



The role of social networks formed on the golf course in creating business value

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

13 November 2008

ABSTRACT

The emergence of a highly competitive, global knowledge based economy is increasingly compelling organisations to discover ways in which to create a sustainable competitive advantage. The efficient use of resources and capital at the organisation's disposal is critical to ensuring success. Social capital is recognised as a resource which should be leveraged to the organisations benefit.

This study considered the value of social networks formed on the golf course for both individuals and organisations. In addition to this, underlying relational factors for the realisation of this value were explored. This was done based on structured depth interviews with individuals who use golf as a method of networking, and representatives from various organisations. A survey was also incorporated into the study using a snowball sampling technique, in order to create a better understanding of the social factors involved in golf social networking in the South African environment.

Importantly, the results showed that organisational benefits may be derived as a result of investment in golf social networking. The golf social network was found to contain a high level of cognitive trust, and motivation was identified as a strong factor in the realisation of benefits for organisations. The network was also found to be homophilous, and fairly representative of the senior management bracket in South Africa, which currently faces equity challenges. A model for managing golf social networks was posed.

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.

Ronli Maria Magdalena Greyling

13 November 2008

ACKNOWLEDGEMENTS

- My family, for always being there.
- Brendan, for making sure I climbed the last stretch.
- My fellow MBA's, for challenging me and keeping me on track.
- Dr. Caren Scheepers, my supervisor, for her guidance and support in completing this task.

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LIST OF ABBREVIATIONS

ANC	African National Congress
A-SCAT	Adapted Social Capital Assessment Tool
CEE	Commission for Employment Equity
CSAE	Centre for the Study of African Economies
EAP	Economically Active Population
GCIS	Government Communications
GSR	Goods, services and revenue
IQR	Inter-quartile range
PCAS	Policy Coordination and Advisory Services
SAGA	South African Golf Association
SAGDB	South African Golf Development Board
UCLA	University of California, Los Angeles

1. INTRODUCTION TO RESEARCH PROBLEM

1.1. *Introduction*

Within an environment of global uncertainty and instability, a need for not only countries, but also organizations and individuals to become more competitive is created. Alternatives to traditional forms of capital generation are now being explored with the aim of ensuring long-term sustainability.

South Africa in particular faces a number of interesting social and economic challenges. In addition to these challenges, the market liberalising effects of globalisation and the influence of the highly pragmatic Asian states play an important role in the future success of this country, it's nationals, and the participant organisations.

In this light, the creation of social capital is an interesting notion. Social networks form the framework on which social capital can be created. With increased uptake of internet and mobile-device based networking applications, the concept of the potential value of social networks is facing a diversity of opinions.

This research considers the role of social networking in the creation of organisational value. A traditional, highly aspirational network type with inherent old-boys club implications, networks formed on the golf course, is considered here particularly for its potential to shed light on the importance and current

state of social capital generation within the highly diverse South African environment.

1.2. Macro-environment of business

We exist in an era of rapid change. In particular, two macro trends are identified in relevant literature. These are globalisation and post-Fordism.

Globalisation drives the need for new methods of improving efficiencies in resource usage (Viator, 2007) as a result of the removal of trade barriers and increased competition on a global scale.

Millet and Harvey (1999) refer to the shift of industries away from manufacturing and agriculture towards services and knowledge as post-Fordism. Frei (2008) states that this is observed as economies mature.

Furthermore, Millet and Harvey (1999) suggest three underlying contributors which are posed as having a significant influence on the business environment on a global scale, as well as being central to the two macro-trends of globalisation and post-Fordism. These are changes in demographic trends, identify and technology:

- Demographic trends – the changing features of society and shifting requirements.
- Identity – the richness of context, relationships and affiliations created by networks of individual and collective identities.

- Technology – the break-down of trade barriers through enabling technological advancement.

Facing the emergence of a global, highly competitive knowledge-based economy, the appropriate and efficient use of valuable resources and capital is becoming ever more critical in ensuring competitive advantage and long-term economic success.

1.3. Competitive advantage and social capital

The resource-based view of strategy places a particular focus on the importance of an organisation's resources as the foundation for defining, enabling and constraining its corporate strategy (Zack, 1999). Resources are considered a source of competitive advantage if they fulfil a particular need, are not easily imitated, and organisational value can be captured from them.

Allee (2000) refers to three "value currencies" of the knowledge economy: Goods, services and revenues (GSR), knowledge, and intangibles. These relate to the forms of capital highlighted by Ostgaard and Birley (1994) - financial, physical and human capital. They argue that the resource base that is made available through personal networks cannot be ignored as it plays a dominant role in the formulation and implementation of strategy. Social capital is defined as the resources and benefits created as a result of relationships and interactions between people.

Burt (1997b), Nahapiet and Ghoshal (1998) posit the development of social capital and hence social networks, as a complement to intellectual capital, and fundamental component of organisational advantage (Nahapiet & Ghoshal, 1998).

1.4. *The changing face of social networking*

Social networks are the structure on which social capital is created. A variety of forms of social networking exist. These range from the traditional methods of networking such as club memberships, to the use of more technologically advanced online and mobile applications.

These modern techniques have generated much controversy, and have been accompanied by a diversity of opinions on the potential value of social networking for business. For instance, Li (2007) points out that business is both social and personal and that bonds are built between people rather than businesses, indicating the relevance of social networking in a business context. Davenport (2007) on the other hand posits that the use of such tools in the business environment is misconstrued, and that there exists no link between such tools and creation of organisational value. Though traditional methods of networking seem to have become common place in the business environment, limited information on the realisation of value from such networks is available.

The utilisation and benefits of social networks make for an interesting area of study in a country such as South Africa, where it is believed that “social

networks, even among the poor, do have some influence on an individual's access to resources, opportunities for employment and so on" (PCAS, 2006).

1.5. South Africa

According to Pieterse (2002), on winning the first democratic election in South Africa in 1994, the African National Congress (ANC) set out to realise its goal of building a "truly united, non-racial, and non-sexist nation" (ANC, 1997). This nation building project intended to both unify and allow "expression of diversity" (Pieterse, 2000), and the country became referred to metaphorically as the *rainbow nation*.

The concept of the South African *rainbow nation* has come under a lot of criticism as a result of recent racial and xenophobic events. More than fourteen years into its democracy, South Africa faces a number of interrelated challenges which have a direct bearing on economic success shape the countries strategic objectives (GCIS, 2008):

- High levels of diversity and low integration/cohesion of society.
- Emerging economy, largely dependent on limited natural resources.
- Poverty, widening inequality and tumultuous social landscape.
- Pending socio-economic conflict.
- Political uncertainty.

In search of ways in which to overcome these challenges, Baker (2000) is quoted in reference to social capital as a “bulkward of democracy”, a form of defence of the freedom of the state. Brown (2001) calls for commitment, responsibility, and a common sense of affiliation in the rebuilding of the nation.

1.6. *The Asian entrant*

“The rise of China will have important implications for Africa”, Hale (2006).

Greenhalgh (2001) poses an organisational model in which relationships are at the centre. He argues that although this is considered contrary to the standard western view of organisations, their eastern counterparts consider this to be the central component of the organisation.

Fan and Zigang (2004) postulate a number of cultural differences in eastern and western business approaches. In particular they note that as compared to American managers, Chinese managers favour cooperative strategies, display a higher level of conflict and risk avoidance, and pay more attention to building social and interpersonal relations.

Li (2006) highlights social relations as crucial to success and survival in doing business with Chinese firms. This is supported by the study by Jansen & Ramström (n.d.), who considered the network relationships between Nordic and Chinese firms. The article *Doing Business in Asia* (Gross, 2003) provides an outline of cultural differences, and ways in which to ensure relationships are

nurtured. In particular, Gross (2003) points out the eastern tendency to develop long-term relationships based on integrity and trust, in contrast to the western competitive tendencies and focus on generating profits.

In addition to this, the high value placed on position in society is indicated by Li (2006), and according to Reuters (2006), participation in elite activities such as golf are considered to be a way in which ambitions may be achieved.

1.7. Golf and social networking

Empirical studies referring to the use and value of business golf are few and far between. This concept of golf as a networking tool is covered mainly in popular press and management reviews, with emphasis placed largely on the management of relationships with customers, rather than on networking.

A common perception exists that many business deals are created either on the golf course, or as a direct result of interactions on the golf course. Ruquet (2003) for instance, indicates the propensity of golf being used as a business tool by insurance agents, allowing them to build relationships with clients and create an environment for easy communication and exchange of information. Rynecki (2007) refers to golf as an “*18-Hole Character test*”. He goes on to say that “*No boardroom can provide the insight into a CEO’s nature that a round of golf can*”. This view is strongly supported by Pitcock (2005), who says that an individual’s behaviour on the golf course is an indication of their abilities in business.

Inclusion of executive golf programs on offer at business schools (Pethokoukis & Mannix, 2004), such as the Wits Business School's Management Advancement Programme (Wits Business School, n.d.), is indicative of the value placed on proficiency on the golf course in the business setting. The result of this perception is often investment, on an individual basis in acquiring skills and knowledge required to be competent on the golf course, as well as corporate investment in large corporate golf events and activities. These events are often associated with the bringing together of influential people from business, sport and politics as in the annual event held at Pinnacle Point (Yeld, 2008).

1.8. Motivation for research

Organisations compete on increasingly higher levels and the need to create and sustain corporate advantage becomes more and more evident (Zack, 1999). Effective use of resources is therefore a cornerstone in the choice and implementation of organisational strategy (Collis and Montgomery, 2005). Burt (2000), Tsai and Ghoshal (1998) consider social capital within the organisation as considered such a resource.

Kilduff and Tsai (2003) indicate that individual social capital may have benefits for the community or organisation to which they are linked. According to Portes (2000), the effects of social capital generated at individual level on higher levels remains to be tested. Limited information on the realisation of value from such networks is available.

This research aims to investigate the business value of social networks formed on the golf course, a traditional networking environment, as well as to identify prerequisites for value creation. Of particular interest is the influence of golf's inherent 'old boy's' nature on social networking in the South African business environment, which is characterised by diversity of race, language, age, gender, and disability (PCAS, 2006).

1.9. Aims of research

This research seeks to investigate the role of the social networks formed on the golf course in creating business value. In particular, the study aims to investigate the aspects of these social networks that have a direct impact on business value creation, and give an indication of the significance of social networks formed on the golf course in creating value.

Specifically the research will seek to establish:

- The benefits and costs of social networking on the golf course on both a personal and organisational level
- The opportunity created by social networks formed on the golf course by investigating the structural characteristics of such networks and their relation to business value creation.
- The motivational factors required to create business value, which are inherent in relationships formed as a result of social networking on the golf course.

2. LITERATURE REVIEW

Both South African businesses as well as the South African economy are faced with potential instability as a result of shifting macro-economic factors (CSAE, 2001). This is an underlying driver of the need to investigate potential sources of organisational advantage, such as social capital. An understanding of the ability to use social capital to such advantage is therefore considered essential in ensuring sustainability.

Furthermore, as social capital is formed on the frame of social networks, an understanding of the nature of existing networks provides insight into the potential for generating organisational advantage.

The intention of the literature review is to provide a clear reasoning of the need for the research. The pyramid principle, proposed by Minto (1987), has been applied in the writing of the literature review, in order to present a structured overview of the understanding of the main theoretical constructs related to the research.

This review provides the following:

- An overview of the elements of social networks.
- Investigation of social networks and underlying relational requirements in the generation of social capital.
- An investigation of organisational value of social networks.
- Traditional old boys' networking and diversity
- Golf as a business tool

2.1. Introduction to social networks

It's not what you know, it's who you know.

Social or personal networks refer to a set of individuals tied together by a mapping of relationships which exist between them (Ethier, n.d.). Li (2007), Kase and Liu (1996) point out networks are based on personal relationships, and hence are of importance to business. These networks are formed and evolve over time (Kossinets & Watts, 2006), as ties are created, altered or destroyed.

Tichy, Tushman and Fombrun (1979) describe three properties of social networks:

- Structural property, which deals with network configuration.
- Relational property, which considers the nature of ties.
- Transactional content, which refers to the type of exchange which occurs within the network.

Each of these properties is shown in Figure A0-1, and discussed in further detail here.

2.1.1. Structure

The first network property identified by Tichy *et al.* (1979) relates to the configuration of the social network. Wasserman and Faust (1994) list a number

of concepts related to network structure. The network is said to consist of a finite set of nodes, or actors. The network is further defined in terms of its size (number of actors), and the groups or sub-groups which exist within it. Actual network size indicates the number of actors which exist within the network, whereas effective network size incorporates the theory of structural holes (Anderson, 2007), and adjusts for redundancy of information that occurs in high density networks as a result of an individual's network contacts knowing each other.

The structural network property also incorporates the aspects of network density (cohesion), homogeneity and openness (Claridge, n.d.). Reagans and McEvily (2003) further introduce network range, which is defined as the prevalence of ties across diverse boundaries. Networks with lower density are said to have a higher degree of range (Marsden, 1990), and increased network range is argued to ease the process of knowledge transfer, in particular conveying complex ideas to more heterogenous audiences (Reagans & McEvily, 2003).

In order for an exchange of ideas to occur between actors in the network, relationships which tie the actors together must exist.

2.1.2. Ties

The network structure discussed above is held together by way of relationships, or ties between actors. Tie strength in particular is considered a key network

concept (Anderson, 2007). Granovetter's (1983) strength of weak ties argument asserts that an individual's acquaintances (weak ties) are less likely to have relationships with one another than the individual's friends (strong ties). Weak ties therefore lead to a greater diversity of resources and information to which the individual has access. According to Wu and Choi (2004) weak ties do so more efficiently (particularly with regards to time and investment in relationships), and in this way, increase value. The type of ties which exist is related to network structure, in that effective network size is increased with the introduction of weak ties. It is across these ties that exchange occurs.

2.1.3. Exchange of content

The abovementioned network ties, act as conduits for exchanges between actors. The nature of network ties influence the access to and exchange of resources, and reduce time and investment required to access these resources (Nahapiet & Ghoshal, 1998). Exchanges vary in form, and may include exchange of material/physical resources (such as business transactions), exchange of information or knowledge sharing, exchange of affection (such as personal liking and respect), and exchange of influence or power (Tichy *et al.* 1979).

The existence of a social network, consisting of the network structure, ties and content is a requirement of, but not sufficient for the creation of social capital. Additional aspects are considered in the following section.

2.2. Social networks and the creation of social capital

The study by Anderson (2007) indicates that possession of a social network structure may have little value when a lack of motivation exists to take advantage of the opportunities provided by the network. This leads to the potential for generation of social capital through social networks.

A multiplicity of definitions exists for the notion of social capital (Adler and Kwon, 1999 and Claridge, n.d.). Ethier (n.d.), describes social capital as the position that an individual holds in a network, and the resulting ability of the individual to utilise resources contained within that network. Putnam *et al.* (1994, Quoted in Carayannis, 2000) refers to social capital as “features of social organisation” that “facilitate coordination and cooperation for mutual benefit”.

Broadly defined, social capital is the resources which are accumulated through relationships between people (Coleman, 1988). According to Burt (2000), there exists a general point of agreement regarding social capital, that social structure (or network structure) is a “kind of capital that can create for certain individuals or groups a competitive advantage in pursuing their ends.” Tsai and Ghoshal (1998) liken social capital to physical and human capital, saying that social capital is “a productive resource, facilitating actions that range from an individual’s occupational attainment to a firm’s business operations”.

Adler and Kwon (1999) argue that the existence of a network tie does not imply that social capital (which underpins the creation of value as shown in Figure

A0-3), will actually be created, and that effects will materialise. Following this, they propose three elements of social capital, all of which are required in order to realise benefits of social capital. The elements of social capital include:

- Opportunity,
- ability, and
- motivation.

Each element is dictated by a variety of environmental circumstances and fall within given political, legal and economic contexts. The elements and underlying factors are discussed.

2.2.1. Opportunity

Opportunity exists as a result of the potential value created by the network itself, and relates to the structural dimension of social capital (Chua, 2002; Nahapiet & Ghoshal, 1998).

The creation of opportunity is generally attributed to the structural network characteristics, as well as the existence and type of relationships within the network. Ties create opportunity for the generation of social capital, allowing actors to leverage resources and knowledge contained within the network. The flexibility and ease of exchange through network relations reduces the time and investment required to gain access to such resources.

Harpham, Grant and Thomas (2002) refer to the structural component of social capital as “connectedness” in their model of The Adapted Social Capital Assessment Tool (A-SCAT), and place a strong focus on personal association – homophily – as an essential element of opportunity.

2.2.1.1. Homophily

Birds of a feather flock together.

Homophily refers to the tendency of individuals to associate with others who are similar (Kilduff & Tsai, 2003). McPherson, Smith-Lovin and Cook (2001) accredit the predominance of homogeneity in personal networks, particularly with regards to sociodemographic, behavioural and intrapersonal characteristics, to this tendency. Homophily in race and ethnicity is said to create the strongest divides in our personal environment followed in order by age, religion, education, occupation and gender (McPherson *et al.*, 2001).

Two schools of thought exist on the issue of homogeneity vs. heterogeneity in social networks (Krishna and Shrader, 1999). The first sees heterogenous networks as more beneficial in terms of the economic welfare of the members involved, and hence social capital. Kilduff and Tsai (2003) mention the benefits derived from heterophily which brings about the introduction of new information and resources into a group as a result of an individual acting as a broker between two otherwise unconnected groups.

On the other hand, homogenous networks are shown to be more effective possibly as a result of a strong feeling of association with the network. Uzzi and Dunlap (2005) refer to the self-similarity principle, which states that network contacts are often chosen based on similarity, which increases trust, makes for more efficient networks due to common understanding, enhances knowledge transfer, and has gratifying effects on personal ego. They caution that too much similarity however inhibits access to information, and therefore the potential for creativity and problem solving is decreased. With reference to the effect of homophily on the limitation of “people’s social worlds”, McPherson *et al.* (2001) caution that homophily has “powerful implications for the information they receive, the attitudes they form, and the interactions they experience”.

Over and above the opportunity which is created as a result of association with a social network for the generation of social capital, individuals should be able to utilise the opportunity to create value. The concept of ability is further discussed.

2.2.2. Ability

The ability to create value from opportunity arising from the social network structure and ties is considered critical for successful social capital generation. Burt (1997b) refers to this ability as human capital, and a complement to social capital in creating value.

According to Adler and Kwon (1999), two factions exist in social network theory regarding human capital. The first sees human capital only as a complement to social capital, whereas the other sees human capital as a constituent of social capital. The view taken here is that of Adler and Kwon (1999), that abilities play multiple roles in the creation of social capital; forming the context in which social capital is created, complementing social capital in creating value, and essentially being a factor in the creation of social capital itself. They further relate these abilities to the cognitive dimension of social capital posed by Nahapiet and Ghoshal (1998) and build on basic human capital by including other forms of accessible skills and resources, as well as shared beliefs.

2.2.2.1. Shared beliefs

The cognitive dimension of social networks posed by Chua (2002), Nahapiet and Ghoshal (1998) composes a set of shared interpretations and meanings amongst actors in the network. Human capabilities, common interpretations and shared beliefs enable transfer of new interpretations and perceptions, ultimately facilitating the combination of different forms of resources and enhancing tacit knowledge (Chua, 2002). People are ultimately kept apart as long as they do not share similar languages and beliefs (Nahapiet & Ghoshal, 1998).

Thus far, opportunity and ability to create social capital have been considered. An additional intrinsic requirement for the generation of value through social capital is the motivation of the actors to realise such value. The notion of motivation at various levels is examined.

In an environment in which opportunity exists, as does the ability to make use of the opportunity, a final element is required in order to generate value. The concept of motivation is highlighted and discussed in the following section.

2.2.3. Motivation

The final element of social capital posed by Adler and Kwon (1999) is that of motivation. Both opportunity and motivation are required in order for social capital benefits to materialise (Anderson, 2007). This relational aspect increases access to resources, the level of value anticipated to result from interactions, and the desire to engage with other network actors in order to create value (Nahapiet & Ghoshal, 1998). Chua (2002) further shows that the relational dimensions of networks are the strongest predictors of the quality of exchange in the network, and advise the prioritisation of development of this dimension.

Chua (2002) notes the following sources of motivation to generate value from social networks; the level of care between actors (friendship or kinship), the norms of cooperation between members, and the sense of affiliation with the network group. Anderson (2007) includes “need for cognition”, a personality trait which drives an individual’s motivation to realise the potential informational benefits which are made accessible through their networks.

Portes (1998) goes on to distinguish between two forms of motivation:

- Instrumental motivation - based on enforced trust driven obligations enforced by the community, and rational thought.
- Consummatory motivation - based on internalised norms and experiences.

Adler and Kwon (1999) indicate that although social capital research has often focused on the conscious motivation of actors to exploit social networks for their own benefit, the consummatory forms of motivation also play a role. This includes reciprocity and affective trust which is developed at an inherent or emotional level, and is distinguished from cognitive (enforced) trust by Smith and Lohrke (2007).

2.2.3.1. Reciprocity

Reciprocity binds communities based on trust that favours will be returned in the long run. Reciprocity is based on the concept that 'I will do something for you without expecting a return, but believing that at some stage in the future, you will do something for me'. Reciprocity creates common interests, and drives the goal for the 'common good'. According to Harper (2002), reciprocity measures the willingness of people to co-operate for mutual benefit and is a core component of social capital, along with trust. Furthermore, Wu and Choi (2004) relate trusting relationships to the promotion of reciprocity within networks.

2.2.3.2. Trust

Dubini and Aldrich (1991) describe trust in a networking context as being “*the basic element for determining the solidarity of the link and the permanence of the tie, reducing the risks for the involved parties*”. Greve (1995) highlights a lack of trust as a potential reason for failure in establishing connections.

Tsai and Ghoshal (1998) explain that cooperative behaviour in the exchange of resources may ensue when trust exists between two exchange partners. The reputation for trustworthiness of a network member was confirmed in his study to be an important variable when selecting a potential transaction partner, as members with a high perceived degree of trustworthiness benefited from higher levels of resource exchange with other members.

Carayannis *et al.* (2000) state that companies are able to accumulate social capital by developing relationships that are trustful, thereby cooperating more efficiently with one another. Strong forms of trust (similar to affective trust) are said to be the most effective and efficient for cooperative relationships as it not only decreases cost of transaction and governance, but also reduces the risk of opportunistic behaviours through shared values, principles and standards. Gulati, Nohria and Zaheer (2000) in addition highlight reputational risk as a mitigating factor of opportunism, and a form of deterrence based (cognitive) trust.

Literature indicates that dense social networks benefit from a higher level of trust than more sparse networks. Dubini and Aldrich (1991) state that a higher degree of trust is held in strong network ties than in relatively weaker ones. The increase in the level of trust that is gained in dense networks is therefore traded off against both the diversity of information as well as the increased access to resources that is likely to be gained as a result of the sparser network structure. Trust however remains a crucial enabling factor for cooperation, the exchange of resources and information. It is considered a limiting factor on transactional and governance costs, and ultimately the enables the creation of value.

Social capital incorporating opportunity, ability and motivation is viewed as an organisational resource, the potential value of which is considered in the following section.

2.3. Value creation and corporate strategy

Collis and Montgomery (2005) propose that value creation lies at the heart of corporate strategy. They further state that organisations are able to create value through realising corporate advantage, which is done by aligning and controlling resources, business and the organisational structure with the ultimate goals, objectives and vision of the company. A model for value creation indicating relationships between these elements is shown in Figure A0-2.

Following this, the resource-based view of strategy places a particular focus on the importance of an organisation's resources as the foundation for defining, constraining or enabling its corporate strategy (Zack, 1999).

2.3.1. Resources and value creation

As it is the firm's resources that dictate what a firm is able to do, they are viewed as a key component in creating corporate advantage, and thus adding value to the organisation. The value of a particular resource is said to be highest in a situation in which high levels of scarcity, demand for and appropriability of such resource are mutually inclusive (Collis & Montgomery, 2005). Organisations are therefore able to create competitive advantage by correctly identifying and efficiently utilising such resources.

Three categories of resources are identified by Collis and Montgomery (2005), including:

- tangible assets (physical assets that can be consumed),
- intangible assets (assets that are not consumed, however can diminish in value), and
- organisational capabilities (processes combining other resources to create outputs).

Allee (2002) suggests that the general shift towards the concept of the knowledge economy requires a systems thinking perspective of the organisation. She proposes that all organisations can be viewed as networks in

which value is created through numerous exchanges of three “value currencies”, or resource bases (Allee, 2000):

- Goods, services and revenues (GSR) i.e. physical assets.
- Knowledge i.e. information and know-how.
- Intangible benefits e.g. customer loyalty and trust.

These value currencies are conceptually associated with the resource categories previously outlined, and the main aspects of social network theory as shown in Table A0-1.

The resource exchange view is supported by Tsai and Ghoshal (1998), who focus on resulting intra-organisational value creation as a result of resource exchange rather than value creation across these organisational boundaries (Allee, 2000). They show a clear link between intrafirm networks on the creation of business value (in particular on productive exchange of resources and increased product innovations), and claim that investment in creation of social capital within the organisation will lead to creation of value for the organisation. The outcomes of the study by Chua (2002) further indicates that there is a positive correlation between the level of social interaction and the quality of knowledge created as a result of such interaction.

