and one frequently needs a couple of goes at it to get it right, however it is a process that can go on forever, so:

“There’s a time that is a stop time and a point where you stop designing, where you don’t keep on going... we move on. You need to know when to draw the line. You have to be disciplined about shutting it down and moving on.”

These respondents admitted that design will fill the time available, however much it is, and without a strict deadline designers have the capacity to mess around indefinitely.


“[He] would not pin his colours to the mast at all. [He liked] to be as grey as possible for as long as possible - I think he felt that would give him time to come up with the best solution. What it ends up doing is that no decision is made and the worst one is made in a hurry. You have to have a deadline; you can’t allow people to fritter away hours and hours on something, because they can.”

It appears as if the effective and experienced designers appear to have mechanisms to help them out of tight corners.

“You don’t need two weeks to do something. A great idea comes to you like this! If you are a well-trained, disciplined brain then you are absolutely focused. It’s about setting the parameters of what you want to achieve and then working back. You need to involve the creatives in that because they are quite freaky people sometimes. You need to set their time.”

The responses to the time management question based on their position on the creativity spectrum are shown in Table 7.

Table 7: Time Management

Spectrum	Respondent	Response
Artistic  Technical	1	Performance based – regular supervised rehearsals
	2	Performance based – regular rehearsals
	3	Traffic managers
	4	Traffic managers
	5	Traffic managers
	6	Project managers who programme for the team
	7	Creative people managed through “Gateways”
	8	N/A
	9	Scheduled programme
	10	Check points planned in
	11	Disciplined time limit
	12	Internal deadlines
	13	Project leaders manage their own projects
	14	Left alone and expected to get on with it

5.4.2.3 Conclusion

The common thread was that there does need to be quite strict time management, as the design process is not finite and can continue indefinitely unless a deadline imposes a limit. The variable factor appeared to be whether the designers were able to manage their own time or whether they had to be closely supervised. On the more creative end of the scale, in the advertising industry there is a whole department devoted to “traffic management” which organises and monitors every minute of the creative day. On the other end of the scale at the engineering side, designers were left very much alone.

5.4.3 Category of Analysis - Collaboration:

This category explored whether creative work is better achieved by individuals or a group, and whether it is more productive for design work to be produced in teams or by a single person.

5.4.3.1 Interview questions relating to this category of analysis:

- How are your design teams organised? Do you encourage collaboration or individual expression?

The answers to this question are quoted in Appendix 3 – Table 21.

5.4.3.2 Collaboration -Themes:

All ten respondents to this question were unanimous. The initial generation of the idea is done in isolation by one person, but it then needs to be thrown open to a broader audience so that it can be tested.

“We cannot design creatively in a consultative environment. We need to have very strong idea of what you want to be and then let the idea go and let other people drive it further.”

All the respondents said that although it is not thought possible to be creative in a team, designs which “kicked, bounced or ricocheted around” are more robust than ideas which are never exposed to other influences.

“It is important that even if you do it individually you still have a kickplate environment that you can bounce ideas off one another to test them. You may think it’s awesome but if someone else looks at it, it turns out to be a dumbass idea.”

Opening the design up keeps designs fresh, relevant, on track and ensures their depth, range and diversity, whereas keeping the creative process individual ensures originality, ownership and vision.

“[If you have] different disciplines around the room, it is a good thing, different cultures and diversity helps as opposed to a country club of thinking where everyone thinks the same.”

It appears, therefore, as if ideas need an owner but also a social life.

5.4.3.3 Conclusion

There was no difference in the answers from organisations across the spectrum. Even the engineers had sessions where they discussed their designs in a group, although they were described to the researcher as being “horribly introverted”.

The understanding of the creative process is critical in order to promote productivity. The inappropriate allocation of time or insensitive formation of teams can cripple the creative process. In addition, although the process of generating and developing ideas is constant across the creativity spectrum, the various organisations managed their time very differently according to how technical the nature of their work was.

5.5 Research Question 3 - Motivation: What sort of rewards do Creative Designers require in order to produce their most creative work?

This research question investigated the nature of these rewards and the effects they have on performance.

5.5.1 Category of Analysis – Motivation:

This explored the factors that enhance or stifle the will to create, what is seen to work and what seems to have no effect, as well as any factors that shut down the creative process.

5.5.1.1 Interview questions relating to this category of analysis:

- What intrinsic (non-financial) motivators do you provide your staff? How do they respond?
- What do you find is most effective in inspiring the best work in your creative people?

The responses to the above questions are quoted in Appendix 3 – Table 22.

5.5.1.2 Motivation – Themes

Of the eleven respondents, eight mentioned money, however seven of these were only talking about money in the context of motivators more powerful than money. When they did mention money, it was usually last, as a half embarrassed afterthought. Money only appeared to become an issue when the intrinsic incentives run out or there is so little money that it causes hardship.

“If you haven’t paid your rent, you have a threatening letter because your bond isn’t paid, you maybe haven’t eaten as well as you should have done, then you are not going to perform to your ability. It is also the group psychology. That unrest is filtering through, so they are not a comfortable happy group so yes, standards will slip and they will not perform as well.”

“When our staff are very young what motivates them is building buildings they love and they are passionate about and how much they are learning. And then things start to happen, people start to get married they start to turn 30 and so they start to worry about things like driving a better car and if they are married, how are they going to educate their kids, so now it is everything we have spoken about before, and about money.”

Most of the respondents mentioned that the creative professions do not usually generate very high fees and there is usually not enough extra money to use as incentives. Only the engineering firm discussed at length their bonus and share incentive scheme.

Doing the job because they loved it and felt passionate about it was the general theme. The designers appeared to be more motivated by the promise of personal satisfaction and the prospect of challenging and exciting projects than about monetary rewards.

“I don’t think interior designers or architects are ever going to get rich ... but we are getting the kind of satisfaction that you don’t get in another profession. I often wonder what I would have done if I had done something else – I would have been a lot wealthier.”

Right across the spectrum the concept of “living their dream” emerged. The ballet company and the engineering firm used those exact same words. Other equally emotive words such as “love” and “passion” were used frequently in the interviews to describe how the designers felt about their careers.

“They perform with absolute passion and dedication and commitment because they love what they do, it’s not just a job or a check at the end of the month, it’s about being able to live my dream.”

“I really do love what I do. I really do enjoy design. At this stage it is 4/5 days that I enjoy coming to work. I am passionate about design.”

The younger staff indicated that they were happy as long as they were learning and getting experience. However, everyone across the scale was motivated by exciting and challenging work and an opportunity to show what they could do. They all indicated that they feel that they have something to prove and deeply appreciate the opportunity to demonstrate it.

“It’s more something you do for yourself and the experience you want to get for yourself. I’m here to learn and if they like my ideas then I know I am going in the right direction and I’m doing a good job, that’s what motivates me.”


They all liked to feel that their careers had some momentum and to feel that they were contributing to the organisation and its continuity. They needed to feel valued and valuable. They also liked to feel as if their ideas were appreciated, acknowledged and recognised. Coming up with a good idea is a reward in itself, especially if they are publically acknowledged for it.

“In order to feel valued you need to feel as if you are contributing to the bottom line. I was certainly more creative when I was more appreciated.”

“Praise is really something because there is nothing better than when some-one says, “Wow, that is a fantastic idea, it’s exactly what the client is looking for.”

An indication of what inspired those in different positions on the spectrum appears in Table 8.

Table 8: Motivational Values

Spectrum	Respondent	Response
Artistic  Technical	1	Being inspired, living their dream
	2	Opportunity to perform and belief in their art.
	3	Acknowledgement and awards
	4	Awards and recognition
	5	Personal satisfaction.
	6	Passion for design
	7	Recognition
	8	N/A
	9	Passion, satisfaction and feeling valued.
	10	N/A
	11	Praise, feeling valued, acknowledgement, contributing
	12	Feeling valued and money
	13	Bonuses and share incentive schemes and making a difference

5.5.1.3 Conclusion

The nature of the creative professions is that there is a performance or a tangible product at the end of the process. The opportunity to be part of this creation is a strong intrinsic reward. At the artistic end of the spectrum the rewards are expected to be more emotionally gratifying such as awards and applause. On the technical end, although there was some emphasis on money, the motivation was more about feeling valuable and being able to contribute.

5.6 Research Question 4 – Organisational context: What sort of organisational design and structure is most conducive to the simultaneous promotion of creativity and productivity?

The role of the creative manager is to create an environment that is conducive to creative thinking while simultaneously driving production and managing the projects. The following factors explored what organisational interventions are required in order to achieve this.

The Category of Analysis for this part of the question was Organisational Structure.

5.6.1 Category of Analysis – Organisational Structure

The internal organisation of a company determines how the members interact with each other and how the environment is set up for communication, collaboration and feedback. This category explored which organisational model is best suited to a creative environment.

5.6.1.1 Interview questions relating to this category of analysis:

- What kind of control do you exercise over your design professionals in terms of company structure?

The answers to this question appear in Appendix 3 – Table 23.

5.6.1.2 Organisational Structure – Themes:

Several models of organisational structures emerged:

Studio Model – this is the traditional professional design company model where the whole process is creative, from the beginning of the design process to the end of the delivery stages. The creative designers run the projects and the organisation is set up in the service of this continuous creative process. There are no silos; everybody has sight of everything and can do everything. It is demanding and exhausting but promotes learning and development. This model was found in the creatively successful architectural design practices and the smaller practices.

“We have specifically structured our practice where we don’t separate them out, so if you are able to land work you must be able to deliver that work. We want holistic architects, we don’t want designers and we don’t have this differential in the office, design class and delivery class people in our office. If you start filling your business with those kind of people and you don’t keep them segmented into silos then there are no issues about how you drive creativity through your business.”

Design Management Model – in this structure the organisation is split into different teams which are managed by a project co-ordinator who ensures that the work of each team flows and corresponds. The creative designers are just one team in this structure, alongside technical production and delivery teams. They keep an eye on creative intent once it leaves their domain but are no longer in control of it. This works well in bigger offices and in bigger projects where the division of labour ensures that everyone does what they do best. The large commercial practices operated in this way.

“We really believe in division of labour and using the right skills for the right job. We separate our projects very much into the creative process where we have a creative team who design and conceptualise a project, and then we have a technical team who take that project and follow through in terms of production and documentation and then we have an implementation team that take that project onto site and they are all different skills and different people and teams.”

Hierarchy – there is a fixed status and structure of authority in the office; people operate according to their position in the company. This was found in the two performance organisations and in the unsuccessful architectural practice. The creative culture is determined by the person on the top of the pile.

“No, it is not very democratic. Someone has to take the final decision. In the company administratively there is a CEO, then there is the artistic director. Then all the other positions fall underneath that”.

Agency Structure – this structure consists of “creatives” and “suits”. The space between these two opposite poles is mediated by a “traffic department”. The separation tends to keep the creatives immature and the suits quite arrogant about their power. It is typical of the advertising and branding agencies.


“We have two lobes to the business, the creatives and the suits, the traditional agency structure which is probably wrong. The creatives are always saying we want more time, we need more this, we need more that, and the suits are saying hurry up, you are taking too long.”

It appears as if the bigger, more commercial practices tend towards the design management and agency structure, whereas the smaller, more boutique style design firms tend to the studio model in the better examples. One respondent suggested that when and if they got too big for the studio model they would have to divide their practice into smaller studios, rather than spoil the creative and nurturing environment that the studio gives the designers.

“If we ever got really big the model that we have might not work. At some of those practices they break it up into smaller modules of about 50 people into smaller studios, so we would just be a studio within a larger culture.”

When the occurrence of these models was plotted against the creativity spectrum a definite trend appeared as shown in Table 9.

Table 9: Organisational Structure per Organisation

Spectrum	Respondent	Response
Artistic  Technical	1	Hierarchy
	2	Hierarchy
	3	Agency Structure
	4	Agency Structure
	5	Agency Structure
	6	Agency Structure
	7	Agency Structure
	8	Design Management
	9	Design Management
	10	Studio
	11	Studio
	12	Studio
	13	Studio – holistic all-rounders
	14	Studio – independent

5.6.1.3 Conclusion

This spectrum was very clear; the more artistic companies tended to a more structured and authoritarian hierarchy and the more technical organisations had a flatter, more egalitarian structure. The more artistic organisations tended to the Agency Structure and then the Design Management model before reaching the Studio model at the more technical end of the spectrum.

5.7 Research Question 4a - Psycho-social environment: What company culture and values would promote both creativity and productivity simultaneously?

This subsection investigated whether the social environment and the psychological atmosphere impacts the levels of productivity and creativity within the organisation, focussing primarily on the nature of the relationship between management and the creative staff, and how to give the design professionals the type of support and encouragement they require.

The categories of analysis for this section were Creative Culture, Psychosocial Environment and Productive Culture.

5.7.1 Category of Analysis – Creative Culture:

This category explored how the organisation thinks about creativity and how they nurture and promote it, or conversely what mechanisms inhibit it.

5.7.1.1 Interview questions relating to this category of analysis:

- How does your company define creative success?
- What controls do you have in place to ensure that the design work is of a specific quality?

The responses to these questions appear in Appendix 3 – Table 24.

5.7.1.2 Creative Culture – Themes

Most respondents choose to see their organisations as a passion and not a business - even those that insisted that one needs to be absolutely business-like in order to be taken seriously still felt passionately about what they were doing. The word “passion” was mentioned in almost every interview and was a recurring theme throughout the interviews, not just in this section.

“If you run this as a business you have a problem, you need to run it as a passion with the business secondary.”

“You can’t present great stuff unless you get passionate about it and you need to get mad to get passionate.”

“This company is run on passion, you are 100% correct to say it is not driven by money, it is not, everybody in this business is here because we believe that it adds value to our nation, and it does.”

One of the methods of generating a creative company culture was to use creativity as a thread that ran through all parts of the business. The creative people were not separated out into silos, instead everyone was expected to be creative, even the administrative staff. No one is permitted to be mundane. This does not mean the ideas were generated collaboratively, but rather that the creative work was supported from all sides.

“In traditional architectural practices you are going to find that you have the creatives and then they hand the work over. In our practice design ethos runs right through the detailing as well. The culture drives right through with creativity. In terms of delivery we see ourselves as being creative in the way we deliver. We see ourselves as a creative business in all aspects of what we do. No separating.”

“It was creatively led ... everyone is creative. So you are creative in your own space, so if you were a strategist you were creative, if you were in client service you were creative about that, they were trying to build that culture of everyone being creative”

The other side of the spectrum was when one person generated all the creative energy and the function of the rest of the team was to support the vision of that one person. This was most evident in the orchestra, where the conductor's vision of the piece prevailed over that of any orchestra member, and in the ballet and advertising companies where there was a “creative director” that determined the creative culture. In terms of leadership, one person looked after and guided the creative energy.

“My job is to keep the creative edge of our business going. I monitor the designs all the way, every day.”

“I generate the creative energy of this office.”

Six of the nine respondents to this question talked about the quality of their staff as a factor in their creative culture. Hiring the right people with the certain “x-factor” was seen to be important, as was their experience and fit with the culture. There was no mention of creative training. Staff was either seen to be creative or not. There was frequent mention of nurturing creativity, but the assumption appeared to be that it had to be there already.

“It’s that X-factor. You either have it or you don’t have it. I don’t think you can ever teach it. The guy might be brilliant, straight A student, intellectually sound but if he doesn’t have that X factor, to have that nuance that makes you a great designer, it’s that kind of genius, how do you define it? It’s not about technique, it’s about creativity.”


Much emphasis was placed on the importance of the big idea. There was real belief in the power of ideas to change the world and a search for the idea that would transcend and transform. A belief in the bigger impact of an idea seemed to be a major driver of creative culture.

“At a very high level ideas are about prodding and pushing the world forward and by doing that you create something better than was there before.”

“I think it is very important that I have a basic design philosophy and a basic design narrative for every design project. If you don’t have a philosophy and a narrative and process for design you will run out of ideas. Then you have something that you can carry all the way through.”

The differences between the creative cultures of the organisations are demonstrated in Table 10.

Table 10: Differences in Creative Culture

Spectrum	Resp.	Response
Artistic  Technical	1	Employed purely for their ability at their art. Creative Director in charge.
	2	Employed purely for their ability at their art. Creative Director in charge.
	3	Believe in the big idea. Creative Director in charge.
	4	Everyone is required to be creative, but only in their own space. Creative Director in charge.
	5	Creative people are employed only to do creative work. Creative Director in charge.
	6	Creative people are employed only to do creative work. Chief Designer oversees everything.
	7	The best are able to straddle both worlds and function in both – considered very rare.
	8	Must be able to see practical application of what they are doing.
	9	creative people only do creative work but keep an eye on intent throughout.
	10	Integrated – some people do all parts of the project, some focus on design.
	11	Everybody does everything – multi-task.
	12	People need to be both creative and technical
	13	Integrated – creativity driven through every part of the business. Require all-rounders.
	14	Designers must be able to get along with everyone on the broader project team. No creative director.

5.7.1.3 Conclusion

The factor that differentiated the organisations from each other was how integrated the creative people were into the company. Where the creative people were heading up the main operations was at the opposite end of the spectrum to where the creative people were placed in a “hothouse”. Most notable and indicative of their creative culture was what type of people the organisations chose to employ and what their capabilities were expected to be.

5.7.2 Category of Analysis – Psychosocial Environment

This category explored how people are supported, encouraged and given confidence in their creative work. In addition, it explored what environment is necessary to sustain productivity. Conversely this category investigates what sort of office atmosphere would stifle creativity or be detrimental to productivity.

5.7.2.1 Interview questions relating to this category of analysis:

- How do you support a designer's self-confidence?
- What sort of internal evaluation does your creative staff receive during the design process? What is the best way of getting a positive response to criticism?

The answers to these questions appear in Appendix 3 – Table 25.

5.7.2.2 Psycho-social environment – themes:

The opinions of all ten respondents were unanimous: there is an environment that is conducive to the generation of good ideas and one that is not.

“If you have a culture that it very demanding, often an idea can look a bit silly and fragile, if people are scared to talk about it or debate it in a group then you get very correct ideas, nothing particularly wrong with them, nothing particularly right.”

A positive environment is one of empowering without overshadowing, where anyone has permission to come up with something and they are not fearful to put their ideas forward because their contribution is encouraged and appreciated.

“They are not judgmental, very encouraging and they want to know your ideas, they appreciate and value your input. They never put your ideas down. It's comfortable.”

Judgment should be suspended while ideas are being put forward. This encourages off-the-wall ideas and prevents embarrassment if the ideas are not so good. The best ideas are then chosen to take forward.

“What used to work well and what I really appreciated ... was that it was thrown open to everybody, the cleaning lady included, it was very democratic.... bring your sketches we are going to have a session. There was no preciousness around it. He encouraged free debate where you could say, that’s a crap idea, and it was OK. Nobody was scared, in the end he would say, I’m going with that one. We’ll take a bit from here and some from there and let’s go from there. For me it was a wonderful way of just getting the creative juices flowing, even the technical people who weren’t terribly good.”

In some organisations the words ‘egalitarian’ and ‘democratic’ were used but the negative environments were when only one person was permitted to have ideas and their seniority or arrogance shut down the creative process in others.

“In [the other] office it was very different, everyone got very precious and defensive, and they were scared the design was not good. There was not much creativity going on because [he] himself was the creative guru, so any other creativity was a threat.”

A casual environment was more conducive to creative thinking than formality because it allowed the freedom to challenge the status quo and have a free debate, regardless of one’s position or status in the company.

“Honest, open, accessible. Ideas travel very badly through bureaucracy. It’s not as if you’re at this level so you can have this idea and once you are a big boy you can have this level idea, so it is also very egalitarian.”

The process of coming up with ideas was spoken about as if it were really fragile and easily suppressed.

“If you let people be creative, they are more creative. If you box it in you are only going to get creativity up to that point.”

“Give them permission to have ideas. It is amazing how if you give them permission, people fly. The energy is just fantastic.”


Therefore a mechanism for encouraging ideas is necessary. Five of the six companies that engaged on this topic had open idea presentation sessions, where people would present their ideas (which they had come up individually) to each other in a controlled forum. All ideas received equal respect, although most would eventually be discarded.

In order for productivity to flourish it was then necessary to re-assert control, pick the successful idea and send people back to refine it.

“We drive our creatives through “gateways”. We will chuck it open, you’ve got 30 minutes (or 30 days), at the end of 30 minutes we close it down, we want all your ideas, we will filter it. We want every idea possible, then we take the best up through the next gateway and we will take the next 3 days focusing on just the best stuff and manage that process. You’ve got to let it go, you must let chaos reign, then pull it in.”

For the range of psychosocial environments see Table 11.

Table 11: Psychosocial Environments across the Creativity Spectrum

Spectrum	Respondent	Response
Artistic  Technical	1	Treated like “soap bubbles”
	2	Made to feel safe and secure
	3	Free of fear. Permission to have ideas
	4	Containment and respect
	5	Encouraging and comfortable
	6	Need to be heard
	7	encouraged to have ideas
	8	Non judgemental
	9	Freedom and casual
	10	Supportive
	11	Egalitarian
	12	Democratic
	13	Empowering
	14	Team feels special

5.7.2.3 Conclusion

The range between the different organisations was varied, but in a nuanced way. On the one end of the scale it was about empowerment, but at the other end it was more about nurturing.

5.7.3 Category of Analysis – Productive Culture

In order to understand how to drive productivity it was essential to know what each company considered to be productive behaviour. In one instance productivity may be seen as the generation of ideas and in another the delivery of projects. This category was chosen so that a picture of productivity in the design professions could be established.

5.7.3.1 Interview questions relating to this category of analysis:

- How do you define productivity? What do your top designers do that distinguishes them from the less successful employees?
- What controls do you have in place to ensure that the design work is of a specific quality?
- Do you involve your creative teams in issues of profitability and productivity? How do you actively involve them in practice matters?

The responses to these questions appear as quotes in Appendix 3 – Table 26.

5.7.3.2 Productive Culture – Themes:

All respondents answered this question but there was a distinct contrast between the two ends of the spectrum. In the more technical professions, the factor that was perceived to drive productivity was that the person who does the design must do the delivery, i.e. the creative person should be able to do all parts of the project and creative people should not be isolated in only the creative work. It was felt that they learn more when they work on a project from start to finish as this makes them grow as designers, as the practical experience helps them understand the mechanics of their designs. It was considered unproductive to get lost in the idea and not be able to deliver it.