Argote and Ingram (2000) support the notion of business value creation through knowledge transfer however unlike Allee (2000), who proposes exchanges across organisational boundaries, they state that corporate advantage is

derived by encouraging intra-organisational knowledge transfer, whilst preventing knowledge transfer out of the organisation.

Cross and Prusak (2002) claim that as a result of social networks not being a part of the organisational hierarchy, management does not place enough emphasis on ensuring that informal social networks receive sufficient resources and are managed effectively. They suggest that a systematic approach to management of these networks is required in order to make them more effective in finding information, and getting work done. Burt (1997b) builds on this by stating that part of the value a manager adds to the organisation in which he works is the ability to identify opportunities in which to add value, and put together an appropriate mix of people in order to develop these opportunities.

2.3.2. Cost-benefit analysis for value realisation

Allee (2007) proposes the use of a cost-benefit analysis, considering both tangible and intangible values, for measuring value realisation. Value realisation is defined as “*the act of turning a value input, either tangible or intangible, into real gains, benefits, or assets that contribute to the success of the participants and their organisation*” (Allee, 2007).

Table A0-2 highlights tangible and intangible costs and benefits proposed by Allee (2007). Based on the definitions provided, these are related to financial and non-financial costs and benefits respectively, and are further considered at both the organisational and personal levels.

2.3.2.1. Organisational benefits of social networking

A number of benefits of social networking exist to the organisation and are considered here. In particular, improved relationships and access to resources are highlighted in literature as outcomes of social networking which are beneficial to organisations.

Greenhalgh (2001) finds that “adversarial relationships” have hindered the competitive advantage of western business. In the newly developing knowledge based environment, creation and maintenance of relationships have replaced previous bureaucratic command and control.

Uzzi and Dunlap (2005), in an article on building networks, categorise three unique advantages delivered by networks: private information, access to diverse skills sets, and power. Private information is gathered from personal contacts, and the value of this information is dependant on the level of trust which exists within the network. Networks provide access to diverse skills and unique, valuable resources which in turn help to develop more complete, creative and unbiased views of issues. Power and benefits such as faster promotions (Kilduff & Tsai, 2003) are often afforded to individuals, also referred to as network brokers, which link network members with trustworthy and informative ties. These ties lead to network benefits as a result of collaboration between important network members and exploitation of opportunities.

Between organisations, the creation of social capital alters inter-firm relationships with the effect that externalities (consequences of a firm's actions) are limited through obligations to network partners, access to goods and services are increased, and cost of entering contracts is reduced, resulting in improved terms and levels of trade, and increased ability for value creation (McGrath & Sparks, 2005).

Wilson and Appiah-Kubi (2002) distinguish fast and slow growth firms through their ability to pursue competitive advantage by using networks to access resources. In the study conducted by Landry and Amara (2000) it is found that social capital adds value to the organisation in the form of increased innovation. In addition to this it is posed that increased diversity of social capital has a direct bearing how radical resulting innovations are.

Nahapiet and Ghoshal (1998) highlight the importance of the ability of the organisations to not only create, but also share knowledge – an ability created as a result of social networks.

Benefits arising from social networking are not limited to the organisation. Personal benefits which arise as a result of social networking are listed in the following section.

2.3.2.2. Personal benefits of social networking

Drucker (1999) places relationships at the base of organisations, and explains the necessity of understanding and making use of the strengths and weaknesses of others, and understanding one's own place and contribution, in order to be effective.

On an individual level, Kilduff and Tsai (2003) suggest that networks affect a range of personal factors from health and mortality, to career success (performance and promotion), to personal identity. According to Gamba and Kleiner (2001), job success relies heavily on the ability to network; networking provides access to resources, political support, and can create opportunities for growth and advancement in the long term; networking can diminish feelings of aloneness in corporate environments, particularly important for women and minorities; and networking across organisational boundaries can increase understanding and create a more holistic perspective. The study conducted by Tsai and Ghoshal (1998) indicates once again, the importance of interpersonal networks on the career success of individuals.

2.3.2.3. Costs of social networking

According to Walen and Lachman (2000), the negative effects of social networking activities have received little consideration in previous literature and are now gaining interest. It remains therefore to be said that there exists both a cost to social networking, as well as the potential for negative results of networking activities.

Cope (2003) considers the process of investment in social networks as a critical component of effective professional networking, and highlights personal time invested in networking as an important cost. In order to ensure value is realised, networks must be carefully constructed and managed in support of select strategic areas, as managing a large number of unproductive relationships can be time and energy intensive (Cross, Liedtka & Weiss, 2005). Wu and Choi (2004) point out the efficiency of lower density networks containing less redundant information as less time is wasted in maintaining these networks relationships.

Portes (2000) further includes investment of material resources, and the requirement of a diversity of cultural knowledge in order to establish relationships as requirements for generating social capital.

According to Kilduff and Tsai (2003) social networking may have adverse effects on personal well-being, trust and relationships. This is supported by the study by Walen and Lachman (2000), which highlights the association between “*strained exchanges and network satisfaction, depression, well-being, and distress*”, as well as physical health.

2.4. Diversity - The old boys' network

Gamba and Kleiner (2001) explain that although the rise of modern methods of networking have created an entirely new network, in which “companies form,

contacts meet, investments flow and deals happen”, this network emulates the traditional old boys network. This newer, more hippy network is just “as cliquish, as male, as white and as Ivy League as the traditional old boys network”.

In contrast to the old boy’s networks, Mayo and Pastor (2005a) show that increased diversity, both professional (tenure and education) and social or demographic (gender, race and age), have a positive effect on the effectiveness of work teams. Unique constraints, including structural and cultural barriers, exist on women and racial minorities in the workplace, and are of particular importance in the South African context.

2.4.1. Gender

“A society free from gender oppression and all forms of inequality”

Vision of the Commission for Gender Equality

Kochan *et al.* (2003) found their study to be consistent with research showing that gender diversity has either no, or only positive, effects on team interactions and processes. Mayo and Pastor (2005b) share these conclusions, indicating that gender diversity in fact facilitates the emergence of charismatic leadership, and hence increases performance and satisfaction of followers (Robbins & Judge, 2007).

Jackson (2001) however shows that women still face a glass ceiling, particularly in attaining top executive positions in Fortune 500 companies. In South Africa,

after more than fourteen years of democracy and an Employment Equity Act in place for ten years, gender remains a key point of unfair discrimination in the workplace, along with disability and race (CEE, 2008). The CEE Annual report (2008) indicates that the percentage of South African women in professionally qualified management positions has decreased from 36.4% to 33.4%, down a total of 3%, over the period from 2003 to 2007. Gender equity in the private sector in particular has been slower to reform than in the public sector (PCAS, 2006).

This may in part be attributed to differences in networking behaviours of men and women, which impact network structure and relationship characteristics (Ibarra, 1993; Scott, 1996). These differences in behaviour may be as a result of a number of constraints, including the traditional role of women in less influential positions, with lesser resources at their disposal (Forret & Dougherty, 2004). The studies conducted by Forret and Dougherty (2004) and McGuire (2002) show that this results in women's networking behaviours being less advantageous as compared to their male counterparts, and ultimately impedes career success.

2.4.2. Race

Race and ethnicity are considered the greatest cause of division in society (McPherson *et al.*, 2001). According to Glaeser *et al.* (1999), people from different races or nationalities behave in a less trustworthy manner towards one

another, and differences in race and nationality reduce the level of trustworthiness between individuals.

“The history of South Africa since the advent of colonialism has been shaped by race as a critical determinant of social relations within and among classes”

PCAS (2006). Slow inroads have been made into cultural equity in the country, with severe under representation of black South Africans in qualified Management positions (CEE, 2008).

Mollica, Grey and Trevino (2003) say that homophilous ties provide valuable sources of mutual support. They go on to mention that the downfall, particularly of racial homophily, is that it may also reduce the access of racial minorities to information and resources, hindering performance and advancement. Kochan *et al.* (2003) find that racial diversity has neither a positive nor negative effect on performance, however may be an enhancing factor under certain circumstances.

2.5. Golf as a business tool

Perhaps one of the most likely candidates for consideration as an old boy's network, is golf. A fair amount of controversy exists around the concept of golf as a useful business tool, though research on the matter is limited. The reason for the perceived usefulness of golf ranges from its ability to let the player “escape the turmoil of life”, “perfect the art that is the deal” to the perception that

“You learn a lot about people on the golf course”, as discovered by Buckley (2007) in an interview with Donald Trump.

Haner-Dorr (2002) in an article for the Business Journal in Orlando, proposes for instance that the relationship between golf and business in Florida is unavoidable, and that many business deals have been made or broken as a result of a game of golf. Slack (n.d.) indicates that a variety of individuals ranging from entrepreneurs, middle managers and executives are seeing the benefits of golf on both their businesses and their careers. He further states that business golfers see golf as a way in which to form friendships that might not otherwise have been forged, where the real focus is on building relationships and opening business opportunities. A study by the Hyatt Hotels corporation found that 93% of executives surveyed believed that “playing golf with a business associate was a good way to establish a closer relationship”, with more than a third saying that “some of their biggest deals were made on a golf course”, and a large number saying that playing golf resulted in additional business” (Byrd, 1993).

Studwell (2007) refers to golf as the “*base ingredient of this social-business mix*” when referring to a group of politically and economically influential Asian business tycoons, “*Asia’s godfathers*”. The business dealings of these “*godfathers*” range from the financial sector to commodities. Golf is seen to be the “*social lubricant of Asian big business*”.

Conversely, golf has long been seen as an elitist old boys' network with inherent discriminatory aspects. Numerous examples exist of private golf clubs that disallow female members in order to retain their "all-male status", and undermine the progress made in gender equality (Song, n.d).

Wailgum (2008) further indicates that not everyone is convinced of the "*relationship building, networking and career advancement power of the game of golf*". In a survey of IT professionals by CIO magazine, it was found while half the respondents said that golf had aided their careers, the other half thought it held no value to them. Internet networking applications were found in some cases to be more valuable. Perhaps most importantly, the survey found that this perception varied dramatically by organisational functions such as IT, business and sales.

From an intangible benefit perspective, the study by Kobriger *et al.* (2006) indicates the positive contribution of physical steps taken on the golf course as part of a general physical activity plan. This is supported by Parkkari (2003), indicating that the physical activity of walking during a golf game has health enhancing effects. Lane and Jarret (2004) on the other hand indicate the potential for negative changes in mood for ageing players, with increased anger, depression, and fatigue, and decreased vigour.

2.6. Conclusion of literature review

Social capital is considered to be a complementary resource to human capital, created as a result of interactions and relationships between people. As such, it is seen as a key component in creating competitive advantage and therefore value for both individuals and organisations.

Realisation of value is dependent on three dimensions:

- Opportunity,
- ability, and
- motivation.

Realisation of value requires these dimensions to be mutually inclusive, therefore the existence of a network, ties and content (opportunity) alone are not sufficient for value creation. The network must contain an inherent ability (largely as a result of shared understanding, human capability and beliefs), and motivation (based often on the concepts of reciprocity and trust) in order for value to be created.

Attainment of these dimensions is however often perceived to be at the expense of the diversity and range of value (contacts and information) held within the network. In addition to this, redundancy of network ties reduces the level of return on investment related to networking. Larger networks of weak ties exist at the expense of trustful relationships which are inherent in strong ties. Lower density networks hold lower amounts of redundant information, and are

considered more efficient as less time is required to maintain these relationships. Higher density network however often contain higher levels of trust, reducing the possibility of opportunism, thereby lowering associated network costs, increasing cooperation and hence value creation. These trade-offs should be considered in social networking activities for the purpose of creating organisational value.

Golf is postulated as being an ideal tool for organisational value creation as a result of its perceived ability to improve network ties and increase levels of trust between network actors, whilst retaining the desired high levels of network diversity and access to network resources.

3. RESEARCH QUESTIONS

This purpose of this study was to investigate the role of social networks formed on the golf course in creating business value.

Zickmund (2003) recommends a review of the study areas which define the problem and limit the study as a basis for development of the research questions and objectives. The following research questions were identified:

1. Research Question 1: Tangible value

- What are the tangible costs and benefits, to both the organisation as well as the employee, associated with creating and maintaining golf social networks?

2. Research Question 2: Intangible value

- Do the organisational and individual perceptions of the cost and benefits associated with the creation and maintenance of golf social networks go beyond those of only a tangible nature i.e. are intangible benefits created?

3. Research Question 3: Tangible / intangible relationship

- Does a relationship exist between the tangible and intangible value of golf social network formation and maintenance?

- Do preconditions related to the relational dimensions of social networks exist for this relationship?
 - a. Shared beliefs
 - b. Motivation
 - c. Affective trust

4. Research Question 4: Organisational impact

- The type of business value created as a result of golf social networks varies in form of exchange and by level of organisational impact.
 - a. Content / form of exchange
 - b. Level of organizational impact

5. Research Question 5: Network structure

- The type of business value created as a result of golf social networks varies based on the structure of the golf social network, including:
 - a. Network size
 - b. Network density and range
 - c. Diversity (Gender and racial)

For the purpose of this study, the term “golf social network” refers to the social networks formed and maintained on the golf course. The term “business deals” refers to the exchange of GSR, knowledge and intangible benefits, and creating value for the organisation.

4. RESEARCH METHODOLOGY

4.1. *Research design*

A two-phased, exploratory approach was identified as suitable for the purpose of this study (Zickmund, 2003). The study is perception based and considered qualitative, the purpose of which is to provide a basis on which further studies, concerned with the business value and associated benefits of social networking tools, may be conducted.

The first phase of the study was further split into two stages, both of which made use of depth interviews as the main method of data collection;

- The first stage was used to identify the nature of organisational investment in social networking as well as the perceived benefits thereof.
- The second stage investigated personal experiences and perceptions of members of the relevant social network.

Open ended questions were used in both stages in order to encourage respondents to respond freely. Basic content analysis was used to identify key variables and variable ranges indicated in the depth interviews. Additional secondary data obtained from the relevant organisations (such as financial reports indicating total entertainment spend from which the value of social networking spend may be calculated) were collected and analysed. These outcomes were then incorporated into the second phase of the study, a survey questionnaire, which was posed to a larger sample in order to collect the

primary data (Zickmund, 2003), and create a framework for understanding the business value of the social networks created using golf as a tool.

The questionnaire was piloted prior to use. During this piloting process, the questionnaire was administered to a small group of respondents in order to identify and correct any ambiguity and potential bias in the questions (Zickmund, 2003).

4.2. Population, unit of analysis and sampling

Zickmund (2003) defines the target population as *“the specific, complete group relevant to the research project”*. He suggests asking the question *“To whom do we want to talk?”* in aiding identification of the population.

4.2.1. First stage depth interviews

The population considered for the first stage of depth interviews consists of all organisations operating in South Africa. The perspective of the HR or marketing representative interviewed, informed by relevant organisational policies regarding social networking, was used as the basis of analysis. A convenience sample consisting of 6 organisations was used for this stage.

4.2.2. Second stage depth interviews and phase 2 questionnaire

Wasserman and Faust (1994) point out the difficulty in determining the boundary of the set of members, and thus the population, when analysing social networks. This is due to the potentially infinite number of links between members. Marsden (1990) lists a number of aspects on which to base the definition of network boundaries, including:

- membership status,
- social relations,
- participation in events, and
- zonal distance from focal unit.

The population considered in both the second stage of depth interviews as well as the second phase of the study is defined as all individuals who have the potential to create business value through social networks formed on the golf course. The network boundary is defined by the existence of social relationships between such individuals (Marsden, 1990).

Gretzel (2001) indicates that the unit of analysis in network analysis is not only the individual network member, but also the entity consisting of a collection of individuals and the ties between them. The perceived structural and relational variables which exist within the golf network are therefore considered in the study. This study views the social network from the perspective of the focal

person, and network descriptions are therefore based on the direct environment of the respondents (Greve, 1995).

A convenience sample of 8 individuals belonging to the population was used for the depth interview. A snowball sampling technique was used for the survey questionnaire. The size of the snowball sample is determined by the size of the social networks formed. As a result of the sampling technique, no racial and gender quotas were incorporated into the selection of the sample, however these data pertaining to these aspects did form part of the considerations of the study. The participants of the individual respondent interviews were also requested to initiate the snowball. Respondents were requested to complete an online survey where confidentiality was assured as identifiers were not requested or stored.

4.3. Procedure and data collection process

The first phase made use of depth interviews with the selected participants in both stages of the initial data. Discussion guides for each of the two types of depth interviews are included in APPENDIX 1: Respondent company interview and APPENDIX 2: Individual respondent interview. Open ended questions were used in order to reduce bias of the outcomes of the interviews.

The summary by Gretzel (2001) lists 5 data sources for social network analysis:

- Questionnaires
- Direct observation

- Written records (Archives or diary)
- Experiments
- Derivation

Based on this list of data sources, as well as the nature of the study and research questions, a survey questionnaire was selected as the most appropriate data collection method for the second phase of the study.

Short, clear and concise questions were used in the questionnaire, the wording of which has been selected in order to reduce variability of the response (Walonick, 1997). Basic demographics considered relevant to the study, such as age and gender, were requested in the questionnaire in order to provide a profile for respondents and their networking behaviour. More detailed responses testing perceptions were requested, and were based on a 6-point Likert scale. This format was chosen in order to ensure that respondents would give a definitive, positive or negative response to the questions posed. A sample of the proposed questionnaire is included in APPENDIX 3: Research questionnaire.

4.4. Data analysis

Weber (1990) describes content analysis as a research method that applies a number of procedures in order for valid inferences to be made from text. He notes that the central idea of content analysis is that many words are classified into fewer content categories along with other concepts believed to have similar meanings. One of the purposes of content analysis is to code open ended

questions. Weber (1990) indicates that “there is no simple right way to do content analysis”, and that investigators must judge the most appropriate methods for the problems under investigation. Reliability and validity of the content analysis are important in ensuring appropriate research outcomes.

Basic content analysis was applied to the outcomes of the first phase of the study in order to categorise information obtained in the interviews. In cases where audio from interviews were recorded, interview transcripts were created. All of the documented interview transcripts were used as inputs to the content analysis. Concepts mentioned by the relevant interviewees were identified from the transcripts for the questions posed and categorised according to the interviewer’s understanding of these concepts. This was believed to be the most reliable and valid method of analysis, as the interviewer not only had the most informed understanding of the concepts from the interview sessions, but also conducted the content analysis. The initial qualitative research phase based on interviews allowed for the development of a basic understanding of the perceptions of the individual interviewees, and highlighted a number of aspects to be further investigated in the second research stage.

The key variables and ranges that were identified as a result were incorporated into the final questionnaire design. This included amongst others, the lists of perceived costs and benefits. The questionnaire was administered online, and data was collected electronically before being coded for each variable considered in the survey questionnaire, checked and corrected. The data was

further analysed in Excel and SPSS. Relevant data was displayed graphically in order to create a better understanding of interrelationships prior to further analysis. This was done in the form of bar and scatter charts indicating frequency of response.

4.4.1. Respondent demographics and behaviour

Frequency tables and percentages were used to investigate nominal data (Zickmund, 2003) for both respondent demographics and networking behaviour. Respondent age was visually banded into 11 categories in order to graphically represent the age distribution of respondents. Descriptive statistics were run on select parameters to determine both mean value and standard deviation. Box plots were used to graphically represent these parameter characteristics, as well as indicate the existence of outliers.

4.4.2. Research Questions 1 & 2

Perceived costs and benefits highlighted during the first stage depth interviews were posed to the questionnaire respondents. This data was analysed using frequency tables and percentages, indicating the most frequently selected variables.

The levels of cost and benefit were measured using a 4 point Likert scale (with ordinal scale; none, low, medium and high). Descriptive statistics were used to identify mean values and standard deviation of the cost and benefit parameters.

4.4.3. Research Question 3

Data was first tabulated and inspected visually for trends. Data was then cross-tabulated, and variables tested for independence in order to ascertain the existence of a relationship (Albright, Winston & Zappe, 2006) between perceived network costs and benefits. This was done at both tangible/intangible and personal/organisational levels.

The chi-square test for independence is based on the frequencies in a cross-tabs table, and tests if the counts in the table's row categories are probabilistically independent from the counts in the table's column categories. Due to the low cell counts noted during visual inspection of the tables, Fisher's exact test was selected for investigating the existence of relationships between variables. This test is used as an alternative to the chi-square test when cells have an expected frequency of five or less (UCLA, n.d.). With a selected significance level of 5% ($\alpha=0.05$), a result of Fisher's exact test of less than 5% indicates a significant relationship exists between the tested variables.

Significant relationships determined in this way were then analysed further based on the relational dimensions of cognitive trust, motivation and affective trust.

Cognitive trust and motivation were measured based on respondent perceptions, based on a 4 point Likert scale (with ordinal scale; none, low, medium and high) as indicated in APPENDIX 5: Statistical variable calculations.

Descriptive statistics were run in order to determine both mean values and standard deviations. Mid-level values of 2.5 were used to further categorise responses into existence of the relational variable and non-existence of the relational variable. Cross-tabs were again run on the relationships, and layered using the relational dimensions in order to determine relational preconditions.

Affective trust was measured based on the types of relationships within the networks, using network percentage friendship composition as a proxy for affective trust. Percentage friendship was categorised equally into a 3 point Likert scale (with ordinal scale; low, medium and high). Cross-tabs were run on the previously highlighted relationships, layering results based on the level of affective trust in the network.

4.4.4. Research Question 4

Descriptive statistics were used to analyse respondent perceptions of both the form of exchange and the organisational impact which come about as a result of social networking on the golf course. Frequency and percentage data was graphically represented using bar charts.

4.4.5. Research Question 5

Descriptive statistics and box plots were used to analyse respondent network structure. Spearman's correlation test was then used with a 5% significance level to identify the existence of relationships between network structural

characteristics and the business value aspects (form of exchange and organisational impact).

4.5. *Research limitations and exclusions*

A number of potential limitations exist:

- The research is a cross sectional study and will therefore consider only past events. The limitation is that development in the social networks over time will therefore not be tracked as a result of the limited time available for the research.
- Questionnaire response rate is not ensured. In addition to this it is expected that the both the population as well as the sample obtained may be fairly limited in size. Although at this stage these factors are unknown, it is possible that they will have a limiting effect on the research.
- The sample is highly biased as a result of the convenience sampling methods employed in the study, resulting in inherent errors in the research design. Although random sampling will provide data that may be generalised across the population and allow for statistical inference, access to the population is limited as a result of the small and relatively hidden population, and a non-probability sampling technique will instead be used.
- Non response error exists as it is likely that some individuals will not be willing to partake in the research, although the snowball sampling technique is expected to inherently reduce this error.

The level of ability, or human capital, contained within the network and its impact on the business value created is not considered in this research.

4.6. Ethical considerations

Kadushin (2005) indicates the concern of institutional review boards for the ethical considerations and potential harm to respondents when conducting network research. This is mainly driven by the requirement of social network research to record names of respondents and contacts.

Borgatti and Molina (2005) state that network research in organisations bring a 3rd party into the mix of respondent and researcher, that of the organisation.

Though potential harm may be brought about for individuals and organisations which participate in network research, the benefits of these studies are rarely towards organisations and society (Kadushin, 2005), and even more infrequently do the individual participants benefit. The responsibility of ensuring that risk of harm is eliminated lies in the hands of the academic researchers, the primary beneficiaries of the research.

In this research, no identifiers were recorded, eliminating the potential harm that could potentially be brought about as a result of participation in this research.

5. RESULTS

5.1. Introduction

This chapter presents the results of the study which focused on the role of social networks formed on the golf course on the creation of business value. Research data for 14 individual interviewees and 61 survey respondents are presented based on the research questions indicated in Chapter 3. The survey achieved a completion rate of 62%, with 61 respondents initiating the response, and 38 fully completing the survey. All responses to survey questions are considered, with the number of responses indicated for the relevant section.

This section covers the following areas:

- Demographics of the questionnaire respondents
- Respondent behaviour with regards to golf social networking
- Findings related to each of the research questions posed in Chapter 3.