“If you isolate someone to be creative you basically pull them out of the full delivery process and they stop learning how to deliver the buildings they are designing. We insist that our architects run the building to completion. Otherwise they lose touch with the processes and they become less effective. We celebrate the delivery of our buildings we don’t celebrate the initial phase of the design.”

“We’ve had designers who all they do is draw and draw and draw, and it looks amazing but at the end of the day it’s just a job for them. If they are quite involved from the beginning of the project, from the word go they would probably produce a better quality of design, they see also not just the design but the practicality of it.”


Ten of the 12 respondents confirmed that creative people need multiple skills in order to be effective. This was the factor that differentiated the top performers from the non-performers.

“The best creatives are those that can straddle both, they can sell the idea to the client and talk to him about business.”

“We like people to be multi-disciplined, for instance, they must be able to do details, Photoshop, Revit and a furniture layout. That is our idea of a productive person. A small practice like ours, everyone does everything. Everyone’s involved.”

Whether or not each organisation subscribed to the protectionist or protagonist view of productivity is shown in table 12.

Table 12: Method of ensuring productivity

Spectrum	Resp.	Response
Artistic  Technical	1	N/A
	2	A happy organisation does better
	3	Productivity related to quality of ideas
	4	Productivity related to success of the idea
	5	Creative people in separate department
	6	Creative people in separate department
	7	Engagement, focus and an ability to “join the dots”
	8	Better if designer is able to keep practicalities of manufacture in mind
	9	Designer stays with the project, watching brief until the end
	10	He who starts project, finishes project
	11	Multi-disciplined person most productive
	12	Involved in all aspects of a project
	13	Fully engaged with all parts of the project
	14	Direct relationship between their productivity and their merit bonus. No separation between design and production. Has to work or it falls down.

Although having sight of the end product was considered more productive, the other factor that respondents mentioned that creatives must be constantly aware of is their contribution to the well-being of their project or company.

“If creative people have sight of the end product or their impact on the firm, they are more productive. In order to ensure creative people are productive they need to see and appreciate their contribution to the well-being of the firm, otherwise they are happy to drift around in a cloud of pink smoke. Creativity is a fine excuse not to live in the real world.”

Most of the companies defined productivity as the impact on their own organisational environment, but only two saw their success through the success of their clients. These were both advertising companies.

“Great ideas can quantum leap and that is the ultimate measure of productivity. We didn’t push the market share by 1% which would make the client very happy, but we did something completely new and crazy and Boom. It’s wonderful when creative people look at something in such a different way that it creates a quantum leap in your measurements.”

Even though as designers the work produced was going to be used by another party, the only two instances where the client’s success was mentioned are quoted above.

Design firms appear to be very introspective, defining their productivity in terms of their own experience rather than the business outcomes of their clients.

5.7.3.3 Conclusion

The overriding theme for this research question is the line of sight from the idea to the finished product. The organisations that allow their creative people to be involved from inception to manufacture manage to promote both culture and productivity simultaneously. The organisations that put their creative people into silos tend to be able to promote one or the other.

5.8 Research Question 4b - Physical Work Environment: What configuration of physical space would work to promote both the levels of creativity and productivity among design professionals?

This subsection investigated whether the way the office is physically organised impacts on either creativity or productivity, and what sort of spatial organisation is best to support both of these processes.

5.8.1 Category of Analysis – Physical Space:

The impact that the physical environment has on the creative worker was explored with the intention of establishing which spatial layout is most conducive to creativity, collaboration and productivity.

5.8.1.1 Interview questions relating to this category of analysis:

- How do you make the work environment conducive to creativity?
- How do you make the work environment conducive to collaboration?
- How is the workspace organised? Is there a differentiation in space for different kinds of design work?

The responses to these questions and the researcher's observations are available in Appendix 3 – Table 27.

5.8.1.2 Physical Space – Themes:

For the 11 respondents to whom this question was applicable, open plan was definitely the preferred choice of office layout. It appeared that the more open the layout, the better. The drawing studio, with everyone part of the same space and little differentiation between workspaces (almost exposed), seemed to be the most favoured.

“They are in one space. It’s open plan. They want to be in open plan. They want to sit in long benches next to each other. Previously we spent a lot of money cocooning people into their own little creative space, but these guys don’t want to do it anymore. They want to be almost exposed. They plug iPod into ears and “blom” out.”

The reason given for this was that the team needed physical sight of the whole design process, to the extent that there should be no partitions or blocked visual lines between members of the same design team. In order to collaborate effectively there needed to be a space that allowed lots of interaction between team members. The only partitions sanctioned were those separating one team from the other, but within that team it was important that everyone could see everything that was being worked on.

“It is completely open plan, everyone sits cheek by jowl there is no separation. As projects move we move people into teams, the documentation team and the creative team sit together, aren’t separate. The project co-ordinator sits right next door to the designer. It is a lot easier than having to move every time you want a decision.”

Although the designers previously said that coming up with creative ideas is a solitary activity, they do not like to feel isolated from rest of company while they are doing it. They feel they are less productive if they are in their own offices because they need to feel a part of things.

“I don’t think having people in separate offices is a great idea because for design you don’t need to be sealed off. In fact you shouldn’t be off in your ivory tower designing, because you’ll never come down.”

“I spend most of my day sitting at the green table, (workbench in the middle of the drawing office) I’ll sit and sketch and draw ... I don’t like sitting in my office, I in the studio so that I have contact with everyone all the time.”

“I prefer upstairs because you don’t see people when you are downstairs, I think you are productive if you are seeing people and you feel more a part of the company and the processes within the company.”

An open drawing office also has the advantage of being a naturally collaborative space, and the respondents spoke of the value of communal areas, either common work areas or social areas such as the coffee station.

“We had quite a nice setup with everyone’s desk around and a table in the middle where we could all work on stuff together, it was much more of a creative setup.”

However, the areas that were contrived as separate fun areas for creative people to hang out in were not popular or used very much. The more successful spaces were a central common work area and a drawing board or table that the team could easily gather around and interact.

“We tried to have two spaces, one for innovation and communication, table tennis and bean bags, it wasn’t used. People would rather use the coffee machine or sitting outside having a smoke. There is more communication that takes place there than if it forced.”

One respondent said she didn’t like using the table tennis area because it didn’t look as if she was working when she was there and people “looked at her funny”.

Several of the respondents felt that the space must look and feel like a creative design space. They wanted signifiers that say ‘this is a creative space’.

“You can create a spatial environment that gives people permission to have ideas and enjoy themselves... open, colourful, clues, visual clues.”

“I can walk into an agency and say - they don’t want you to do creative work here. If you blocked the sign it could be financial services”

The call centre modular workspace layout was unpopular among the managers because they could not tell what people were doing in their cubicles. It was also unpopular among the designers because they could not spread their work out and see it all at once. One manager lamented the demise of the drawing board because you could see from a distance what people were working on.

“You don’t want people to be working on stuff that the rest of the office isn’t aware of. It’s important that the office knows what is going on, who’s working on what, who’s meant to be working on stuff.”

Several respondents said that the atmosphere and desk arrangement was more important than the quality of the office space and that attractive offices were seen as a bonus rather than an essential ingredient to creativity.

“I think if you are creative and you are set at a task, you can do it anywhere. I don’t think you need total exterior external stimulation to be creative.”

“Creativity can be anywhere, we did great work [in our first space] because the atmosphere was much more important than the glitzy office. I’ve seen swish offices with no heartbeat.”

5.8.1.3 Conclusion

The researcher felt that this category was included as a possible result of bias towards the importance of physical space. There was no significant difference between the different ends of the creativity spectrum, only agreement on the necessity for open lines of sight and places within the space where collaboration could occur, balanced with low levels of noise and disruption.

5.9 Research Question 5 - Management and Leadership Style: What is the best management style that brings out the best creatively and productively in creative professionals?

In order to develop a theory of management it is important to understand the impact that various leadership styles have on productivity and creativity. The observations in this section will provide useful insights into what leadership techniques can be used since many creative people are the principals in their design practices; this also extends to the clients. The clients are also involved in managing creative people, especially if the design organisation is one of many on a project team.

The categories of analysis explored for this question were the Design Brief, the Relationship with the Client and Management Style.

5.9.1 . Category of Analysis – Design Brief

This category explored the best way to brief creative people and present them with the required task. It investigated whether design professionals should be given more or fewer limitations in order to bring out the best of their creativity and productivity.

5.9.1.1 Interview questions relating to this category of analysis:

- How do you like to be briefed? What sort of information do you need in order to be creative and productive?

The answers to this question are available in Appendix 3 – Table 28.

5.9.1.2 Category of Analysis: Design Brief

Without exception, all of the nine respondents who answered this question said that a brief with tight constraints was the framework in which they could be the most creative. The more boundaries the better, as it is the boundaries that force one to be creative and look for the possibilities within the given parameters, i.e. they actually find the restrictions helpful.

“I find I am more creative when I have restrictions, you know where your boundaries are but you also know how you can push them and how you can bend them and I think the creativity lies in that, finding the possibilities within the set of restrictions.”

However, all the creative people are looking for is for the problem to be properly defined. There was a lot of frustration expressed about “control freak” clients or micro managers who insist on telling them how to do their job. Uniformly, all the respondents needed parameters and direction, not prescription.

“What I don’t like and what I find stifles creativity is when the client tries to solve the problem themselves. You want to say, “Give me the outcomes you are looking for rather than telling me how to get there.” I would rather hear what you want, rather than how you think I am going to do it. I want the problem solving left to me, so give me the problem not the solution.”

“I like the client to know what he wants in terms of the componentry. If you haven’t been given a clear brief, you can go around in circles and have an enormous amount of abortive work which is the bane of our lives. If there is a good brief in terms of those components, the client has a shopping list, then that is fine, I think the client is coming to us because they want our expertise. I don’t like to be told, “This is what it is going to look like. I want something linear here etc.”

A theme that recurred among several of the respondents was that of “insight, not information”.

“The problem today in business is to confuse information with insight, we can all Google, so in a brief the trick is not to ask the clients for information, it is to ask the client for insight. What does it mean? Briefs should contain the insights which are the precursor to the idea, otherwise you have so much mining of data which takes up so much time.”

Experiential briefing was considered useful because it gives insight instead of information.

“The best briefs are when people are actually exposed to the product. When you actually cook the product, taste it, drive it. For example with BMW, the guys went to the factory and walked the floor. You start by exposing them to it. Then you give them the objective, we need to market the power steering or whatever.”

5.9.1.3 Conclusion

Within these basic parameters there was not a range of preferences. Good basic parameters which are not too prescriptive, a strong experiential foundation and an insightful description of the outcome with the solution being left up to the creative team, were the themes for this category.

5.9.2 Category of Analysis – Client Involvement and Relationship

The relationship between the client and the designers is critical to the design process because it affects the understanding that the designer has of the problem to be solved. This also involves creative risk, which is the risk that the client will not like the design after much time and effort has been invested in it.

5.9.2.1 Interview questions relating to this category of analysis:

- How do you handle creative risk? (This is defined as the potential that the client will not like your idea.)
- What kind of interaction do you allow between your creative people and the client and how do you allow the client to participate in the design process to mitigate this risk?

The responses to these questions can be found in Appendix 3 – Table 29.

5.9.2.2 Themes – Client Involvement

All of the nine respondents to this question stated that their clients like to feel involved in the creative process. Most respondents said they take the client on the design journey with them and show them how they build the logic behind the design so that there are no end surprises.

“Some clients like to be taken along with all the breadcrumbs, I actually like that.”

“You have to take you client with you ...most of the clients are spending a lot of money and you want to build up the logic in their minds so that there can only be one outcome. Everything else we have dismissed along the way.”

Most agreed that if you keep the client close throughout the process you reduce the risk of straying down the wrong path, i.e. it keeps you on track and reduces the risk of getting rejected at the end. Only one said they had a client that trusted them completely to do the right thing. Most of the time it was an iterative process, checking in with the client several times to ensure that he was going to be satisfied with the result.

“We will show the client [each step] to get their input. We will never go onto the next step... We are absolutely strict, we are not prepared to go further – [until] there is buy in on every single process with commentary. At least when we give them the final solution they haven’t told us what to do, but they have told us what they want. The final solution is pretty close and we very seldom have presentations rejected in their entirety

Six of the respondents mentioned that the worst kind of client relationship was when the client did not trust them and insisted on interfering in the creative process. They found this particularly frustrating.

“If you’ve come to a professional, let them give you a professional service.”

“If you can see that the client is an absolute control freak, he might as well have just done it himself. He is just killing us. What is the point of employing us?”

“We do have some difficult clients who think that interference is positive feedback.”

Only the two performance companies had the luxury of “surprising” their clients at the end. All the rest were consistent in their need to mitigate the risk by involving the client in the process.

5.9.2.3 Conclusion

The feedback on this question was unanimous. The relationship with the client is a constructive part of keeping the project on track but this has to be managed carefully, otherwise it turns into destructive interference.

5.9.3 Category of Analysis – Management and Leadership Style.

This category explores the extent and the nature of management intervention required to ensure that design professionals are both creative and productive, with specific reference as to whether designers need to be left alone to do their best creative work or if they need to be closely monitored.

5.9.3.1 Interview questions relating to this category of analysis:

- What sort of internal evaluation does your creative staff receive during the design process?
- How closely do you monitor their work? Do you get involved or just let them get on with it?

The full results of this category are in Appendix 3 – Table 30.

5.9.3.2 Management and Leadership – Themes

Although there was a consistent thread of creative people needing a lot of attention, there were significant differences between the ways that this was applied along the spectrum. On the one end of the spectrum were the obsessive micro managers, and on the other, the delegators who never wanted to see the project again.

“I try to do as little as possible. So if I get the job my job is to give it to someone else to do. Then hopefully it will stay away. They will carry on and do their thing until it goes wrong or they need input from me. I won’t go and mess with their projects because then I am interfering.”

On the artistic side of the spectrum it was overwhelmingly in favour of constant involvement; a close monitoring style of management with a high level of management intervention needed to keep the creative teams on track. This was seen as a risk management exercise because if progress is not closely controlled, there is the risk of the creative team going off and doing something the client does not like.

“We are both control freaks, and our staff will tell you that we don’t let go enough. The best way is to be involved all the time. Don’t give it away and then come back too much later, you must be involved to monitor the creative process. It is micromanaging.”

For productivity it appeared as if constant monitoring and involvement was required to keep everyone on track. Creative people appear to need a lot of attention and they do not appear to mind the constant management vigilance, because it makes them feel noticed and acknowledged.

“The most productive offices I have ever worked in are the ones where the guys do watch you like a hawk. It was not relaxing – you had to be producing all the time.”

“You cannot do this business remotely, it is all the time, on the job. The creative directors need to have their fingers on the pulse all the time.”


In the middle of the spectrum, respondents spoke about the necessity to treat creative people like individuals and respond to their individual needs on a relationship basis.

“The key is identifying the strengths and weaknesses of those individuals. You can’t have a one solution fits all, you have to really know your staff, you have to know which buttons to press, how much flexibility to give. We have a different model for each person. If I was to treat employee A the same as employee B it would be an absolute disaster.”

“You need to acknowledge that creative people are individuals and that they motivate in different ways. They have the hunger and the talent but the chips on their shoulders need to be directed. You have to acknowledge that they are not a machine. They need real close attention”

Table 13 demonstrates the differences in response across the creativity spectrum.

Table 13: Range of Management Techniques

Spectrum	Resp.	Response
Artistic  Technical	1	Environment controlled
	2	Creative people cosseted
	3	Pay close attention
	4	Constant monitoring
	5	Close involvement
	6	
	7	Constant monitoring
	8	
	9	Set a direction and then monitor progress.
	10	Individuals each managed differently
	11	Micromanaging control freaks
	12	Watched like hawk
	13	Designers expected to work independently
	14	Projects delegated

5.9.3.3 Conclusion

Counterintuitively, it appears that the more artistic organisations, rather than hankering after more freedom, actually require more management control, while the more structured organisations have far more freedom from management.

6. Discussion of Results

6.1 Introduction

The purpose of the interviews was to establish how, in practice, creative design companies are overcoming the challenge of focusing the energy of their creative staff simultaneously into both creative and profitable work, ensuring the quality of the designs in terms of innovation and practicality and making certain that the designers work productively and profitably. The literature tended to describe these tendencies as a “paradox”, assuming that it was one or the other- creativity or productivity.

In choosing the creative design professions to interview, it was not immediately obvious that they lay along a spectrum of creativity, ranging from almost pure art to engineering. Plotting them along this spectrum and then analysing the style of management revealed that, depending on where one is on the spectrum, the style of management control is different. Counterintuitively, the more artistic the organisation, the stricter the management intervention required, while the more technical the organisation, the less management intervention is required. This is in almost direct opposition to the prevailing view, which advocates a system of allowing the creative people free reign and locking the managers away (Torr, 2008).

Artistic people appear to actually crave attention and are seemingly poor at organising themselves. Copious amounts of nurturing and cosseting are required to get them to be productive. On the other end of the scale, a certain independence and maturity is required to be able to balance the demands of a more technical career.

Some of the categories investigated did not reveal a range of answers but rather a common thread or an overriding theme. It appears as if there are definite boundaries to managing creative people that should be adhered to, and within these constraints there are other factors that can vary.

The discussion that follows compares the findings from the interviews with the prevailing view in the literature and condenses and compiles the findings in order to extract the management concept and map it against the creativity spectrum.

6.2 Research Question 1 – Creative Personality: Should the creative personality be nurtured and protected from the business realities?

6.2.1 Discussion

The literature took a very indulgent stance towards the creative personality, suggesting that they are a colourful, but inherently unstable, group of people (Feist, 1998). According to the findings of neuroscience, which are more useful and current models of the brain, the functional creative designer is a whole brain thinker. The necessity of coming up with new ideas requires the ability to think divergently, but the ability to test and document this requires convergent thinking. The creative person is required to use both hemispheres simultaneously, finding as many connections as possible, and must be able to regulate the activity of their frontal lobe to ensure that they can defocus to come up with an idea and then rapidly refocus in order to manifest it (Cropley, 2006).

This is hugely cognitively demanding and uses most of the brain's resources, leaving little facility for mundane and boring tasks that require the use of only one small area of the brain at a time. The challenge for managers is how to harness this considerable ability in the service of the firm.

The interviews revealed three conflicting theories as to how this should be achieved. Firstly, creative people should not be involved in the non-creative work of the practice - neither the technical aspects of the job at hand nor the administrative or business part. This is a distraction from the work that they have been hired to do and is not an effective use of their abilities.

The literature warns against this practice, suggesting that it makes creative people vulnerable because they become dependent on intermediaries who may not understand what design is all about and therefore implement inappropriate strategic or management interventions (Bilton & Leary, 2002).

The second model that emerged from the interviews suggested that even if creative people are not directly involved in technical or practical matters, they should at least have sight of the business objectives or have a watching brief over technical matters.

This was upheld by Raelin (1989), who advocated the splitting of operational, administrative and strategic control so that the administrative tasks of the creative people are limited to 30% of their time. However, this still firmly puts the management of the company into non-creative hands.

Four of the companies visited had adopted the third model, which is that the organisation is run by the creative people. The creative people are not siloed but are fully involved in all practice matters. There is the potential for this to go horribly wrong as seen in two of the four examples, as people qualified in design or artistic fields seldom have the temperament, training or expertise, or even the interest, to think about business matters in an appropriate way. However, when the right type of people are involved the results are spectacular, as seen in the two remaining companies.

Seidel (2009) came the closest to defining the right sort of person, who has creative expertise and understands creative work, and can therefore provide the necessary resources to build an organisational culture that is supportive of creative work. They can also structure and plan creative work and communicate effectively about ideas and concepts. They are additionally a stakeholder in the company, which ensures that all the above are done with a strategic vision.

The second theme, Cognitive Style, explores what particular traits need to be nurtured and which need to be discouraged. The literature offered further insights. Convergent thinkers are more predictable to manage, as this trait embodies, logical thinking, speed and accuracy, but divergent thinkers have a tendency to the unconventional, excitement, risk and surprise which makes them stressful to have around if you are trying to manage a business (Cropley, 2006).

In the course of their design work, creative people are required to access both forms of thinking continually, the divergent and insightful part in order to come up with the idea, and the convergent and practical part in order to translate it into a workable design. They are equally capable of both forms of thought, possibly preferring to use them in tandem, looking for both the art and the science in any given situation, which is why they could possibly come into conflict with a purely convergent way of thinking.

Figure 5 demonstrates the range of answers to Research Question 1 on the spectrum. The more technical the task, the further to the right and the more artistic temperaments are over to the left.

Figure 5: Creative Personality

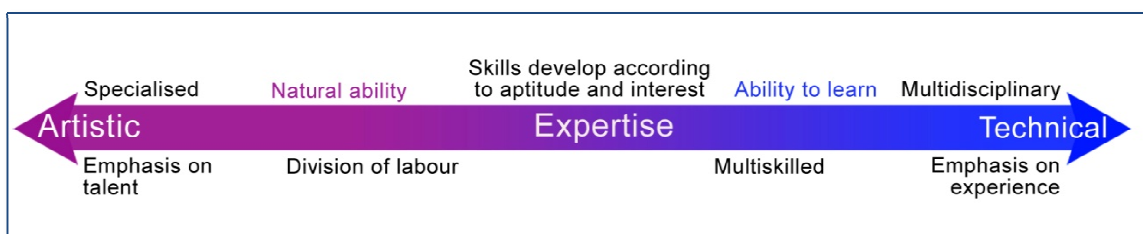


Amabile’s Component Model of Creativity (1997) linked the creative skills mentioned above with motivation and expertise. Expertise is, according to Amabile (2009), a combination of experience, talent and training, and comprises the set of skills that a person can call upon in their execution of their work. The academic debate centres on the argument that these skills are either “domain specific” and cannot be transcended, or that creative people can adopt any set of skills because with creativity comes huge adaptability and ability to learn.

The reality is that with artistry and talent training is required, and this has to be quite specific in order to achieve mastery. The members of the orchestra were not able to multi-task between orchestra sections; the brass players could not fill in for the strings players in a crisis. However at the technical and functional end of the spectrum the engineers were required to be able to do drawings, calculations, fee proposals, reports, site inspections, and client liaisons. Over time they developed these skill sets, whether or not they had any original affinity or training for them.