5.2. Respondent demographics

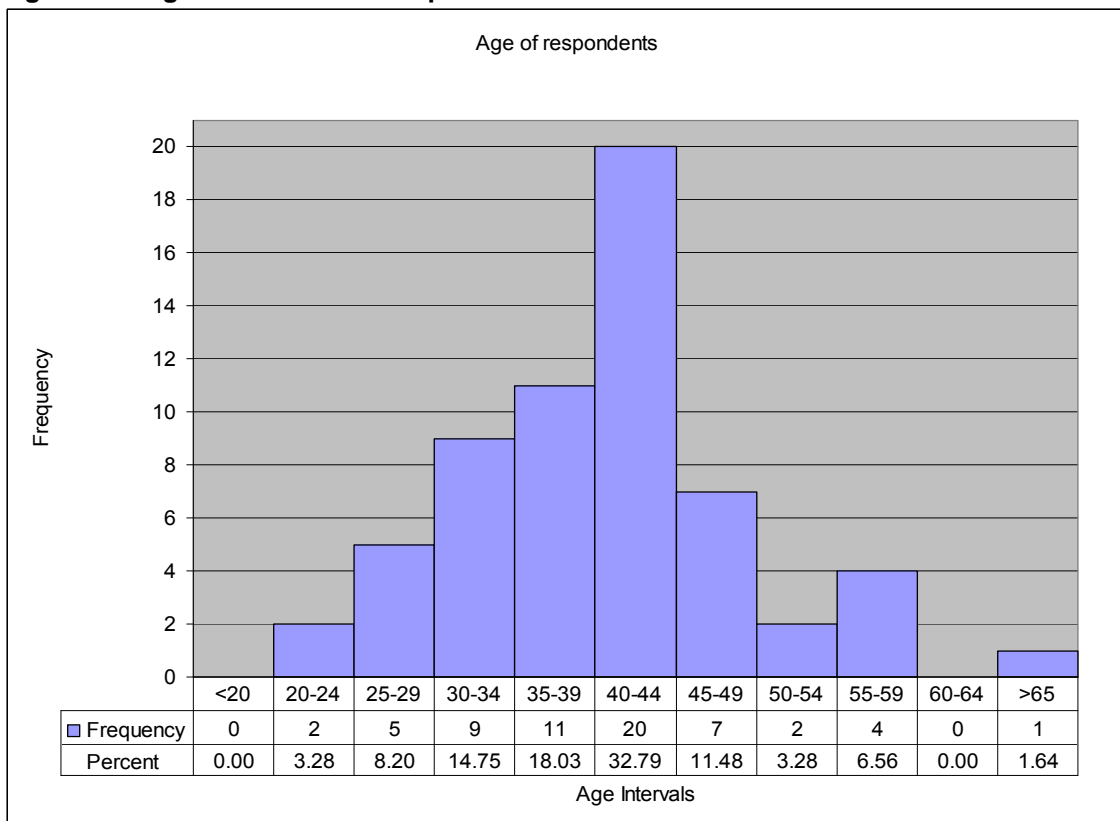
A snowball sampling technique was used to identify questionnaire respondents. This section describes the demographics of the questionnaire respondents. The following aspects are considered:

- Age
- Gender
- Ethnicity

- Employment status
- Functional role
- Industry

61 respondents completed the demographics section of the questionnaire. The mean age of the respondents was 40 years, with a median of 41. The minimum respondent age in the sample was 21, and the maximum age was 67. The age distribution of respondents is shown in Figure 5-1.

Figure 5-1. Age distribution of respondents.



The majority of respondents were between the ages of 35 and 44 years of age, with less than a quarter of respondents falling outside a 30 to 49 year age bracket.

Table 5-1 indicates that a vast majority of the questionnaire respondents (86.89%) were male.

Table 5-1. Gender of respondents.

Gender	Frequency	Percent
Male	53	86.89
Female	8	13.11
Total	61	100

Table 5-2 indicates that a significant portion of the questionnaire respondents were white, with 77.05% of the survey respondents belonging to other ethnic groups.

Table 5-2. Ethnicity of respondents.

Ethnic Group	Frequency	Percent
White	47	77.05
Indian / Asian	10	16.39
Black	2	3.28
Coloured	2	3.28
Total	61	100

This information is graphically represented in Figure 5-2.

Figure 5-2. Graphical representation of respondent ethnicity.

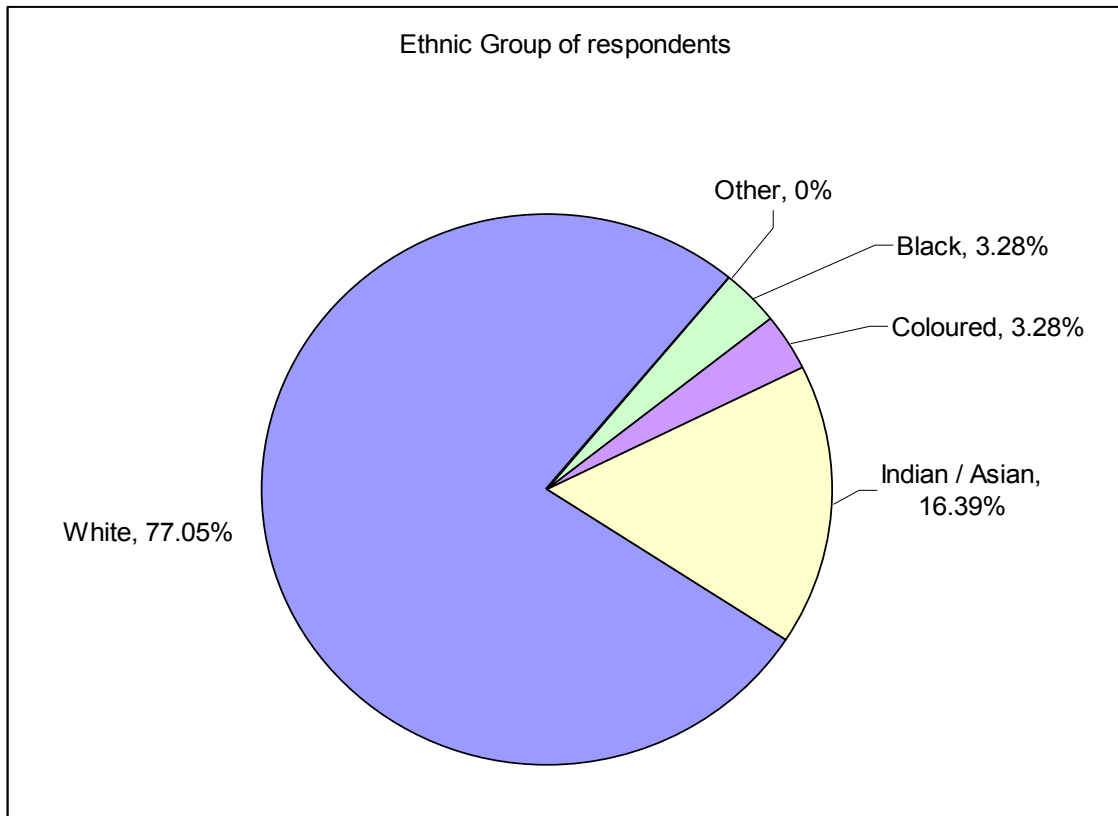


Table 5-3 shows that eighty percent of the respondents are employed, of which 18.03% are self-employed.

Table 5-3. Employment status of respondents.

Employment Status	Frequency	Percent
Employed	49	80.33
Self-employed	11	18.03
Retired	1	1.64
Total	61	100

The functional role of the respondents is shown in Table 5-4. The majority of respondents were in middle management / supervisor and senior management roles. These categories accounted for the functional roles of just over sixty percent of the respondents.

Table 5-4. Functional role of respondents.

Functional Role	Frequency	Percent
Middle management / Supervisor	20	32.79
Senior management	17	27.87
Entrepreneur	8	13.11
Knowledge worker / Employee	9	14.75
Executive	7	11.48
Total	61	100

The industries in which the respondents are employed are indicated in Table 5-5. The option for “other” industry was selected most frequently, indicating that the list of industries provided may not have been perceived as an exhaustive list by twenty six percent of the respondents.

Table 5-5. Industry of respondents.

Industry	Frequency	Percent
Other	16	26.23
Finance, insurance & real estate	12	19.67
Transport, storage and communication	9	14.75
Construction, Mining & Minerals	8	13.11
Professional services	8	13.11
Manufacturing	4	6.56
Government services	2	3.28
Not Applicable	1	1.64
Wholesale and retail trade	1	1.64
Total	61	100

5.3. Networking behaviour

61 respondents completed questions pertaining to networking behaviour. Table 5-6 indicates the number of respondents who actively network on the golf course, as well as the frequency with which they play golf. Sixty percent (36) of the respondents claim to use golf as a method of networking.

Table 5-6. Respondent active networking behaviour.

Frequency of play	Actively network		Don't actively network	
	Frequency	Percent	Frequency	Percent
A few times per week	4	11.11	1	4.17
Once a week	10	27.78	6	25.00
A few times per month	8	22.22	3	12.50
Once a month	8	22.22	4	16.67
A few times per year	6	16.67	7	29.17
Once a year or less	0	0.00	3	12.50
Total	36	100.00	24	100.00

61.11% of individuals who actively network on the course play golf more than once a month. The average number of years of active networking of these respondents is 9.58, with a standard deviation of 8.03, as shown in Table 5-7. Removing extreme outliers, in this case more than 3 Inter-quartile ranges (IQR) from the upper quartile, results in an adjusted mean of 8.08 years.

Table 5-7. Descriptive statistics for number of years of active networking on the golf course.

	N	Mean	Std. Deviation	Minimum	Maximum
No. Years actively networking	36	9.583	8.029	1	40

This information is represented graphically in Figure 5-3.

Figure 5-3. Box plot indicating number of years of active networking on the golf course.

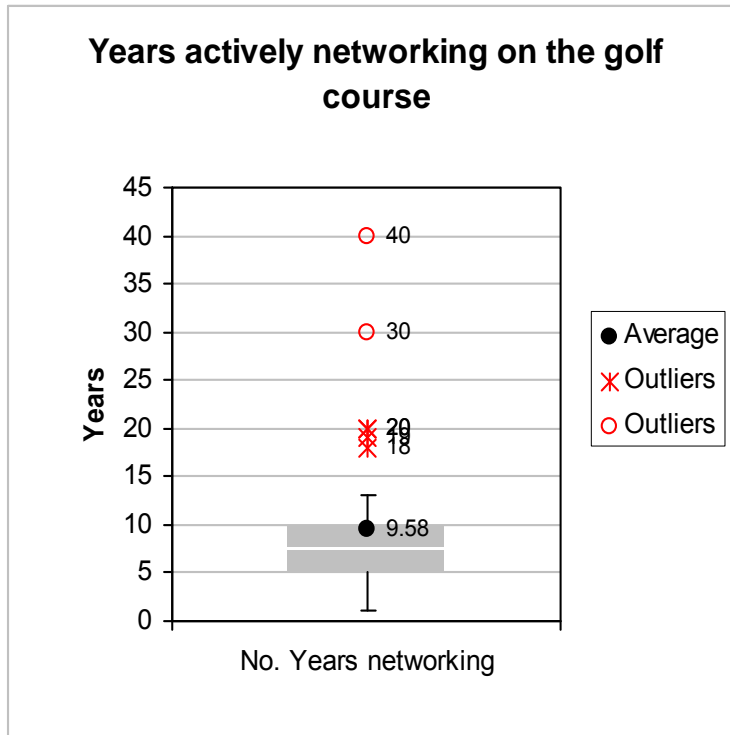
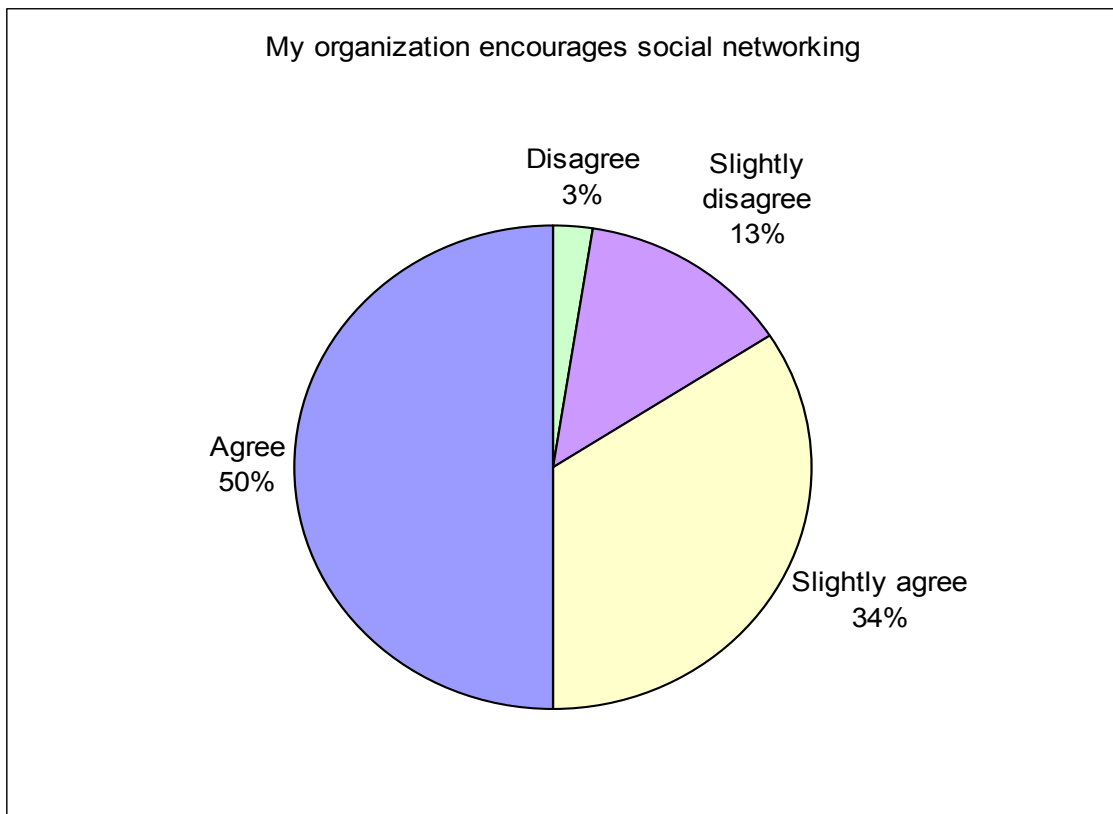


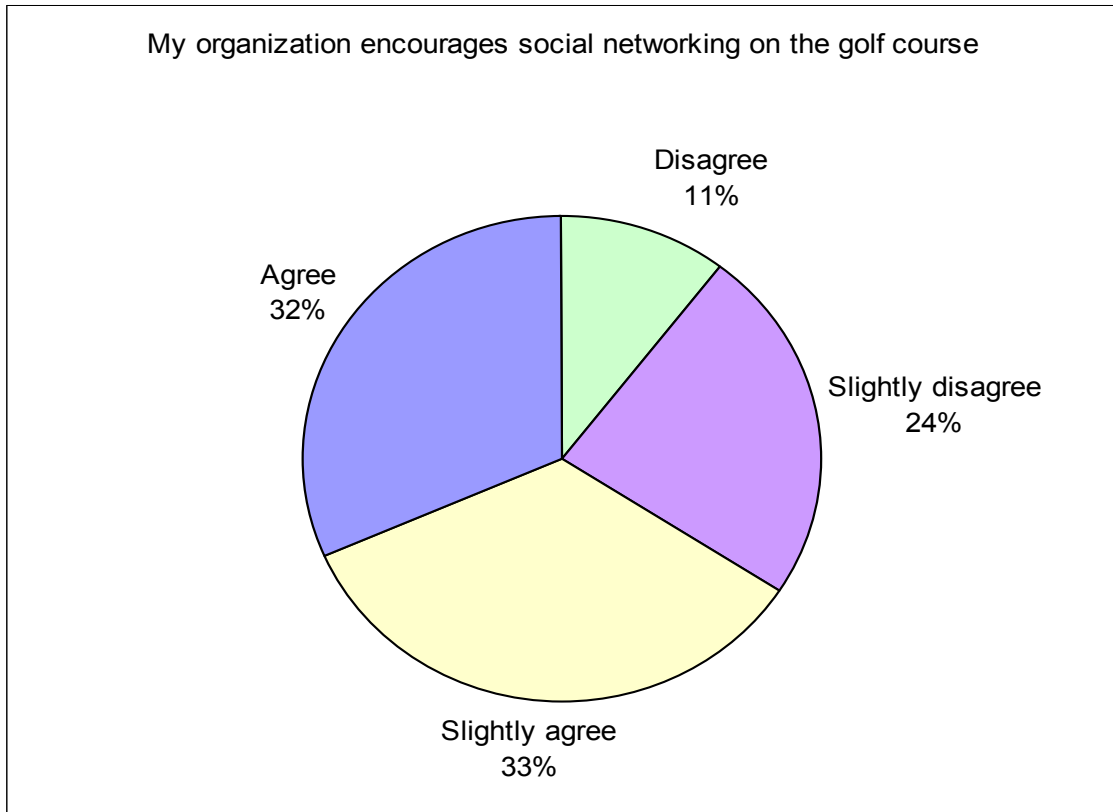
Figure 5-4 indicates the percentage of organisations which encourage employees to engage in social networking activities. The data indicates that 84% of respondents agreed to some extent that their organisation is supportive of social networking.

Figure 5-4. Percentage of organisations which encourage social networking.



38 survey respondents completed questions regarding organisational support of social networking activities. Figure 5-5 indicates the percentage of organisations which encourage employees to engage in social networking on the golf course. In this case, a significantly smaller percentage of respondents indicated that their organisation is supportive of social networking on the golf course, however the majority (65%) of respondents agree to some extent.

Figure 5-5. Percentage of organisations which encourage social networking on the golf course.



5.4. Research question 1: Tangible value

Table 5-8 indicates the results of the depth interview content analysis. Perceived tangible costs and benefits associated with the creation and maintenance of golf social networks are shown.

Table 5-8. Tangible costs and benefits associated with golf social networking for employees and organisations.

	Personal	Organisational
Tangible Costs	<ul style="list-style-type: none"> • Personal membership fees • Golf equipment • Golf lessons • Practice / Driving range costs • Playing costs (incl. green fees, caddies, carts) • Bets • Meals / drinks • Sponsorship of charities • Investment in golf-course property / time-share options for entertaining contacts • Opportunity cost (lost potential for networking in other ways) 	<ul style="list-style-type: none"> • Personal membership fees • Corporate membership fees • Golf equipment • Golf lessons • Practice / Driving range costs • Playing costs (incl. green fees, caddies, carts) • Bets • Meals / drinks • Sponsorship of charities • Investment in golf-course property / time-share options for entertaining contacts • Corporate golf day costs • Golf tour fees • Opportunity cost (lost potential for networking in other ways)
Tangible Benefits	<ul style="list-style-type: none"> • New business contacts created • Improved relationships • Builds personal entrepreneurial skills (e.g. creation of new entrepreneurial opportunities) • Builds personal management skills (e.g. planning abilities) • Build personal leadership skills (e.g. character, discipline, behaviours) • Career advancement • Positive influence on business performance 	<ul style="list-style-type: none"> • New business deals / opportunities • Creation of long-term / strategic business relationships • Increased control over business partnerships • Direct ties created with external organisations • Direct ties created with governmental / regulatory organisations • Improved access to key decision makers • Exchange of business critical information • Forewarning of potential business opportunities • Positive influence on business performance • Improved efficiencies within the organisation • Improved customer offering through improved service, referrals etc.

These aspects were then posed to respondents of the questionnaire. The results shown in Table 5-9 indicate the frequency with which each of the tangible aspects was selected as a personal cost by the respondents.

Table 5-9. Personal Tangible costs associated with golf social networking.

Personal tangible costs	Frequency	Percent
Golf equipment	48	16.16
Practice / Driving range costs	41	13.80
Personal membership fees	39	13.13
Meals / drinks	37	12.46
Golf lessons	35	11.78
Playing costs (incl. green fees, caddies, carts)	34	11.45
Bets	29	9.76
Sponsorship of charities	12	4.04
Investment in golf-course property / time-share options for entertaining contacts	11	3.70
Opportunity cost (lost potential for networking in other ways)	11	3.70
Total	297	100

The results shown in Table 5-10 indicate the frequency with which each of the tangible aspects was selected as a personal benefit by the respondents.

Table 5-10. Personal Tangible benefits associated with golf social networking.

Personal tangible benefits	Frequency	Percent
Improved relationships / friendships	45	22.96
New business contacts created	36	18.37
Build personal leadership skills (e.g. character, discipline, behaviours)	28	14.29
Builds personal entrepreneurial skills (e.g. creation of new entrepreneurial opportunities)	26	13.27
Builds personal management skills (e.g. planning abilities)	25	12.76
Positive influence on business performance	23	11.73
Career advancement	13	6.63
Total	196	100

Table 5-11 shows the frequency with which each of the tangible aspects was selected as an organisational cost by the respondents.

Table 5-11. Organisational Tangible costs associated with golf social networking.

Organisational tangible costs	Frequency	Percent
Corporate golf day costs	25	17.86
Sponsorship of charities	24	17.14
Meals / drinks	20	14.29
Playing costs (incl. green fees, caddies, carts)	17	12.14
Personal membership fees	13	9.29
Corporate membership fees	11	7.86
Golf tour fees	10	7.14
Opportunity cost (lost potential for networking in other ways)	6	4.29
Golf equipment	4	2.86
Practice / Driving range costs	4	2.86
Investment in golf-course property / time-share options for entertaining contacts	3	2.14
Golf lessons	2	1.43
Bets	1	0.71
Total	140	100

Table 5-12 shows the frequency with which each of the tangible aspects was selected as an organisational benefit by the respondents.

Table 5-12. Organisational Tangible benefits associated with golf social networking.

Organisational tangible benefits	Frequency	Percent
New business deals / opportunities	34	14.66
Forewarning of potential business opportunities	26	11.21
Direct ties created with external organisations	25	10.78
Improved access to key decision makers	25	10.78
Creation of long-term / strategic business relationships	24	10.34
Exchange of business critical information	21	9.05
Positive influence on business performance	21	9.05
Improved customer offering through improved service, referrals etc.	18	7.76
Increased control over business partnerships	13	5.60
Direct ties created with governmental / regulatory organisations	13	5.60

Improved efficiencies within the organisation	12	5.17
Total	232	100

Respondents were asked to rate the level of financial cost and benefit on a 4 point Likert scale with the following numerical allocations:

- 1 – “No cost / benefit”
- 2 – “Low cost / benefit”
- 3 – “Medium cost / benefit”
- 4 – “High cost / benefit”

The results are shown in Table 5-13. Descriptive data indicated for each variable includes mean values, standard deviations and minimum and maximum values are indicated. All respondents indicated a degree of personal financial cost (minimum value selected in this case is greater than 1, “no cost / benefit”). All means fall between 2 and 3, indicating that all tangible aspects are on average considered to be between low and medium.

Table 5-13. Level of financial cost / benefit associated with golf social networking.

Variable	N	Mean	Std Dev	Minimum	Maximum
Personal level of financial cost	49	2.755	0.630	2	4
Personal level of financial benefit	49	2.265	1.036	1	4
Organisational level of financial cost	46	2.348	0.822	1	4
Organisational level of financial benefit	46	2.891	1.038	1	4

5.5. Research question 2: Intangible value

Table 5-14 indicates the results of the depth interview content analysis. Intangible costs and benefits associated with creating and maintaining golf social networks are shown.

Table 5-14. Intangible costs and benefits associated with golf social networking for employees and organisations.

	Personal	Organisational
Intangible Costs	<ul style="list-style-type: none"> • Reduced time available for work responsibilities • Deterioration of network relationships / broken trust • Deterioration of reputation / credibility • Increased levels of stress / disappointment • Sacrifice of personal / family time 	<ul style="list-style-type: none"> • Revenue loss through lost productive time • Deterioration of business relationships / broken trust • Deterioration of brand perception • Internal political conflict
Intangible Benefits	<ul style="list-style-type: none"> • Access to more diverse information • Increased knowledge sharing • Improved people-skills & method of approach • Provides information and gauge of trustworthiness • Trusted advice sharing • Shared sense of association • Shared values • Break-down of cultural barriers • Break-down of gender barriers • Mental wellbeing (Work-life balance, relaxation & stress reduction) • Physical wellbeing (Exercise) 	<ul style="list-style-type: none"> • Improved business relationships • Touch-point on status of business relationships • Relationship management (Partners, customers, competitors) • Creation of team dynamic across organisational boundaries • Creation of problem-solving / solution-orientated environment • Improved brand perception • Break-down of business tensions • Break-down of political tensions • Break-down of cultural tensions • Break-down of gender tensions • Access to diverse information across organisations / industries • Increased knowledge sharing • Assessment of potential business partners / relationships • Employee wellbeing

These aspects were then posed to respondents of the questionnaire. The results shown in Table 5-15 indicate the frequency with which each of the intangible aspects was selected as a personal cost by the respondents.

Table 5-15. Personal intangible costs associated with golf social networking.

Personal intangible costs	Frequency	Percent
Sacrifice of personal/family time	18	39.13
Personal cost resulting from reduced time available for work responsibilities	12	26.09
Deterioration of reputation / credibility	6	13.04
Increased levels of stress / disappointment	6	13.04
Deterioration of network relationships / broken trust	4	8.70
Total	46	100

The results shown in Table 5-16 indicate the frequency with which each of the intangible aspects was selected as a personal benefit by the respondents.

Table 5-16. Personal intangible benefits associated with golf social networking.

Personal intangible benefits	Frequency	Percent
Mental wellbeing (Work-life balance, relaxation & stress reduction)	42	12.03
Physical wellbeing (Exercise)	41	11.75
Increased knowledge sharing	39	11.17
Access to more diverse information	33	9.46
Improved people-skills & method of approach	32	9.17
Break-down of cultural barriers	31	8.88
Shared sense of association	29	8.31
Provides information and gauge of trustworthiness	28	8.02
Shared values	28	8.02
Trusted advice sharing	26	7.45
Break-down of gender barriers	20	5.73
Total	349	100

Table 5-17 shows the frequency with which each of the intangible aspects was selected as an organisational cost by the respondents.

Table 5-17. Organisational intangible costs associated with golf social networking.

Organisational intangible costs	Frequency	Percent
Revenue loss through lost productive time	10	66.67
Internal political conflict	4	26.67
Deterioration of brand perception	1	6.67
Deterioration of business relationships / broken trust	0	0.00
Total	15	100

Table 5-18 shows the frequency with which each of the intangible aspects was selected as an organisational benefit by the respondents.

Table 5-18. Organisational intangible benefits associated with golf social networking.