The creative organisations visited were as equally divided as the literature, but with a definite distribution along the creativity spectrum, as demonstrated in Figure 6 with talent at the one end and experience at the other.

Figure 6 – Expertise



6.2.2 Conclusion

The conclusion is that if you treat creative people as delicate, unstable creatures that need to be cosseted and protected from the brutal realities of the business world, you risk alienating them and encouraging unproductive diva-like behaviour. If you unleash their creative intelligence on the business itself you stand a chance of developing something really special but also of introducing too much distraction and eroding creative potential. However you will always come up against the limitations of cognitive style and expertise.

The capabilities of each side of the spectrum need to be acknowledged in order to maximise the potential of each type of employee.

6.3 Research Question 2 – Design Process: Is there a systematic approach to design that can be used to promote productivity or does the analysis of the design process stifle creativity?

6.3.1 Discussion

Between them, the respondents in the interviews identified the following creative processes that they liked to follow:

Discovery time – understanding the problem, doing research and laying a foundation for the design work.

Mulling over time – time to come to grips with the problem, variously called ‘planting a seed’, ‘time in the crucible’ and ‘sleeping on it overnight’.

Logical pathway – a series of steps and decisions that the designer goes through in order to build the logic of the design and explain it to the client

AND / OR

The magic – described as the ‘Aha’ moment by one respondent and ‘intuition’ by another. However, the respondents that believe in this magic said that if the magic was proving elusive, instead of trying to force it they always go back to the basics and try another path, or delve a little further into the discovery process for a deeper insight that could prove more useful.

Testing - At some point during their interviews, all respondents spoke about this iterative nature of design work - testing to see if it works and if not, taking a few steps back and trying again.

These processes described during the interviews correspond to the model proposed by Wallas in 1926: Preparation, incubation, illumination and verification. However, those believers in the “logical pathway” as opposed to “the magic” could argue, as do Bilton and Leary (2002), that waiting for the magic is unreliable and the design concept has to be built upon firmer foundations if it is to be taken seriously. This is why the respondents put a lot of emphasis on the preparation and discovery stage because this is where the ideas are generated.

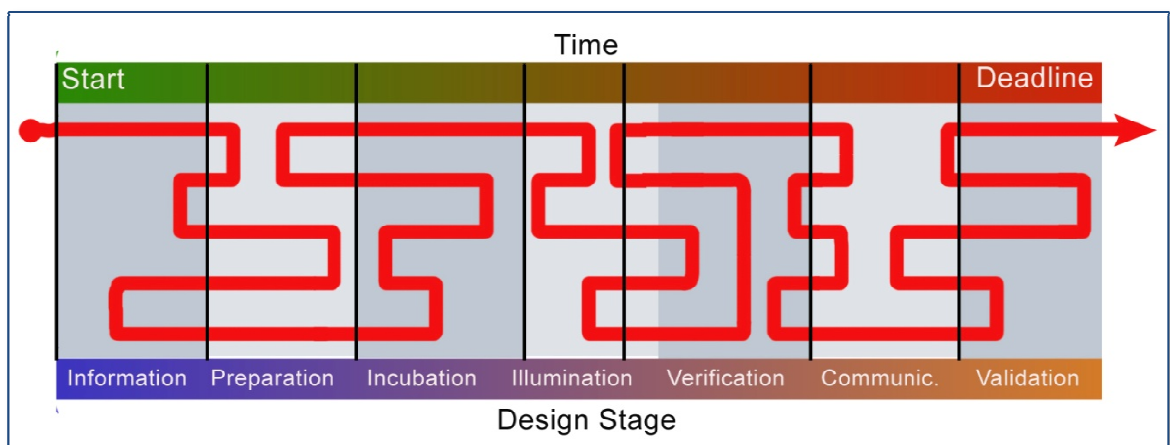
The other stages revealed by the literature review, information, communication and validation talk to the iterative nature of the creative process that the interviews revealed (Herring et al., 2009). The design has to go back and forth so that it can be evaluated, not only by the client to see if he likes the design, but by others in the company for practicality and technical accuracy.

This pattern of the design process was constant across the professions. Therefore the nature of the creative process is a parameter for design rather than a range. The nature of the design process is illustrated in Figure 7 below.

Both Torr (2008) and Amabile (1998) stated that deadlines and programmes kill creativity and shut down the creative process, however most of those interviewed used time management as a tool to ensure that their creative people were being productive.

According to those interviewed, the design process will take up the time allowed and then a bit more than that. Because of the iterative nature of design work, every time it goes through an iteration it gets a bit better; a bit more polished and refined. All designers take immense pride in their work and want it to be the best that it can possibly be, therefore they will keep working, even if the point at which they are happy is long after the deadline has come and gone. This is why the more artistically aligned creative practices sometimes have “traffic managers” to ensure that the creative people don’t forget about the programme or the deadline. Other companies have least a structured programme and deliverables set to work to, to ensure that the iterations are kept under control.

Figure 7: The Creative Process



Without the discipline of a structured time programme, the profits of a project are eroded, therefore in order to drive productivity each process has to be given a reasonable amount of time and then shut down so that it can move onto the next. A strictly structured programme acts as the on/off switch and does not put a stop to creativity, merely the inevitable trap of unsupervised divergent attention. Amabile's (1998) now outdated maze did not seem to fit any of the descriptions; that kind of unstructured wandering about was definitely seen as counterproductive.

Zampetakis et al. (2010) referred to this as "metacognition", and agreed that those who are able to manage their mental time are able to turn the creativity on as required. He did, however, go on to argue that the creative people themselves should be in charge of these deadlines, and Amabile also suggested that the euphemism of "strategic target" should be used to cushion the impact on creativity.

The research revealed no such thing. The experienced and effective designers were particularly hard on themselves when it came to time restrictions and even tougher on those reporting to them. The distinct message that came out of the interviews was that any loosening of the time constraints resulted only in squandered time, not better ideas.

How time was managed in each organisation ranged from scheduled rehearsals and "traffic management" on the one end, to self-managed on the other. It appears as if the more convergent thinkers are better able to manage their time than the divergent thinkers as depicted in figure 8.

Figure 8: Time Management Capabilities



Time constraints are a great promoter of both creativity and productivity, but the nature of the person being managed has to be understood in order to apply time management that is appropriate to their way of working. Forcing a programme on someone who has no inclination to follow it is as counterproductive as micromanaging someone who prefers to work independently.

The generation of the idea is, according to all those interviewed, a solitary activity, but as much input as possible is required before that in order to set the scene for that idea. Testing and developing the idea once it comes out of the incubation and illumination stages is seen as absolutely necessary for the quality of the design.

Brainstorming is an idea generation technique that has been much discredited since its emergence in the late 1950s. According to Torr (2008), brainstorming works best when you do not do it alone. He argued that “[It is only useful] when individuals generate ideas in the absence of a group and then subject those ideas to exploration and evaluation in a group setting” (Nickerson, 1999)

Herring et al. (2009) defined collaboration as “sitting down and talking about it, seeing what seems to resonate, creating a loose construction of ideas in an informal setting”. (p.7). This is the most accurate reflection of what emerged in the interviews. Rather than viewing collaboration as a separate activity it should be tacked into the creative process as follows:

Table 14: Designing Collaboratively or Individually per Design Stage

Design Stage	Design Style
Information	Collaborative
Preparation	Collaborative
Incubation	Individual
Illumination	Individual
Verification	Collaborative
Communication	Individual
Validation	Collaborative

Rather than collaboration being seen as a way to generate more or better ideas, it should be used as part of the structured creative process and programmed into the time frame mentioned above. It is part of the iterative loop, the design has to touch base a certain amount of times before it can be considered robust enough to go out on its own.

6.3.2 Conclusion

Waiting around for “the magic” to happen is not seen as particularly productive. In a commercial environment the designers have learnt techniques to come up with ideas that are more reliable. It is therefore the role of the manager in a creative environment to not only understand the creative process, but facilitate it. Therefore a close understanding of the process is required so that the deadlines can be managed and the various stages and iterations can be accommodated.

Understanding how the design process works is also essential when putting teams together, as it is important not to force collaboration at inappropriate stages as this could shut down the creative process. Conversely, when ideas are ready to be discussed it is important to support that process to ensure the quality and relevance of the work being produced.

6.4 Research Question 3 - Motivation: What sort of rewards do creative designers require in order to produce their most creative work?

6.4.1 Discussion

The findings for motivation corresponded to what was discussed in the literature review. Bilton and Leary (2002) suggested that the financial rewards for creative work were never going to be sufficient to motivate creative people. Several of the respondents mentioned that money in the creative industries was notoriously tight and that this form of motivation was very simply not available to use. It appears, therefore, as if creative people have found other ways to motivate themselves that are less transient than profit.

Amabile (2012) spoke about intrinsic and extrinsic motivators. During the interviews three forms of intrinsic motivation emerged - the first was the inherent enjoyment and satisfaction of doing creative work, the second was working on interesting and challenging projects and the third was the opportunity to make a contribution.

It could be argued that the first intrinsic factor is difficult to influence, as loving creative work is a personality trait and a personal preference, however it emerged that if the leaders of the organisation can ascribe meaning to the work that their staff are doing then it is easy for them to feel passionate about it. For instance, the director of the ballet company had convinced his dancers that the work they do is important for the well-being of the nation. He called them "ballet ambassadors" and the collaboration they do with overseas choreographers is to them, a form of foreign relations.

The members of the orchestra performed for many months without any remuneration at all. Their motivation was their fight for the orchestra's very existence because without an opportunity to perform they are not musicians. This need to protect their very identity motivated them through exceptionally difficult times.

In the same manner, the creative design people interviewed revealed that the opportunity to work on exciting projects was a privilege because it gave them an opportunity to show what they could do. Several of the people interviewed indicated that they try very hard to secure work that is inspirational and remarkable because it keeps their creative staff engaged.

This links to the important extrinsic factor which is recognition. Although Amabile (2012) argued that extrinsic factors are tricky because they can de-motivate just as much as they motivate, it appears as if praise for successful work, either in the form of awards or simply congratulations, was enormously motivating. Many of those interviewed talked about “having their idea chosen” as being the ultimate morale booster. The fact that it is their idea that has moved the campaign or the project forward gives them a sense that they have contributed and made a difference. Feeling valuable is both an intrinsic and an extrinsic motivator, as it gives meaning to the task at hand and generates positive external feedback (Prabhu, Sutton & Sauser, 2008).

Only the engineering firm spoke at length about money, but the respondents whose organisations were more to the right of the spectrum frequently spoke about their value and their contribution to their company, while those on the left were more concerned about their role in generating ideas. This disparity is demonstrated in figure 9 below:

Figure 9: Motivational Factors



However, it is important to note that if a creative designer’s motivation is linked to personal satisfaction and praise of their peers, neither of these factors leads to profitability or productivity. Client satisfaction was seldom mentioned as a motivator, it was more the recognition of their peers and company superiors that mattered the most. The motivation did not lie in meeting a deadline or making a profit, but rather in winning an award, doing something meaningful, or receiving praise and recognition. This dislocation between motivators and profit and productivity is a possible indicator of why creative firms seldom have sufficient money to use as a motivator.

6.4.2 Conclusion

The rewards for creative people appear to be in creation; they need to see the physical outcome of their efforts in order to ascribe value to the work they do. It is therefore important to ensure that the work that creative people do progresses to a meaningful conclusion and they are not merely going around in circles. Just as performance artists need to perform professionals such as architects need to see their work built. The biggest motivator for creative designers is to see their design make it into the world, as then they can really say that they have contributed.

The challenge for management is to make sure that their creative design staff is not stuck in a metaphorical rehearsal. The opportunity to perform gives them an opportunity to be a virtuoso.

6.5 Research Question 4 – Organisational context: What sort of organisational design and structure is most conducive to the simultaneous promotion of creativity and productivity?

6.5.1 Discussion

The literature regarding professionals and knowledge workers suggests that organisational structure is key to ensuring their engagement and performance. The integrated model indicated for the management of professionals by Byrne et al. (2009) suggested a flat organisational structure with the leader of the group being conversant with the design process and able to provide the resources and support required by the creative people. The fact that the leader is required to be a designer himself implies a hands-on approach suited only to the studio model that emerged in the interviews.

In the studio model the creative designers run the organisations and therefore ensure that they are set up to support the creative process. The managers and the designers are not separated and therefore everybody is integrated into the organisation. However, this was the exception rather than the rule.

The Design Management Model, in which the organisation is split into different teams and managed by a project co-ordinator, is also popular in professional design firms. The danger of this model is that designers risk getting siloed. Byrne et al. (2009) warned against isolating knowledge workers from the ultimate outcome of their work, and Seidel (2011) suggested that they should be allowed to manage themselves as they have a better understanding of the tasks that they are required to perform.

The Agency Structure as favoured by the advertising and branding houses was considered, even by the senior staff, to be rather awkward and outdated. However, because of the speed of the projects in these industries, it was not seen as practical for the creative people to be dealing with anything other than the design work so the role of the intermediaries becomes important.

The fixed status and structure of a strict hierarchy only appeared to work in the two performance firms where people were happy to operate according to their position in the pyramid. The organisations with a greater tendency towards pure art had a far more autocratic structure than the companies whose focus was more on functionality, where the organisational structure tended to be flatter. The orchestra and the ballet company were very much dominated by one person, the architecture firms and the interior design firms were fairly democratic, but the engineering firm was very much egalitarian.

This is illustrated in figure 10 below:

Figure 10: Organisational Structure



6.5.2 Conclusion

It appears as if the less structured the creative process, the more structured the organisation has to be and conversely, the more structured the creative process, the more egalitarian the management can afford to be.

6.6 Research Question 4a - Psycho-social environment: What company culture and values would promote both creativity and productivity simultaneously?

6.6.1 Discussion

In the interviews it became evident that the design companies define themselves as creative, being led by a passion for what they do and the pursuit of the “Big Idea”. Interestingly, only the engineering firm defined their culture as efficient, profitable and productive.

Puccio and Cabra (2010) identified the following factors that promote an organisational culture of creativity:

Innovation as part of the company strategy: In the interviews this emerged as important in the more aggressive companies, where it manifests in the ability to challenge and inform design thinking. Chasing awards was also seen as a good mechanism to ensure that this happens. However, although most of the companies spoke about their prioritisation of creativity, only two said that innovation was their chosen strategy.

Flexible and co-operative team structure: This did not emerge in the interviews as much as having a team where each member provides depth and richness to the project.

Support mechanisms: Puccio and Cabra (2010) mentioned hard resources such as technical support, and soft resources in the form of idea support. However, physical resources were never mentioned in any of the interviews. What was rather required was support for the fact that they were having ideas in the first place – a culture where ideas are important and conceptual thinking is encouraged, where there is permission to have ideas and there is a need for the ideas to be robust and fresh.

Tolerance of failure: Puccio and Cabra (2010) spoke about the need to be able to take creative risks and the acceptance that sometimes this is going to fail. However tolerance of failure was not mentioned in any of the interviews. The bigger fear seemed to be the inability to come up with an idea at all, good or bad, or not to have your idea taken seriously.

The fact that you can have an idea and that it will not be used was not seen as a failure, but rather as a filtering process. The designers interviewed appeared to understand that some ideas are good and some are bad, but it is equally important to put them all out there because otherwise you will never know what works.

Continuous learning: This was defined by Puccio and Cabra as ongoing rigorous debate. The interviews revealed that instead of talking about design the continuous learning was actually in project completion, where the design was taken through to the end stages and the designer could see what worked and what did not. It was therefore seen as critically important that the designers had sight of their end product. It is also important that the well from which ideas can be drawn is as deep and wide and possible, so this type of experiential learning is very important.

Unfortunately Puccia and Cabra's (2010) model for creative culture did not seem to have much relevance for the design companies interviewed. Those interviewed were mainly concerned about either the quality of the ideas being generated or how creativity was being integrated into other areas of the organisation. Those closer to the artistic side of the spectrum preferred their creative staff to live only in the world of ideas and those closer to the technical side requiring their staff to be more a part of the real world. Another common concern was the control over the ideas, with those on the left having their creative thoughts guided by a creative director and those on the right being required to think independently.

Figure 11: Creative Culture



In the category of Psychosocial Environment the difference in the range of behaviours across the creativity spectrum, as demonstrated in Figure 12, was important, but subtle. On the one hand, artistic people appear to need security and nurturing, while on the other end of the spectrum it was articulated as a different form of care. Rather than being protected, they preferred to be empowered.

Figure 12: Psycho Social Environment



This category is possibly the most difficult one to get right, and the easiest to get wrong, as the opposite of nurturing is not neglect, but freedom. Freedom in this case means being trusted sufficiently to get on with things and get them right as opposed to being able to do whatever one wants.

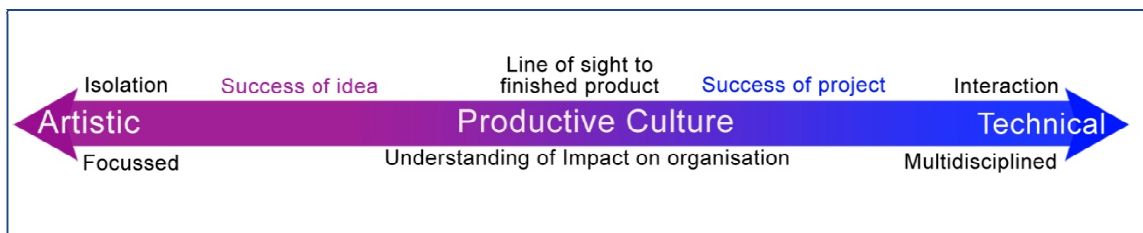
The other side of the argument is productive culture. The study of the literature revealed that the output of a design firm is very difficult to measure. The fact that drawings are produced does not necessarily mean that the content of those drawings is correct. The fact that an advertising campaign makes it to print does not mean that it will be successful and sell more products. The product of a design is intellectual and counting the pieces of paper produced does not take that into account. Only the engineers came up with a physical output that they could measure - a certain prescribed number of drawings, delivered on time, with all the correct information shown.

Nachum (1999) came to the conclusion that productivity in a services industry is unquantifiable, but Sahay (2005) suggested that rather than focus on the output of individuals, one should instead pay attention to the overall results of the organisation, such as profitability, value for the customer and quality of service. Having sight of these outcomes was mentioned in some of the interviews as promoting productivity, however this ambition is not always possible if creative people are protected from business realities and are not required to participate in practice matters.

Although some of the creative design companies made a passing reference to profitability and the impact on the client, none of them, not even the engineers, identified the experience of the customer as a measure of productivity. This is of some concern as it appears as if the value of the creativity is perceived as mainly internal and the concerns are introspective and not client related.

Oddly enough two respondents mentioned smoke - one to say that if creative people cannot see or appreciate their contribution to the firm they will be “happy to drift around in a cloud of pink smoke”, while the other said that they do not pay their creative people to “sit and smoke it up on the roof”. This implies that given half a chance, creative people would do just that. These differences in the range of productivity measures are illustrated in figure 13.

Figure 13: Productive Culture



The interviews were far more helpful in answering the productivity question than the literature. In Figure 13 we can see that the more artistic temperaments require an almost monastic isolation but the technical temperaments thrive in a demanding environment where they are fully engaged.

6.6.2 Conclusion

The really effective managers transcended ordinary productivity interventions and used more subtle mechanisms to ensure that their creative staff was working full tilt all the time. Respect for ideas and how they are created; integrating creativity into all aspects of the organisation; and knowing exactly what environment will be conducive to the well being of creative people were the levers for creativity. Having sight of the whole project, where it is going and your full impact on the final product; and a good working understanding of your influence on the well-being of the firm, were greater predictors of productivity and drivers of profitability than interventions such as a structured working environment.

6.7 Research Question 4b - Physical Work Environment: What configuration of physical space would work to promote both the levels of creativity and productivity among design professionals?

6.7.1 Discussion

The findings regarding physical office space were unanimous - as open plan as possible, clear sight lines across the office, no divisions, and preferably a spectacular view out.

The suggestions from the literature review were not so bold. Puccio and Cabra (2010) suggested that flexibility was the key and that the spaces should be malleable according to what activity was required at each stage of the work. They did however advocate the “hybrid” space, where an area can be used for both individual and collaborative work. Although this particular solution was not mentioned by those interviewed, it was more the absence of boundaries rather than the delineation of space that was considered effective.

Innovation Labs (Magadley & Birdi, 2009) - where the creative team is transported offsite in order to remove them from distractions - had no equivalent in the design firms. The idea was to make the office space itself conducive to idea generation. In a crunch, some respondents mentioned locking themselves in a boardroom, but drawing on the energy of the office around them was seen as more effective. The challenge was not necessarily the layout of the offices but how to direct the energy so that it was conducive to design.

Martens (2011) indicated a concern about the noise and disruptions of the open plan office, suggesting that interruptions disturb the flow of creative thinking. In the offices visited this was achieved by ensuring that the drawing office as a whole was separated from the noisy reception, lunch, finance and print function, however within that space it was all open so that the interactions were purely project related and therefore counted as collaboration and not disruptions.

Physically isolating the creative department was unpopular. Those firms who defined themselves by their creativity felt that design needed to be the front and centre activity in the firm and almost “on show”. As previously discussed, it was seen as necessary for the design team to have sight of the whole production process so isolating them was seen as unproductive, but the open plan office where they were surrounded by every process was seen as a physical interpretation of that concept. This transparent space also corresponded to the studio model of organisational structure; where there is little hierarchy and authority distance, there is little demarcation of space.

Generally only the very senior people were isolated in their own offices. Most of them gave slightly embarrassed justifications as to why they needed their own offices at all. One had a parrot that needed to be contained as its squawk was alarming, others made confidential client information the reason, but most told the researcher that they do not spend much time in their offices anyway, preferring to be around the energy in the studios or drawing offices.

6.7.2 Conclusion

In general, the question of physical space was seen as an interesting, but not crucial, factor in creativity. Only the architects and interior designers felt that it was critical. Many of the other professions interviewed felt that creativity should be powerful enough to occur anywhere and that a pleasant workable space could help creativity but it would be very hard for the environment to hinder it.

6.8 Research Question 5 - Management and Leadership Style: What is the best management style for the Creative Professionals that bring out the best creatively and productively?

6.8.1 Discussion

The design brief can come from two sources - the client or the manager of creative people who is giving work instructions. Either way the same principles apply; the person giving the design brief is dealing with design professionals. Drucker's (1999) six factors that determine productivity in knowledge workers did not emerge during the discussion regarding productivity in a design environment, however looking at these factors in the light of giving instructions to designers they begin to make sense and correspond to the findings from the interviews relating to client involvement.

Drucker (2013) suggested that knowledge workers must identify the task themselves. Those interviewed found it immensely frustrating to be told how to do their jobs by interfering clients. They argued that it is important to present the problem that needs solving and then stand back and allow the designers to decide how it needs to be done.

Drucker (2013) said that knowledge workers need to have autonomy; client interference is neither needed nor welcomed. However, while interference is a problem, it became evident in the interviews that design companies considered client involvement as a way to minimise design risk, which is the possibility that the client will not like the outcome when it is presented. This can be avoided by inviting the client along on the design journey. Most of the respondents said they check in with their clients every step of the way to ensure that they have a measure of client satisfaction as they go.

The concept of the designer having complete autonomy, which is suggested by much of the literature, is a fanciful one. The research revealed that what is more likely to happen is that the designer who demands complete autonomy until the design is complete is very simply going to end up doing it all again, at his own expense, when it turns out the client does not like the route they have taken.

Drucker (2013) stated that innovation is an important part of knowledge work, therefore if a prescribed solution is required then a professional design firm is the incorrect place to find it. Without innovation design work is just drudgery and both creativity and productivity is reduced.

Drucker (2013) also proposes that knowledge work requires continuous learning and teaching. This is more relevant to the internal management of the creative team than the concern of the client. However, if rephrased to say that design requires continuous exploration and discovery, then clients will be in a better position to understand that the creative process evolves rather than springs forth fully formed on the day of presentation.

All the above was confirmed by Amabile (2002), who said, "People will be more creative if you give them the freedom to decide how to climb a particular mountain". She did qualify this by going on to say that "You needn't let them choose which mountain to climb". This implies that clear direction is necessary, but not instruction.

The findings in the category of management and leadership style contradicted the literature on this topic, which suggested that professional knowledge workers should be granted autonomy to decide how to do things themselves and then be left alone to do it. Segal Horn (1987) described this as "loose control of day to day working with high degrees of self supervision".

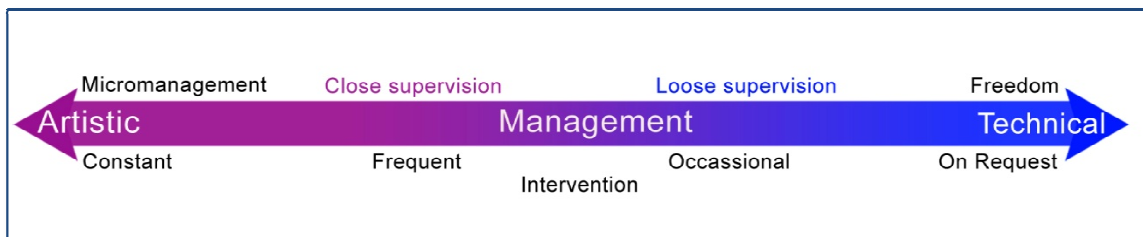
However, Segal Horn was talking about IT design professionals who fall to the right of the creativity spectrum. His generalisation is not useful when dealing with the introduction of art and form into the equation. In practice, it appears that the opposite occurs. Many of the managers freely admitted to being "control freaks" and "micromanaging."

However, those being supervised in this way did not complain about it. They did not appear to find it restrictive or claustrophobic; in fact they appeared to welcome or invite the attention. Relationships between designers and their supervisors were close, with managers striving for a high degree of personal knowledge about their reports in order to be able to respond to them in the most individually appropriate ways.

Seidel (2009) introduced a model for the manager of design professionals which he called “creative supervision”. He suggested two strategies. Firstly, the internal breakdown, where the creative process is understood so that resources, budget, time and assistance can be allocated, and internal review, when the creative team “check in” to see if the client’s brief is being met, if their technical details stand up to scrutiny and if they are generally on target for all other indicators.

This is a particularly useful model to demonstrate the differences across the Creativity Spectrum, as the detail and frequency with which these two events occur differs from one end to the other as demonstrated in Figure 14.

Figure 14: Management Style



6.8.2 Conclusion

The contradiction between the evidence and the interviews indicates that there is a variety of appropriate responses to this question. On the artistic side of the spectrum, creative people expect large amounts of management intervention but on the more technical side creative people expect to be left to their own devices.

7. Conclusion

From the results of the previous two chapters it becomes evident that there is much conflicting advice on how to manage creative people. It is also apparent that there is a range of behaviours that can be considered useful, depending on what sort of organisation is under consideration. In order to establish what sort of management style is most appropriate it becomes necessary to know where the organisation is on the creativity spectrum and analyse what mechanisms are most appropriate for that position.

7.1 Theory Formulation

The theory of the Creativity Spectrum emerged, as required in an inductive approach, from the observations made during the interviews. Once these observations had been sorted according to the themes of the research and the categories of analysis, they were contrasted and compared to identify common and conflicting themes. These were documented in Chapter 5 and Appendix 3. These themes were then “delimited” into the abstract concepts shown on the creativity spectrum in Chapter 6 (Glaser & Strauss, 2009; Henning, 2004).

When all the factors for managing creative people are assembled together as in Figure 15, a certain continuity in management style becomes evident. This developed into a model for creative organisational alignment as described below.

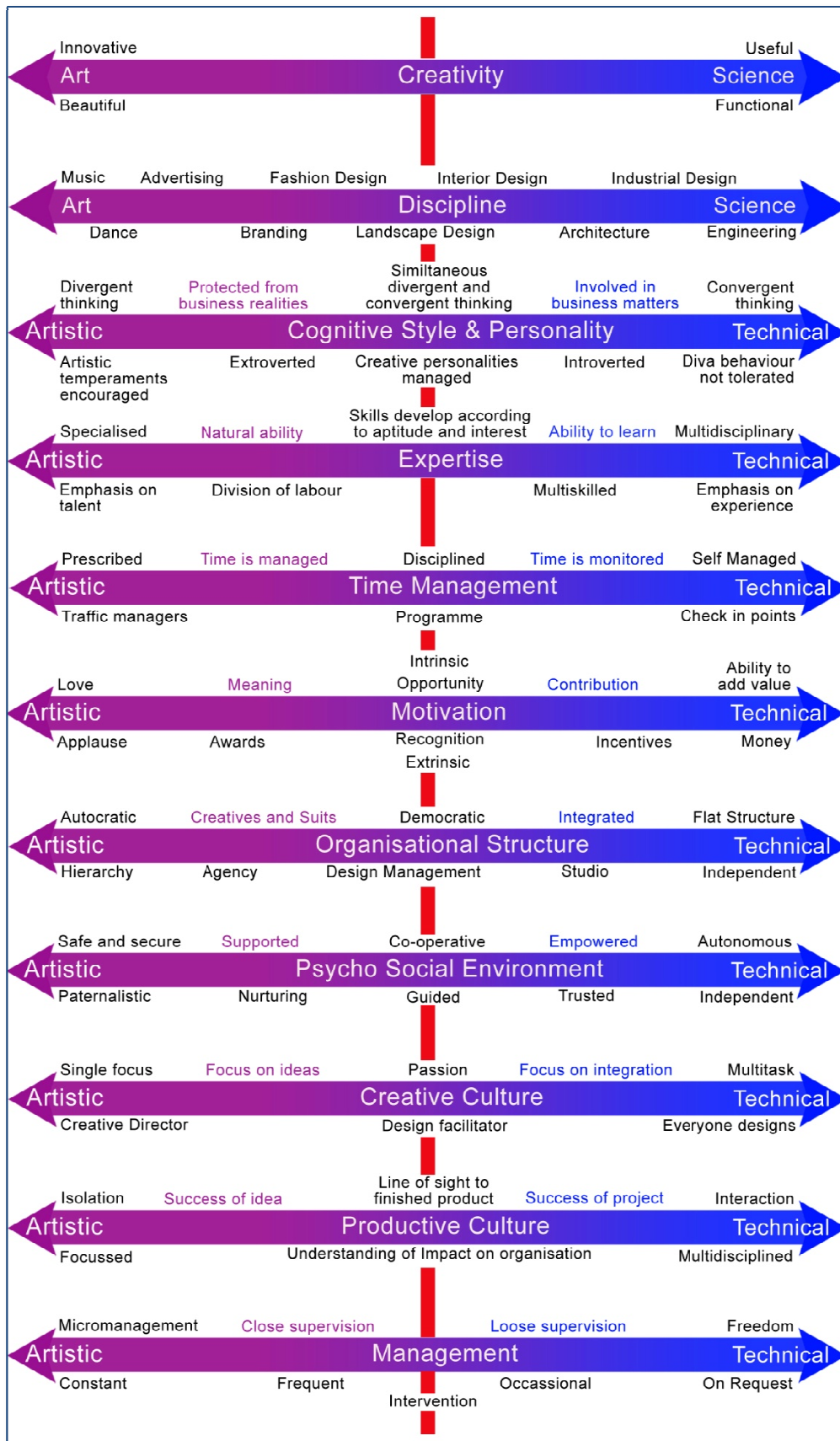
7.2 Introduction to the Model

In Figure 15, each figure depicting the range of behaviours across the creativity spectrum have been stacked over each other and aligned. The three control organisations are to be found on the extremes of the diagram, with the orchestra and ballet company on the left and the purely functional engineering practice on the right. The range of behaviours as they appear in the previous chapter is retained, however for graphic purposes they have been simplified to the three main concepts on each horizontal.

The red line down the middle indicates where the academic definition of creativity lies – at the intersection between what is innovative and what is useful, what is beautiful and what is functional; the meeting point of art and science. However this merely represents a point on a spectrum and does not represent the truth on the ground. All organisations that are involved in design vary in how they go about approaching their work and their practice, depending on the nature their work, the preference of the management team, or the way the organisation has evolved over time. Being close to the centre of the model does not indicate an optimal position - the red line is merely a datum line for discussion.

Only the categories of analysis that demonstrated a variance are shown in Figure 15. The parameters that remained constant, such as the design process, time constraints and the design brief, are not represented here.

7.3 Figure 15: The Creativity Spectrum Model



7.4 Interpreting the Model

In order to understand the model effectively it becomes necessary to choose a position along the vertical and move the red line to the left or right until the indicators on the horizontal bars resonate with the organisation under consideration. This does not necessarily mean that the examples given in the discipline level are an absolute indicator of where an organisation should sit on the spectrum. A company may find itself significantly to the left or right of where the examples explored in this document have been ranked.

The first step to understanding the model would be to pick a point on the creativity spectrum where the organisation perceives itself to be and then work down the model and plot the reality of the management style against each horizontal bar. Ideally the points should be aligned vertically, but in reality they may align themselves along a vertical unrelated to the starting point which means that the organisation needs to adjust their image of themselves. Alternatively they will zigzag across the model, indicating that the management style is not aligned with their creative strategy or the organisation has a crisis of identity, not knowing what sort of creative style they should adopt.

The probability that industrial designers would fall to the right of the central red line, but not as far over as the structural engineers, is high. Conversely, jewellery designers should find themselves quite far to the left of the central red line - further to the left than fashion design because jewellery is less functional than clothing - but still to the right of a sculptor, whose work has no function other than to exist; jewellery still has to stay attached to its wearer.

As a further example, within the industry of fashion design there can still be great variance in the positions they find themselves in. The fashion designers interviewed started out as wedding dress designers and moved later to corporate wear and uniforms. In the initial stages of their enterprise they were far to the left as the emphasis on a wedding dress is on originality and beauty rather than on any great functional requirement. At this stage of their careers the designers relied very much on artistic inspiration. When designing uniforms, however, they moved significantly to the right as their work moved towards the functional and practical.

The next step would be to see where there is the most alignment or on what bar there is the most investment. For instance, the organisation may be very committed to a certain culture, for instance a nurturing management style with high involvement by authority figures that ensure that their creative staff are cosseted and protected. This would be difficult and stressful to change, so the organisation should place their red line so that it falls over this category and work on aligning the other factors to this constant.

In this example, if this organisation was expecting their staff to manage their own time, a disconnect between the company culture and their culture of productivity would become evident. Since company culture is the stronger factor here, they would do well to align their time management processes to the culture by introducing traffic managers so that their time management style corresponds to the need of the staff, which is to have these factors taken care of for them.

In addition, if management were finding that their staff was not sufficiently motivated, they should enquire whether their incentives are aligned to their chosen position on the spectrum. In the above example, if management were trying to motivate their staff with bonuses, they would possibly find that a system of internal recognition awards would be more effective as the staff are looking for psychological, not financial, reinforcement.

On the other end of the spectrum, a firm of engineers who lie on the independent and introverted side of the spectrum would be irritated and frustrated by a protective and closely managed style of management. They would be more productive if told to formulate a work programme themselves and then get on with it, checking in occasionally to pick up their monetary reward.

If there is no one clear factor to which the company is committed it is then necessary to plot their behaviours on each level and establish along which vertical position there is the greatest alignment. Any disconnect between the vertical alignment of the model and real positions on the horizontal bars indicate the parts of the organisation that need attention.

These variances may indicate a problem in the organisation; maybe their management style and behaviour is not in accordance with where they are on the spectrum, in which case they should align their management style to an appropriate position on the spectrum. Alternatively, it could be that they are incorrectly placed on the spectrum and need to modify their position according to what they prefer their management style to be.

They could possibly, if they have the appetite for extensive change management, move their position to where they think they should be strategically. This would mean re-aligning all the factors to correspond to their new position - a stressful and disruptive, but possible necessary, exercise.

Conversely it could mean that an organisation has simply chosen a position on the creativity spectrum that is different to most of the other firms in their industry. This could offer a competitive advantage as they will offer a different style of product or service to the other more conventionally placed firms. One of the architecture firms visited had positioned themselves very much further to the right of the central red line, and in operating differently to other architectural firms which are more centrally placed, had managed to capture a dominant share of their market.

7.5 Recommendations

The symptoms of misalignment between the style of creativity and management are internal organisational stress caused by personality clashes, resistance to change interventions, demotivated staff and a lack of creativity and productivity. In addition the inability to meet deadlines and a low quality of work could also be symptomatic of a lack of internal alignment of the internal office culture.

The model also has implications for Human Resources management. Two of the companies visited had a policy of not employing “design divas”. Both these companies were situated to the right of the spectrum. However, to the left of the spectrum it may be desirable to encourage the artistic temperament as a “personality designer” could be a competitive advantage and selling point. In the performance industries it is essential to have a dynamic soloist, preferably one that can generate publicity and attract an audience. Some companies like to have a marketable “rock star” designer that attract clients through the force of their personality and reputation.

However, if one person is going to be favoured above others, it is pointless pretending that the organisational structure is egalitarian and democratic. It can only cause great unhappiness if those who have been told that they are all equally valued are treated like “stage hands”. If an organisation values its empowered and autonomous company culture, a “diva” who expects special treatment is going to cause internal friction and unproductive unhappiness in the rest of the staff. Management in this case should either shut that kind of behaviour down or dismiss that person and ensure that they do not employ people of that profile again.

Employees would find this model useful if they are battling with understanding an office culture or struggling to fit into an organisation. Instead of fighting against the prevailing system they may find it less stressful to adapt their working methods to suit the creative culture of the firm and moderate their behaviour to allow themselves to be managed in an appropriate way.

Clients who are struggling to communicate effectively with their creative teams would benefit from establishing where their chosen consultants are on the spectrum. Far to the left encourages client participation but further to the right, their close involvement will be seen as interference and is going to damage rather than improve performance.

Managers would benefit from comparing their management style to the working style of their reports and aligning their own techniques to what their staff requires of them. However if the creative energy is lacking or the work methods are unprofitable, it may be the staff that have to be re-aligned.

7.6 Problems of the Extreme

The most creative place for an organisation to be is in the middle as this is where the right amount of collaboration and independence occurs. Too far to the left and the organisation wanders into the realm of art and too far to the right and grey functionality takes over.

Although it is up to an organisation to decide where it wants to be on the spectrum, there are certain design professions that are naturally more suited to certain positions. The performing arts need to be far over to the left because the performers need to comply with an overall artistic vision that is determined by one person. Independent thought and individual interpretation is not required from the members of the corps de ballet or the string section of an orchestra, but conformity is. The hierarchical nature of firms at this end of the spectrum ensures that only one or two people are getting to be creative, the rest are submitting to an artistic director. Independent thought is discouraged and shut down. Artistry at the extreme left is high, but organisational innovation is low; individual innovation is permitted to only a few.

On the other extreme of the spectrum where high levels of individual responsibility are required, independent thought and autonomous behaviour is high, but control is very low. The risk of designers going off on an inappropriate tangent is substantial as their ideas are unmediated by collaboration. Where everyone is permitted to have multiple ideas of equal importance the problem becomes one of mediating and filtering. The common complaint at this extreme is that it is like “herding cats”.

The red line down the centre not only represents the intersection between innovation and functionality, but also between independence and domination.

7.7 Limitations

It only became apparent after the data had been processed that there was too big a gap between the architectural firms and the engineering firm, and this space should have been filled with either an industrial design firm or commercial product designers. This occurred because the architects interviewed saw themselves more to the left of the creativity spectrum than anticipated.

This research makes no suggestions as to how to bring about the changes necessary to achieve the required alignment. The model is only a diagnosis tool and not a mechanism for organisational change.

The model is also not a suggestion for strategy decisions. There are no recommendations, only examples, as to where a particular type of firm should position itself on the spectrum. With the exception of the three architectural firms, the sample only contained one example of each of the other disciplines. The research therefore does not explore where each discipline should ideally be on the spectrum and what the implications would be if they were too far off their recommended position.

Although the concept of client involvement was discussed, client satisfaction was not explored. The creative organisations tended to be very introspective and did not equate the concept of client satisfaction with productivity or success. The creative organisations' attitudes to client satisfaction would have made an interesting category of analysis.

7.8 Future Research Ideas

A recommendation to take this research further would be to apply the model to a wider range of creative professions and not limit it to design organisations. The wealth of insight provided by the orchestra and ballet company highlighted issues in the design companies that would not have been evident without these two organisations as controls. By expanding the research to other creative professions, such as the writing of IT code, film production and journalism, much deeper insight into the nature of creative work could be established.

Conversely it would be equally useful to choose just one discipline and investigate a range of management styles within that one discipline and establish which management style is best suited in terms of profitability and quality of design for that particular profession. For instance, a study of 20 architectural firms would establish what the best way to manage an architectural firm would be, based on any chosen metric such as profitability, awards or staff satisfaction.

Alternatively, the model could be adapted to a different field other than creativity where a range of behaviours is experienced, for instance sport management, where optimum athletic performance occurs at the intersection between individual performance and teamwork. There is the possibility that categories such as Psycho Social Environment are different for team sports than for individual sports. Teams may require a secure and nurturing style of management but golfers would be irritated unless they can retain their independence.

One of the concerns that emerged during the interviews was how difficult it is to put a value on creative work. The functional side of the work attracts some commercial value but the artistic side appears to be taken for granted and no extra value appears to be ascribed to a product that is more beautiful than another that does the same thing. It would be an interesting study to establish if this is indeed true and what the public perception of the value of creativity really is.

7.9 Conclusion

It is unhelpful to lump all creative people into one basket and then complain that they are too difficult to manage. The creative professions comprise a wide range which differs from purely artistic people to those involved in pure problem solving; what works for one company does not work for another.

Should there be an overriding factor on which the integrity of the firms depend, all other factors should be aligned to it so that there is consistency across the organisation. Misalignment causes friction in the creative environment which detracts from the work at hand and affects productivity. In order to manage creative people effectively, for both productivity and creativity it is necessary to align the productivity interventions to the chosen strategic creative position of the company.

In the companies visited it was those with the strongest sense of self identity that were faring the best. Having an accurate perception of who you are and what you want to be is the best indicator of how integrated productivity and creativity are. Those companies with conflicting creative and management styles were the ones experiencing the most difficulty in juggling creativity and productivity. Aligning these two factors takes a lot of honest introspection. The purpose of this research is to facilitate this self examination.

This research should assist future researchers by describing and identifying the intricate and nuanced nature of creative work and by showing that it is impractical to make assumptions about creative people that do not take this complexity into account. Creative people are inextricably defined by the type of work that they do and in looking at it in this way they cease to be mysterious and impossible and appear to be marvellously gifted instead.

There is only a paradox between nurturing creativity and promoting productivity if the nature of creative design and creative designers is not understood. Without this understanding there is no alignment between the techniques required to nurture creativity and promote productivity and the two forces compete destructively. In order to promote an environment in which creativity and productivity re-enforce each other, it is necessary to adapt management techniques appropriate to the nature of the work being done, the people doing it and their preferred working methods.

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9. Appendices

9.1 Appendix 1: List of Interviews

Table 15: List of Interviews

	Person	Company
1	Dirk Badenhorst	SA Mzansi Ballet Theatre
2	Duncan Gibbon	Johannesburg Philharmonic Orchestra
3	John Hunt	TBWA Hunt Lascaris
4	Rosa Leigh	TBWA Hunt Lascaris
5	Graeme Leigh	HKLM
6	Kara Van Der Esterhuyse	HKLM
7	Liesle Duvenage	HKLM
8	Jenna Clifford	Jenna Clifford
9	Marc Glass	Marc and Michael
10	Trevor Julius	DSGN
11	Mark Young	Landmark Studios
12	Julia Williams	Imprint, Previously of Nicholas Plewman
13	Graham Holtshausen	Dakota Design
14	Antony Orelowitz	Paragon
15	John Truter	WSP

The recording device failed during the interview with Jenna Clifford so that interview was not used.

9.2 Appendix 2 - Interview Guide

1. Creative Personality

- How do you think the Creative Ego manifests itself in your environment? What are the positives and negatives of dealing with Creative Personalities?
- Do you feel that the Creative Personality needs to be nurtured and protected in order for them to perform creatively?

2. Cognitive Style

- How much administrative work are creative professionals expected to do. How do you support them so that they concentrate on creative work?
- Do you try to protect your creative staff from distractions by isolating them or do you like them to be involved in everyday office life?