Organisational intangible benefits	Frequency	Percent
Relationship management (Partners, customers, competitors)	36	11.08
Improved business relationships	35	10.77
Increased knowledge sharing	29	8.92
Break-down of business tensions	26	8.00
Employee wellbeing	25	7.69
Touch-point on status of business relationships	24	7.38
Improved brand perception	23	7.08
Access to diverse information across organisations / industries	22	6.77
Assessment of potential business partners / relationships	20	6.15
Creation of team dynamic across organisational boundaries	19	5.85
Break-down of cultural tensions	19	5.85
Creation of problem-solving / solution-orientated environment	16	4.92
Break-down of gender tensions	16	4.92
Break-down of political tensions	15	4.62
Total	325	100

Respondents were once again requested to rate the level of non-financial cost and benefit on a similar 4 point Likert scale as that indicated in chapter 5.1. The results are shown in Table 5-19. All respondents indicated a degree of personal financial cost (minimum value selected in this case is greater than 1, “no cost /

benefit”). All means fall between 2 and 3, indicating that all intangible aspects are on average considered to be between low and medium.

Table 5-19. Level of non-financial cost / benefit associated with golf social networking.

Variable	N	Mean	Std Dev	Minimum	Maximum
Personal level of non-financial cost	49	2.347	0.855	1	4
Personal level of non-financial benefit	49	2.796	1.040	1	4
Organisational level of non-financial cost	46	2.370	0.903	1	4
Organisational level of non-financial benefit	46	2.717	0.958	1	4

5.6. Research question 3: Tangible / intangible relationship

The section serves to present the results of an investigation into the relationship between tangible and intangible values associated with golf social networking.

A consistent methodology was followed when investigating potential relationships between each of the relevant value categories. Data was tabulated and inspected visually for trends. Following this, data was cross tabulated and the variables were tested for independence in order to ascertain the existence of a relationship (Albright, Winston & Zappe, 2006).

The chi-square test for independence is based on the frequencies in a cross-tabs table, and tests if the counts in the table’s row categories are probabilistically independent from the counts in the table’s column categories. Due to the low cell counts noted during visual inspection of the tables, Fisher’s exact test was selected for investigating the existence of relationships between variables. This test is used as an alternative to the chi-square test when cells

have an expected frequency of five or less (UCLA, n.d.). With a selected significance level of 5% ($\alpha=0.05$), an exact significance of less than 5% indicates that a significant relationship exists between the tested variables.

5.6.1. Personal costs and benefits

Table 5-20 indicates the relationships considered at a personal level as well as the relevant chapter.

Table 5-20. Potential relationships between personal costs and benefits.

	Personal tangible benefit	Personal intangible benefit
Personal tangible cost	5.6.1.1	5.6.1.2
Personal intangible cost	5.6.1.3	5.6.1.4

A total of 49 (80.3% of initial respondents) samples were available for consideration of costs and benefits on a personal level.

5.6.1.1. Tangible cost vs. Tangible benefit

Table 5-21 shows the cross tabulation of the personal level of financial/tangible cost with the personal level of financial/tangible benefit.

Table 5-21. Cross tabulation of the personal level of financial/tangible cost with the personal level of financial/tangible benefit

			Personal level of financial benefit				Total
			None	Low	Medium	High	
Personal level of financial cost	Low	Count	6	5	2	4	17
		Row %	35.29	29.41	11.76	23.53	100.00
		Column %	42.86	33.33	15.38	57.14	34.69
		% of Total	12.24	10.20	4.08	8.16	34.69
	Medium	Count	8	8	10	1	27
		Row %	29.63	29.63	37.04	3.70	100.00
		Column %	57.14	53.33	76.92	14.29	55.10
		% of Total	16.33	16.33	20.41	2.04	55.10

High	Count	0	2	1	2	5
	Row %	0.00	40.00	20.00	40.00	100.00
	Column %	0.00	13.33	7.69	28.57	10.20
	% of Total	0.00	4.08	2.04	4.08	10.20
Total	Count	14	15	13	7	49
	Row %	28.57	30.61	26.53	14.29	100.00
	Column %	100.00	100.00	100.00	100.00	100.00
	% of Total	28.57	30.61	26.53	14.29	100.00

The result of Fisher's exact test was a value of 9.823 with an exact significance of 0.087. This indicates that the null hypothesis claiming no association between the variables cannot be rejected at a 5% significance level. Therefore no significant relationship can be proven between the personal level of financial/tangible cost and the personal level of financial/tangible benefit.

5.6.1.2. Tangible cost vs. Intangible benefit

Table 5-22 shows the cross tabulation of the personal level of financial/tangible cost with the personal level of non-financial/intangible benefit.

Table 5-22. Cross tabulation of the personal level of financial/tangible cost with the personal level of non-financial/intangible benefit.

			Personal level of non-financial benefit				Total
			None	Low	Medium	High	
Personal level of financial cost	Low	Count	2	4	5	6	17
		Row %	11.76	23.53	29.41	35.29	100.00
		Column %	28.57	36.36	31.25	40.00	34.69
		% of Total	4.08	8.16	10.20	12.24	34.69
	Medium	Count	4	7	9	7	27
		Row %	14.81	25.93	33.33	25.93	100.00
		Column %	57.14	63.64	56.25	46.67	55.10
		% of Total	8.16	14.29	18.37	14.29	55.10
	High	Count	1	0	2	2	5
		Row %	20.00	0.00	40.00	40.00	100.00
		Column %	14.29	0.00	12.50	13.33	10.20
		% of Total	2.04	0.00	4.08	4.08	10.20

Total	Count	7	11	16	15	49
	Row %	14.29	22.45	32.65	30.61	100.00
	Column %	100.00	100.00	100.00	100.00	100.00
	% of Total	14.29	22.45	32.65	30.61	100.00
	Total	14.29	22.45	32.65	30.61	100.00

The result of Fisher's exact test was a value of 2.461 with an exact significance of 0.921. This indicates that the null hypothesis claiming no association between the variables cannot be rejected at a 5% significance level. Therefore no significant relationship can be proven between the personal level of financial/tangible cost and the personal level of non-financial/intangible benefit.

5.6.1.3. Intangible cost vs. Tangible benefit

Table 5-23 shows the cross tabulation of the personal level of non-financial/intangible cost with the personal level of financial/tangible benefit.

Table 5-23. Cross tabulation of the personal level of non-financial/intangible cost with the personal level of financial/tangible benefit.

		Personal level of financial benefit				Total	
		None	Low	Medium	High		
Personal level of non-financial cost	None	Count	3	3	2	0	8
		Row %	37.50	37.50	25.00	0.00	100.00
		Column %	21.43	20.00	15.38	0.00	16.33
		% of Total	6.12	6.12	4.08	0.00	16.33
	Low	Count	8	4	6	2	20
		Row %	40.00	20.00	30.00	10.00	100.00
		Column %	57.14	26.67	46.15	28.57	40.82
		% of Total	16.33	8.16	12.24	4.08	40.82
	Medium	Count	3	6	5	3	17
		Row %	17.65	35.29	29.41	17.65	100.00
		Column %	21.43	40.00	38.46	42.86	34.69
		% of Total	6.12	12.24	10.20	6.12	34.69
	High	Count	0	2	0	2	4
		Row %	0.00	50.00	0.00	50.00	100.00
		Column %	0.00	13.33	0.00	28.57	8.16
		% of Total	0.00	4.08	0.00	4.08	8.16

Total	Count	14	15	13	7	49
	Row %	28.57	30.61	26.53	14.29	100.00
	Column %	100.00	100.00	100.00	100.00	100.00
	% of Total	28.57	30.61	26.53	14.29	100.00

The result of Fisher's exact test was a value of 9.264 with an exact significance of 0.373. This indicates that the null hypothesis claiming no association between the variables cannot be rejected at a 5% significance level. Therefore no significant relationship exists between the personal level of non-financial/intangible cost and the personal level of financial/tangible benefit.

5.6.1.4. Intangible cost vs. Intangible benefit

Table 5-24 shows the cross tabulation of the personal level of non-financial/intangible cost with the personal level of non-financial/intangible benefit.

Table 5-24. Cross tabulation of the personal level of non-financial/intangible cost with the personal level of non-financial/intangible benefit.

		Personal level of non-financial benefit					Total
		None	Low	Medium	High		
Personal level of non-financial cost	None	Count	6	2	0	0	8
		Row %	75.00	25.00	0.00	0.00	100.00
		Column %	85.71	18.18	0.00	0.00	16.33
		% of Total	12.24	4.08	0.00	0.00	16.33
	Low	Count	1	6	5	8	20
		Row %	5.00	30.00	25.00	40.00	100.00
		Column %	14.29	54.55	31.25	53.33	40.82
		% of Total	2.04	12.24	10.20	16.33	40.82
	Medium	Count	0	3	11	3	17
		Row %	0.00	17.65	64.71	17.65	100.00
		Column %	0.00	27.27	68.75	20.00	34.69
		% of Total	0.00	6.12	22.45	6.12	34.69
	High	Count	0	0	0	4	4
		Row %	0.00	0.00	0.00	100.00	100.00
		Column %	0.00	0.00	0.00	26.67	8.16
		% of Total	0.00	0.00	0.00	8.16	8.16

Total	Count	7	11	16	15	49
	Row %	14.29	22.45	32.65	30.61	100.00
	Column %	100.00	100.00	100.00	100.00	100.00
	% of Total	14.29	22.45	32.65	30.61	100.00

The result of Fisher's exact test was a value of 37.182 with an exact significance of 0.000. This indicates that the null hypothesis claiming no association between the variables may be rejected at a 5% significance level. The alternative hypothesis is accepted, as a relationship exists between the personal level of non-financial/intangible cost and the personal level of non-financial/intangible benefit.

5.6.2. Organisational costs and benefits

Table 5-25 indicates the relationships considered at a personal level as well as the relevant chapter.

Table 5-25. Potential relationships between organisational costs and benefits.

	Organisational tangible benefit	Organisational intangible benefit
Organisational tangible cost	5.6.2.1	5.6.2.2
Organisational intangible cost	5.6.2.3	5.6.2.4

A total of 46 (75.4% of initial respondents) samples were available for consideration of costs and benefits on a personal level.

5.6.2.1. Tangible cost vs. Tangible benefit

Table 5-26 shows the cross tabulation of the organisational level of financial/tangible cost with the organisational level of financial/tangible benefit.

Table 5-26. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of financial/tangible benefit.

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Organisational level of financial cost	None	Count	5	1	1	0	7
		Row %	71.43	14.29	14.29	0.00	100.00
		Column %	71.43	16.67	5.56	0.00	15.22
		% of Total	10.87	2.17	2.17	0.00	15.22
	Low	Count	1	5	6	7	19
		Row %	5.26	26.32	31.58	36.84	100.00
		Column %	14.29	83.33	33.33	46.67	41.30
		% of Total	2.17	10.87	13.04	15.22	41.30
	Medium	Count	1	0	10	6	17
		Row %	5.88	0.00	58.82	35.29	100.00
		Column %	14.29	0.00	55.56	40.00	36.96
		% of Total	2.17	0.00	21.74	13.04	36.96
	High	Count	0	0	1	2	3
		Row %	0.00	0.00	33.33	66.67	100.00
		Column %	0.00	0.00	5.56	13.33	6.52
		% of Total	0.00	0.00	2.17	4.35	6.52
Total	Count	7	6	18	15	46	
	Row %	15.22	13.04	39.13	32.61	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	15.22	13.04	39.13	32.61	100.00	

The result of Fisher's exact test was a value of 21.309 with an exact significance of 0.001. This indicates that the null hypothesis claiming no association between the variables may be rejected at a 5% significance level. The alternative hypothesis is accepted, as a relationship exists between the organisational level of financial/tangible cost and the organisational level of financial/tangible benefit.

5.6.2.2. Tangible cost vs. Intangible benefit

Table 5-27 shows the cross tabulation of the organisational level of financial/tangible cost with the organisational level of non-financial/intangible benefit.

Table 5-27. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of non-financial/intangible benefit.

			Organisational level of non-financial benefit				Total
			None	Low	Medium	High	
Organisational level of financial cost	None	Count	5	0	2	0	7
		Row %	71.43	0.00	28.57	0.00	100.00
		Column %	83.33	0.00	10.53	0.00	15.22
		% of Total	10.87	0.00	4.35	0.00	15.22
	Low	Count	1	5	7	6	19
		Row %	5.26	26.32	36.84	31.58	100.00
		Column %	16.67	45.45	36.84	60.00	41.30
		% of Total	2.17	10.87	15.22	13.04	41.30
	Medium	Count	0	6	9	2	17
		Row %	0.00	35.29	52.94	11.76	100.00
		Column %	0.00	54.55	47.37	20.00	36.96
		% of Total	0.00	13.04	19.57	4.35	36.96
High	Count	0	0	1	2	3	
	Row %	0.00	0.00	33.33	66.67	100.00	
	Column %	0.00	0.00	5.26	20.00	6.52	
	% of Total	0.00	0.00	2.17	4.35	6.52	
Total	Count	6	11	19	10	46	
	Row %	13.04	23.91	41.30	21.74	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	13.04	23.91	41.30	21.74	100.00	

The result of Fisher's exact test was a value of 20.922 with an exact significance of 0.002. This indicates that the null hypothesis claiming no association between the variables may be rejected at a 5% significance level. The alternative hypothesis is accepted, as a relationship exists between the organisational level of financial/tangible cost and the organisational level of non-financial/intangible benefit.

5.6.2.3. Intangible cost vs. Tangible benefit

Table 5-28 shows the cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of financial/tangible benefit.

Table 5-28. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of financial/tangible benefit.

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Organisational level of non-financial cost	None	Count	6	1	0	0	7
		Row %	85.71	14.29	0.00	0.00	100.00
		Column %	85.71	16.67	0.00	0.00	15.22
		% of Total	13.04	2.17	0.00	0.00	15.22
	Low	Count	0	2	10	9	21
		Row %	0.00	9.52	47.62	42.86	100.00
		Column %	0.00	33.33	55.56	60.00	45.65
		% of Total	0.00	4.35	21.74	19.57	45.65
	Medium	Count	1	2	6	3	12
		Row %	8.33	16.67	50.00	25.00	100.00
		Column %	14.29	33.33	33.33	20.00	26.09
		% of Total	2.17	4.35	13.04	6.52	26.09
	High	Count	0	1	2	3	6
		Row %	0.00	16.67	33.33	50.00	100.00
		Column %	0.00	16.67	11.11	20.00	13.04
		% of Total	0.00	2.17	4.35	6.52	13.04
Total	Count	7	6	18	15	46	
	Row %	15.22	13.04	39.13	32.61	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	15.22	13.04	39.13	32.61	100.00	

The result of Fisher's exact test was a value of 24.698 with an exact significance of 0.000. This indicates that the null hypothesis claiming no association between the variables may be rejected at a 5% significance level. The alternative hypothesis is accepted, as a relationship exists between the organisational level of non-financial/intangible cost and the organisational level of financial/tangible benefit.

5.6.2.4. Intangible cost vs. Intangible benefit

Table 5-29 shows the cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of non-financial/intangible benefit.

Table 5-29. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of non-financial/intangible benefit.

			Organisational level of non-financial benefit				Total
			None	Low	Medium	High	
Organisational level of non-financial cost	None	Count	6	0	1	0	7
		Row %	85.71	0.00	14.29	0.00	100.00
		Column %	100.00	0.00	5.26	0.00	15.22
		% of Total	13.04	0.00	2.17	0.00	15.22
	Low	Count	0	11	5	5	21
		Row %	0.00	52.38	23.81	23.81	100.00
		Column %	0.00	100.00	26.32	50.00	45.65
		% of Total	0.00	23.91	10.87	10.87	45.65
	Medium	Count	0	0	11	1	12
		Row %	0.00	0.00	91.67	8.33	100.00
		Column %	0.00	0.00	57.89	10.00	26.09
		% of Total	0.00	0.00	23.91	2.17	26.09
High	Count	0	0	2	4	6	
	Row %	0.00	0.00	33.33	66.67	100.00	
	Column %	0.00	0.00	10.53	40.00	13.04	
	% of Total	0.00	0.00	4.35	8.70	13.04	
Total	Count	6	11	19	10	46	
	Row %	13.04	23.91	41.30	21.74	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	13.04	23.91	41.30	21.74	100.00	

The result of Fisher's exact test was a value of 42.747 with an exact significance of 0.000. This indicates that the null hypothesis claiming no association between the variables may be rejected at a 5% significance level. The alternative hypothesis is accepted, as a relationship exists between the

organisational level of non-financial/intangible cost and the organisational level of non-financial/intangible benefit.

5.6.3. Relational elements

The influence of the relational elements – cognitive trust, motivation and affective trust – on each of the previously identified relationships is considered here. This was done by layering each of these factors over the cross-tabs for the existing relationships which were identified in the two previous sections:

- Personal: Intangible cost vs. intangible benefit
- Organisational: Tangible cost vs. tangible benefit
- Organisational: Tangible cost vs. intangible benefit
- Organisational: Intangible cost vs. tangible benefit
- Organisational: Intangible cost vs. tangible benefit

5.6.3.1. Cognitive trust

Cognitive trust was measured based on the perception of the survey respondents that the members of their golf social network share a similar set of values and beliefs.

The variable was calculated by summing the responses to 3 questions rated on a 4 point Likert scale testing this variable. The summed values were then banded into a similar 4 point Likert scale with a mid-level value of 2.5. Details are provided in APPENDIX 5: Cognitive trust variable calculation. Values in the Likert scale above 2.5 indicate that a degree of cognitive trust exists between

members in the golf social network, whereas values below 2.5 indicate that there is limited, or no cognitive trust between members in the golf social network.

Table 5-30 shows the descriptive statistics for the cognitive trust variable. 38 (62.3%) respondents of the initial 61 respondents completed the questions pertaining to cognitive trust. The mean value for this variable is 3.53 indicating that there exists a degree of cognitive trust within the golf social network.

Table 5-30. Descriptive statistics for Cognitive Trust variable.

	N	Mean	Std. Deviation	Minimum	Maximum
Cognitive Trust	38	3.53	0.56	2	4

In addition to this, Table 5-31 indicates the frequency of respondents indicating the existence of cognitive trust within the golf social network, compared to those indicating limited cognitive trust. Cognitive trust is present in 97.37% of respondent networks.

Table 5-31. Frequency statistics for Cognitive trust variable.

	Frequency	Percent
No cognitive trust	1	2.63
Cognitive trust	37	97.37
Total	38	100.00

Cross-tabs such as those in 5.6.1 and 5.6.2 were run with the relational variable of cognitive trust as an additional layer, banded by the mid-level value. The results of these cross-tabs are shown in APPENDIX 5: Cognitive trust cross tab.

Fisher's exact test was once again used to determine independence of the variables when layered by this variable, the results of which are shown in Table 5-32 and Table 5-33.

Table 5-32. Fisher's exact test results for personal costs vs. personal benefits layered by cognitive trust.

		No cognitive trust		Cognitive trust	
		Value	Exact sig.	Value	Exact sig.
Non-financial cost	Non-financial benefit	*	*	16.535	0.011

Table 5-33. Fisher's exact test results for organisational costs vs. organisational benefits layered by cognitive trust.

		No cognitive trust		Cognitive trust	
		Value	Exact sig.	Value	Exact sig.
Financial cost	Financial benefit	*	*	19.626	0.002
Financial cost	Non-financial benefit	*	*	16.926	0.011
Non-financial cost	Financial benefit	*	*	17.307	0.009
Non-financial cost	Non-financial benefit	*	*	28.001	0.000

Only 1 (2.63%) respondent of a total number of 38 respondents indicated a limited level of cognitive trust within the golf social network. Due to this low sample number, the relationship between costs and benefits could not be verified when the level of cognitive trust is low.

The exact significance resulting from Fisher's exact test is less than the significance level of 5% in each case when cognitive trust is present in the respondent's network. The alternative hypothesis is therefore accepted, indicating that a relationship exists between the tested variables when a degree of cognitive trust exists.

5.6.3.2. Motivation

Respondent motivation was measured based on the perception of the organisation’s encouragement of social networking on the golf course, as well as the individual’s clarity regarding desired outcomes of networking.

Similar to the cognitive trust variable in Chapter 5.6.3.1, the motivation variable was calculated by summing the response to a set of questions and banded into a 4 point Likert scale. Details are provided in APPENDIX 5: Motivation variable calculation. Values in the Likert scale above 2.5 indicate that respondents are motivated to some degree to utilise the golf social network, whereas values below 2.5 indicate that respondents are not motivated to utilise the network.

Table 5-34 shows the descriptive statistics for the motivation variable. 38 (62.3%) respondents of the initial 61 respondents completed the questions pertaining to cognitive trust. The mean value for this variable is 3.24 indicating that there exists a degree of motivation to utilise the golf social network to create benefits.

Table 5-34. Descriptive statistics for Motivation variable.

	N	Mean	Std. Deviation	Minimum	Maximum
Motivation	38	3.24	0.94	1	4

In addition to this, Table 5-35 indicates the frequency of respondents indicating the existence of motivation to realise benefits from the golf social network, compared to those indicating no motivation to do so. 76.32% of respondents indicated that they are motivated to some degree to realise benefits from their golf social network.

Table 5-35. Frequency statistics for motivation variable.

	Frequency	Percent
Not motivated	9	23.68
Motivated	29	76.32
Total	38	100.00

Again, cross-tabs were run, now using the relational variable of motivation as an additional layer, banded by the mid-level value. The results of these cross-tabs are shown in APPENDIX 5: Motivation cross tab.

Fisher's exact test was once again used to determine independence of the variables when layered by this variable, the results of which are shown in Table 5-36 and Table 5-37.

Table 5-36. Fisher's exact test - Exact significance for personal costs vs. personal benefits layered by motivation.

		No motivation		Motivation	
		Value	Exact sig.	Value	Exact sig.
Non-financial cost	Non-financial benefit	5.929	0.214	12.677	0.073

Table 5-37. Fisher's exact test - Exact significance for organisational costs vs. organisational benefits layered by motivation.

		No motivation		Motivation	
		Value	Exact sig.	Value	Exact sig.
Financial cost	Financial benefit	10.532	0.024	15.118	0.019
Financial cost	Non-financial benefit	7.524	0.333	13.625	0.047
Non-financial cost	Financial benefit	10.865	0.212	16.163	0.010
Non-financial cost	Non-financial benefit	11.034	0.135	21.472	0.000

The null hypothesis claiming no relationship between the tested variables cannot be rejected at a 5% level of significance when considering personal non-financial cost and benefit. The level of motivation is therefore not associated with a relationship between these variables on a personal level.

When considering relationships between variables at the organisational level, the alternative hypothesis may be accepted as Fisher's exact test yields significance values below the 5% level. A significant relationship between each of the variable pairs exists when a degree of motivation to realise value from the network is present.

Fisher's exact test yields significance value below the 5% level when testing the relationship between organisational financial cost and organisational financial benefit regardless of the level of motivation in the network.

5.6.3.3. Affective trust

Affective trust within the golf social network was measured based on the perceived tie strength of the relationships within the golf social network. The percentage of friendships was used as a proxy to tie-strength.

This variable was banded into a 3 point Likert scale, indicating low, medium and high levels of friendship within the network. Details are provided in APPENDIX 5: Affective trust variable calculation.

Table 5-38 shows the descriptive statistics for the affective trust variable. 40 (65.6%) respondents of the initial 61 respondents completed the questions pertaining to affective trust. The mean value for this variable is 2.08 indicating that a medium level of friendships exists, and therefore a degree of affective trust exists within the golf social network.

Table 5-38. Descriptive statistics for Affective trust variable.

	N	Mean	Std. Deviation	Minimum	Maximum
Affective trust	40	2.08	0.83	1	3

In addition to this, Table 5-39 indicates the frequency of respondents indicating low, medium and high levels of friendship within their golf social network. The percentage of relationships in each of the identified categories was found to be very similar, with 37.5% of respondents indicating a high level of friendships within the network.

Table 5-39. Frequency statistics for motivation variable.

	Frequency	Percent
Low	12	30.00
Medium	13	32.50
High	15	37.50
Total	40	100.00

Again cross-tabs were run. In this case the relational variable of affective trust was used as an additional layer. The results of these cross-tabs are shown in APPENDIX 5: Affective trust cross tab.

Fisher's exact test was used to determine independence of the variables when layered by this variable, the results of which are shown in Table 5-40 and

Table 5-41.

Table 5-40. Fisher's exact test - Exact significance for personal costs vs. personal benefits layered by affective trust.

		Low aff. trust		Med aff. trust		High aff. trust	
		Value	Exact sig.	Value	Exact sig.	Value	Exact sig.
Non-financial cost	Non-financial benefit	1.342	0.755	11.822	0.100	12.417	0.055

Table 5-41. Fisher's exact test - Exact significance for organisational costs vs. organisational benefits layered by affective trust.

		Low aff. trust		Med aff. trust		High aff. trust	
		Value	Exact sig.	Value	Exact sig.	Value	Exact sig.
Financial cost	Financial benefit	5.880	0.675	9.421	0.402	13.518	0.022
Financial cost	Non-financial benefit	7.396	0.322	10.589	0.249	13.469	0.024
Non-financial cost	Financial benefit	12.175	0.473	9.327	0.402	11.747	0.091
Non-financial cost	Non-financial benefit	13.508	0.036	11.305	0.133	16.668	0.001

The null hypothesis claiming no relationship between the tested variables cannot be rejected at a 5% level of significance when considering personal non-financial cost and benefit in networks with low to medium levels of affective trust. In networks with high levels of affective trust, the alternative hypothesis may be accepted, indicating a relationship between personal non-financial cost and personal non-financial benefit. The level of affective trust is therefore associated with a relationship between these variables on a personal level.