3. Expertise

- How do you balance the demands made by creative work and the demands made by business?
- What sort of demands do you make on your staff beyond the creative role?
- Do you involve your creative teams in issues of profitability and productivity?
- How do you actively involve them in practice matters?

4. Creative Process

- Have you broken down the design process into stages in order to understand what your creative team is doing?
- Is the process of design factored into the project programme?
- Do you monitor your design team as they are working or do you wait for the big unveiling at the end?

5. Time Management

- How does your creative team manage their time? Do you give them preset programmes or do you let them organise themselves?
- Do you find that the creative team are self-regulating (organising) or need outside control to keep them on target?
- Do you allow for and impose time limits on each of the design stages?

6. Collaboration

- How are your design teams organised? Do you encourage collaboration or individual expression?

7. Motivation

- What intrinsic (non-financial) motivators do you provide your staff? How do they respond?
- What do you find is most effective in inspiring the best work in your creative people?

8. Organisational Structure

- What kind of control do you exercise over your design professionals in terms of company structure?

9. Creative Culture

- How does your company define creative success?
- What controls do you have in place to ensure that the design work is of a specific quality?

10. Psychosocial Environment

- How do you support a designer's self-confidence?
- What sort of internal evaluation does your creative staff receive during the design process? What is the best way of getting a positive response to criticism?

11. Productive Culture

- How do you define productivity? What do your top designers do that distinguishes them from the less successful employees?
- What controls do you have in place to ensure that the design work is of a specific quality?
- Do you involve your creative teams in issues of profitability and productivity. How do you actively involve them in practice matters?

12. Physical Space

- How do you make the work environment conducive to creativity?
- How do you make the work environment conducive to collaboration?
- How is the workspace organised. Is there a differentiation in space for different kinds of design work?

13. Design Brief

- How do you like to be briefed? What sort of information do you need in order to be creative and productive?

14. Client Relationship

- How do you handle creative risk? This is defined as the potential that the client will not like your idea?
- What kind of interaction do you allow between your creative people and the client and how do you allow the client to participate in the design process to mitigate this risk?

15. Management and Leadership Style

- What sort of demands do you make on your staff beyond their immediate creative role?
- How closely do you monitor their work? Do you get involved or just let them get on with it?

9.3 Appendix 3 - Tabulation of Results: Quotes and Themes.

9.3.1 Introduction

The tables which follow are a selection of quotes from the transcribed interviews. The left hand column shows which discipline the respondent is from and these have been arranged according to the order identified on the creativity spectrum in Table 2. The next column is a selection of quotes that provide evidence of how the respondents answered the questions. The third column is a summary of the concept or insight offered in the responses. This final column was distilled into the progressions in the tables in chapter 5.

The quotes have been organised according to the categories of analysis rather than the actual questions in the interviews. The unstructured nature of the interviews meant that the respondents spoke generally about their subject and frequently did not answer specific questions at all, while offering insights into other more valuable areas.

In the event that the subject was not covered at all, it has been indicated that the respondent did not address this category.

9.3.2 Table 16: Category of Analysis - Creative Personality

Discipline	Quote	Outcome
Ballet Company	You have to always understand that they are never happy. Really they are never happy...they are always thinking that they are better than they are. I'm not saying that they are not good, but they think that they are even better. That's the starting premise for everybody. So when I do have a happy face it's ten times easier and then you ensure that you stroke that of course and you encourage that behaviour.	Tolerated, but considered tedious.
Orchestra	They are not pandered to. It tends to be submerged in the greater good. Once you are in rehearsal or performance mode that behaviour is suppressed because the conductor ... is calling the shots. At the end of the day, all the individual artistic temperaments actually get closed down by the conductor who says, this is what I am going to present to the audience.	Not tolerated. Suppressed by strong leadership
Advertising	Did not address this category.	
Advertising	It's becoming less and less. If you get a diva that is damn good and they are successful it is tolerated, that's the terrible thing, and it's a nightmare for the client services person and for the client. But if they are coming up with the most amazing stuff then it is very difficult to manage it, you work around it and wait for them to mature.	Trade off – somebody else takes the strain for the creative personality.
Branding	There is always a design diva, definitely in every company. A lot of architects and designers have complexes. One of the guys on our team left the company because the creative director asked him to do a sample board and he thought that that was beneath him.	Childish Behaviour
Branding	The way he thinks is stereotypical creative thinking, it's all over the place, we'll have a discussion and he'll come back the next day saying that he woke up at three in the morning and he had had an idea and he thinks we should put it in the presentation. Which I then do, but then he comes in 3 hours later with another idea, which was a very interesting process because I got to the stage where I was panicking every time he walked into the studio because I thought, oh no, he's had another idea!!	Tolerated, but stressful to manage.
Branding	Did not address this category.	

Fashion	I think really creative people are passionate, they feel very strongly about what they do, even if they are not right. There is often a lot of tension, we've had a good few screaming matches in the office, especially when there are deadlines. You must be able to recognise that he or she is not being difficult, it's just that they really believe. That is what you have to nurture and understand.	Tolerated with an attempt to understand
Interiors	Did not address this category.	
Landscape	We have a couple of people who are very creative and exceptionally difficult to manage. The key is identifying the strengths and weaknesses of those individuals.	Tolerated, but stressful to manage. Trade off – somebody else takes the strain for the creative personality.
	We have an immensely creative person ... but I sparingly put him in front of a client, because he doesn't have the ability to listen in that situation. It is that inability of the really creative mind to recognise when to speak and what to say, just incapable, so I'll take him to one meeting and then get asked not to bring him to another one. That kind of personality is an extreme.	
	With truly creative people communication can be quite difficult because they have selective hearing. Selective hearing is a real problem.	
	It is the hassle and the stress that that type of personality brings to me, because I am the one that manages it. Is it worth all that and the answer is definitely yes, because if it wasn't – there's a tradeoff here because I am the one who takes the strain. I can't think of one person who was really really creative who was easy to manage. They all have some issues of some kind.	
Architecture	Did not address this category.	
Architecture	There was not much creativity going on because [he] himself was the Creative guru, so any other creativity was threat. It's ego, there's a big ego involved in creativity and the ego needs to be managed. [It] can actually hamper creativity because the way he would sometimes behave when you produced a design, he'd actually fight with you about it.	Tolerated but considered childish and destructive.
	There's no reason why creative people can't do that sort of thing it's just that they are indulged too much.	
	The conclusion I am coming to is that creative people really need to grow up a lot. I you can get them to behave like an adult you have quite a special thing, but they don't.	

Architecture	No, We don't hire prima donnas designers. It's not good for our culture and it's not good for their career development. They are not valuable.	Not tolerated. Destructive Influence
	Your divas become very powerful in your office space they undermine the culture of your business because the other people then feel like they are less and we don't have that in our business.	
Engineering	For me some people are precious and some people are intense. If I do an interview and someone is intense they don't get the job. Intense means I've spoken to them for 5 minutes and I'm tired. That's intense and you don't want anyone like that, it's not good for team spirit. It wears everybody down. I try to interview everybody myself, to get the right personalities.	Not employed

9.3.3 Table 17: Category of Analysis - Cognitive Style

Discipline	Quote	Outcome
Ballet Company	Did not answer this question	
Orchestra	The skills required for management, does that necessarily sit in the same skill set as someone who is a musician? Unlikely... the longer I have sat in this role the more I can say it is not a good combination. You are going to impose certain artistic inclinations on what is essentially a functional or administrative role. You should separate them.	Should be separated due to lack of expertise.
	Musicians tend to study, but with little real education in how to perceive this as a business endeavour. They know theory and practice of music but there is nothing in there about business. These tend to be highly skilled in their artistic career and have poor to negligible life skills.	
Advertising	More and more there is this blur, they are having to understand the business needs, so they might not ... understand a flow chart, but more and more they understand what the need is. So even if you are a pure creative artist you have to understand the client's business otherwise you don't have any relevance.	Need to understand business or they risk being left behind.
Advertising	I'm not sure that is really valid. I think it is a cliché and bit old fashioned. Especially in the advertising industry that is outdated, the pony tail is very old school. There is a bit of the residue of the 70's where there were the suits and the creatives. But the extremes of both where suits suck up to clients and wouldn't recognise creativity and creatives are people with beads around their necks which wouldn't understand business, the world is too interconnected today to operate in silos. That's a very old paradigm.	
Branding	Admin, the creative director and the project manager are involved in billing meetings and know exactly what is going on in this quarter, they have to do income sheets and stuff like that. The creative people are not protected from the realities of the business, not at all. We get sat down every quarter and get told where we are with clients and who has paid and who hasn't. We are very aware of it. We are not protected	Know what is happening on the business side, aware.
Branding	Did not answer this question	

Branding	We pay creatives to do what they are good at. They shouldn't be running around doing the admin side. Let the suits do that. That's what they get paid for, to wine, dine sell and make sure the admin is happening. So we typically get BComm type marketing people as potential suits and we get your worst hippies sitting in the studio, getting lost in things.	Their time is valuable.
Fashion	Did not answer this question	
Interiors	I don't let my creative people waste their time on sorting out filing or sorting out the Photoshop on their sketches, give it to someone else to do, it's not rocket science. I can get a technical person to do that.	Their time is valuable.
Landscape	I absolutely hated the business side of it, it nearly cost us the company. We had to change all of that. It wasn't something that I enjoy so ... this business manager runs all the finances, all the accounts, invoices, everything, he does all the administration. That was taken out of my hands because I am not very good at it.	Lack of interest and aptitude.
Architecture	I have three hats....and I switch between those three all day long, every day. The difficult thing is keeping enough energy for all three of those. It saps every piece of energy out of you. Looking at cushions and then steel details and then a fee proposal and an FFE proposal and then you are climbing in your car to have a fight with the contractor....(FFE is furniture, fittings and equipment) The ADD (Attention Deficient Disorder) does wonders for me. I have the capability to jump all the time and not get bored. Someone else might not be able to jump between all those things. To run a practice like this you need to be that kind of person, switch between all these things and stay focused. It's about being really diligent.	Possible, but exhausting.
Architecture	We had no idea if what we were working on related to what the company was earning. It would have helped if we had all just known if we were paying for ourselves. We never knew if anyone was really paying their due. Most are really, really bad at that stuff. They need to be aware that it happens and what impact they are having on that side of things, but to get them to do it – it would never get done. How do you force them to do it? Is it necessary? Ultimately everyone has to help make the machine work and if you are not helping you have to go, if you are not contributing. But if you can't tell whether you are a help or a hindrance you never have sight of it. In order to be productive creative people must have sight of what their contribution is, but they don't necessarily need to be the ones to administer it.	Need to know what is happening on the business side, but probably not going to administer it properly.

Architecture	Our creative people are definitely involved in practice matters because we are hiring all round people.	Creatives integrated into the running of the practice.
	We try to take the accounting side of our business and say, "how do we integrate the accounting and our creativity and our production into one process?" We have a creative [person] driving the implementation of an accounting package. The accountant would not understand the work flow scheduling and the processing and the risk work components of our work. so we see the accountant as integral to our creative process.	
Engineering	The more senior the engineers get, the more admin they will do. I mean we all have to do a fee proposal and a time sheet and the contractual matters. It is the engineers doing that. The admin staff can't do that. The engineers must do that themselves.	Taken for granted that they are involved

9.3.4 Table 18: Category of Analysis – Expertise

Discipline	Quote	Outcome
Orchestra	The vested interest is one thing, the skills are another. The skills required for management, does that necessarily sit in the same skill set as someone who is a musician? Unlikely.	Disparate Skills Skills specialised in one area.
	Musicians tend to study, but with little real education in how to perceive this as a business endeavour. They know theory and practice of music but there is nothing in there about business. These tend to be highly skilled in their artistic career and have poor to negligible life skills.	
Ballet Company	I don't care how senior you are or not, if I think you are phenomenal dancer you can come from anywhere and perform the lead. I don't care. I don't want you to have to wait six years, by then you have lost your talent, and by then you have lost your inspiration. That doesn't work for me.	Talent more important than experience.
Advertising	Very rarely will you get one person, but you can, someone like Graham, he has an MBA, he is architect, he has very much a business side to him and he is very creative. He is one of those rare creatures.	Crossover of skills very rare
Branding	Sometimes this is problem because some of the project managers don't have a design background, which is very frustrating because something that can look very simple can take days. I have to explain the whole process that I have to go through and only then does she grasp it, which is a frustration on my side, because if I have to understand how your project managing works and work with your time schedule then it feels as if there should be some kind of other way round in terms of a background of what I do.	Disparate skills.
Branding	I got given a list of things I had never done before, this is me that has only been working for three months, sitting there al big eyes, I ended up going to one of the seniors because I didn't know what all this stuff was, and she looked at me and said, "Is this your brief?" This is unacceptable, this is not a junior's brief, this is a director's brief. She kind of mentored me through it, so I did all the work but I constantly had to keep going back to her, but she gave me a bunch of examples to look at. It was a great learning experience but it was really intimidating	Experience necessary
Branding	So we typically get Bcomm type marketing people as potential suits and we get your worst hippies sitting in the studio, getting lost in things. Big problem is when you are sending a suit in and he doesn't understand.	Disparate skills.
Fashion	Personally, it is not my field. I would rather leave it to someone who knows what they are doing. I think that in a lot of business, who runs the finances is the most important.	Untrained Specialisation

Interiors	We really believe in division of labour and using the right skills for the right job. We separate our projects very much into the creative process where we have a creative team who design and conceptualise a project, and then we have a technical team who take that project and follow through in terms of production and documentation and then we have an implementation team that take that project onto site and they are all different skills and different people and teams.	Separation of skills. Specialisation
Landscape	That was taken out of my hands because I am not very good at it. The HR side of the business is run by Glen, I am more involved in strategy, key accounts and key designs. It all tends to happen organically on the basis of your skill sets.	Do what you show aptitude for.
	As you get bigger you need to get more specialised. Rob can only design, he can't do anything else, that's all he does. But Bernard can do plants and project management. Glen and myself pretty much do everything. It's the nature of the people. I think it is important that people do more than just what they are comfortable with. It allows them to grow. If it doesn't work, we acknowledge it and provide support for that aspect.	Some people more capable than others
	I have recognised my skill sets and I try to recognise other people's in the office.	
Architecture	Most are really, really bad at that stuff. They need to be aware that it happens and what impact they are having on that side of things, but to get them to do it – it would never get done. How do you force them to do it? Is it necessary? Nick needed someone to deal with that. He was so bad at it. Most are really, really bad at that stuff.	More artistic, more specialised. No aptitude.
	Someone like Nick is just the wrong person to be involved in administration. It just never got done. That whole side of things needs to be taken care of.	
Architecture	I have three hats: I'm an architect, I've now become an interior designer and I am a financial guy and you switch between those three all day long every day. The difficult thing is keeping enough energy for all three of those.	Demanding playing more than one role.
	The guys here get very frustrated because they are architecturally trained and that's where they want to be and that's what they know and now they get thrown into this and that. To run a practice like this you need to be that kind of person, switch between all these things,	Need to be the right kind of person.
	Our practice is not like that. We like people to be multi-discipline, for instance, they must be able to do details, photoshop, Revit and a furniture layout. That is our idea of a productive person.	Multi-disciplinary

Architecture	We try to distill into the people who work in our practice that before they are 30 they need to have done 10 000hours, like that Malcom Gladwell book, if you want excellence you have to drive. When you are young and you haven't got obligations you need to drive your skill set above your peers and you need to get there before you are 30. The harder you work the more skills you get and then you get better jobs and you get into a reinforcing cycle. We don't care if you have a horrible time for two years, now practice because after that period of time you are going to be an excellent architect. The people who come to our practice understand that they are going to work hard and it's a tough environment.	Need multiple skill sets. Experience Training
Engineering	It is the engineers doing that. The admin staff can't do that. The engineers must do that themselves. The junior engineers will be limited to design, the senior engineers to design and admin or practice matters. I for instance do a lot of that.	More experience leads to greater skill sets

9.3.5 Table 19: Category of Analysis - Creative Process

Discipline	Quote	Outcome
Ballet Company	Did not answer this question	
Orchestra	Did not answer this question	
Advertising	We tend to dance between the chaos and control. In my opinion the chaos should be 51% and the control 49%. Once you start getting too much the other way, it goes in swings – we are too crazy, we are too straight, it's an equilibrium. If you have a retail client you have to get it out so it swings more towards control. If you are doing a pitch for a big client then the pitch process will be a little more chaos as you look for the idea.	Stay loose. Let ideas grow . Fragile Process Iterative Process
	The more you drill down into it, the more you want it to happen, the more it goes away. If you were going to say to someone, I want a great idea NOW, it won't work. But we do, we have timelines and all sorts of things, but in creating that idea, you plant a seed and you step back and you see how it goes.	
	Often an idea... is two phases, the "aha" moment and then there is the ripple effect; how do you implement it? How do you polish it?	
Advertising	The best briefs are when people are actually exposed to the product. For example with BMW, the guys went to factory and walked the floor. This is experiential briefing when you actually cook the product, taste it, drive it. That's where you start by exposing them to it. Then you give them an objective, you need to sell whatever, we need to market the power steering. give them a period of time, 2/3 days to think about it and put ideas together and then regroup and have a tissue session with the client, asking him what he thinks so you don't spend two weeks on an idea and it's wrong.	Discovery Process. Critical Pathway
	... you have to create a critical pathway, the first two days you guys can brainstorm, then we review, then we ferment it and then we finalise it and by Thursday we have a rehearsal .	

Branding	<p>Sometimes things work and sometimes they don't work out and it is a bit of back of forth to work out why it is and isn't working. Sometimes it is a very intuitive type of thing, but that is a bit of a gamble, because what you see in your head and what happens when you start drawing it out are different things.</p> <p>The bigger process in terms of the deliverables is very guided. How you put those things together is usually up to you. I prefer to do it in a logical order, so I'll do my research to ensure that it fits into the brief. Whereas I know some creatives do what they feel like and what they think is going to work and afterwards they are like, I need something to support what I just did here. That's a very personal thing but in the bigger scheme of the process there is definitely boxes that need to be ticked but the order is up to you.</p>	Iterative Process, otherwise too much of a Gamble Guided but not controlled
Branding	Did not answer this question	
Branding	<p>We first of all say, what is the big idea? If there is no big idea, go away. It is sacrosanct. It needs to be intuitive. Throw it out and bring it. You can see if they have had a range of ideas. There is no science to it but there is framework.</p> <p>The process that we use is discovery. So first it is insight, we develop a business case. Then from the business strategy we turn it into design by defining the values that we want this new thing to have, we try to do a bit of personification. Into picture words and then into the pictures. ...We'll try to develop it in a very logical way.</p> <p>Very much so. We don't just jump to desert without the peas and the cauliflower etc. The magic vests with a good understanding of the logic. Starts with a really great statement or insight. Any great design starts with great insight. Everything that we do we will try to give meaning or function to in terms of the strategy. We try to demystify it, but not to the extent that we make it super logical, the engineers would do that.</p>	Big Idea. Discovery Process. Series of logical steps. Meaning, not magic.
Fashion	We'll get the brief, we like to see the interiors, we'll sit with the architect so we know the vibe and the feel that they are going for, we'll then brainstorm. We'll come up with a couple of designs, we'll do two or three boards, we'll present, they'll love certain things, they dislike other things. From that stage, once it is approved we start going into samples.	Discovery Iterative nature.
Interiors	The creative process has a number of logical steps, we don't ever just go off. We are fairly structured as opposed to just going off to find the magic and try to post rationalise what they have done. We don't do that, we pre-rationalise why we are going to do something, and that's how we give it meaning.	Meaning, not magic.

Landscape	It's totally unstructured. We wait for the magic. Before we have put pen to paper we have been involved in the process, we've talked about the site and where the components are, we talked about the architecture. Before we even sit down we've been involved in the process. And then whatever happens, happens.	Preparation plus magic. Iterative Foundation Understanding necessary
	Sometimes the design process can get stalled, you get problems – you can go around in circles and that's not very productive, but it is going to happen, dealing with other creative people and in dealing with yourself as a creative person, sometimes you can't get to grips with a particular design issue or problem, you can spend two or three days getting absolutely nowhere on a project and then you come in the next day and it is sorted. It happens. It's not quite writers block – it just doesn't work. It is often because you have just not understood in your mind what it is required.	
Architecture	The creative process has a number of logical steps, we don't ever just go off. We are fairly structured as opposed to just going off to find the magic and try to post rationalise what they have done. We don't do that, we pre-rationalise why we are going to do something, and that's how we give it meaning.	Meaning, not magic.
Architecture	The creative process is informed by the parameters of the useful part of it. For example, you need a site, site boundaries, that are going to inform the sort of building you put on it, your response. I can't start the creative process until I have those practical things in place. They inform and manage the Creative Process. Otherwise you are sitting at a blank piece of canvas, painting.	Foundation before creative process starts
	[She] once said to me, "design is just making decisions." Simple as that. You have six choices and you go "That one." Don't be precious. There's a good one and a bad one and often there is no clear path.	
	The thing about design is that it is iterative. If someone is very creative and doesn't think about the practical side of things then the loop needs to happen so that the practical side can be fed back into it. You need that feedback and criticism because that may make a better design of it, I think that design are more honed than dug out of a treasure box somehow. They need that time in the crucible. If you don't close that loop it will always be one iteration.	Iterative Process makes design better Foundation before creative process starts
	The creative process is informed by the parameters of the useful part of it. For example, you need a site, site boundaries, that are going to inform the sort of building you put on it, your response. I can't start the creative process until I have those practical things in place. They inform and manage the Creative Process. Otherwise you are sitting at a blank piece of canvas, painting.	Iterative Process makes design better

Architecture	<p>There are certain basics in commercial work, you have to take the site, generate grids... bulk massing studies ...floor plate...vertical circulation, and then I don't understand how the rest of the process works. So some days I'll wake up and it won't be there, so I'll go to sleep and it will be there in the morning. We do it intuitively.</p>	<p>Basics plus intuition. Incubation</p>
	<p>I think what we have learnt to do is to quickly generate the basics ... then you can go away and in the back of your mind and it can sit there for a few days while you start to think through what you think that building should be. There is a balance between this creative edge, which comes funnily enough after you have done the basics and not before.</p>	
Engineering	<p>We do these things in loops, The loops are: you do it first with the architects schematic stuff. Then you do a schematic design, which is actually conceptual, so that we can say in principle it works. So we spend a bit of time on that. Then we get to the next stage where we actually do a design. So we have these very definite rounds of design. So you do it again for measurement and then the next step would be to fine tune it because the QS is never happy. Then you do your real design and your real drawings and that is your last cycle. Then there is the close out cycle which between you and me doesn't get much attention.</p>	Iterative

9.3.6 Table 20: Category of Analysis - Time Management

Discipline	Quote	Outcome
Ballet Company	Did not answer this question	
Orchestra	Did not answer this question	
Advertising	Advertising became a time based industry, much like lawyers. I think it is a very stupid way to have done it but the industry did it to itself. The theory is that if you have booked TV time for two weeks' time your commercial better be ready, and sometimes that is not bad because it focuses the mind.	Time is money. Provides a focus
Advertising	Time is money. If you are being paid for a hundred hours you have to deliver in 100 hours, if you have structured it carefully on your brief, the creatives also have a topline understanding that it isn't a long haul thing, traffic is aware of it and basically at the end of each day traffic will be seeing that there is a problem because you are spending weeks on your delivery.	Time is money. Structured.
Branding	There is pressure to finish things. It does impact your creativity because when the pressure is on, you hit like a block and you get a bit panicked. Its pressure on you to manage your own time.	Can't always turn it on.
	In an ideal world you would like as much time as possible to get your best ideas out, but that doesn't happen. You always feel like you would like more time to develop your concept further, because we are perfectionists, you want your idea to be amazing and we don't like putting out crap, you want to put out your best work. But sometimes you only get two days to do something.	Could always use more time, design can only get better.
Brandingsometimes you have a solution in ten minutes but sometimes you can be sitting there for three days and still not have a workable solution. I think that makes it a bit difficult, so the company compensates for the fact that you might take longer. I think they usually build in the potential for two or three reverts. They try to figure out the scope and complexity of the project, who they are working with and how many hours they estimate it will take. Sometimes this is problem because some of the project managers don't have a design background, which is very frustrating because something that can look very simple can take days.because if I have to understand how your project managing works and work with your time schedule then it feels as if there should be some kind of "other way round" in terms of a background of what I do.	Can't always turn it on. Acknowledge that it is iterative. Need to understand the process.in order to structure the time.

Branding	Creativity has to start somewhere and it has to stop somewhere. Time is probably the most underutilised tool in the whole game.	Deadline Magic
	We drive our creatives through “gateways”. We will chuck it open, you’ve got 30 minutes (or 30 days), at the end of 30 minutes we close it down, we want all your ideas, we will filter it. We want every idea possible, then we take the best up through the next gateway and we will take the next 3 days focusing on just the best stuff and manage that process. You’ve got to let it go, I was a student of chaos theory, you must let chaos reign, then flipping pull it in. You’ve got to separate the wheat from the chaff. You must know where you are heading, you must manage time and you must make people think quickly. Creativity isn’t about sitting back, it’s about constant engagement. Challenge, challenge, challenge. The moment you take your foot off the time accelerator you get crap. I remember producing great stuff in an 8 hour design exercise that I have used here.	Internal deadline to manage the iteration process. Chaos – gateway theory. Discipline.
	You don’t need two weeks to do something. A great idea comes to you like this! If you are a well-trained, disciplined brain then you are absolutely focused. It’s about setting the parameters of what you want to achieve and then working back. You need to involve the creatives in that because they are quite freaky people sometimes. You need to set their time. You have to let them go and then you have to pull them back in.	Time is money.
	Reasonable time. This is a harsh industry. If you haven’t made the time gap then get on with it. If you can’t make that time gap then cheers.	
Fashion	Did not answer this question	
Interiors	We run to a very scheduled programme, we put together a very structured programme of our presentations we understand what the end objective is and what you have to do for it, what our timeline is, what our deliverables are and we programme everything accordingly.	Structured process.
	We work out how many drawings we do and she will put together all our deliverables and work out how long we have to do it and what we have to do to achieve it. I and then co-ordinate all those things into a very structured format and a structured project programme.	Time is money. Iterative so it could go on for ever.
	For us a really good project is one that has a really tight pre-contract period. Pre- is a lump sum fee so we can say that we have this amount of drawings to do in that amount of time, this is our resources and at the end if we manage it properly we can make a profit. Often, the more condensed and the more pressure there is on it, the better it is for us in the sense that they don’t have the time to bugger around.	More structured, less pressure.

Interiors	Some people, the more time you give them, the more time they will use. It is not a finite black and white thing, so you can explore thousands of options, but at some point if you have time pressure, you have to apply your mind, decide where you are going and how you are going to get there and meet the deadline, so provided it is not an unrealistic deadline which puts people under immense pressure, there must be some kind of deadline. Unfortunately it is the creative people that tend to be the ones that work the long hours, our creative teams never leave before 7/8 o'clock at night, they are often here over the weekends. We are getting better – we used to work 48 hours without sleep, but these days we are a little bit more focused in how we are putting it together and we are more structured, we tend to not put ourselves under dramatic pressure working ridiculous hours.	More structured, less pressure.
Landscape	<p>There is not a lot of stuffing around. Things happen and move on. We tend to just go, but we are obviously aware of the interim deadlines, we knew we had to hit these dates and we couldn't do it without some serious planning. If it's small we just head down the path and see where it leads us.</p> <p>It is how to get from the inception point of the creative process to that deadline and with these type of people it is never a straight line. Sometimes you have false start and it goes like a ??? and sometimes there is no start and it all compacted into the last ten percent of the process and it drives me mad, but everyone's different.</p>	Organic process, structured time.
Architecture	<p>There's a time that is a stop time and a point where you stop designing, where you don't keep on going. We met this morning at six, we spent two hours of focused creative time and now we are finished. We move on –it goes to modeling now. You need to know when to draw the line,</p> <p>For me I think the less time the better. If you have too much time you [mess] around and [mess] around. Being creative you need to set a parameter and a time limit, you have to walk out of that room after two hours and you must have designed these areas. It's finished. Onto the next thing. You have to be disciplined. If you are not you land up spending too much time on things that are not necessarily financially viable to do.</p> <p>I don't think the structure should lead the design. If it's done according to the schedule then it still may be [awful]. Whereas it's a process and it may take three or more renders before we are happy with it, but if you stick to a schedule then when it is done it's done and you could miss out. It's got to be a soft structure that allows the creative process pattern to happen.</p>	<p>Use time as a focussing mechanism.</p> <p>Discipline about the iteration process.</p> <p>Time is money.</p> <p>Design led schedule.</p>

Architecture	<p>The creative process itself fills the time available. There are days are when you are more creative than others. But certainly have an eye on the bottom line would have been a stimulus to getting on with things and making a decision. [She] once said to me, “design is just making decisions.” Simple as that. You have 6 choices and you go “That one”. Don’t be precious. There’s a good one and a bad one and often there is no clear path.</p> <p>[He] would not pin his colours to the mast at all. To be as grey as possible for as long as possible - I think he felt that would give him time to come up with the best solution. What it ends up doing is that no decision is made and the worst one is made in a hurry. You have to have a deadline, you can’t allow people to fritter away hours and hours on something, because they can. There’s no outcome. It’s the only way.</p> <p>I did it to myself, when I first started my own practice, I had a house to design but I couldn’t get myself to start. So I phoned the client and said, “I’m ready,” when shall we meet? And they said Friday, so now I knew I had a deadline and I had to present them with something, so all of a sudden the creative juices get switched on. You need to light a fire under those people otherwise nothing is going to happen.</p> <p>The thing about the creative process is that there is always something better out there. You’ve got an idea, but it’s not quite there, you not ready to show anything yet. If you have a creative team you have to manage their time for them. Otherwise they will spend a whole month on it. The thing about design is that it is iterative.</p>	<p>Discipline about the iteration process.</p> <p>Without internal deadlines the design goes through one iteration.</p> <p>Discipline</p>
Architecture	<p>The problem is that we have these very stringent deadlines so you have to be creative within a certain period of time. I might have a block for two weeks, I might not be able to be creative now.</p>	<p>Can’t always turn it on.</p>
Engineering	<p>We schedule everybody on a Friday afternoon, every director puts in his need for people and the time he needs them for. We have one director who massages this and does something and if there are crunches and people have deadlines then he has to sort this out before the crunch really happens. And then the directors will check up on them on a daily basis, well not really a daily basis, not as often as that. It’s very structured.</p>	<p>Check in occasionally</p>

9.3.7 Table 21: Category of Analysis – Collaboration

Discipline	Quote	Outcome
Ballet Company	Did not answer this question	
Orchestra	Did not answer this question	
Advertising	I think that more and more it is a team sport so you have creative team, the account manager, strat[egy], different disciplines around the room is a good thing, different cultures, diversity helps as opposed to a country club of thinking where everyone thinks the same.	Diverse inputs, Idea that ricochets
	9/10 it is the team ... you can't remember who came up with it, but ideas need to ricochet which is why you have the team, you need the team to amplify it.	
Advertising	I sometimes find that it was better to have one head of the creative team that worked on the brand consistently but that you farmed out the work to junior teams and then you get the best from them without any staleness or repetition.	
Branding	Everybody does their own part and then we come together once we have done our sketches and then we select ideas and develop the ones that we like further, or sometimes somebody will start something and hand it over to somebody else and work on it together.	Start alone and then open it up.
Branding	For the most part it is individual, sometimes two designers will get the same brief and we'll each do our own thing and then see what we have and then put it together, especially if it is something that you are starting from scratch. If it's just tweaking then you normally just do it on your own.	Idea generation alone Ideas need help.
	I struggle to design in isolation, even it is just someone to be a sound board, a lot of the time you just need someone to look at things a bit differently.	
Branding	Workshops, absolutely. You need that diverse input when you are throwing it open. But then it's my job to take it away and develop it and to bring in everything everyone else has said. We have this fight often. If I am the creative director it doesn't mean I have to listen to you all, I don't have to aggregate what you all say.	Throw it open, but on authority.
	By yourself you go faster, together you go further.	

Fashion	We give them a lot of leeway, this is the brief, come up with a couple of ideas of your own. We'll put everything up and then we'll call the whole team involved. Somebody will come and say, "that's amazing but what if we did this?" That's how I like to work. Sometimes what I find is you'll get quite a good idea or point of view from someone who is not really creative. They will come and look and give a piece of advice and it's good to hear that. They are looking at it from a different point of view. It adds something.	
Interiors	We work as a team and it is very open. Look, some designers are sometimes very protective over what they do, which is typical of a designer. Somebody has to take responsibility for having designed it but there is the input of the team, we tweak the design and work together, some people are less precious than others and it takes different kind of personalities and skills to work in a design office.	One responsibility, bolstered by the team.
	The way we work on projects on a creative basis is we strategise a design approach, the creative person goes off and comes up with the initial design direction, they then show me and we crit it together and give inputs so that we are managing the creative process all the way through . I don't tell somebody what to do, I'd rather send them off in a direction. It's very much about talking about the right approach and then they go off and come back with stuff and we might say not quite on the mark, let's move it a little bit this way.	
Landscape	We have a studio atmosphere. Rob prefers to work at home, but if he is doing something tricky he prefers to do it here where I can check things. If he wants that support we must give him that support. A studio environment is got to be the best way to nurture these people because you can't nurture them if they are working in isolation.	Ideas need support.
Architecture	It is important that even if you do it individually you still have a kickplate environment that you can bounce ideas off one another to test them. You may think it's awesome but if someone else looks at it, it turns out to be a dumbass idea.	Bounce ideas around.
Architecture	Did not answer this question	

Architecture	If I am under huge pressure I'll do it on my own, if we have more time I'll do It with you in a collaborative environment. The design process needs to be driven by a single person otherwise you end up with a level of mediocrity.	Single Person
	We cannot design creatively in a consultative environment. We need to have very strong idea of what you want to be and then let the idea go and let other people drive it further. You find that other people take your idea and enhance it, then they will bring it back to you and you will absorb some of the stuff that they put in and then they feel acknowledged. And then you add to it again and then they add to it and then you bring it back.	Faster One big idea from one person. Input from others.
Engineering	Did not answer this question	

9.3.8 Table 22: Category of Analysis – Motivation

Discipline	Quote	Outcome
Ballet Company	<p>We have done drives when we incentivised selling where we have said you can have 30% of each ticket you sell. That doesn't work.</p> <p>Giving them new ballets, working with creative people, they are doing the most contemporary piece they have ever done in their lives, and half of them don't even like contemporary dancing, but the way that he is working with them, the way that he is inspiring them, that makes them happy. By giving them nice roles. For the first time, in a very long time they are getting a 13th check, that helps a little bit, but it really isn't, this thing isn't about money, it really isn't.</p> <p>They perform with absolute passion and dedication and commitment because they love what they do, it's not just a job or a check at the end of the month, it's about being able to live my dream.</p>	<p>Financial incentives do not work.</p> <p>Enjoy a challenge</p> <p>Exciting work</p> <p>Love what they do.</p> <p>Living the dream</p>
Orchestra	<p>[We had] 34 musicians who did this with absolute joy and pleasure and without a cent, because their belief in their craft, their art. There are times that they will do something for no financial rewards. This is a career path that they have chosen, that they have been educated for, that they practice for and that they have experience in. What do they want? They want to perform. When I asked them, they said, "we are so glad you gave us an opportunity to play." If you can make it financially rewarding all the better but there are times when they will do it without financial reward.</p> <p>The percentage of those who make a really good living out of music, the ratio is 5% make a decent living and 95% don't.</p> <p>If you haven't paid your rent, you have threatening letter because your bond isn't paid, you maybe haven't eaten as well as you should have done, you are not going to perform to your ability. It is also the group psychology. That unrest is filtering through, so they are not a comfortable happy group so yes, standards will slip and they will not perform as well.</p> <p>So they will rise to the occasion if you have given them a belief in the continuity of the organisation. They will have belief in themselves and their talent but that has to be in context and in this case that has to be an orchestra that they believe they are going to survive and that belief contributes hugely to their performance.</p>	<p>Belief in what they are doing.</p> <p>Opportunity to show what they can do.</p> <p>Money a secondary motivator unless it is causing hardship.</p> <p>Belief in the organisation and their future.</p> <p>Pride, empowerment, appreciation, respect.</p>

Orchestra	We take pride in performing well together. A happy orchestra works well, happy people work well. People who feel empowered, appreciated, and um paid.	Feeling valuable.
	The final straw was that the musicians felt they were not being treated as people and not being respected. It was all about relationships. Make them feel valuable.	
Advertising	The good creatives are motivated. I will hire for attitude before talent a million times over. We realised that the people who were now our core had all battled through life, orphans, had a tough time, they had something to prove, all had issues. The hunger – you can't make someone care.	Something to prove. Acknowledgment
	You have creative people that you need to acknowledge that they are individuals and they motivate in different ways. The moment that you care beyond the business has huge returns, give them breaks, acknowledgment, huge for creatives, not necessarily money.	More than money.
Advertising	They thrive on a new way of looking at something, creative awards are hugely important to them. The awards in the end will lead to great pay, because they lead to more work which means more pay. That and having fun and coming up with cool ideas and seeing what other people have done.	Recognition Reward is in the good idea. Contribution
Branding	We are not rewarded with any incentives, we are expected to do the job. The most you'll probably get is, "oh that's a good idea, let's use it." It's more something you do for yourself and the experience you want to get for yourself. I'm here to learn and if they like my ideas then I know I am going in the right direction and I'm doing a good job, that's what motivates me.	Personal Satisfaction Experience and Learning
	The incentives run out after a while and the hours you are expected to work are crazy. People don't stay in the industry long. They end up going off where they can be their own boss.	When Intrinsic incentives run out – money becomes an issue.
	The main reason you would come through a branding agency is for the experience and to learn. Eventually the intrinsic stuff runs out.	
Branding	I really do love what I do. I really do enjoy design. At this stage it is 4/5 days that I enjoy coming to work. I am passionate about design.	Passionate about what they do.
Branding	Recognition. They need a framework, they've all got little egos, but hell they need recognition. Most of the young creatives are quite scared of the client but as they get older the ability to present their own ideas to the client, that's what gives them the recognition.	Recognition
Fashion	Did not answer this question.	

Interiors	I don't think interior designers or architects are ever going to get rich ... but we are getting the kind of satisfaction that you don't get in another profession. I often wonder what I would have done if I had done something else – I would have been a lot wealthier. It's the nature of what we do, we are passionate about what we do.	Satisfaction Passion for their profession. Money secondary.
	To show appreciation is something that everyone likes. When you give them feedback and you tell them how it went and how everyone was happy and you boost their morale. People do respond to that, and you've got to keep on reinforcing their value to you in the organisation. In our company all our creative people are associates in the business	Appreciation positive feedback Feeling valued. Belief that they are contributing.
Landscape	Sometime verbal strokes are more important than financial reward, that feeling of being part of the team and having done your bit for the team and done their bit for the company. That to some people is more important than a financial reward. It is the understanding of what strokes are necessary to get the most out of them. In a genuine way. When something has been done well it is to acknowledge that work has been done well and has improved the practice going forward	Belief that they are contributing. Money is secondary
Architecture	Did not answer this question.	
Architecture	In order to feel valued you need to feel as if you are contributing to the bottom line, especially If I have contributed to a certain % of the bottom line. I was certainly more creative when I was more appreciated.	Feeling valued. Belief that they are contributing.
	There was a reward because if your design got chosen, you got all the kudos. On Friday the entire office would come, pin it up, and we'll all present. You wanted to do it because if yours got chosen it was terrific.	Acknowledgement of their ideas. Praise.
	I think praise for the work that they do is a brilliant thing. It really is a fantastic motivator. Obviously I have never been in practice that offers it but I should imagine that a bonus, monetary incentive would. I don't think it necessarily inspires creativity or actually gets the process going. (Not convinced)	Money secondary
	Praise is really something because there is nothing better than when some-one says, "Wow, that is a fantastic idea, it's exactly what the client is looking for."	

Architecture	When our staff are very young what motivates them is building buildings they love and they are passionate about and how much they are learning. And then things start to happen, people start to get married they start to turn 30 and so they start to worry about things like driving a better car and if they are married, how are they going to educate their kids, so they have these debts like life insurance and all these things that creep up after their 20s, so now it is everything we have spoken about before, and about money.	Passion Learning Career momentum Feeling Valued Excitement Money mentioned last.
	People need to be in a learning environment and they always need to feel that their careers are moving forward and feel valued, and they need to be excited about what they are doing.	
Engineering	What you do is, I think how to sell engineering. You need to sell the dream. In my field it is easier than many of the other fields because I can show somebody a picture of a pretty building, but if you are in road engineering, what do you show the guy?	The dream Money Not interested in Awards Being able to make a difference
	How you motivate them is that you pay them a reasonable salary, we have a fixed bonus which is part of their salary, we had a bonus system but we added it to the salary. Then we have a merit bonus system.	
	We do awards as well, we have SAPOA and the steel awards, but it is very disconnected. I said you have done the American School, please submit that, but he forgot. It says it all to me because it is unimportant.	
	I know what drives me because at this stage of my life it is not money anymore, it is very nice to get a fat salary at the end of the month but what drives me is the difference I think I can make.	

9.3.9 Table 23: Category of Analysis - Organisational Structure

Discipline	Quote	Outcome
Ballet Company	No, it is not very democratic. Someone has to take the final decision. In the company administratively there is a CEO, then there is the artistic director. In other companies around the world it is the other way round, the artistic director gets what they want. Then all the other positions fall underneath that.	Hierarchy Does admin or art determine the strategy?
Orchestra	An orchestra is structured and that is terribly important. There is a conductor; the artistic committee has decided on the program so that is done, I can't argue with that, now my section leader calls the shots, there is a real hierarchy in an orchestra.	Hierarchy – status and structure determine who is doing quality management
Advertising	Did not answer this question.	
Advertising	If you want to get efficient creative design, build that triangular partnership where people are working as a team. Don't separate them too much, in fact keep people together so that they are working together.	Agency Structure – Creatives and Suits - Traffic sits in between Keeps the creatives immature
Branding	The better traffic guys also have to understand output and the production process. At the end of the creative process it has to go into production and a mistake there can be very costly. If you don't have everything lined up you are in trouble. There are a number of stages where traffic is very much involved. I just think it frees them [the creative people] up, we had quite a few young creatives and they didn't want to be bothered with deliverables, they were quite happy to just get out there and do what they do best which is to create a fabulous idea. But that is just a lack of maturity,.	