When considering relationship between organisational financial cost and both organisational financial and non-financial benefit, the null hypothesis may only be rejected at the 5% level of significance when affective trust is high.

At the same significance level, when considering the relationship between organisational non-financial cost and financial benefit, the null hypothesis may not be rejected regardless of the level of affective trust in the network. This

indicates a low probability that the relationship exists based on the varying levels of affective trust.

A relationship between organisational non-financial costs and benefits is evident at a 5% level of significance only when levels of affective trust are low, or high.

5.7. Research question 4: Organisational impact

The effect of golf social networking on the organisation was tested on two levels. The first level considers the types of exchange which are believed to occur over the network ties. The second considers the perceived organisational impact. Of the initial 61 respondents who started the survey, 38 (62.3%) completed the section relevant to organisational impact.

A four point Likert scale was used to measure the level of agreement of respondents that each of the forms of exchange occur as a result of interactions on the golf course. A mid-level value of 2.5 was used to categorise respondents' overall level of agreement. Mean values above 2.5 indicate that respondents are, to some extent, in agreement that the form of exchange occurs. Values below 2.5 indicate that respondents are in disagreement to some extent. The same approach was used when examining the perceived organisational impact.

5.7.1. Form of exchange

The following forms of exchange are considered:

- Exchange of business related information and/or knowledge sharing

- Improved business relationships
- Empowerment
- Business deal creation (exchange of GSR)

Table 5-42 shows the descriptive statistics for each of the form of exchange variables. All mean values exceed the mid-level value of 2.5, indicating that respondents agree that each of these forms of exchange occur as a result of interactions on the golf course. Exchange of business related information and/or knowledge sharing, and improved business relationships had the highest mean values with lowest standard deviation, indicating that these two forms of exchange are most prevalent in golf social networks. This is followed by the creation of business deals, and finally empowerment.

Table 5-42. Descriptive statistics for Form of exchange variables.

	N	Mean	Std. Deviation	Minimum	Maximum
Business related info/knowledge sharing	38	3.37	0.79	1	4
Improved business relationships	38	3.37	0.79	1	4
Business deals (Exchange of GSR)	38	3.08	0.91	1	4
Empowerment	38	2.63	1.00	1	4

Figure 5-6 shows the frequencies with which respondents agreed or disagreed with the statement “My interactions on the golf course result in exchange of business related information and/or knowledge exchange”. 86.84% of respondents agreed with the statement to some degree.

Figure 5-6. Frequency table: Exchange of information/knowledge

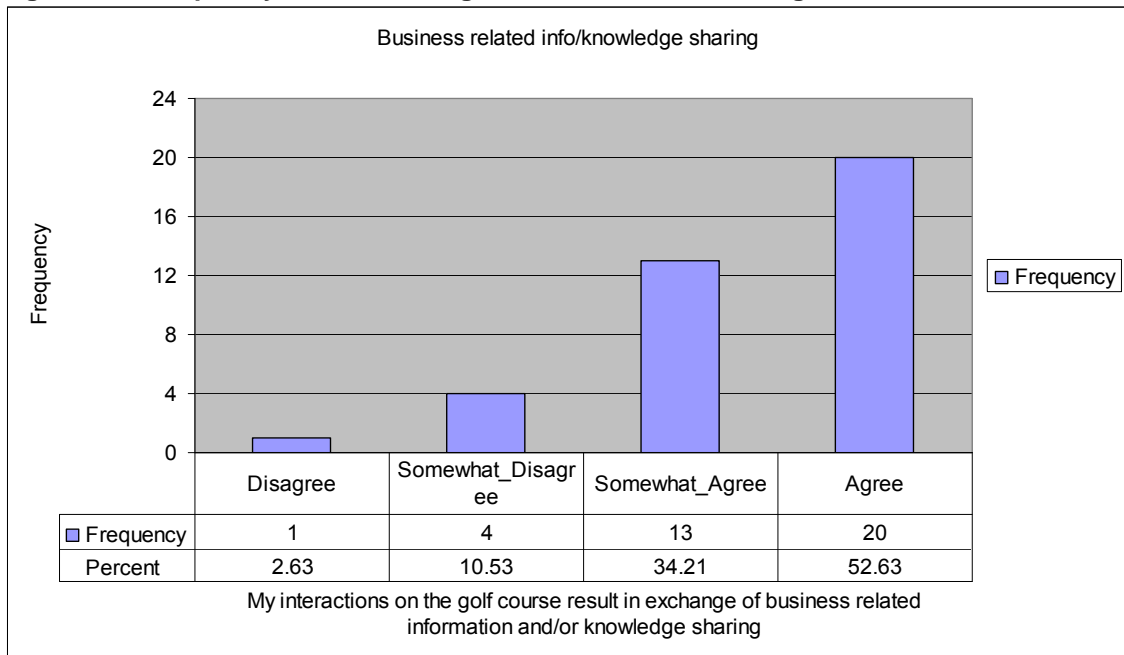


Figure 5-7 shows the frequencies with which respondents agreed or disagreed with the statement “My interactions on the golf course result in improved business relationships”. 86.84% of respondents agreed with the statement to some degree.

Figure 5-7. Frequency table: Improved business relationships.

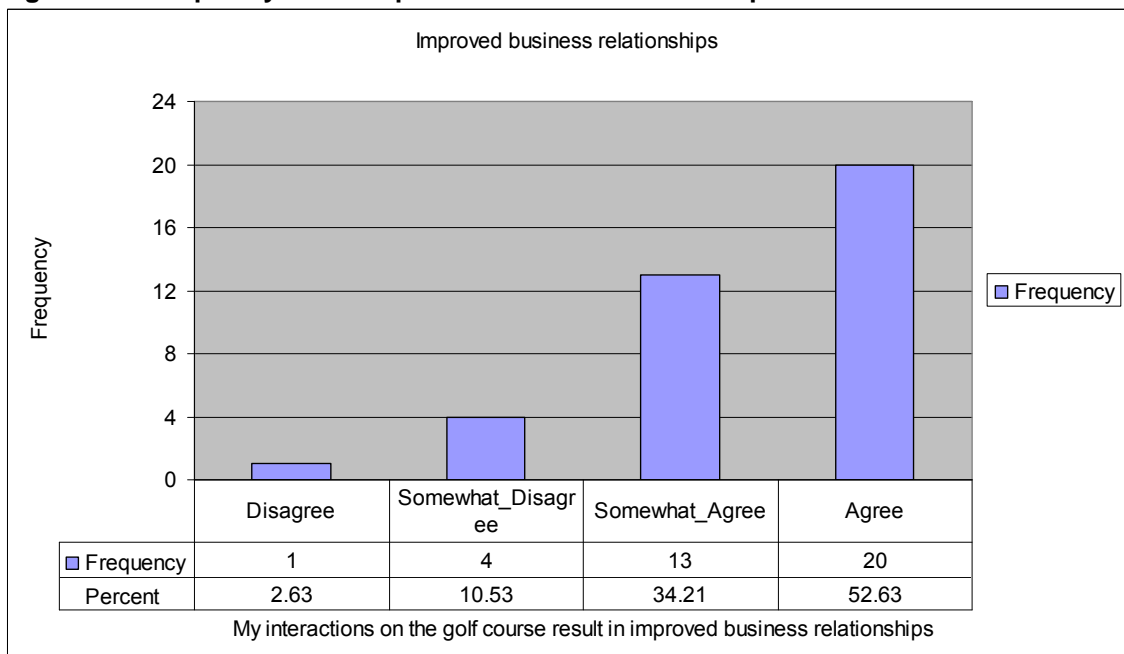


Figure 5-8 shows the frequencies with which respondents agreed or disagreed with the statement “My interactions on the golf course result in empowerment”. 52.63% of respondents agreed with the statement to some degree.

Figure 5-8. Frequency table: Empowerment.

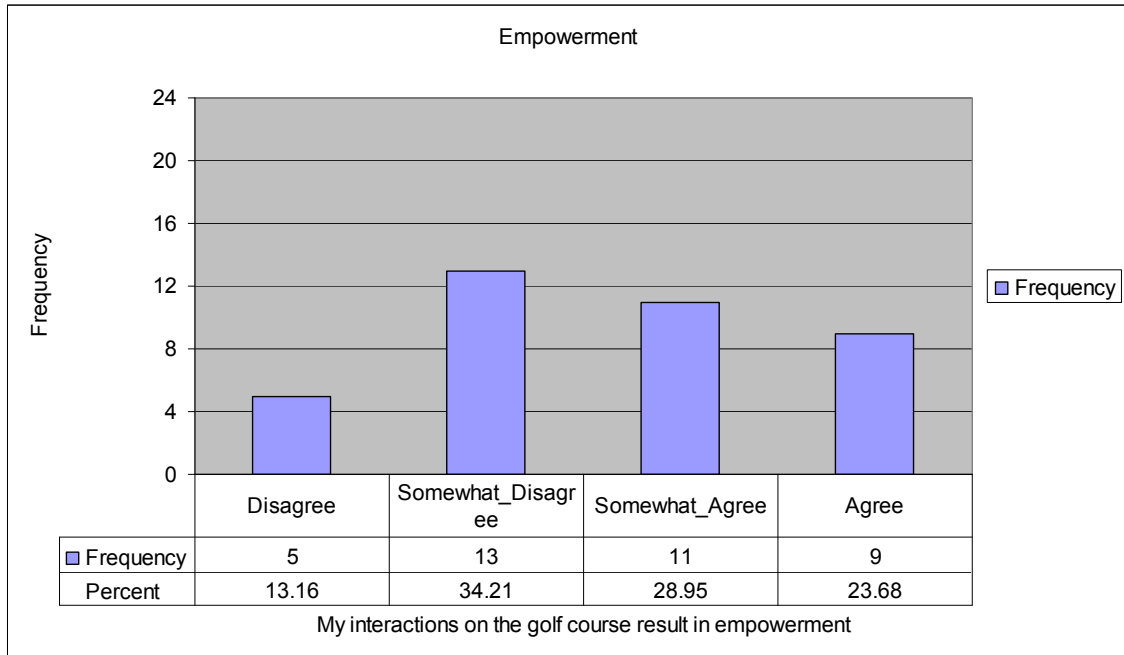
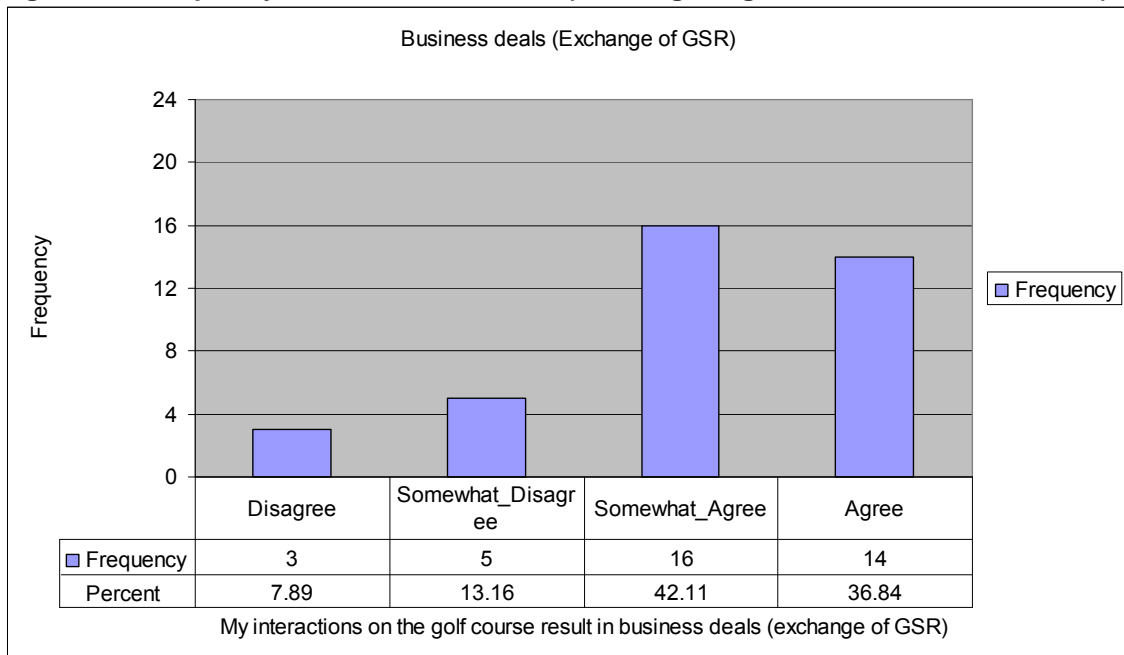


Figure 5-9 below shows the frequencies with which respondents agreed or disagreed with the statement “My interactions on the golf course result in business deals”. 78.95% of respondents agreed with the statement to some degree.

Figure 5-9. Frequency table: Business deals (Exchange of goods, services or revenues).



5.7.2. Level of organisational impact

The following levels of organisational impact are considered:

- Strategic
- Functional
- Operational

Table 5-43 shows the descriptive statistics for the level of organisational impact variables. All mean values exceed the mid-level value of 2.5, indicating that in general, respondents agree that organisational impact occurs at each of these levels as a result of interactions on the golf course. Strategic level of organisational impact received highest level of support from respondents with a mean value of 2.74 and standard deviation of 0.89. This is followed by

organisational impact at a functional level, and finally effects at an operational level.

Table 5-43. Descriptive statistics for level of organisational impact variables.

	N	Mean	Std. Deviation	Minimum	Maximum
Strategic Impact	38	2.74	0.89	1	4
Functional impact	38	2.71	0.84	1	4
Operational impact	38	2.61	1.05	1	4

Figure 5-10 shows the frequencies with which respondents agreed or disagreed with the statement “My organisation’s benefit derived from golf social networks is considered to be of a strategic nature”. 71.05% of respondents agreed with the statement to some degree.

Figure 5-10. Frequency table: Strategic impact.

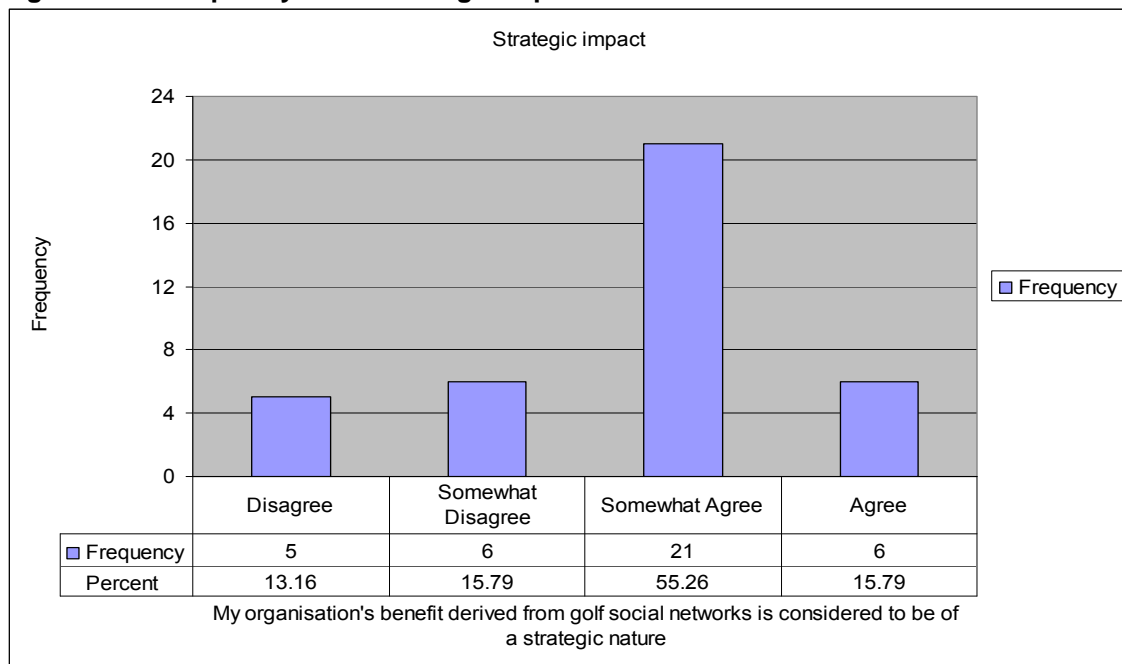


Figure 5-11 shows the frequencies with which respondents agreed or disagreed with the statement “My organisation’s benefit derived from golf social networks

is considered to be of a functional nature”. 63.16% of respondents agreed with the statement to some degree.

Figure 5-11. Frequency table: Functional impact.

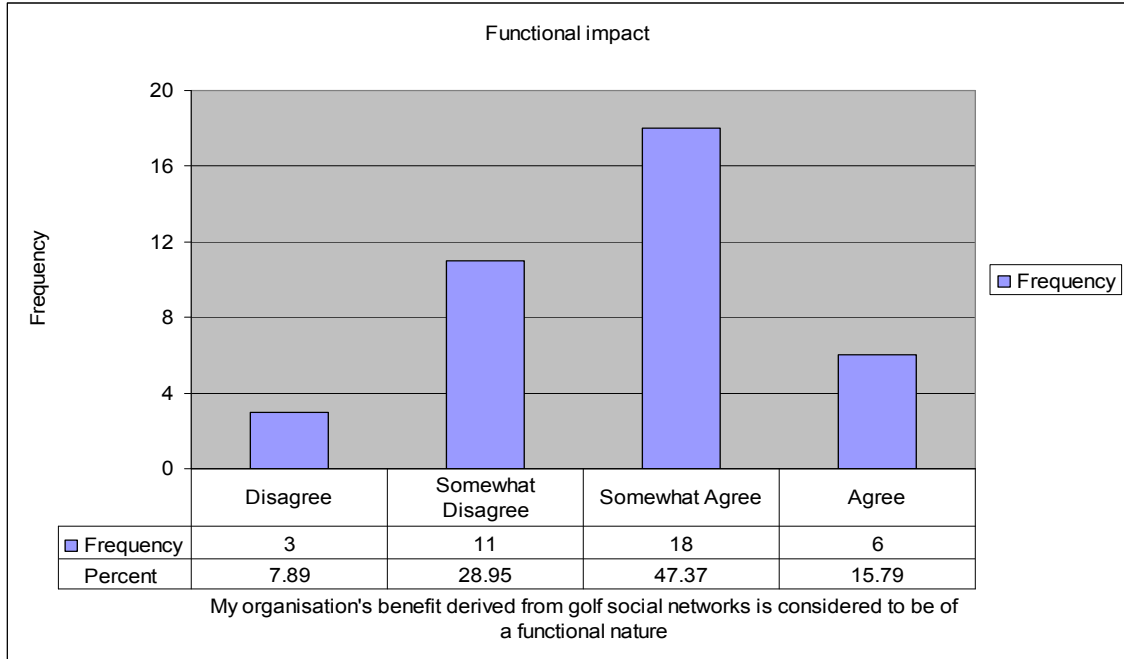
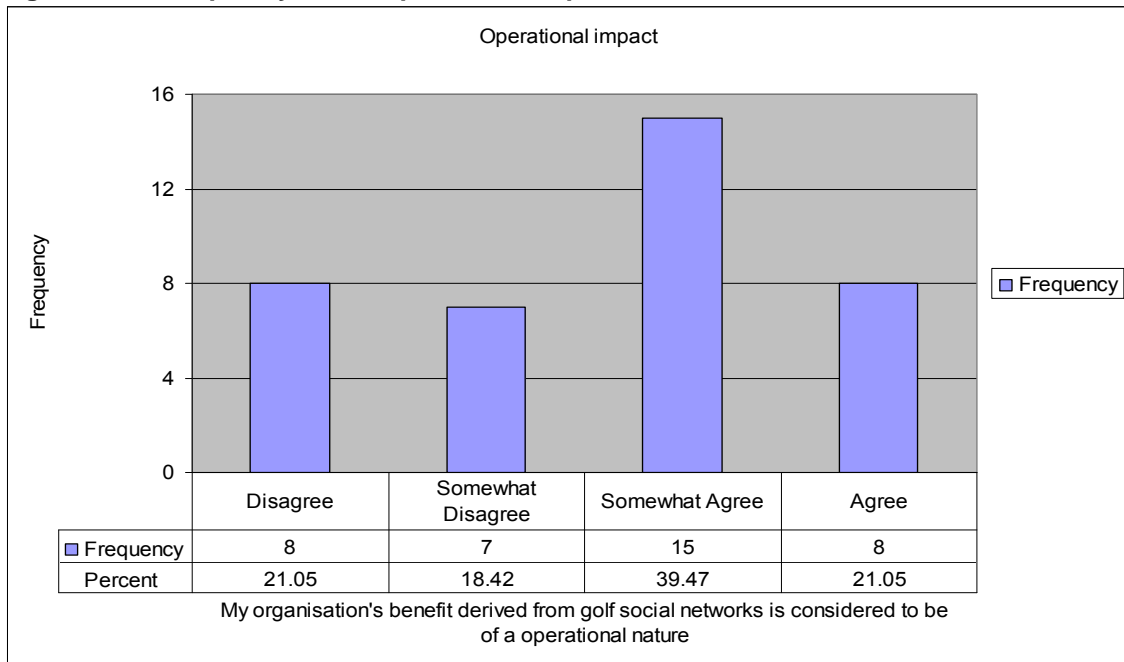


Figure 5-12 shows the frequencies with which respondents agreed or disagreed with the statement “My organisation’s benefit derived from golf social networks is considered to be of an operational nature”. 60.53% of respondents agreed with the statement to some degree.

Figure 5-12. Frequency table: Operational impact.



5.8. Research question 5: Network structure

Presented in this section, are the results of the investigation into the effects of the social network structure on the type of business value created. The structural characteristics of the network are first examined, including the following aspects:

- Size
- Gender composition
- Ethnic composition
- Tie strength / relationship composition

Thereafter, the relationship between these characteristics, and both form of exchange and level of organisational impact are considered. A total of 40

respondents completed questions pertaining to the structure of the golf social network.

5.8.1. Golf network structure

Respondents were requested to indicate the number of direct network contact made through their networking interactions on the golf course. The results of the descriptive statistics run on this variable are shown in Table 5-44, and indicate a mean value of 36.9, with a standard deviation of 39.72.

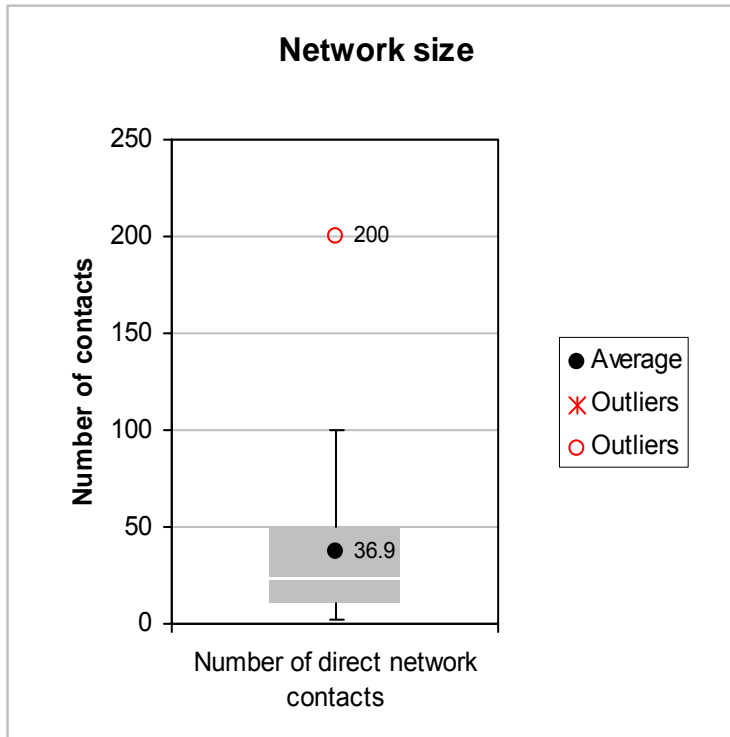
Table 5-44. Descriptive statistics for network size variable.

	N	Mean	Std. Deviation	Minimum	Maximum
Number of contacts	40	36.90	39.72	2.00	200.00

Figure 5-13 graphically represents these results. An outlier more than 2 standard deviations from the mean is evident, indicating 200 network members.

An extreme outlier is evident indicating 200 direct network contacts. Eliminating this outlier, results in a mean network size of 32.7 members with a standard deviation of 30.02.

Figure 5-13. Box plot indicating expected network size.