Branding	They are on a different team but we are very much integrated. We have a project manager and she sits upstairs with us and constantly manages the process.	Project Manager – coordinates different teams
Branding	We have this whole debate, we have two lobes to the business, the creatives and the suits, traditional agency structure which is probably wrong. The creatives are always saying we want more time, we need more this, we need more that, and the suits are saying hurry up, you are taking too long.	Agency Structure – Creatives and Suits - Traffic sits in between
Fashion	Did not answer this question.	
Interiors	We really believe in division of labour and using the right skills for the right job. We separate our projects very much into the creative process where we have a creative team who design and conceptualise a project, and then we have a technical team who take that project and follow through in terms of production and documentation and then we have an implementation team that take that project onto site and they are all different skills and different people and teams. I don't try to get a creative person to become structured in terms of the way they would approach a project in a very organised structured way. I've come to the conclusion that there are different skills and you have to use those skills for their strengths and not for their weaknesses. I know a lot of practices try to get their creative designer to also do the working drawings and the project management. It may work, but for us it doesn't.	Division of Labour. Creatives on one of many teams under a project co-ordinator. Design Management Keep an eye on creative intent, but don't drive it through.
	We are lucky in the sense that most of our projects are large, huge, as a result, we need teams of people to work on a job, not just individuals, and we structure our projects accordingly. We have a project partner who works on a project, we then have a project co-ordinator, that person is a technical person, they don't necessarily design or draw, but they co-ordinate all the facets of the project. Under them is the creative team. They live in a creative world, they have to be technically proficient enough to check all the working drawings and check that their designs are being interpreted correctly	

Landscape	<p>We have a studio atmosphere. A studio environment is got to be the best way to nurture these people because you can't nurture them if they are working in isolation.</p> <p>In Harper Downy's office, they are all doing different things but the interaction in terms of design ideas is amazing, and that interaction between the designers was fantastic. The fact that we were all together, the studio environment has got to be the most creative way to work.</p> <p>On the one hand we have to manage creative people but on the other we are a creative entity that needs to be managed, but usually we just end up managing the client.</p>	<p>Studio Environment-nurturing, learning. Can be managed and you can manage.</p>
Architecture	Did not answer this question	
Architecture	Did not answer this question	
Architecture	<p>We see the creative process running through our whole business even through to our accounting procedures and the way that they are run. We try to run a business that is innovative and reinventing itself on a day by day basis so even that very process is creative in itself.</p> <p>We have specifically structured our practice where we don't separate them out, so if you are able to land work you must be able to deliver that work. We want holistic architects, we don't want designers and we don't have this differential in the office, design class and delivery class people in our office. If you start filling your business with those kind of people and you don't keep them segmented into silos then there are no issues about how you drive creativity through your business.</p> <p>In traditional architectural practices you are going to find that you have creatives and then they hand the work over. In our practice design ethos runs right through the detailing as well. The culture drives right through with creativity. There's no separation. If you don't silo it into these components then it doesn't exist and production and creativity and design are one. It's incredibly demanding to be in all those spaces at once.</p> <p>If we ever got really big the model that we have might not work. At some of those practices they break it up into smaller modules of about 50 people into smaller studios, so we would just be a studio within a larger culture.</p>	<p>Organisational structure in the service of creativity.</p> <p>. Drive creativity through from beginning of process to end of delivery. Whole process is creative.</p> <p>Studio – creative designers run the projects</p>
Engineering	So there will be reporting between the different levels, but typically my approach is, they will carry on and do their thing until it goes wrong or they need input from me. I won't go and mess with their projects because then I am interfering. They would deal very much the same way with the levels below them. So it's see what you can do and if you can't do it or some people need more guidance.	Very independent. Engineers run the projects.

9.3.10 Table 24: Category of Analysis – Creative Culture

Discipline	Quote	Outcome
Ballet Company	This company is run on passion, you are 100% correct to say it is not driven my money, it is not., everybody in this business is here because we believe that it adds value to our nation, and it does.	Passion Belief in the bigger impact of their idea
Orchestra	Did not answer this question.	
Advertising	If you were to start at a higher level, my definition of an idea would be when you look at the status quo, and you re-engineering or re-inventing something that was previously there. At a very high level ideas are about prodding and pushing the world forward and by doing that you create something better than was there before.	Belief in the power of ideas to change the world.
	I would take culture before strategy any day. With Creative people it is the culture that allows you to do those things. If your strategy is wrong you can tweak the strategy, but if the culture is wrong you will never implement it. We are very much more about people rather than widgets and machines, so the enabling culture is 101, the most important, that allows them, gives them permission to have ideas.	Give people permission to have ideas.
	We tend to dance between the chaos and control. In my opinion the chaos should be 51% and the control 49%. It goes in swings – we are too crazy, we are too straight. If you have a retail client you have to get it out so it swings more towards control. If you are doing a pitch for a big client then the pitch process will be a little more chaos as you look for the idea. Implementation process, a little more controlled.	Chaos and Control. Team Different
	I think that more and more it is a team sport so you have creative team, the account manager, strat[egy], different disciplines around the room is a good things, different cultures, diversity helps as opposed to a country club of thinking where everyone thinks the same.	disciplines need work together. Hire the right people
	The hunger – you can't make someone care, they must have the attitude and then you give them the environment. You can't spend hours trying to tell someone they should be working harder.	

Advertising	It was creatively led ... everyone is creative. So you are creative in your own space, so if you were a strategist you were creative, if you were in client service you were creative about that, they were trying to build that culture of everyone being creative.	Culture of everyone being creative
Branding	Did not answer this question.	
Branding	Did not answer this question.	
Branding	You can't present great stuff unless you get passionate about it and you need to get mad to get passionate. Their job is to produce creativity, if they don't produce it they are not doing their jobs.	Passion
Fashion	Did not answer this question.	
Interiors	We pride ourselves first and foremost on being creative designers who have excellence in what we do, we are award winning designers, and this is what gets us further projects going forward.	A commitment to creativity and excellence. The right people –genius / X-factor Belief in the transcendental and transformational nature of an idea.
	We have incredibly creative people who work for us, but it is not like they arrived here yesterday morning. They have worked for us for many years, and they get better, not worse, as creative director, I try and search for excellence.	
	We approach our project quite differently to other designers, when we look at a project, we don't look at what the interiors are going to be, we look at what that organisation is about, we try and define the operators brand and look at the brand values. We have an intellectual basis for our creative process.	
	It's that X-factor. You either have it or you don't have it. I don't think you can ever teach it. The guy might be brilliant, straight A student, intellectually sound but if he doesn't have that X factor, to have that nuance that makes you a great designer, it's that kind of genius, how do you define it? It's not about technique, it's about creativity.	
Landscape	I can't think of anything worse than just doing office buildings. We try to bring in interesting projects.	Need to find the creative work.
Architecture	I think it is very important that I have a basic design philosophy and a basic design narrative for every design project. If you don't have a philosophy and a narrative and process for design you will run out of ideas. Then you have something that you can carry all the way through.	Importance of the big idea.

Architecture	An approach to design should always be fresh, this is not something I experienced in our office, very often we recycle, just modify it a bit to fit on the site. So that may be more productive, but actually the creative process needs to be fresh ... something new and different and something you haven't seen before.	Commitment to originality
Architecture	If you run this as a business you have a problem, you need to run it as a passion with the business secondary.	Passion, not a business.
	In traditional architectural practices you are going to find that you have the creatives and then they hand the work over. In our practice design ethos runs right through the detailing as well. The culture drives right through with creativity. In terms of delivery we see ourselves as being creative in the way we deliver. We see ourselves as a creative business in all aspects of what we do. No separating.	Creativity in all parts of the business, not separated out.
	We are very careful about how we source our staff in our business and we hopefully source correctly and then people's skills drive creativity through our brand.	Creative culture is people based.
	The person who drives HR has to drive the culture of our business, we have a dedicated HR manager but she is creative in the way she drives our culture so we spend the same creativity that drives our architecture to drive our HR policy so for example we had.	Creativity needs to be a thread that runs through.
	If someone who envisioned the building is different to the person who delivered the building the finished product is always going to be different to the design in subtle ways. We want the person who envisioned the building to have to make those compromises in a creative way so that creativity stays as part of the delivery and that's how we ensure quality. It's all integrated.	
Engineering	Did not answer this question.	

9.3.11 Table 25: Category of Analysis - Psychosocial Environment

Discipline	Quote	Outcome
Ballet Company	Did not answer this question.	
Orchestra	If you can create an atmosphere in which they feel that is safe and secure and controlled. This sounds terribly restrictive but this is what most creative people want. It is actually an environment where all the things are taken care of, so you don't have to worry about anything else, you just get out there and perform to your best ability.	Safe and secure
Advertising	Give them permission to have ideas. It is amazing how if you give them permission, people fly. The energy is just fantastic.	Permission to have ideas
	Free of fear, honest, open, accessible. Ideas travel very badly through bureaucracy. You're at this level so you can have this idea and once you are a big boy you can have this level idea, so it is also very egalitarian.	Anyone can have ideas Egalitarian
	If you have a culture that it very demanding, often an idea can look a bit silly and fragile, if people are scared to talk about it or debate it in a group then you get very correct ideas, nothing particularly wrong with them, nothing particularly right. Logic is a terrific idea to check an idea right at the end but not at the beginning.	Not fearful to put ideas forward
Advertising	You are doing a pitch and you are just not cracking the idea, tempers flare and people get tired. I'd tell them it's only advertising. Because you get drama, oh my word! You need to keep your head steady so that you can lead them.	Safe, secure and contained respect
	Collaborative, and definitely one of mutual respect, because they are important, you can't keep them in a dark hole. You build it up, you build relationships and friendships.	
Branding	They are not judgmental, very encouraging and they want to know your ideas, they appreciate and value your input. They never put your ideas down. It's comfortable.	Suspend judgment Appreciative of your ideas. Comfortable

Branding	The juggling doesn't bother me that much but what does frustrate me is if I can see something is going to bomb out and no one listens to me when I say it. Sometimes I don't feel as if being the baby in the team I have the authority to say this is not going to work. That really frustrates the process and leaves no room for creativity.	Fearful to voice opinion – no creativity Not egalitarian
Branding	We drive our creative through “gateways”. We will chuck it open, you've got 30 minutes (or 30 days), at the end of 30 minutes we close it down, we want all your ideas, we will filter it. We want every idea possible, then we take the best up through the next gateway and we will take the next 3 days focusing on just the best stuff and manage that process. You've got to let it go, I was a student of chaos theory, you must let chaos reign, then pull it in..	Encouraged to have ideas Choose the best stuff
Fashion	You can destroy creativity. If you constantly criticise. Criticism is good but it has to be positive criticism. You have to build people up to recognise the positive in what they are doing. They are not always right but you need to give them confidence by looking for the good in what they are doing. They have to know that the colour is terrible but the design is great. Creative people are sensitive.	Feedback, not criticism. Recognise the good ideas. Nurture ideas Don't box them
	If you take their advice, their input, sometimes they will see things that we don't see. It's important to nurture that. You must allow creative people to be creative. Let people be good at what they do.	
	If you let people be creative, they are more creative. If you box it in you are only going to get creativity up to that point.	
Interiors	We have a separate pause area where we encourage people to get up from their work stations for tea in the morning and afternoon so that they do intermingle and connect, that is just normal psychology of the workspace, they do encourage people to mix and socialise. In the old days we used to chain them to a desk and make them clock out at 5 o'clock. Some of the creative people never come to work before 9 or 10. You've got to understand that not all people are the same and you can't treat them all the same. This is not a bank, we can't treat people like that.	Freedom Casual
Landscape	Did not answer this question.	
Architecture	Did not answer this question.	

Architecture	<p>What's the good of doing the best buildings in the world if everyone's going to be fired next month. It's got to work.</p> <p>What used to work well and what I really appreciated ... was that it was thrown open to everybody, the cleaning lady included, it was very democratic.... bring your sketches we are going to have a session. On Friday the entire office would come, pin it up, and we'll all present. There was no preciousness around it. He encouraged free debate where you could say, that's a crap idea, and it was OK. Nobody was scared, in the end he would say, I'm going with that one. My name is going on the board so I'll decide what to go with. We'll take a bit from here and some from there and let's go from there. For me it was a wonderful way of just getting the creative juices flowing, even the technical people who weren't terribly good, even the draughtsman who came from an underprivileged background came up with something interesting. You wanted to do it because if yours got chosen it was terrific.</p>	<p>Secure-safe</p> <p>Everyone free to have ideas</p> <p>Democratic</p> <p>Free debate</p> <p>OK to have a crap idea</p> <p>Choose the best stuff</p> <p>Precious and defensive bad for creativity</p> <p>A creative guru shuts it down</p>
	<p>In [the other] office it was very different, everyone got very precious and defensive, and they were scared the design was not good. There was not much creativity going on because [he] himself was the Creative guru, so any other creativity was threat.</p>	
Architecture	<p>I think my strongest skill is I am learning how to empower people to own the creative process without me overshadowing them. I will chair a discussion around design.</p>	<p>Empowering without overshadowing</p>
Engineering	<p>Right through the project he made the team believe that they were special, so there lies the key. So if you are special you have to deliver special attention and special design and special everything because otherwise you are not living up to your own expectation because you are now special. And it really worked. It was a great project.</p>	<p>Made to feel special</p>

9.3.12 Table 26: Category of Analysis - Productive Culture

Discipline	Quote	Outcome
Ballet Company	No matter how much they believe it is art, that's fine, but actually it's a business and if we don't run like a business we won't be treated like a business.	Run like a business
	I tell them that they can never say to people, "I am going to dance," they must say, "I am going to work." We are trying to get people to rethink what a ballet dancer is. It's not a hobby. It's a job. They are selling, just by walking into a place and looking like a dancer, the poise, wearing certain clothes, talking about the ballet.	Creatives immersed in the business Have to have sight of the business aims.
	They have to take ownership of this company as much as I do. So we sit with them once a month in company meetings and we discuss their issues and concerns and they get to understand what I am trying to do. My office is usually completely open with glass right onto the studio and we can both ways. We can see what we are selling and they can see that we are selling them. It is two such different worlds that they forget that it takes both worlds to make a performance sell. Often they think it is just about them, and it is not.	Structured work environment. Need to be able to be disciplined & creative
	It is highly structured. As I said just now, we are trained like this. (straight up and down) Ballet dancers want to know that they have a rehearsal at that time. They will not mind doing the extra work, because that is the way they are brought up. It is a very disciplined and incredibly regimented which is why ballet dancers make good people for any other profession, because they have the creativity plus the regimentedness it takes to be successful in any kind of job. And they don't talk back.	
Orchestra	We have been playing together for so long, it is a certain experience that you build up. There is a collective experience of players. We take pride in performing well together. A happy orchestra works well, happy people work well. People who feel empowered, appreciated, and..... um paid.	Experience and working together as a team
Advertising	A great idea can quantum leap and that is the ultimate measure of productivity. We didn't push the market share by 1% which would make the client very happy, but we did something completely new and crazy and Boom. It's wonderful when creative people look at something in such a different way that it creates a quantum leap in your measurements.	Quantum leap Creatives need multiple skills to be effective
	The best creatives are the ones that can straddle both, they can sell the idea to the client and talk to him about business.	
Advertising	Did not answer this question.	

Branding	Sometimes this is problem because some of the project managers don't have a design background, which is very frustrating because something that can look very simple can take days. I have to explain the whole process that I have to go through and only then does she grasp it, which is a frustration on my side, because if I have to understand how your project managing works and work with your time schedule then it feels as if there should be some kind of other way round in terms of a background of what I do.	Managers need to understand how production is done.
Branding	We are only going to do that if the design has an impact on the target. So in our case it is not about being cool, we start the process with strategic insights and what we have to achieve. That has to be measurable.	Measurable impact effectiveness
	You have for example the Loerie awards which are coming up next week, that recognises creativity for creativity's sake. You also get an award called the Apex award. Apex actually rewards effectiveness, it's all very well to do an ad that looks beautiful and people say, "I saw this ad but I don't know what the product is for," then you've lost already.	Must be able to quantify the creative work.
	There is more and more a move towards creating advertising that is effective. It is such a difficult thing. How do you quantify the value of a big idea? Is it purely the amount of time that is taken to produce it? How do we put a value on our creative work?	Teamwork between different disciplines
	The most successful time is when you have a good relationship between strategy, creatives and the clients. If you create that three headed team when they are all talking to each other it is the most effective and the most efficient delivery.	
Branding	It's art if it is great creativity but doesn't have business results. Our clients must have better business results because of our creativity.	Keep sight of the business results.
	We don't pay them to sit and smoke up on the roof. They really have to deliver because we sell that creativity. Yes, we have commoditised it to a degree, but I will never admit it. We have more quantified it, we know what type of creativity is needed for the outcome.	Work hard Quantified the creative work
	Creativity isn't about sitting back, it's about constant engagement. Challenge, challenge, challenge. The moment you take your foot off the time accelerator you get crap.	Constant challenge
	They're engaged and absolutely focused, they can connect the dots. It enables you to put a whole lot of different worlds together. I want a guy that works under pressure, that engages and doesn't sit back and has a need to deliver against a business brief.	Be able to do a range of things

Fashion	You reach that balance between what is possible and what is easy. We always strive for something different but what is possible, what is feasible?	Have to keep practicalities in mind. Involved from the beginning to the end.
	We've had designers who all they do is draw and draw and draw, and it looks amazing but at the end of the day it's just a job for them. If they are quite involved from the beginning of the project, from the word go. They probably produce a better quality of design, they see also not just the design but the practicality of it.	
Interiors	We have a technical documentation team that work under the project manager /coordinator who will programme all of the resources. We work out how many drawings we do and she will put together all our deliverables and work out how long we have to do and what we have to do to achieve I and then co-ordinate all those things into a very structured format and a structured project programme.	Strict project programme. Structured delivery Designer stays with the project, even if not actively involved. Balance functionality Work hard, focussed
	The designer will check the output and the information on those drawings is correct. Throughout the phases of the project they will check to see what is going on. After a while they will not be actively involved but they will always keep an eye on what is happening. There will be regular project meetings with the team, technical, creative, project partner and the rest of the people. They will all sit together and decide where they are. As a creative industry we are structured, we work particularly to time sheets, we look at profitability of each project.	
	No. It is a functional requirement. There has to be a balance between functionality and creativity. You can be as creative as you like but if it doesn't work functionally it is a waste of time.	
	Some agencies have this buzz about it, loud music and everyone talking and chatting. Our office is not like that, it is quiet, we have some music in the background but people just sit down and work. I don't know if that is good or bad but it seems to work for us. We don't have people slacking off and doing whatever else during the day and then working until midnight. We want them to be productive during the work hours.	
Landscape	We tend in the main that if someone starts a project they have to finish it and do both parts. As you get bigger you need to get more specialised. I think it is important that people do more than just what they are comfortable with. It allows them to grow. If it doesn't work, we acknowledge it and provide support for that aspect.	Person works on project from start to finish Makes them learn and grow. Production is structure
	It presumes that our business our business is unstructured, but it isn't, our business is incredibly structured, and we have a very structured way of how we do projects.	

Architecture	<p>The biggest problem is, for us being creative we sometimes forget about the business part, where we spend so much time coming up with an idea, workshoping it and checking it, and testing it and we've spent so many hours on it that at the end of the day the amount of fees that we are spending on it are totally out of sync.</p> <p>. To run a practice like this you need to be the kind of person that switches between all these things, stay focused and still remember to impart info to your team. So what we do is we have planning meetings, I'll sit with the guys and run through it. It's about being really diligent.</p> <p>We like people to be multi-disciplined, for instance, they must be able to do details, Photoshop, Revit and a furniture layout. That is our idea of a productive person. A small practice like ours, everyone does everything. Everyone's involved.</p>	<p>Getting lost in the creative work is counterproductive Hard work, diligence Creative people do all parts of the project</p>
Architecture	<p>The productive people are actually the ones that are producing sketches, drawings, ideas and are well on that pathway of visualisation. They are quickly fleshing out their ideas. The ones that are not productive are those that are sitting doodling. The creative process can take an awfully long time. One of the problems is that you can say that you have a design block and that can take three days. There has to be some physical trail, but very often there isn't.</p> <p>The less time spent on the creative process, the more productive it is and the better for business.</p> <p>If creative people have sight of the end product or their impact on the firm, they are more productive. In order to ensure creative people are productive they need to see and appreciate their contribution to the well-being of the firm, otherwise they are happy to drift around in a cloud of pink smoke. Creativity is a fine excuse not to live in the real world.</p> <p>Ultimately everyone has to help make this machine work and if you are not helping you have to go if you are not contributing. In order to be productive creative people must have sight of what their contribution is.</p> <p>To have someone involved in all aspects of a project is a fantastic experience, who better to go onto site than the person who did the drawings, at least take that person along and they anticipate problems. It's more productive. There's no reason why creative people can't do that sort of thing it's just that they are indulged too much.</p>	<p>Unproductive to get lost in the idea. Hard work – producing drawings Sight of the end product more productive Must be able to see your contribution to the company Involved in all parts of the project</p>

Architecture	We challenge every part of our business all the time.. We are constantly challenging people in our business, constantly measuring their skills and always pushing them further. It's good for our business and it is good for them so when they leave they leave as better architects.	Constant challenge Hard work experience Person who does the design drives the delivery Do not isolate the creative people. Learn more when involved to the end.
	The harder you work the more skills you get and then you get better jobs and you get into a reinforcing cycle. We don't care if you have a horrible time for two years, now practice because after that period of time you are going to be an excellent architect. The people who come to our practice understand that they are going to work hard and it's a tough environment.	
	If someone who envisioned the building is different to the person who delivered the building the finished product is always going to be different to the design in subtle ways. We want the person who envisioned the building to have to make those compromises in a creative way so that creativity stays as part of the delivery and that's how we ensure quality. It's all integrated.	
	If you isolate someone to be creative you basically pull them out of the full delivery process and they stop learning how to deliver the buildings they are designing. We insist that our architects run the building to completion. Otherwise they lose touch with the processes and they become less effective. We celebrate the delivery of our buildings we don't celebrate the initial phase of the design.	
Engineering	Your systems must allow for correct design. That's why we have wonderful things like ISO, we don't even call it quality assurance anymore because it's a swear word. It's now, "The way we work." The whole idea is to incorporate it into what we do.	Systems Direct line of site between work and reward
	It was absolutely direct. If you were on that team you could see how much time everyone spent on the job and what cost and then we divvied it up so that it was an absolutely direct arrangement. Then they got 10% of the profit. They really could see it . That was a good system. What we need is a merit bonus system a where you can really see the connection between performance and getting a merit bonus.	

9.3.13 Table 27: Category of Analysis – Physical Space

Comments in blue indicate researchers own observations.