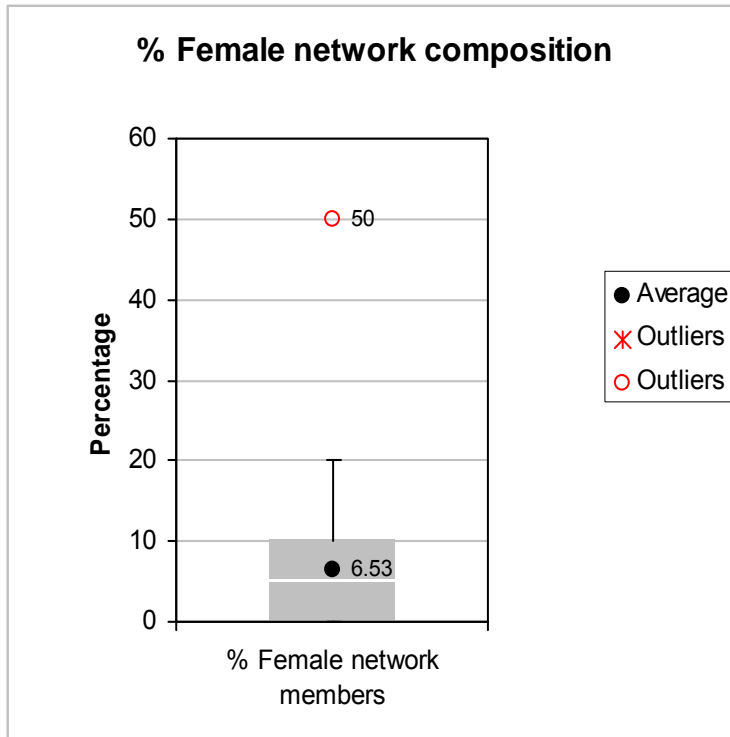
Respondents were posed a question regarding the perceived percentage female composition of their golf social network. The results of the descriptive statistics run on this variable are shown in Table 5-45, and indicate a mean value of 6.53% with a standard deviation of 9.02%.

Table 5-45. Descriptive statistics for network gender (female) composition variable.

	N	Mean	Std. Deviation	Minimum	Maximum
%Female	40	6.53	9.02	0.00	50.00

Figure 5-14 graphically represents the responses regarding perceived network gender (female) composition.

Figure 5-14. Box plot indicating perceived network gender (female) composition.



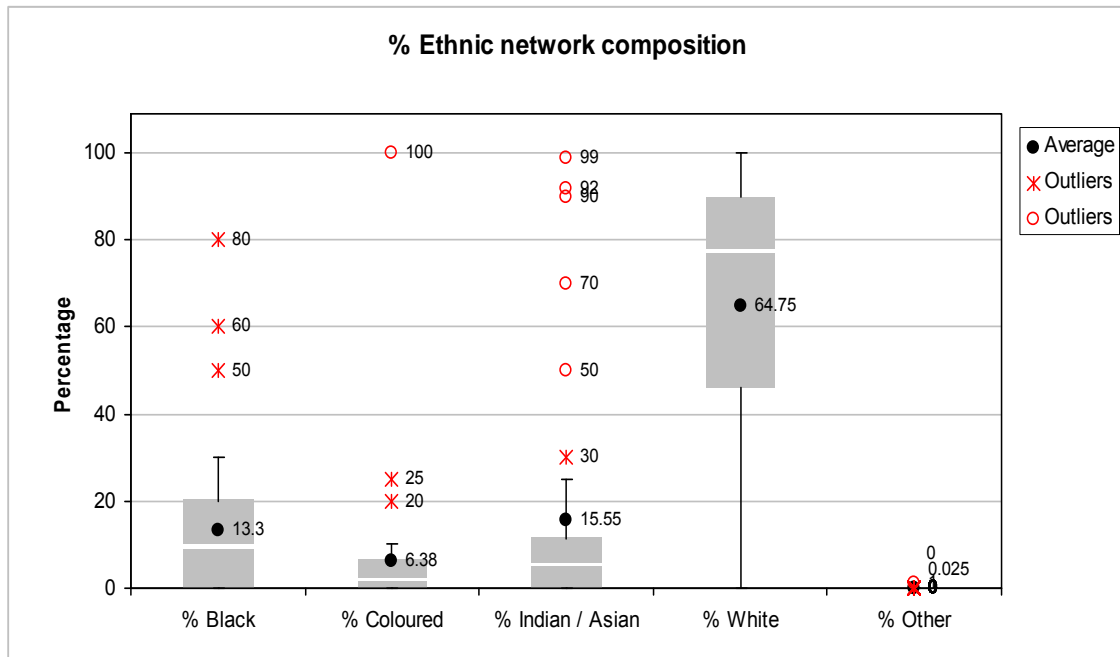
Respondents were further posed a question regarding the perceived percentage ethnicity of their golf social network. The results of the descriptive statistics run on this variable are shown in Table 5-46.

Table 5-46. Descriptive statistics for network ethnic composition variable.

	N	Mean	Std. Deviation	Minimum	Maximum
%Black	40	13.30	17.40	0.00	80.00
%Coloured	40	6.38	16.23	0.00	100.00
%Indian/Asian	40	15.55	26.52	0.00	99.00
%White	40	64.75	31.79	0.00	100.00
%Other	40	0.03	0.16	0.00	1.00

The graphical representation of results is shown in Figure 5-15.

Figure 5-15. Box plot indicating perceived network ethnic composition.



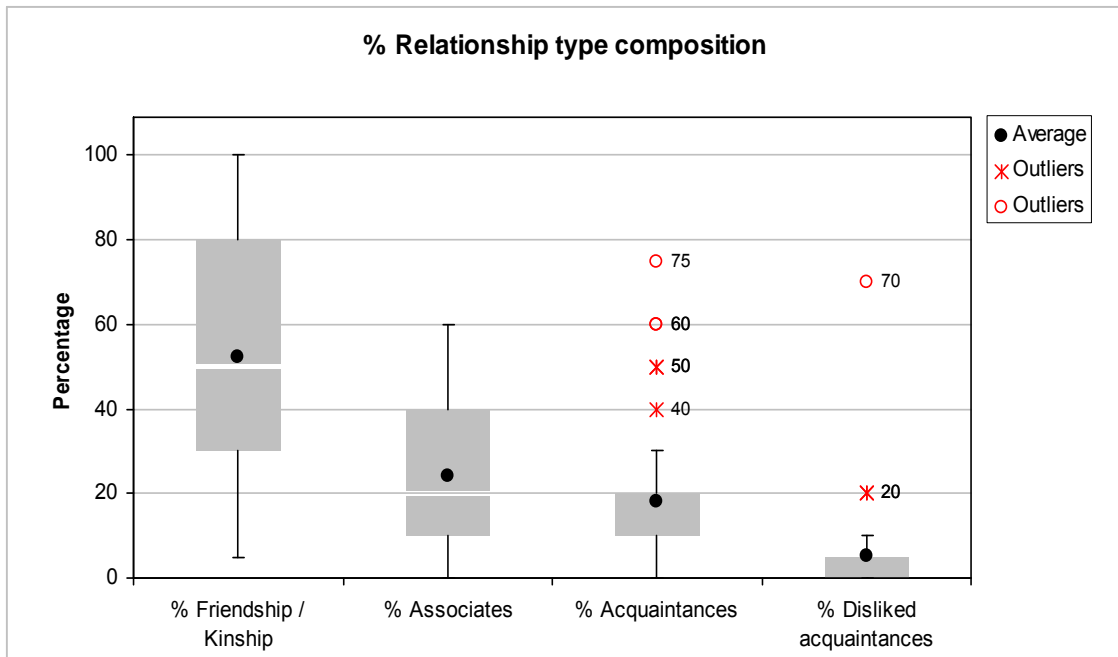
Respondents were also posed a question regarding the perceived relationship types within their golf social network. The results of the descriptive statistics run on this variable are shown in Table 5-47.

Table 5-47. Descriptive statistics for network relationship type composition variable.

	N	Mean	Std. Deviation	Minimum	Maximum
%Friendship / Kinship	40	52.38	26.48	5.00	100.00
%Associates	40	24.13	16.98	0.00	60.00
%Acquaintances	40	18.25	18.06	0.00	75.00
%Disliked Acquaintances	40	5.25	11.75	0.00	70.00

The results are shown in Figure 5-16.

Figure 5-16. Box plot indicating perceived network relationship type composition.



5.8.2. Form of exchange

Form of exchange was considered in light of the network structural characteristics outlined in Chapter 5.8.1.

5.8.2.1. Size

The result of Spearman's correlation between form of exchange and network size is shown in Table 5-48.

Table 5-48. Correlation between form of exchange and network size.

		No. contacts
Exchange of business related information / knowledge sharing	Correlation Coefficient	0.375
	Sig. (2-tailed)	0.020
	N	38
Improved business relationships	Correlation Coefficient	0.331
	Sig. (2-tailed)	0.042
	N	38
Empowerment	Correlation Coefficient	0.324
	Sig. (2-tailed)	0.047
	N	38
Business deals (exchange of GSR)	Correlation Coefficient	0.448
	Sig. (2-tailed)	0.005
	N	38

A weak correlation ($r < 0.5$) exists between network size and each of the exchange forms at a 5% level of significance.

5.8.2.2. Gender composition

The result of Spearman's correlation between form of exchange and network gender composition is shown in Table 5-49.

Table 5-49. Correlation between form of exchange and network gender composition.

		%Female
Exchange of business related information / knowledge sharing	Correlation Coefficient	-0.386
	Sig. (2-tailed)	0.017
	N	38
Improved business relationships	Correlation Coefficient	-0.284
	Sig. (2-tailed)	0.084
	N	38
Empowerment	Correlation Coefficient	-0.233
	Sig. (2-tailed)	0.159
	N	38
Business deals (exchange of GSR)	Correlation Coefficient	-0.083
	Sig. (2-tailed)	0.620
	N	38

A weak inverse correlation exists between network female composition and exchange of business related information / knowledge sharing at a 5% significance level.

5.8.2.3. Ethnic composition

The result of Spearman's correlation between form of exchange and network ethnic composition is shown in Table 5-50.

Table 5-50. Correlation between form of exchange and network ethnic composition.

		%Black	%Coloured	%Indian/Asian	%White	%Other
Exchange of business related information / knowledge sharing	Correlation Coefficient	-0.197	0.160	-0.036	0.026	-0.125
	Sig. (2-tailed)	0.236	0.336	0.829	0.876	0.456
	N	38	38	38	38	38
Improved business relationships	Correlation Coefficient	-0.133	0.231	0.036	0.017	-0.125
	Sig. (2-tailed)	0.426	0.164	0.829	0.921	0.456
	N	38	38	38	38	38
Empowerment	Correlation Coefficient	0.126	0.413	0.302	-0.486	0.070
	Sig. (2-tailed)	0.450	0.010	0.066	0.002	0.675
	N	38	38	38	38	38
Business deals (exchange of GSR)	Correlation Coefficient	0.190	0.286	0.247	-0.019	-0.048
	Sig. (2-tailed)	0.253	0.082	0.136	0.909	0.774
	N	38	38	38	38	38

A weak correlation exists between empowerment and the percentage black network composition. Conversely, a weak inverse correlation exists between empowerment and the percentage white network composition. Both relationships are at a 1% significance level.

5.8.2.4. Relationship composition

The result of Spearman's correlation between form of exchange and network ethnic composition is shown in Table 5-51.

Table 5-51. Correlation between form of exchange and network relationship composition.

		%Friendship / Kinship	%Associates	%Acquaintances	%Disliked Acquaintances
Exchange of business related information / knowledge sharing	Correlation Coefficient	-0.304	0.460	0.252	-0.074
	Sig. (2-tailed)	0.063	0.004	0.127	0.660
	N	38	38	38	38
Improved business relationships	Correlation Coefficient	-0.232	0.319	0.213	-0.026
	Sig. (2-tailed)	0.161	0.051	0.198	0.877
	N	38	38	38	38
Empowerment	Correlation Coefficient	0.066	0.104	0.073	-0.190
	Sig. (2-tailed)	0.694	0.535	0.665	0.252
	N	38	38	38	38
Business deals (exchange of GSR)	Correlation Coefficient	-0.322	0.439	0.216	0.139
	Sig. (2-tailed)	0.049	0.006	0.192	0.407
	N	38	38	38	38

Associate network composition displays a weak correlation with both the exchange of business related information / knowledge sharing, as well as business deals (exchange of GSR) at a 1% significance level. The level of friendships/kinships within the network displays a weak inverse correlation with business deals (exchange of GSR) with 5% significance.

5.8.3. Level of organisational impact

Level of organisational impact was considered in light of the network structural characteristics outlined in Chapter 5.8.1.

5.8.3.1. Size

The result of Spearman's correlation between level of organisational impact and network size is shown in Table 5-52.

Table 5-52. Correlation between level of organisational impact and network size.

		No. contacts
Strategic impact	Spearman Correlation	0.041
	Sig. (2-tailed)	0.809
	N	38
Functional impact	Spearman Correlation	0.323
	Sig. (2-tailed)	0.048
	N	38
Operational impact	Spearman Correlation	0.321
	Sig. (2-tailed)	0.050
	N	38

Network size is weakly correlated with the creation of both functional and operational business value at a 5% significance level.

5.8.3.2. Gender composition

The result of Spearman's correlation between level of organisational impact and network gender composition is shown in Table 5-53.

Table 5-53. Correlation between level of organisational impact and network gender composition.

		%Female
Strategic impact	Spearman Correlation	-0.203
	Sig. (2-tailed)	0.222
	N	38
Functional impact	Spearman Correlation	0.023
	Sig. (2-tailed)	0.889
	N	38
Operational impact	Spearman Correlation	-0.291
	Sig. (2-tailed)	0.076
	N	38

No correlation exists between network female composition and the creation of any of the levels of organisational impact at the 5% significance level.

5.8.3.3. Ethnic composition

The result of Spearman's correlation between level of organisational impact and network ethnic composition is shown in Table 5-54.

Table 5-54. Correlation between level of organisational impact and network ethnic composition.

		%Black	%Coloured	%Indian/Asian	%White	%Other
Strategic impact	Spearman Correlation	0.145	0.319	0.217	-0.423	0.041
	Sig. (2-tailed)	0.384	0.051	0.191	0.008	0.805
	N	38	38	38	38	38
Functional impact	Spearman Correlation	0.157	0.192	0.145	-0.444	0.064
	Sig. (2-tailed)	0.347	0.247	0.386	0.005	0.701
	N	38	38	38	38	38
Operational impact	Spearman Correlation	0.071	0.315	0.391	-0.187	-0.118
	Sig. (2-tailed)	0.671	0.054	0.015	0.261	0.482
	N	38	38	38	38	38

White network composition displays a weak inverse correlation with the creation of both strategic and functional business value at a 1% significance level. Indian/Asian network composition displays a weak correlation with the creation of business value at an operational level with a significance of 5%.

5.8.3.4. Relationship composition

The result of Spearman's correlation between level of organisational impact and network ethnic composition is shown in Table 5-55.

Table 5-55. Correlation between level of organisational impact and network relationship composition.

		%Friendship / Kinship	%Associates	%Acquaintances	%Disliked Acquaintances
Strategic impact	Spearman Correlation	-0.234	0.177	0.319	-0.033
	Sig. (2-tailed)	0.158	0.287	0.051	0.844
	N	38	38	38	38
Functional impact	Spearman Correlation	-0.079	0.172	0.130	-0.100
	Sig. (2-tailed)	0.636	0.303	0.436	0.552
	N	38	38	38	38
Operational impact	Spearman Correlation	0.126	0.228	-0.109	-0.240
	Sig. (2-tailed)	0.452	0.169	0.515	0.148
	N	38	38	38	38

Relationship type displays no correlation with any of the levels of organisational impact at the 5% significance level.

6. DISCUSSION OF RESULTS

6.1. Introduction

This section relates the research findings presented in Chapter 5 to the literature review in Chapter 2, and the relevant research questions outlined in Chapter 3.

The structure outlined in Chapter 5 is repeated, and the following areas are covered:

- Demographics of the questionnaire respondents
- Respondent behaviour with regards to golf social networking
- Findings related to each of the research questions posed in Chapter 3.

6.2. Overview of research problem

As organisations compete on increasingly higher levels, the need to create and sustain corporate advantage becomes more and more evident (Zack, 1999). Burt (2000), Tsai and Ghoshal (1998) identify social capital as a contributing factor to the creation of corporate advantage, and thus business success.

Kilduff and Tsai (2003) indicate that social capital generated at individual level may benefit the community or organisation to which they are linked. Limited information is available however on the realisation of value from these networks (Portes, 2000).

This research seeks to investigate the role of the individual social networks formed on the golf course in creating value at the organisational level. Benefits derived from, and costs incurred as a result of social networking on the golf course are considered at both individual and organisational levels. The relationships between costs and benefits are explored, and underlying factors investigated.

The research further seeks to explore social networking in the South African business environment, which is characterised by diversity of race, language, age, gender, and disability (PCAS, 2006) within the context of a traditional networking environment with an inherent 'old boy's' nature.

6.3. Respondent demographics

The sample analysed here consisted of a snowball sample of 61 respondents. Following the data represented in Chapter 5, the sample is:

- 86.89% male
- 77.05% white
- 50.82% aged between 35 and 44 years
- 60% employed in middle management/supervisor or senior management roles

The intention of using the snowball technique was to sample a typical golf social network in South Africa. When developing the research methodology to

incorporate this form of sampling, the expectation was that individuals would refer members of their own golf social network to the survey, thereby allowing for data collection across the network. In addition to understanding the structure of such a network, the social dynamic which exists in the network is also highlighted. This is of particular importance when considering the level of integration and social representation within such a network.

Table 6-1 is a condensed form of the data represented in Chapter 5. This format emphasizes the degree of homogeneity which exists within the sample. It is important to note that as a result of the sampling technique, the sample is expected to be similar to a typical golf social network in South Africa.

Table 6-1. Condensed sample demographic data.

			Ethnic group				
			Black	Coloured	Indian/Asian	White	Other
Gender	Male	Knowledge worker / employee	0	1	2	1	0
		Middle Management / supervisor	2	1	6	10	0
		Senior Management	0	0	1	15	0
		Executive	0	0	1	5	0
		Entrepreneur	0	0	0	8	0
	Female	Knowledge worker / employee	0	0	0	4	1
		Middle Management / supervisor	0	0	0	1	0
		Senior Management	0	0	0	1	0
		Executive	0	0	0	1	0
		Entrepreneur	0	0	0	0	0

As can be seen in Table 6-1, the respondent demographic data indicates a fairly high level of homogeneity in the golf social network. This is true on the levels of gender, ethnicity and functional role. Supporting this, the following observations are made:

- 24.59% of respondents are white males in senior management positions.

- 16.39% of respondents are white males in middle management or supervisory positions.
- 13.11% of respondents are white male entrepreneurs.

In summary, there appears to be a high level of homophily within golf social networks, with more than half of the tested sample (54.10%) consisting of white men in the three abovementioned functional roles.

The demographic of the network may be as a result of a number of factors. Firstly, as previously discussed, golf is inherently an old boy's network. By nature, individuals who do not fit into a particular profile may encounter challenges when attempting to become a member of such a network (Song, n.d.). In an attempt to break down such barriers, organisations such as the South African Golf Development Board (SAGDB), backed primarily by international business tycoon Johann Rupert and the SA Golf Association (SAGA), have made it their goal to develop the game across the country and make golf accessible to all South Africans (SAGDB, n.d.).

Secondly, golf is often considered an activity for the elite (Song, n.d.). South Africa has only recently achieved its democracy, and is slowly overcoming a history of inequality (CGIS, 2008). The demographic of the golf social network may merely be an indication of the status of integration and equality within the upper echelons of the country. To the contrary, and in support of golf social networks as a method of value creation, respondents from both the depth

interview and survey stages acknowledged the breakdown of cultural and gender barriers as benefits of interactions on the golf course.

6.4. *Networking behaviour*

The majority (60%) of survey respondents indicated that they use golf as a method to actively network with other individuals. High levels of active networking on the golf course is particularly true for entrepreneurs and individuals in senior management positions, of which a respective 87.5% and 70.6% claimed to use golf as a social networking tool. This can be contrasted for instance with the 33.3% of knowledge workers who claim to network actively in this manner.

Individuals who network actively appear to regularly create opportunity for interactions. Networking occurs on a regular basis (66.11% of respondents indicating frequency of play more regular than once a month), and over a long period of time (average tenure of 9.58 years).

Considering social networking from an organisational perspective, 84% of respondents state that their organisation supports social networking. 65% state that this support is extended to social networking on the golf course. This difference is indicative perhaps of the stigma attached to golfing. Queenan (2008) in an article in the newly released *Golf Business*, a magazine from the editors of *Finweek*, states that golfing CEO's are often criticised for their

pastime. Golf is seen as a way for people to “get away from their work”, and an inappropriate use of productive time.

6.5. *Research question 1: Tangible value*

The purpose of this research question was to identify the perceived tangible (financial) value associated with the creation and maintenance of golf social networks, at both individual and organisational level.

Following Allee’s (2007) cost-benefit analysis, a variety of costs and benefits were cited during the depth interviews as contributors to the value of golf social networks. Tangible (financial) aspects were identified at both individual and organisational level, thereby meeting the objectives of the research question. The acknowledgement of tangible costs supports Portes (2000), who lists investment of material resources as a requirement for generating social capital.

These tangible costs and benefits were then posed to the respondents of the online survey. The results were analysed based on frequency of selection, and percentage of total selections within the tangible aspects subgroup. The presentation of the findings in this way allowed an interpretation of the tangible aspects which impact most frequently on individuals and organisations. Five aspects identified with the highest frequency within each value category are indicated in Table 6-2. The relative weight (importance) of the individual aspects was not considered in this study.

Table 6-2. Most frequently identified tangible costs and benefits of golf social networking.

	Personal	Organisational
Tangible Costs	<ul style="list-style-type: none"> • Golf equipment • Practice / Driving range costs • Personal membership fees • Meals / drinks • Golf lessons 	<ul style="list-style-type: none"> • Corporate golf day costs • Sponsorship of charities • Meals / drinks • Playing costs (incl. green fees, caddies, carts) • Personal membership fees
Tangible Benefits	<ul style="list-style-type: none"> • Improved relationships / friendships • New business contacts created • Build personal leadership skills (e.g. character, discipline, behaviours) • Builds personal entrepreneurial skills (e.g. creation of new entrepreneurial opportunities) • Builds personal management skills (e.g. planning abilities) 	<ul style="list-style-type: none"> • New business deals / opportunities • Forewarning of potential business opportunities • Direct ties created with external organisations • Improved access to key decision makers • Creation of long-term / strategic business relationships

Tsai and Ghoshal (1998) state that interpersonal networks have a strong influence on career success and the rate of promotion of individuals. In contrast to the latter, the current study indicates that career advancement was selected least frequently from the list of tangible benefits. This aspect was instead trumped by benefits such as new or improved relationships, and the development of leadership, management and entrepreneurial skills. This indicates that membership of the golf social networks may result in the development of behaviours crucial to career success rather than directly advancing individual careers.

From an organisational perspective, new business deals or opportunities and forewarning of such opportunities were selected most frequently (26%) as organisational tangible benefits. This may be as a result of two underlying benefits; increased direct ties created with external organisations, and improved access to key decision makers. These findings are aligned with Kilduff and Tsai

(2003), who state that collaboration between important network members result in the exploitation of valuable opportunities.

Furthermore, the golf social network as an enabler of the creation of long term, strategic business relationships highlights its potential as an important resource in creating corporate advantage.

6.6. *Research question 2: Intangible value*

The purpose of this research question was to determine if the perceived costs and benefits associated with the creation and maintenance of golf social networks at both individual and organisational level go beyond that of a tangible nature. Intangible (non-financial) costs and benefits were identified at both individual and organisational level during the depth interviews, thereby meeting the objectives of the research question.

These intangible costs and benefits where then posed to the respondents of the online survey. The results were analysed based on frequency of selection, and percentage of total selections within the intangible aspects subgroup. The presentation of the findings in this way allowed an interpretation of the intangible aspects which impact most frequently on individuals and organisations. Where appropriate, five aspects identified with the highest frequency within each value category are indicated in Table 6-3. Only three intangible costs at organisational level were selected by survey respondents.

Table 6-3. Most frequently identified intangible costs and benefits of golf social networking.

	Personal	Organisational
Intangible Costs	<ul style="list-style-type: none"> • Sacrifice of personal / family time • Reduced time available for work responsibilities • Deterioration of reputation / credibility • Increased levels of stress / disappointment • Deterioration of network relationships / broken trust 	<ul style="list-style-type: none"> • Revenue loss through lost productive time • Internal political conflict • Deterioration of brand perception
Intangible Benefits	<ul style="list-style-type: none"> • Mental wellbeing (Work-life balance, relaxation & stress reduction) • Physical wellbeing (Exercise) • Increased knowledge sharing • Access to more diverse information • Improved people-skills & method of approach 	<ul style="list-style-type: none"> • Relationship management (Partners, customers, competitors) • Improved business relationships • Increased knowledge sharing • Break-down of business tensions • Employee wellbeing

Improved relationships and access to resources are highlighted in literature as important beneficial outcomes of social networking. These aspects constitute a large portion (39%) of the total selections of organisational intangible benefits.

In line with the observations of Cope (2003), time is recognized as an important cost of social networking. Reduced time for other purposes as a result of golf social networking accounts, in terms of frequency of selection, for 65% of personal intangible costs and 67% of organisational intangible costs. The efficient management of networks and network contacts is therefore considered a key form of cost reduction (Cross, Liedtka & Weiss, 2005).

In support of the claims made by Kilduff and Tsai (2003) as well as Walen and Lachman (2000), negative effects on personal wellbeing and relationships were

also indicated by respondents, however at a lower frequency of selection (21.74%), than that of reduced available time.