Discipline	Quote	Outcome
Ballet Company	I think they are reminded about the value of this space every time we bring in a foreigner. When I have dancers from the NYC ballet or from Washington ballet here they cannot believe because if you go to those companies their studios are indoors, without all the light that we have. And then there is a sense of pride of the dancers being here, the dream and the pride go really well together. They take pride in the fact that people go , “Wow, what an amazing space to work in.” It makes them feel as if it is a wonderful space to work in.	Pride in the space.
Orchestra	Did not answer this question.	
Advertising	<p>Creativity can be anywhere, we did great work because the atmosphere was much more important than the glitzy office. I’ve seen swish offices with no heartbeat. However, environment can add fantastically to it, so if you can, why not. There has been a huge change over the years. I am great fan of open plan for creative work where you can modularise and privatise, I hate walls and doors and closed spaces and visual lines that are blocked. You can’t get up every morning and stare at concrete, if you had the space, why wouldn’t you do something with it.</p> <p>You want to have signifiers that say, this is a creative space. Place like Google, let’s be bright rather than beige. Creatives like the coffee areas and the ping pong table and the swings in the middle of the design area. It says enjoy. You can create a spatial environment that gives people permission to have ideas and enjoy themselves. I can walk into an agency and say they don’t want you to do creative work here. If you blocked the sign it could be financial services. I have found over the years, open, colourful, clues, visual clues. To be very honest we evolved from the [worst] offices in the world but we haven’t overcooked it, but without a doubt when we moved from our last bad offices to here it was a breath of fresh air. If they live in Alex or Soweto they will stay here and work longer because there is free coffee and it is kind of cool here and because maybe going home is not so nice</p> <p>These were fun offices. There was a variety of spaces, groups of people sitting in many different studios. There were fun spaces – corridors with grassy carpets and swings, playrooms. Open, bright and light with lots of communal areas with good views over Sandton.</p>	<p>Atmosphere more important than physical office space.</p> <p>Need Communal spaces.</p> <p>No closed spaces or blocked visual lines.</p> <p>The space must give visual clues that say creative – give people permission to be creative</p>

Advertising	<p>I was always surprised that teams always liked to work in closed off offices. They had their own office with a door where they would shoot the breezes and do what they needed to do. Whereas in my previous work they would work in teams of four or five led by one senior person. I just think people work differently. I like my own office, I like being able to close the door and think. If you are working as a team it makes sense that they are working in their own office space and so that they focus, and brainstorm and work. If you split them up it doesn't work, its personalities, it's skills, it's a combination of things and that is when the magic comes. So I think it probably does make sense to have them in their own hub, because each one of them works on a different brief so you can't have them shouting about different things because that could become quite chaotic.</p>	<p>Different teams had their own studios, but different teams did not work together and were kept apart. Allowed to make it their own space</p>
	<p>So they are together but isolated from other teams? Yes. Then what we would have is that the very very juniors, the interns, working in a central studio. They work side by side and they wait for whatever comes in. They would often be doing prep work and mock ups and stuff like that so they didn't have an office, but the teams themselves had separated space where they could work together and brainstorm.</p>	<p>Only juniors were in a central studio</p>
	<p>We had a canteen, people were always able to have the comforts of life. Other than that, clear open space, facilities and amenities, you saw Hunt Lascaris with the swings. It had a great balcony. Classy elegant offices work, not over the top but just something that allowed them to create their own space, to put up their own pictures, just make it their own space.</p>	

Branding	<p>We used to be downstairs but we have just moved upstairs so that it would be easier to collaborate with the 2D designers. We were downstairs initially because it was quieter downstairs and we would get more work done because everyone is constantly... it gets very distracting, there is a lot of noise and people popping past, and they are very interested if you've got something rendering on your screen they want to know what it is.</p> <p>I would say downstairs was better, there was less distraction and you could focus more on the process and what needs to be done, but upstairs, I prefer upstairs because you don't see people when you are downstairs, I think you are productive if you are seeing people and you feel more a part of the company and the processes within the company</p> <p>I don't like [this setup] all. Compared to what we had downstairs, we had quite a nice setup with everyone's desk around and a table in the middle where we could all work on stuff together, it was much more of a creative setup. Just the way the desks were setup, we had much more space and also the table in the middle, it was just more creative, our stuff was everywhere and we knew where everything was now upstairs we have been told that because we are in an office plan environment we have to be tidy and are not allowed to have paper everywhere – it is more rigid and we are also very aware of what other creative offices look like and we are seriously lacking, it is very corporate and dull.</p> <p>Also what influences your creativity is the departments around you, where you can be in your happy space and listen to music but you are constantly listening to the finance people bitching about numbers and the traffic lady screaming at people down the passage, so it does have a negative impact on your attitude when you are trying to be in that creative space.</p> <p>Just to give yourself space to think, so now that I am upstairs I normally tried to zone everybody out and put in headphones and listen to music, draw away</p> <p>The new upstairs office was crowded with modular workstations. There was no common workspace. The light was poor. The colour scheme was orange, beige and grey. It was very unpopular. It had been implemented in order to fit more staff in. There were few windows or ways to see out.</p>	<p>Quieter better, not too much distraction.</p> <p>Isolation from rest of company less productive. Need to feel a part of things.</p> <p>Need a collaborative space</p> <p>Don't like call centre layout. Does not feel / look creative.</p> <p>Need to be in a happy space – not too much distraction.</p> <p>Zone out</p>
Branding	Did not answer this question.	

Branding	<p>We moved all of the designers to one end of the building in the hope that the egos will start talking to each other. Because we position ourselves as a 360 design agency it is best that the graphic designers are sitting next to the advertisers are sitting next to the architects and truly, truly share. They are in one space. It's open plan. They want to be in open plan. They want to sit in long benches next to each other. Previously we spent a lot of money cocooning people into their own little creative space, but these guys don't want to do it anymore. They want to be almost exposed. The plug iPod into ears and blom out. We tried to have two spaces, one for innovation and communication, table tennis and bean bags, it wasn't used. People would rather use the coffee machine or sitting outside having a smoke. There is more communication that takes place there than if it forced. They form personal alliances and they communicate around those alliances. That will take precedence.</p>	<p>Open plan, the more open the better. Contrived communal space is ignored. Communal design areas, not playgrounds</p>
Fashion	<p>We moved from this beautiful building in Parkhurst. It was funky, it was vibey it had all this creative energy. That was extremely creative. Here, it is a different environment. I think it is calmer. There everyone was kind of on top of each other, here there is a lot more space. There our force of creativity was different, it was dealing with people. Here is more corporate. I think if you are creative and you are set at a task, you can do it anywhere. I don't think you need total exterior external stimulation to be creative</p>	<p>Creativity not space dependant. Influence of the space must be appropriate.</p>
Interiors	<p>We work as a complete studio. It is completely open plan, everyone sits cheek by jowl there is no separation. As projects move we move people into teams, the documentation team and the creative team sit together aren't separate. The project co-ordinator sits right next door to the designer. It is a lot easier than having to move every time you want a decision.</p> <p>We have a separate pause area where we encourage people to get up from their work stations for tea in the morning and afternoon so that they do intermingle and connect, that is just normal psychology of the workspace, they do encourage people to mix and socialise.</p> <p>Although it was a completely open plan studio, it was quiet and peaceful. Lots of light on the top floor with a good view.</p>	<p>Open plan, seated in teams. No partitions. Team has sight of whole process. Communal area</p>

Landscape	<p>A studio environment is got to be the best way to nurture these people because you can't nurture them if they are working in isolation. In Harper Downy's office, they are all doing different things but the interaction in terms of design ideas is amazing, and that interaction between the designers was fantastic. The fact that we were all together,</p> <p>Only the director had his own office, but that is because he owned a parrot and needed somewhere for it to squawk. The rest of the office was an open plan studio, no partitions. Lots of light. Quite exposed. View of the garden.</p>	Studio environment with lots of interaction.
Architecture	<p>There's upstairs and downstairs. What happens is that a project comes in. I spend most of my day sitting at the green table, I'll sit and sketch and draw. Or I'll be downstairs looking at the fabrics. I don't like sitting in my office, I like to sit there or in the studio so that I have contact with everyone all the time.</p> <p>Was a very crowded office, cramped and small. Director admitted he decamps to the boardroom often. Had a central table where he liked to design.</p>	Studio setting. Did have offices but did not enjoy them as it made him feel isolated. Central common work area.
Architecture	<p>I don't think having people in separate offices is a great idea because in design you don't need to be sealed off. In fact you shouldn't be off in your ivory tower designing, because you'll never come down. [Our] office it was open plan, but then you had boards in those days, everyone had a drawing board and there was always music playing.</p> <p>You don't want people to be working on stuff that the rest of the office isn't aware of. It's important that the office knows what is going on, who's working on what, who's meant to be working on stuff. (He says that drawing boards were fantastic, you could walk around the office and you could see exactly what everyone was doing)</p> <p>In [the other] office I was in a semi private working space which was quite nice, I liked that. More than the actual space in those offices was the atmosphere, we weren't looked at if we went to lunch and stuff.</p>	Open plan- so that whole office has sight of what is being worked on. Atmosphere more important.
Architecture	<p>This office was severely open plan with the staff sitting trader style without partitions. The senior partners also sat amongst the staff. They were shuffled every few months so that the teams could sit together. The only closed in areas were the print room and the server room and the accounts and HR offices. There was a nice coffee / lunch room. The effect was rather fish bowl like but the views were spectacular.</p>	Open Plan

Engineering	We have just changed from cellular to open space. Is this just a new fad. I firmly believe in an open space environment. It is much more interactive, you feel much more like a team. It's now an interactive space. We were all in our own offices until the end of last year. The one problem is that you often need to make private calls. We have open space etiquette. You don't shout over each other. It's very quiet here, it's an engineering office.	Open Plan
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9.3.14 Table 28: Category of Analysis – Design Brief

Discipline	Quote	Outcome
Ballet Company	Did not answer this question.	
Orchestra	Did not answer this question.	
Advertising	You need a good brief, then let the creatives chart the route how to get there and we'll come back and sell it to you.	Let the creatives do their thing. Insight, not information.
	The problem today in business is to confuse information with insight, we can all google, so in a brief the trick is not to ask the clients for information, it is to ask the client for insight. What does it mean? Take the information and work with your strategist to squeeze out the insight. So we have to distill what we are given into an insight. Briefs should contain the insights which are the precursor to the idea, otherwise you have so much mining of data which takes up so much time. And clients and agencies have confused information with insight.	
Advertising	The best briefs are when people are actually exposed to the product. For example with BMW, the guys went to the factory and walked the floor. This is experiential briefing when you actually cook the product, taste it, dive it. That's where you start by exposing them to it. Then you give them an objective, you need to sell whatever, we need to market the power steering.	Experiential briefing
Branding	We have a very corporate client base so you get given a lot of restrictions to begin with, which is helpful in terms of what would be practical and what won't. That allows you a nice tick list in terms of what will work and not in a practical sense.	Restrictions helpful Creativity lies in possibilities within given parameters. Give me a problem to solve.
	I find I am more creative when I have restrictions, you know where your boundaries are but you also know how you can push them and how you can bend them and I think the creativity lies in that, finding the possibilities within the set of restrictions. I think that is the correct process to me, the whole problem solving process	
Branding	Did not answer this question.	
Branding	Did not answer this question.	

Fashion	That is where quite a bit of creativity comes into it, because it is easy to create without boundaries, when money is not an option it is easy to go over the top but when you have restraints you really have to be creative. Does that make sense?	Restraints and boundaries make you more creative
Interiors	I don't tell somebody what to do, I'd rather send them off in a direction. It's very much about talking about the right approach and then they go off and come back with stuff and we might say not quite on the mark, let's move it a little bit this way.	Give them direction and send them off and see what they come up with. Brief only about facilities
	The brief is about the facilities, level of finish and materials and the image of the brand and what the client wishes to achieve. Very seldom do we ever get told or given a very strict set of parameters, it seldom happens: location, budget constraints, spatial.	
Landscape	I like the client to know what he wants in terms of the componentry. If they haven't been given a clear brief, you can go around in circles and have an enormous amount of abortive work which is the bane of our lives. It costs us a fortune. If there is a good brief in terms of those components, the client has a shopping list, then that is fine, I think the client is coming to us because they want our expertise. I don't like to be told, "This is what it is going to look like. I want something linear here etc."	Clear brief of components – otherwise waste of time. Use our expertise. Don't tell us what to do. Don't be a control freak. Give parameters. Not details.
	If you can see that the client is an absolute control freak, he might as well just done it himself. He is just killing us. What is the point of employing us? We are all idiots. He is wrong in so much of what he has thought through. It's a waste of time. The other extreme, a client who knows what parameters he wants and he can communicate with you that can be great as well. That helps you. If there is no brief, that is also fine. That gives you freedom to surprise him and hopefully it goes well.	
Architecture	Hilton give you this fantastic thing. It is completely prescriptive. It'll tell you exactly what they want. For SI we had no brief, we had to come up with a scheme to rejuvenate the place and that what all we got. Our first presentation was a dog and pony show. It was a huge risk.	Without a proper brief it is a risk.

Architecture	I also think that they shouldn't be too specific, I don't mean the actual accommodation requirements, because that is pretty basic. For me, what I don't like and what I find stifles creativity from a client is when they try to solve the problem themselves. You want to say, "Give me the outcomes you are looking for rather than telling me how to get there." I would rather hear what you want rather than how you think I am going to do it, so don't tell me how to design because it is not going to help me understand what you are trying to do. It's about trying not to prescribe – I want the problem solving left to me, so give me the problem not the solution.	Specific about accommodation but not about the rest. Let me solve the problem. Give me the outcomes you want. Don't tell me how to do it.
Architecture	Our clients would give us site constraints and budgetary constraints and there's a time constraint and the tenancy of who they are pitching the building to. Then if they are architecturally conservative then in the back of my head as we are designing I have to keep the architecture within acceptable norms for the potential tenant. Otherwise we just try and design the best building we can.	Site, budgets, time constraints. Client preference.
	The less defined the end client's taste is the more creative because the brief is just a mechanism to resolving the building. So the stronger the brief the better it is for us because you are working in very concrete terms and your competitors are doing the same so, you can be innovative in the architecture but within the same constraints and you can compare apples with apples. If there are not a lot of boundaries then there is a problem because there is no basis to compare.	Lots of boundaries better. Innovative within constraints. Brief is a thing to solve.
Engineering	It mustn't be too prescriptive. You must be left with a bit of leeway. In fact the more leeway the better. I think sometimes the brief is too structured.	Not prescriptive

9.3.15 Table 29: Category of Analysis – Client Involvement and Relationship

Discipline	Quote	Outcome
Ballet Company	Did not answer this question.	
Orchestra	Did not answer this question.	
Advertising	Some clients like to be taken along with all the breadcrumbs, I actually like that.	Clients like to see how you got there.
	It's got tougher for clients, I don't think they understand how the world has evolved from advertising to ideas, but nor do the agencies. To me that means we should be working much more closely together. Some clients don't like to be surprised, they like to know how you got there.	
Advertising	It was our job to manage between creative and client and I am finding more and more that the clients were less able to manage their portfolios, they were second guessing their bosses, and there was a huge chain of command. The brief we got was often not the correct brief. Sometimes clients don't really know what they are doing, a tight budget, a tight deadline or you've got a client that is inexperienced.	Clients who don't know what they want delivered are dangerous. Keep the client close so that you don't stray down the wrong path
	We'd have a tissue session with the client, asking him what he thinks so you don't spend two weeks on an idea and it's wrong.	
	So it's common sense to be constantly involved because if you wait till the end and it has gone down the wrong road, you're in trouble, so you have to make it your business to pop your head in and say what ideas have you come up with. If you structure it into your brief that you are going to have regular reviews and you know which way it is going, eventually you build up and understanding of your brief.	
	If you have Creative directors who are mature and open to collaboration. Some of them say go away you can see it when it is finished, and that doesn't work because they won't get it right and the client will vomit, and then it is back to the drawing board until they see that it is team work.	
Branding	Did not answer this question.	
Branding	Did not answer this question.	

Branding	When it is time to meet the client for the initial briefing, we all go. The creative takes off his grungy jeans and stops chewing gum and engages like an adult. Then it becomes an adult to adult transaction, it doesn't become, you're a kid so we keep you in the back. They understand it, the relationship builds, they can ask questions.	The designer needs to be the one with the relationship with the client Client on the journey with you. Build the logic. Control freaks = worst kind.
	You have to take you client with you. If they say go away I trust you, that's fine, but most of the clients are spending a lot of money and you want to build up the logic in their mind so that there can only be one outcome. Everything else we have dismissed along the way.	
	There are guys who would quite frankly rather design it themselves.	
Fashion	If you've come to a professional, let them give you a professional service.	Iterative process with the client.
Interiors	It's how we interact. Generally what we'll do is we'll go and come up with the concept and we'll show them boards and then they'll I love this, I hate that, not what I wanted, that's when we'll bring them in. We do the boards normally twice, sometimes three times and then we do samples.	
Landscape	If you can see that the client is an absolute control freak, he might as well just done it himself. He is just killing us. What is the point of employing us? We are all idiots. He is wrong in so much of what he has thought through. It's a waste of time.	If your client is a control freak he may as well do it himself. Don't like meddling. Clients want to feel involved.
	It's the nature of the client. If they want updates every couple of weeks they can tell you if you are going off track. If they like to meddle and not give you a chance to develop the design, then he is seeing half finished work and it doesn't look completed, they find it frustrating. It comes back to trying to read your client and manage that risk. If they know us really well they will leave us alone. If you know that they just want to feel involved you are happy to bring them on board.	
Architecture	We don't surprise them at the end, we bring them along on the journey.	No end surprises.

Architecture	<p>It's back to that iterative process, if you are constantly being made aware of the practicalities of the design when you interact with your client.</p> <p>He would lose half of what the client said, the creative person needs to be there ...you've done the design. If someone else tries to explain why you have done something in a design without having done the design themselves, that is tricky because you can't answer those questions. You need to be given the chance to defend your decisions.</p>	<p>Client keeps you on track.</p> <p>Designer needs to be the one with the relationship with the client.</p>
Architecture	<p>There is a strong connection between our ability to be successful for our clients and the client relationships.</p> <p>Our clients generally trust us to deliver a building. We do have some difficult clients who think that interference is positive feedback. People come to us because they believe that we can give them an edge. The creative edge is why they are coming to us.</p>	<p>Interference is not positive feedback.</p> <p>They need to trust us.</p>
Engineering	Did not answer this question.	

9.3.16 Table 30: Category of Analysis - Leadership Style

Discipline	Quote	Outcome
Ballet Company	Did not answer this question.	
Orchestra	I see the orchestra as a group of people that I need to find as much work as possible of an exacting nature as I possibly can. So instead of top down I am almost running this bottom up.	Bottom up management.
	They don't have to worry about how they get there or if the lights are going to be working, they don't have to worry if there is a chair there to sit on so that they can perform, they don't have to worry that there is a conductor there to guide them, all those things are done and taken care of and they can just express themselves.	Management taking care of the creative people One guiding person.
	At the end of the day, all the individual artistic temperaments, ideas, actually get closed down by the conductor who says, this is what I am going to present to the audience. He guides the orchestra through his individual vision and he shapes the piece.	
Advertising	You have to be much more of a task driven or team driven, rather than an Ayatollah Khomeini, the boss dictates ... it is also very egalitarian.	Treat as individuals -
	You have creative people that you need to acknowledge that they are individuals and that they motivate in different ways. They have the hunger and the talent but the chips on their shoulders need to be directed. You have to acknowledge that they are not a machine. They need real close attention. Some people prefer that you talk to them just once a week, but you have to acknowledge their differences. Stay close, acknowledge their successes, when something goes wrong get there quickly. You just have to stay close and not stereotype anyone.	Pay close attention – need to be there quickly when something goes wrong
Advertising	It's working very closely with the creative director. They in the end want to have the winning idea and be working with the winning team. So it's common sense and constantly being involved because if you wait till the end and it has gone down the wrong road, you're in trouble, you have to make it your business to pop your head in and say what ideas have you come up with. Some of them say go away you can see it when it is finished, and that doesn't work because they won't get it right and the client will vomit, and then it is back to the drawing board.	
Branding	Did not answer this question.	

Branding	He will help and say, let me see what you have done, this is not going to work, why have you chosen to do this, let me test your thinking.	Close monitoring
Branding	You cannot do this business remotely, it is all the time, on the job. The creative directors need to have their fingers on the pulse all the time.	Constant monitoring
Fashion	Did not answer this question.	
Interiors	They will always keep an eye on what is happening. There will be regular project meetings with the team, technical, creative, project partner and the rest of the people. They will all sit together and decide where they are.	Keep an eye on direction all the time.
	We strategise a design approach, the creative person goes off and comes up with the initial design direction, they then show me and we crit it together and give inputs so that we are managing the creative process all the way through . I don't tell somebody what to do, I'd rather send them off in a direction. It's very much about talking about the right approach and then they go off and come back with stuff and we might say not quite on the mark, let's move it a little bit this way.	Make constant adjustments
Landscape	The key is identifying the strengths and weaknesses of those individuals. You can't have a one solution fits all, you have to really know your staff, you have to know which buttons to press, how much flexibility to give. We have a different model for each person. If I was to treat employee A the same as employee B it would be an absolute disaster. Toys would be thrown out of cot and resignations would follow forthwith and I would lose some of my creative force. But again, even with those types of people, boundaries do have to be set up, even though you give a great amount of latitude, the boundary is still about delivering a quality product for the company on deadline. If you didn't there would be absolute anarchy	Treat as individuals. Set boundaries. Constant involvement Prefer lots of creative control
	When we do a design we kind of do it together, so you see it evolve, it's not like, over there and you have to have a structured review, and then another one because you don't know what's going on. It's done by involvement	
	I would prefer it - to have greater control but I have accepted that I am not going to get it.	

Architecture	We are both control freaks, and our staff will tell you that we don't let go enough	Constant involvement to keep it on track.
	The best way is to be involved all the time. Don't give it away and then come back too much later, you must be involved to monitor the creative process. It is micromanaging, but we know what we want and as the owners of the practice we know what we need, and what the client wants and what is going to be right for the project and what is right financially.	
Architecture	The most productive offices I have ever worked in are the ones where the guys do watch you like a hawk. It was not relaxing – you had to be producing all the time. He was stopping at everyone's work station all the time so if your productivity has been a bit slack you'd be called in – is there something going on?	Constant monitoring.
Architecture	We see the creative process running through our whole business ... we try to run a business that is innovative and reinventing itself on a day by day basis so even that very process is creative in itself.	Constant management and intervention Monitor all the time One person looking after creative energy
	I generate the creative energy of this office.	
	Every three months we review our staff. We set goals for them, we understand where they are going and where they want to be. We tell them what we expect from them. We have a four month hurdle and an eight month hurdle and we tell them what we want them to deliver by then. We don't wait a year and leave the staff in a space where there is no feedback. We are constantly challenging people in our business, constantly measuring their skills and always pushing them further. It's good for our business and it is good for them.	
	My job is to keep the creative edge of our business going and then our associates drive through our business. I monitor the designs all the way, every day.	
Engineering	So it's see what you can do and if you can't do it or some people need more guidance, like the youngsters. So you say, go and do that and show me and I'll check, so that will be done by the senior engineer. It all depends on the need; we vary it according to the need, by and large we want people to do their own thing, it's the only way they learn.	People do their own thing. Ask for help.

The end.