The aspects of deterioration of reputation and credibility received the final 13.04% of selections. This aspect was included as a cost in the questionnaire as it was highlighted as such during the depth interviews. Although considered as a deterrent for inappropriate behaviour in literature (McGrath & Sparks, 2005), and therefore a potential benefit, the consideration of this aspect as a cost may warrant additional research in social network theory.

6.7. Research question 3: Tangible / intangible relationship

This research question aimed to investigate the existence of a relationship between tangible and intangible values associated with golf social networking. Cost and benefit variables were tested for independence at both individual and organisational levels, and across tangible and intangible boundaries.

In meeting the objectives of the research question, a number of relationships were identified. These relationships are identified in Table 6-4.

Table 6-4. Significant relationships between tangible and intangible aspects of golf social networking.

		Personal	Organisational
Financial cost	Financial benefit	×	✓
Financial cost	Non-financial benefit	×	✓
Non-financial cost	Financial benefit	×	✓
Non-financial cost	Non-financial benefit	✓	✓

At individual level, a relationship is seen only between intangible costs and intangible benefits. At organisational level, relationships are seen across and within tangible and intangible boundaries.

Although the nature of these relationships is not tested here, it is evident that investment in social networking at organisational level, be it financial or non financial, has a direct implication on the benefit derived from networking activities. This relationship therefore holds potential business value, and should be investigated more thoroughly. Although previous studies considering the effects of social networks formed at an individual level on the organisation are limited (Kilduff and Tsai, 2003), this study indicates that personal social networks formed on the golf course do indeed have implications on the organisation to which they are linked.

Furthermore, this research question intended to identify the association between the relational dimensions of social networking, including shared beliefs, motivation and affective trust, and the existence of the previously mentioned relationships.

6.7.1. Cognitive trust

Cognitive trust appears to be highly prevalent in golf social networks with 97% of respondents indicating that cognitive trust exists in their golf social network to some degree. Only 1 (2.63%) respondent of a total number of 38 respondents indicated a limited level of cognitive trust within the golf social network. Due to

this low sample number, the relationship between costs and benefits was not be verified when the level of cognitive trust was low.

In the presence of cognitive trust, a significant dependence exists between variables in each of the tested relationships. This is indicated in Table 6-5.

Table 6-5. Existence of relationships in the presence of no / high cognitive trust.

			No cognitive trust	High cognitive trust
Organisational	Financial cost	Financial benefit	*	✓
	Financial cost	Non-financial benefit	*	✓
	Non-financial cost	Financial benefit	*	✓
	Non-financial cost	Non-financial benefit	*	✓
Personal	Non-financial cost	Non-financial benefit	*	✓

The asterisk marks relationships which were not tested. As the converse scenario could not be tested, it cannot be established that a high level of cognitive trust in the network is a precondition for the existence of the tested relationships. What can be said is that cognitive trust is inherently very high within this form of network, making the cases where no cognitive trust is present negligible.

6.7.2. Motivation

On a personal level, motivation to realise benefits from social networking activities on the golf course is not associated with the relationship between intangible costs and intangible benefits. Furthermore, the level of motivation

does not impact the relationship which exists between organisational financial cost and non-financial benefit. This is shown in Table 6-6.

Table 6-6. Existence of relationships in the presence of no / high motivation.

			No motivation	High motivation
Organisational	Financial cost	Financial benefit	×	✓
	Financial cost	Non-financial benefit	✓	✓
	Non-financial cost	Financial benefit	×	✓
	Non-financial cost	Non-financial benefit	×	✓
Personal	Non-financial cost	Non-financial benefit	×	×

The other tested variable pairs are significantly related only when motivation to realise benefits from the social network is high. High levels of motivation are therefore deemed a pre-requisite for the materialisation of benefits from golf social networks at the organisational level. This is in support of Anderson (2007), Adler and Kwon (1999), who indicate that both opportunity created by the network structure (which is heightened in highly homophilous networks such as the one under investigation) as well as motivation to exploit network opportunities are required in order for social capital benefits to materialise.

6.7.3. Affective trust

Table 6-7 indicates variable relationships in light of the level of affective trust held in the golf social network. Significant relationships between organisational financial cost and both forms of organisational benefit occur only when affective trust is high. This implies that the realisation of benefits from the organisation's

financial investment do occur, however only when individuals within the network enjoy good interpersonal relationships with one another.

Table 6-7. Existence of relationships in the presence of varying levels of affective trust.

			Low aff. trust	Med. aff. trust	High aff. trust
Organisational	Financial cost	Financial benefit	×	×	✓
	Financial cost	Non-financial benefit	×	×	✓
	Non-financial cost	Financial benefit	×	×	×
	Non-financial cost	Non-financial benefit	✓	×	✓
Personal	Non-financial cost	Non-financial benefit	×	×	Relationship may exist

The relationship between personal non-financial cost and benefit may be significant only when the level of affective trust in the network is high. Although the level of significance, 0.055, exceeds the 5% significance level, testing with a larger sample size may yield more conclusive results.

Interestingly, non-financial cost is related significantly to non-financial benefit on the organisation only when levels of affective trust are low or high. Medium levels of affective trust may be representative of scenarios where individuals are not certain of the intentions of others (as opposed to cases of high and low affective trust or liking), thereby reducing the ability of individuals to create value from their networks in a manner which is considered low risk.

Research question 4: Organisational impact

The purpose of research question 4 was to identify whether the type of business value created as a result of golf social networks varies in form of exchange and by level of organisational impact. This section serves as an analysis of the results presented in Chapter 5.7 in meeting the aims of the research question.

6.7.4. Form of exchange

The members of social networks are bound together by relationships (ties) which exist in varying strengths between them. It is over these ties which exchange of content occurs. As developed from Tichy *et al.* (1979), the following forms of exchange may occur:

- Exchange of business related information and/or knowledge sharing
- Improved business relationships
- Empowerment
- Business deal creation (exchange of GSR)

The results presented in Chapter 5.7 indicate mean values exceeding the mid-level value for each of the abovementioned forms of exchange. This implies that respondents agree to some extent that each of the forms of exchange occurs as a result of interactions on the golf course. Golf networks are therefore perceived to form a platform for the exchange of the various value currencies.

Considering the mean values, this form of social network appears to be most beneficial as a conduit for the exchange of important business related information and/or knowledge sharing, and improvement and maintenance of business relationships.

Significantly lower levels of support were received for this form of network as a platform for empowerment. This may be a result of the 'old-boy's', or highly homophilous, characteristics of golf.

6.7.5. Level of organisational impact

Organisational benefits which come about as a result of social networking have been shown to vary fairly extensively, ranging from the creation of business deals, to the improvement of relationships and well being of employees. Following from the outcomes of the depth interviews, respondents were requested to consider the form of organisational impact, including impacts on strategic, functional and operational levels.

The mean values indicated in the results for each of the abovementioned levels of organisational impact, exceeds the mid-level value of 2.5. This implies that respondents agree to some extent, that each of the levels of organisational impact occurs as a result of interactions on the golf course. This finding satisfies the aim of this portion of the research question. It further indicates that golf social networks are considered to be influential on organisations at strategic, functional as well as operational levels.

6.8. Research question 5: Network structure

The intention of this research question is to test whether the type of business value created varies based on network structural elements, including network size, density and diversity (ethnicity and gender). Detailed investigation of such aspects gives an indication of the level cohesion, homogeneity and openness within the network (Claridge, n.d.), and may provide insights into the ease of transfer across network ties (Reagans & McEvily, 2003), and the diversity of resources provided by the network (Granovetter, 1983).

This section investigates the perceived structure of the golf network, as well as the impact of structure on the type of business value created, thereby meeting the research question objectives.

6.8.1. Golf network structure

The results presented in Chapter 5.8 indicate a mean number of direct network contacts of 33 members when outliers are eliminated. This is the extent of the network which individuals are able to draw on directly.

Of interest, is the golf social network's ethnic and gender composition. The network is neither representative of the gender nor the ethnic demographic of the South African population, as indicated in the CEE Annual Report (2008). The network composition is however seen to be more closely aligned to that of the senior management bracket in South Africa, as shown in Table 6-8. This may be due to the general esteem held for golf and its association with the elite.

Women in the golf network however are even more poorly represented than may be anticipated on comparison with the demographics of this bracket.

Table 6-8. Comparison of golf social network demographic with demographic data as adapted from CEE Annual Report 2008.

	Golf network	SA population (Census 2001)	Senior Management
Female	6.5%	52.2%	24.90%
Black	13.3%	79.0%	18.1%
Coloured	6.3%	8.9%	6.1%
Indian/Asian	15.5%	2.5%	8.2%
White	65.0%	9.6%	65.2%

What is clear, however, is that the demographic of the senior management bracket continues to misrepresent the Economically Active Population (EAP) in South Africa as required by Section 54 of the Employment Equity Act (CEE, 2008). It is evident therefore, that the golf network also misrepresents the EAP, and from demographic perspective has not yet achieved the levels of diversity required to generate optimal value for organisations.

On consideration of the types of relationships in existence within the golf social network it was found that close ties (friendships/kinships) within the network account for 52.38% of total relationships. According to Granovetter's (1983) strength of weak ties argument, strong ties lead to lower levels of diversity and access to information than relatively weaker ties. The benefit of strong ties is an increased level of trust within the network, which in turn drives cooperation and network efficiency (Carayannis et al., 2000), and reduces risks (Gulati, Nohria and Zaheer, 2000).

6.8.2. Form of exchange

Based on the results presented in Chapter 5, no strong correlations are present between network structural characteristics and the form of exchange which occurs within the golf social network.

Of interest regarding the weak correlations which exist, are the following observations:

- As the number of direct contacts in the network increases, the perceived levels of each of the forms of exchange increases. Larger networks may therefore provide a platform for the exchange of each of the value currencies.
- As female gender representation within the golf social network increases, the level of exchange of business related information and knowledge sharing decreases. This is somewhat contrary to the findings of Kochan et al. (2003), who state that gender diversity has either no, or only positive effects on team interactions and processes. Inherent cultural biases and old boy's network effects may negatively influence information sharing within such networks.
- The level of ethnic diversity within the social network is positively correlated with the perceived ability of the network to empower individuals. Networks with higher black composition, and lower white composition showed higher levels of empowerment than contrasting networks. This is interesting as a large majority of respondents are white

males who feel that their golf social network is a source of empowerment.

- Networks with high levels of strong ties, and therefore high levels of trust (Dubini & Aldrich, 1991), exhibit lower levels of business deal creation than networks with less strong ties. Networks with higher levels of associates (i.e. weaker ties and lower density) show higher levels of new business deals, and information exchange. This may be as a result of the trade-off which exists between high levels of trust within the network as a result of strong ties (friendships), and the increased diversity of information and resources resulting from weaker ties (associates) as discussed in Chapter 2.2.3.2.

6.8.3. Level of organisational impact

Based on the results presented in Chapter 5, no strong correlations are present between network structural characteristics and the level of organisational impact within the golf social network.

Of interest regarding the weak correlations which exist, are the following observations:

- As the number of direct contacts in the network increases, the perceived levels of the functional and operational organisational impact increases. Larger networks may therefore provide a platform for business value creation at functional and operational levels. No relationship is seen between the number of direct contacts and strategic value creation.

- Gender composition displays no relationship with the type of organisational value created.
- Network ethnic homogeneity is negatively correlated with the creation of business value at both strategic and functional levels. The aim of this research was not to test for causality, however high levels of homophily may impede the creation of these forms of value, as access to information is inhibited, and the potential for creativity and problem solving is decreased (McPherson *et al.*, 2001). Creation of strategic value often relies heavily on ability to consider problems in new light.
- The strength of the network ties, and therefore the level of trust which exists within the network, appears to have no relationship with the level of organisational impact created.

7. CONCLUSION

7.1. *Introduction*

The emergence of a highly competitive, global knowledge based economy is increasingly compelling organisations to discover ways in which to create a sustainable competitive advantage. The efficient use of resources and capital at the organisation's disposal is critical to ensuring success. Current literature recognises social capital as a resource which should be leveraged to the organisations benefit. Research into the organisational benefits derived from individual social networks is however, limited (Portes, 2000).

This study considered the value of social networks formed on the golf course for both individuals and organisations. In addition to this, underlying relational factors for the realisation of this value were explored. This was done based on structured depth interviews with representatives from 6 organisations, as well as 8 individuals who use golf as a method of networking. A further 61 survey responses were incorporated into the study. These were collected using a snowball sampling technique in order to create a better understanding of the social factors involved in golf social networking in the South African environment.

This section serves to highlight the main findings of the study, and to provide recommendations to individuals and organisations. Moreover, recommendations on avenues for future research on the topic are provided.

7.2. Main findings

The results of this study provide insight into the role of social networks formed on the golf course in creating business value.

Social networks formed on the golf course emerged as a source of tangible (financial) value for both individuals as well as the organisations in which they exist. Clear, tangible costs and benefits were identified on both levels. For individuals, the most frequently cited benefits of golf social networking were improved relationships, the creation of new business contacts, and the development of personal skill sets. The average perceived level of personal financial cost was however found to exceed corresponding forms of benefit. Employee golf social network relations tend to increase the organisation's access to external organisations, enhance its ability to identify and exploit new business opportunities, and assist in the creation of strategic long-term relationships. On average, the perceived level of organisational financial cost is lower than that of organisational financial cost.

Additionally, intangible (non-financial) value was also discovered to be a result of membership in golf social networks. Once again, this value may be extended to the organisation. The perceived level of non-financial benefits was found to be higher on average than perceived non-financial costs for both individuals and organisations. Individuals claimed to benefit most often from improved personal wellbeing, improved interpersonal skills and increased access to information through diverse knowledge sharing channels. The most common advantages

cited for organisations were a mentally and physically healthier employee base and enhanced relationship management skills, as well as improved business relationships and reduced tensions. Increased knowledge sharing follows.

Moreover, on an organisational level, significant relationships were found to exist between the perceived levels of investment in golf social networking, and the perceived levels of benefit derived. On the individual level, perceived level of financial investment displayed no relationship with any of the perceived levels of benefit.

Motivation was seen to play a role in the derivation of financial benefits for the organisation. The level of intangible benefits indicated a relation to the level of costs regardless of the motivation levels which exist. Motivation to realise benefits from the social network was not seen to play a role in the realisation of personal benefits from golf social networks.

A relationship between the level of financial cost incurred by the organisation and its level of financial benefit existed only when the amount of affective trust in the network was high. It appears therefore that affective trust may have a direct bearing on the realisation of tangible benefits from associated costs for organisations. Non-financial values were realised from non-financial benefits when other than a medium level of affective trust was present. This may indicate that individuals should understand the relationship which exists in order to optimise the realisation of intangible values such as increased access to

information, knowledge sharing and employee wellbeing. Between intangible factors on the personal level, no statistically significant relationship was indicated. Findings did however indicate that a relationship may exist and requires further testing,

It is further seen that a high degree of cognitive trust exists within the golf social network. The network provides the basis for a shared set of beliefs, and therefore a strong sense of affiliation between members. Common interpretations and understanding binds individuals together, ultimately facilitating the creation of value.

Golf social networks provide an environment in which content exchange may occur. Of particular note is the exchange of important business related information, knowledge sharing, and improvement and maintenance of business relationships. Although the network is perceived to assist in the breakdown of cultural and gender barriers, empowerment is seen to perform poorly in comparison to other forms of exchange. Network size, diversity and the relationships which exist within the network are all seen to be related to the type of exchange which occurs within the network. Interestingly, networks with many strong ties exhibit lower a lower level of agreement that new business deals are created than networks with fewer strong ties. The level of agreement is positively related to the number of associates rather than the number of friends within the network.

On average it is perceived that these networks have strategic, functional and operational implications on the organisation. This is likely as a result of the diverse set of benefits derived from golf social networking. Larger networks do not display any relation to strategic value than smaller networks. Both gender and type of relationships within the network appear to have no relationship with the type of value created. The degree of ethnic homogeneity appears to be negatively correlated with the creation of business value at both strategic and functional levels.

The research suggests that golf is used as a method of active networking. Individuals who do so ensure that interactions occur on a fairly regular basis. It appears however that organisations may underestimate the benefits derived from golf social networking. While most respondents agree that their organisation supports social networking, fewer agree that golf is supported as a tool for doing so.

Finally, it is posed that golf social networks are fairly homophilous, largely as a result of the old boys' network influence. Data from this study indicates that the network has low gender diversity, and is not demographically representative. It is clear however that gender and cultural barriers are slowly being overcome in this environment.

7.3. Recommendations

It is clear that golf social networks can be leveraged by both individuals and organisations to create both economic and social value. Relationships have been found to exist between the level of investment in the network and the level of benefit derived as a result. No illusions of grandeur should however be entertained as simple membership of the network does not imply that such value will be derived.

For individuals, the main benefits appear to be those which are intangible, including improved relationships, personal wellbeing new contacts and increased access to knowledge. More tangible than intangible costs are associated with golf social networks on the individual level. It is recommended therefore that personal involvement in such networks is based more strongly on the derivation of personal enjoyment and development, than on the expectation that tangible values will materialise.

Two main recommendations are made in light of the literature review and research presented here, which apply to organisations.

7.3.1. Formal network management

Management of the network is posed as a critical task in the realisation of benefits. Cross and Prusack (2002) indicate that social networking does not form part of the organisational hierarchy. This results in management not

placing enough emphasis on providing resources and developing these. A systematic approach is recommended to make networking, both golf social networking and other forms, more efficient. The recommended approach includes a definition phase, a development phase, and a review phase.

7.3.1.1. Identify

A culture of networking should be encouraged within the organisation as a starting point, creating awareness of the potential individual and organisational benefits. It is recommended that organisations identify which networks exist within and across their boundaries, discover who the network brokers are, and investigate the potential organisational value held. In many instances, organisations may already have access to potential value creating social networks through their employee base.

7.3.1.2. Develop

Based on the outcomes of the definition phase, the organisation should encourage and develop employee interactions and skills in high potential areas. In the case of golf social networking for instance, the organisation may wish to team new recruits with an aptitude for networking with more established employees on a social level, whilst providing 'best practice' guidelines for etiquette.

Both costs and desired benefits should be carefully considered. Desired benefits should be weighed against costs, both tangible and intangible. The golf social network should be viewed as a long term investment rather than an immediate source of benefit.

Networking objectives, consistent with motivation levels, are considered critical in the realisation of benefits from the costs incurred in golf social networking. A supportive networking culture is believed to motivate employees, without unduly formalising the social network. Employees should be encouraged to seek out, and follow up on opportunities which arise as a result of their networking interactions.

7.3.1.3. Review

Review and analysis of interactions and relationships will help to ensure that efficient use is made and networking costs are optimised. A review phase is therefore recommended in which networks and contacts may be evaluated in order to optimise networking tangible and intangible costs.

7.4. Future research

The research presented here attempted to gain insights into the potential value held by golf social networks for South African organisations. Future research should include the following:

- A study of the exact nature of relationships which exist between costs and benefits. This should be used as a baseline to model and ultimately optimise the golf social network.
- A causal study of the influence of the relational elements on these relationships.
- An investigation into the business impact of golf social networking across industry and employee functional role.
- Comparison of golf social networking against other forms of social networking.
- A longitudinal study to investigate the correlation of golf social networking with that of the South African business environment, and the levels of equity within the network.

7.5. Conclusion

The results of this study show that organisational benefits may be derived as a result of investment in golf social networking. The study therefore builds on the limited body of research which considers the effects of social networks formed at an individual level on the organisations to which they are linked.

The golf social network was found to contain a high level of cognitive trust, and motivation was identified as a strong factor in the realisation of benefits for organisations. The network was also found to be homophilous, and fairly representative of the senior management bracket in South Africa, which

currently faces equity challenges. Furthermore, a basic model for managing golf social networks was posed.

REFERENCE LIST

- Adler, P.S. & Kwon, S.W. (1999). Social Capital: The Good, the Bad, and the Ugly. Expanded and modified version of a paper presented at the 1999 Academy of Management meeting in Chicago. Version: Sept 28, 1999.
- Albright, S.C, Winston, W.L. & Zappe, C.J. *Data Analysis and Decision Making with Microsoft Excel*. 3rd ed. Mason: Thomson Higher Education.
- Allee, V. (2000). Reconfiguring the Value Network. *Journal of Business Strategy*. Vol. 21, N4 July-Aug 2000.
- Allee, V. (2002). A Value Network Approach for Modelling and Measuring Intangibles. White Paper presented at *Transparent Enterprise*, November 2002, Madrid.
- Allee, V. (2007). Value Network Analysis and value conversion of tangible and intangible assets. *Draft article for Journal of Intellectual Capital*. 1-22.
- African National Congress (1997). Building on the Foundation for a Better Life: Draft Strategy and Tactics of the African National Congress. Quoted in: Pieterse, H. (2002). In Search of a Nation. *Safundi*. Vol. 3, No.1, 1-18.
- Anderson, M.H. (2007). Social networks and the cognitive motivation to realize network opportunities: A study of managers' information gathering behaviors. *Journal of Organizational Behavior*. Vol. 29, 51–78.
- Argote, L. & Ingram, P. (2000). Knowledge Transfer: A Basis for Competitive Advantage in Firms. *Organizational Behavior and Human Decision Processes*. Vol. 82, No. 1, 150–169.

- Baker, W. (2000). *Achieving success through social capital: Tapping the hidden resources in your personal and business networks*. San Francisco: Jossey-Bass.
- Borgatti, S.P. & Molina, J-L. (2005). Toward ethical guidelines for network research in organisations. *Social Networks*. Vol. 27, 107-117.
- Buckley, W. (2007). *Mega business finds the rough when forging links with Scotland*. The Observer - Guardian News and Media Limited. Retrieved June 24, 2008 from <http://www.guardian.co.uk/sport/2007/nov/11/golf.news>
- Burt, R.S. (1997a). A note on social capital and network content. *Social Networks*. Vol. 19, 355-373.
- Burt, R.S. (1997b). The contingent value of social capital. *Administrative Science Quarterly*, Vol. 42.
- Burt, R.S. (2000). The network structure of social capital. *Research in Organizational Behaviour*. Vol. 22, 345-423.
- Brown, D. (2001). National Belonging and Cultural Difference: South Africa and the Global Imaginary. *Journal of Southern African Studies*, Vol. 27, No. 4, 757-769.
- Byrd, V. (1993). *Company News: Study of Executives and Links; In golf and Business, Similar strokes seen*. The New York Times. Retrieved June 24, 2008 from <http://query.nytimes.com/gst/fullpage>
- Carayannis, E.G., Alexander, J. & Ioannidis, A. (1999). Leveraging knowledge, learning, and innovation in forming strategic government–university–industry

- (GUI) R&D partnerships in the US, Germany, and France. *Technovation*. Vol. 20 (2000), 477 – 488.
- Chua, A. (2002). The influence of social interaction on knowledge creation. *Journal of intellectual capital*, Vol. 3. No. 4, 375-392.
- Claridge, T. (n.d.). *Evolution of Social Capital Theory*. Retrieved May 31, 2008 from <http://www.gnudung.com/literature/evolution.html/>
- Commission for Employment Equity (2008). 8th CEE Annual Report 2007-2008. Department of Labour, South Africa.
- Coleman, J.S. (1988). *Social capital in the creation of human capital*. *American Journal of Sociology*, 94 (Supplement), S95-S120. Quoted in: Ellison, N.B., Steinfield, C. and Lampe, C. (2007). *The benefits of Facebook “Friends”:* *Social capital and college students’ use of online social network sites*. *Journal of Computer-Mediated Communication*. Vol. 12, 1143-1168.
- Collis, D.J. and Montgomery, C.A. (2005). *Corporate Strategy: A Resource Based Approach*. 2nd ed. New York: McGraw-Hill.
- Cope, M. (2003). *Personal networking: How to make your connections count*. Great Britain, Pearson Education Limited.
- Cross, R. & Prusak, L. (2002). The people who make organisations go-or stop. *Harvard Business Review*. R0206G, 5-12.
- Cross, R., Liedtka, J. & Weiss, L. (2005). A practical guide to social networks. *Harvard Business Review*. R0503H, 124 – 132.

- CSAE Conference on Development Policy in Africa: Public and Private Perspectives. 4th Annual Conference, 2001. Oxford University. Abedian, I. & Antonie, F. (2001). *Contemporary challenges facing South African business in a globalizing economy*. Oxford, UK.
- Davenport, T. (2007). Where's the "Working" in Social Networking? *Harvard Business Publishing*. Retrieved May 31, 2008 from http://discussionleader.hbsp.com/davenport/2007/10/wheres_the_working_in_social_n.html/
- Dubini, P. & Aldrich, H. (1991). Personal and Extended Networks are central to the Entrepreneurial Process. *Journal of Business Venturing*. Vol. 6, 305-313.
- Drucker, P.F. (2005) Managing Oneself. *Harvard Business Review*. R0501K, January.
- Ethier, J. (n.d.). *Current Research in Social Network Theory*. Retrieved May 26, 2008 from <http://www.ccs.neu.edu/home/perrolle/archive/Ethier-SocialNetworks.html/>
- Fan, P. & Zigang, Z. (2004). Cross-cultural challenges when doing business in China. *Singapore Management Review*. Vol. 26, No.1, 81-90.
- Forret, M.L. & Dougherty, T.W. (2004). Networking behaviours and career outcomes: differences for men and women? *Journal of Organizational Behaviour*. Vol. 25, 419-437.
- Frei, F.X. (2008). The Four things a service business must get right. *Harvard Business Review*. R0804D, April.

- Gamba, M. & Kleiner, B.H. (2001). The Old Boys' Network Today. *International Journal of Sociology and Social Policy*. Vol.21, No.8/9/10, 101-107.
- Glaeser, E.L., Laibson, D., Scheinkman, J.A., Soutter, C.L. (1999). What is Social Capital? The Determinants of Trust and Trustworthiness, *NBER Working Paper*. No. 7216. JEL No. C9, D7, J7.
- Granovetter, M. (1983).The Strength of weak ties: A network theory revisited. *Sociological Theory*. Vol. 1, 201-233.
- Greenhalgh (2001). *Managing strategic relationships: the key to business success*. New York: The free press.
- Gretzel, U. (2001). *Social network analysis: Introduction and Resources*. Retrieved May 26, 2008 from <http://lrs.ed.uiuc.edu/tse-portal/analysis/social-network-analysis/>
- Greve, A. (1995). Networks and Entrepreneurship – An analysis of social relations, occupational background, and use of contacts during the establishment process. *Scandinavian Journal of Management*. Vol.11, No.1, 1-24
- Gross, A. (2003). *Doing business in Asia*. Washington: Pacific Bridge Inc.'
- Government Communications (2008). *Towards a fifteen year review*. South African Government. South Africa.
- Gulati, R., Nohria, N. & Zaheer, A. (2000). Strategic Networks. *Strategic Management Journal*. Vol. 21, 203-215.

- Haner-Dorr, N. (2002). *The value of playing golf: A business perspective*. Orlando Business Journal. Retrieved June 24, 2008 from <http://orlando.bizjournals.com/orlando/stories/2002/09/23/focus2.html>
- Harper, R. (2002). The measurement of Social Capital in the United Kingdom. Office for National Statistics.
- Ibarra, H. (1993). Personal Networks of Women and Minorities in Management: A Conceptual Framework. *The Academy of Management Review*. Vol. 18, No. 1, 56-87
- Jackson, J.C. (2001). Women middle manager's perceptions of the glass ceiling. *Women in Management review*. Vol. 16, No.1, 30 - 41.
- Jansen, H. & Ramström, J. (n.d.). *Facing the Chinese business network in southeast Asian markets – Overcoming the duality between Nordic and Chinese business networks*. University of Kalmar & Åbo Akademi University.
- Kadushin, C. (2005). Who benefits from network analysis: Ethics of social network research. *Social Networks*. Vol. 27, 139-153.
- Kase, K. & Liu, J.Y-S. (1996). Entrepreneurial networking in Japanese management. *International Marketing Review*, Vol. 13, No. 3, 13-23.
- Kilduff, M. & Tsai, W. (2003). *Social networks and organizations*. London, Sage Publications Ltd.
- Kobriger, S., Smith, J., Hollman, J.H., and Smith, A.M. (2006). The Contribution of Golf to Daily Physical Activity Recommendations: How Many Steps Does

It Take to Complete a Round of Golf? *Mayo Foundation for Medical Education and Research*, August, 81(8): 1041-1043.

Kochan, T., Bezrukova, K., Ely, R., Jackson, S., Joshi, A., Jehn, K., Leonard, J., Levine, D., & Thomas, D. (2003). The Effects of Diversity on Business Performance: Report of the Diversity Research Network. *Human Resource Management*. Vol. 42, No. 1, 3-21.

Kossinets, G. & Watts, D.J. (2006). Empirical Analysis of an Evolving Social Network. *Science*. Vol. 311, 88-90.

Landry, M. & Amara, N. (2000). Does social capital determine innovation? To what extent? Paper presented at *The 4th International conference on technology policy and innovation*, 28-31 August 2000, Curitiba.

Lane, A.M & Jarrett, H. (2004). Mood changes following golf among senior recreational players. *Journal of Sports Science and Medicine*. Vol. 4, 47-51.

Li, J.J. (2006). *Social Relations of Foreign Firms in Chine: A Focus on Trust, Network Ties and Social Capital*. Ph.D. thesis, University of Hong Kong.

Li, C. (2007). *Why your company needs to be on facebook*. Harvard Business Publishing. Retrieved May 31, 2008 from http://conversationstarter.hbsp.com/2007/11/the_business_value_of_social_n.html/

Mayo, M. & Pastor, J.C. (2005a). Networks and Effectiveness in Work Teams: The Impact of Diversity. Instituto de Empresa, IE Working Paper, WP05-10, 1-32.

- Mayo, M. & Pastor, J.C. (2005b). Workgroup gender diversity and charismatic leadership: Asymmetric effects among men and women. Instituto de Empresa, IE Working Paper, WP05-28, 1-32.
- Marsden, P.V. (1990). Network data and measurement. *Annual review of sociology*. Vol. 16, 435-463.
- McGrath Jnr., R., Sparks, W.L. (2005). The Importance of building social capital. *Quality Progress*. Vol. 38, Iss. 2, 45-50.
- McGuire, G.M. (2002). Gender, Race, and the Shadow Structure: A Study of Informal Networks and Inequality in a Work Organization. *Gender and Society*. Vol. 16, No. 3, 303-322.
- McPherson, M., Smith-Lovin, L. & Cook, J.M. (2001). Birds of a feather: Homophily in Social Networks. *Annual Review of Sociology*. Vol. 27, 415-444.
- Minto, B. (1987). *The pyramid principle – logic in writing and thinking*. 3rd rev. London.
- Mollica, K.A., Gray, B. & Treviño, L.K. (2003). Racial Homophily and Its Persistence in Newcomers' Social Networks. *Organization Science*. Vol. 14, No. 2, 123-136.
- Nahapiet, J. & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *The Academy of Management Review*. Vol. 23, No. 2, 242-266.

- National Golf Network (n.d.). *Lookup Golf Courses/ Clubs*. Retrieved May 31, 2008 from http://www.handicaps.co.za/golfclub_lookup.asp/
- Ostgaard, T.A. & Birley, S. (1994). Personal networks and firm competitive strategy – A strategic or coincidental match? *Journal of Business Venturing*. Vol. 9, 281-305.
- Parkkari, J. (2003). A controlled trial of the health benefits of regular walking on a golf course. *The American Journal of Medicine*. Vol. 109, Iss. 2, 102 – 108.
- Pethokoukis, J.M. & Mannix, M. (2004). Shooting par in the workplace. *U.S. News and World report*. Vol. 137, Iss. 8, 10-11.
- Pieterse, H. (2002). In Search of a Nation. *Safundi*. Vol. 3, No.1, 1-18.
- Pitcock, T. (2005). The Shrinks of Shank. *Forbes*. Vol. 175, 49-51.
- Policy Coordination and Advisory Services (2006). A nation in the making: A discussion document on macro-social trends in South Africa. PCAS, Social Sector: The Presidency. South Africa.
- Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology*. Vol. 24, 1-24.
- Portes, A. (2000). The two meanings of social capital. *Sociological Forum*. Vol. 15, No. 1, 1-12.
- Putnam, R.D., Leonardi, R., Nanetti, R.Y. (1994). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press, Princeton
Quoted in: Carayannis, E.G., Alexander, J. & Ioannidis, A. (1999). Leveraging knowledge, learning, and innovation in forming strategic

- government–university–industry (GUI) R&D partnerships in the US, Germany, and France. *Technovation*. Vol. 20 (2000), 477 – 488.
- Queenan, J. (2008). Golf & Money: The Stigma of being a golfing CEO. *Golf Business*. Iss. 6, 72 – 77.
- Reagans, R. & McEvily, B. (2003). Network Structure and Knowledge Transfer: The Effects of Cohesion and Range. *Administrative Science Quarterly*. Vol. 48, No. 2, 240-267.
- Reuters (2006). Chinese varsity makes 'elitist' golf compulsory. Mail and Guardian online. Retrieved July 13, 2008 from <http://www.mg.co.za/printformat/single/2006-10-17-chinese-varsity-m>
- Robbins, S.E., & Judge, T.A., (2007). *Organisational Behaviour*. 12th ed. New Jersey: Pearson Education, Inc.
- Ruquet, M.E (2003). Golf: Business Tools for Agents. *National Underwriter*. Vol. 107, No. 31, 17-19.
- Rynecki, D. (2007). An 18-Hole Character Test. *Business Week*. Iss. 4036, 92-95.
- SAGDB (n.d.). Welcome to the South African Golf Development Board. SAGDB website. Retrieved November 9, 2008 from <http://www.sagolfboard.org/>
- Said, Y.H., Wegman, E.J., Sharabati, W.K. & Rigsby, J.T (2007). Social networks of author–coauthor relationships. *Computational Statistics & Data Analysis*. Vol. 52 (2008), 2177 – 2184.

- Scott, D.B. (1996). Shattering the Instrumental-Expressive Myth: The Power of Women's Networks in Corporate-Government Affairs Author. *Gender and Society*. Vol. 10, No. 3, 232-247.
- Slack, C. (2002). *Going for Green*. Virginia Business Online. Retrieved June 24, 2008 from <http://www.gatewayva.com/biz/virginiabusiness/magazine/yr2002>
- Smith, D.A. & Lohrke, F.T (2007). Entrepreneurial network development: Trusting in the process. *Journal of Business Research*. Doi:10.1016/j.jbusres.2007.06.018.
- Song, E. (n.d). No women (No dogs) allowed: A comparative analysis of discriminating private golf clubs in the United States, Ireland, and England. *Washington University Global Studies Law Review*. Vol. 6, 181-203.
- Studwell, J. (2007). *A tale of money, massage and golf*. Times Online. Retrieved June 24, 2008 from http://business.timesonline.co.uk/tol/business/industry_sectors/
- Tichy, N.M., Tushman, M.L. & Fombrun, C. (1979). Social Network Analysis for Organisations. *The Academy of Management Review*. Vol. 4, No. 4, 507-519.
- Tsai, W. & Ghoshal, S. (1998). Social Capital and Value Creation: The Role of Intrafirm Networks. *The Academy of Management Journal*. Vol. 41, No. 4, 464-476.
- University of California, Los Angeles (n.d): Academic Technology Services, Statistical Consulting Group. Statistical analyses using SPSS. Retrieved

<http://www.ats.ucla.edu/stat/Spss/whatstat/whatstat.htm>

Uzzi, B. & Dunlap, S. (2005). How to Build Your Network. *Harvard Business Review*. R0512B, 53-60.

Vietor, R.H.K. (2007). *How Countries Compete: Strategy, Structure and Government in the Global Economy*. Boston: Harvard Business School Press.

Wailgum, T. (2008). Does playing golf actually help your career? CIO Magazine, Retrieved June 20, 2008 from <http://www.cio.com/article/print/405163>

Walen, H.R. & Lachman, M.E. (2000). Social support and strain from partner, family, and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*. Vol.17, No. 1, 5-30.

Walonick, D.S (1997). *Excerpts from: Survival Statistics*. Bloomington: StatPac, Inc.

Wasserman, S. & Faust, K. (1994). *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.

Weber, R.P. (1990). *Basic Content Analysis*. 2nd ed. California: Sage Publications, Inc.

Wits Business School, (n.d.). *Management Advancement Program*. Retrieved May 31, 2008 from <http://www.wbshost.co.za/content/view/246/147/>

Wu, W-P. & Choi, W.L. (2004). Transaction Cost, Social Capital and Firms' Synergy Creation in Chinese Business Networks: An Integrative Approach. *Asia Pacific Journal of Management*. Vol. 21, Iss. 3, 325.

Yeld, J. (2008). Pinnacle Point artefacts fight continues. IOL - Environment. Retrieved May 31, 2008 from http://www.iol.co.za/index.php?set_id=1&click_id=14&art_id=vn20080522124427475C755414.

Zack, M.H (1999). *Knowledge and strategy*. Butterworth-Heinemann.

Zickmund, W.G. (2003). *Business research methods*. 7th ed. Ohio, Mason.

APPENDICES

APPENDIX 1: Respondent company interview

Introductory letter and informed consent

To Whom It May Concern:

I am currently conducting academic research, the purpose of which is to establish the role of golf as a social networking tool in creating business value. The research will consider both the financial and non-financial organisational benefits provided by these networks, as well as the underlying criteria for realising these benefits. The costs associated with the creation and maintenance of these networks will also be considered. Our interview is expected to last no more than 45 minutes, and will assist in understanding the organisational perspective of the abovementioned aspects of the social networks formed on the golf course.

Your participation is voluntary, and you can withdraw at any time without penalty. All information will be dealt with in the strictest confidence, and as a result, no drawbacks are anticipated for organisations taking part in this research. All information gathered will be presented in a consolidated format, indicating general trends and will not make mention of specific companies. Please indicate your consent - on behalf of the organisation - for the organisational information provided to be used for the purposes of this research, by ticking in the informed consent box below.

Informed Consent provided	<input type="checkbox"/>
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If you have any queries or concerns regarding the research, please feel free to contact either myself or my supervisor. Our details are listed below.

Ronli Greyling (Researcher)
ronli.greyling@ericsson.com
0832003643

Dr Caren Scheepers (Research Supervisor)
caren.scheepers@irodo.com
0829227072

Signature of participant: _____

Date: _____

Signature of researcher: _____

Date: _____

Discussion Guide – Respondent Company Interviews

The aim of the company interviews is to gain an understanding of the organisational background and HR interventions currently in place which are focussed on social networks with the aim of increasing business value. Secondary data may be obtained in order to determine the level of investment etc that is made by the organisation in social networks.

1. Introduction (10 min)

An introduction will be used so that the organisational representatives have a chance to understand the purpose of the research and to address any concerns and to provide an overview of the organisations interventions and policy regarding social networking.

- **Interviewer introduction**
 - Brief explanation of discussion and rules of communication
 - Assurance of confidentiality
 - Including audio-recording
 - Brief overview of purpose of the research
- **Respondent introduction**
 - Brief background of the organisation
 - Industry, department and position
 -

2. Interview (30min)

A number of aspects indicating the importance of social networking to the organisation will be investigated.

- **Importance of Social networking to the organisation**

This section focuses on identifying the level of the organisation's investment in social networking

- Does the organisation see currently invest in any forms of social networking?
- What forms of social networking are/will be invested in?
- What policies exist regarding social networking?
- Are social network structures actively encouraged by the organisation?
- Does the organisation encourage the use of formal/informal social networking tools?

- **Cost of golf social networks**

This section focuses on identifying the organisation's investment in golf as a social network.

- What is the current investment in corporate golf sponsorships and golf days?
- What policies exist regarding payment of membership fees for employees?
- What is the value of the financial cost associated with creating and maintaining social networks on the golf course?
- What are the other associated tangible costs?
- What are the associated intangible costs?
- What is the value / perceived value / opportunity cost of these?

- **Benefits of golf social networks**

This section focuses on identifying the organisational benefits created as a result of golf social networks.

- What are the associated tangible benefits of golf social networks to the organisation?

- What are the perceived intangible benefits of golf social networks to the organisation?
 - What forms of exchange are believed to arise as a result of such networks?
 - What is the perceived value of these exchanges?
 - What perceptions exist regarding the relation between costs and benefits of golf social networks?
- **Perceived and criteria for success & best practices in use of golf to create value**

This section focuses on identifying perceived best practices and requirements for interactions in golf social networks

- Does the company supply guidelines for interactions on the golf course?
- What is the nature of criteria for successful interactions on the golf course?
- How is this success defined (e.g. value or exchange)?

3. Wrap up / Conclusion (5 mins)

- Any final thoughts / recommendations for the successful implementation of interventions with the aim of creating additional value for the organisation.
- General concerns with respect to social networking on the golf course, regarding for instance issues such as gender and race.

Convey thanks and farewell!

APPENDIX 2: Individual respondent interview

Introductory letter and informed consent – Individual respondent interviews

To Whom It May Concern:

I am currently conducting academic research, the purpose of which is to establish the role of golf as a social networking tool in creating business value. The research will consider both the financial and non-financial organisational benefits provided by these networks, as well as the underlying criteria for realising these benefits. The costs associated with the creation and maintenance of these networks will also be considered. Our interview is expected to last no more than an hour, and will assist in understanding the abovementioned aspects of the social networks formed on the golf course.

Your participation is voluntary, and you can withdraw at any time without penalty. All information will be dealt with in the strictest confidence, and as a result, no drawbacks are anticipated for individuals or organisations taking part in this research. All information gathered will be presented in a consolidated format, indicating general trends and will not make mention of specific individuals or companies. Please indicate consent for the information provided to be used for the purposes of this research by ticking in the informed consent box below.

Informed Consent provided	<input type="checkbox"/>
---------------------------	--------------------------

If you have any queries or concerns regarding the research, please feel free to contact either myself or my supervisor. Our details are listed below.

If you have any queries or concerns regarding the research, please feel free to contact either myself or my supervisor. Our details are listed below.

Ronli Greyling (Researcher)
Supervisor)
ronli.greyling@ericsson.com
0832003643

Dr Caren Scheepers (Research
caren.scheepers@irodo.com
0829227072

Signature of participant: _____

Date: _____

Signature of researcher: _____

Date: _____

Discussion Guide – Individual respondent interviews

The aim of the individual interviews is to gain an understanding of the respondent's background and perceptions regarding social networking. This phase of the study utilises open ended questions and will be used in combination with a review of relevant literature to inform a more comprehensive questionnaire for use in the 2nd phase of the study.

1. Introduction (15 min)

An introduction will be used so that every respondent has a chance to understand the purpose of the research and to address any concerns, as well as for the respondent to get to know the interviewer.

- **Interviewer introduction**
 - Brief explanation of discussion and rules of communication
 - Assurance of confidentiality
 - Including audio-recording
 - Brief overview of purpose of the research
 - No right or wrong answers
 - Spontaneous reactions are important even if they may sound 'silly'

- **Respondent introduction**
 - Brief background
 - Industry, department and position
 - Lifestyle incl. hobbies, spare time, memberships of networks.

2. Interview (40min)

A number of aspects of social networking including structure, relationships and associated benefits, costs and underlying criteria will be probed during the interview.

- **Importance of Social networking to the individual**

This section focuses on identifying the level of importance of social networking to the individual.

- Does the respondent currently make a conscious investment in any forms of social networking?
- What forms of social networking are/will be invested in?

- **Costs of golf social networks**

This section focuses on identifying the individual's investment in golf as a social network

- What is the value of the financial costs associated with creating and maintaining social networks on the golf course?
- What are the other associated tangible costs?
- What are the associated intangible costs?
- What is the value / perceived value / opportunity costs of these both personally and to the organisation?

- **Benefits of golf social networks**

This section will focus on the benefits, both tangible and intangible, of personal social networks.

- What are the associated tangible benefits of membership in golf social networks?
- What are the perceived intangible benefits of membership in golf social networks?
- What forms of exchange are believed to arise as a result of such networks?
- What is the perceived importance / impact / level / value of these exchanges?

- **Network Structure**

This section focuses on the structure of the social networks created.

- What forms of active or passive social networking does the respondent participate in?
- What is the nature of the respondent's participation in social networking on the golf course? e.g. regular attendance or occasional participation such as corporate golf days.
- What is the expected size of the respondent's golf social network?
- What is the perceived diversity of the respondent's golf social network?
- What is the level of the tie strength in the respondent's golf social network?

- **Criteria for success & best practices**

This section focuses on identifying the perceived criteria for creating value

- What are the underlying criteria for the materialisation of these benefits i.e. what needs to be in place for these benefits to come about?
- What role do network relational dimensions play in golf social networks?
- What role does motivation play in golf social networks?

3. Wrap up / Conclusion (5 mins)

- Any final thoughts / recommendations for the successful implementation of interventions with the aim of creating additional value for the organisation.
- General concerns with respect to social networking on the golf course, regarding for instance issues such as gender and race.

Convey thanks and farewell!

APPENDIX 3: Research questionnaire

Introductory letter – Survey questionnaire

To Whom It May Concern:

I am currently conducting academic research, the purpose of which is to establish the role of golf as a social networking tool in creating business value. The research will consider both the financial and non-financial organisational benefits provided by these networks, as well as the underlying criteria for realising these benefits. The costs associated with the creation and maintenance of these networks will also be considered.

To this end, you are requested to complete a questionnaire in order to aid the understanding the abovementioned aspects of the social networks formed on the golf course. The questionnaire should take no more than 20 minutes to complete. Your participation is voluntary, and you can withdraw at any time without penalty. All data will be kept confidential. As the research tests the structure and size of social networks, and makes use of a snowball sampling technique in order to identify suitable respondents, you are requested to indicate the details of candidates whose response you believe will add value to the research.

By completing the questionnaire, you indicate that you voluntarily participate in this research. If you have any queries or concerns regarding the research, please feel free to contact either myself or my supervisor. Our details are listed below.

Ronli Greyling (Researcher)
ronli.greyling@ericsson.com
0832003643

Dr Caren Scheepers (Research Supervisor)
caren.scheepers@irodo.com
0829227072

Survey questionnaire

Social networking - Golf

1. Consent and demographic details

* 1. I hereby indicate that I am participating in this research voluntarily, and give my permission for further anonymous use of the data.

Consent provided

* 2. Please indicate your gender:

Male

Female

* 3. Please indicate your ethnic group:

Black

White

Coloured

Other

Indian/Asian

* 4. Please indicate your year of birth e.g, 1956 or 1976:

* 5. Please indicate your current employment status:

Self-employed

Unemployed

Employed

Retired

* 6. Please indicate your functional role:

Knowledge worker / employee

Executive

Senior Management

Entrepreneur

Middle Management / Supervisor

* 7. Please select the industry in which you are employed:

Agriculture, forestry & fishing

Construction, minerals & mining

Electricity, gas & water

Finance, insurance & real estate

Government services

Manufacturing

Not Applicable

Other

Personal services

Professional services

Transport, storage & communication

Wholesale & retail trade



Social networking - Golf

2. Behaviour

* 1. How frequently do you play golf?

- | | |
|---|---|
| <input type="radio"/> A few times a week | <input type="radio"/> About once a month |
| <input type="radio"/> About once a week | <input type="radio"/> A few times a year |
| <input type="radio"/> A few times a month | <input type="radio"/> Once a year or less |

* 2. Do you actively network on the golf course?

- | | |
|---------------------------|--------------------------|
| <input type="radio"/> Yes | <input type="radio"/> No |
|---------------------------|--------------------------|



Social networking - Golf

3. Active Networking

* 1. Please indicate many years you have been involved in networking on the golf course (4.5 indicates 4 and a half years):



Social networking - Golf

4. Personal Value

* 1. I regard the following as PERSONAL COSTS of my social networking activities on the golfcourse:

	Personal cost
Personal membership fees	<input type="radio"/>
Golf equipment	<input type="radio"/>
Golf lessons	<input type="radio"/>
Practice / Driving range costs	<input type="radio"/>
Playing costs (incl. green fees, caddies, carts)	<input type="radio"/>
Bets	<input type="radio"/>
Meals / drinks	<input type="radio"/>
Sponsorship of charities	<input type="radio"/>
Investment in golf-course property / time-share options for entertaining contacts	<input type="radio"/>
Opportunity cost (lost potential for networking in other ways)	<input type="radio"/>
Personal cost resulting from reduced time available for work responsibilities	<input type="radio"/>
Deterioration of network relationships / broken trust	<input type="radio"/>
Deterioration of reputation / credibility	<input type="radio"/>
Increased levels of stress / disappointment	<input type="radio"/>
Sacrifice of personal/family time	<input type="radio"/>
None of the above	<input type="radio"/>

* 2. I regard the following as PERSONAL BENEFITS of my social networking activities on the golf course:

	Personal benefit
New business contacts created	<input type="radio"/>
Improved relationships / friendships	<input type="radio"/>
Builds personal entrepreneurial skills (e.g. creation of new entrepreneurial opportunities)	<input type="radio"/>
Builds personal management skills (e.g. planning abilities)	<input type="radio"/>
Build personal leadership skills (e.g. character, discipline, behaviours)	<input type="radio"/>
Career advancement	<input type="radio"/>
Positive influence on business performance	<input type="radio"/>
Access to more diverse information	<input type="radio"/>
Increased knowledge sharing	<input type="radio"/>
Improved people-skills & method of approach	<input type="radio"/>
Provides information and gauge of trustworthiness	<input type="radio"/>
Trusted advice sharing	<input type="radio"/>
Shared sense of association	<input type="radio"/>
Shared values	<input type="radio"/>
Break-down of cultural barriers	<input type="radio"/>
Break-down of gender barriers	<input type="radio"/>
Mental wellbeing (Work-life balance, relaxation & stress reduction)	<input type="radio"/>
Physical wellbeing (Exercise)	<input type="radio"/>



Social networking - Golf

None of the above

* 3. Please rate the following associated with your golfsocial networking activities:

	High	Medium	Low	None
Personal level of financial cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal level of financial benefit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal level of non-financial cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal level of non-financial benefit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Social networking - Golf

5. Organisational Value

* 1. I regard the following as **ORGANISATIONAL COSTS** of my social networking activities on the golf course:

	Organisational cost
Personal membership fees	<input type="radio"/>
Corporate membership fees	<input type="radio"/>
Golf equipment	<input type="radio"/>
Golf lessons	<input type="radio"/>
Practice / Driving range costs	<input type="radio"/>
Playing costs (incl. green fees, caddies, carts)	<input type="radio"/>
Bets	<input type="radio"/>
Meals / drinks	<input type="radio"/>
Sponsorship of charities	<input type="radio"/>
Investment in golf-course property / time-share options for entertaining contacts	<input type="radio"/>
Corporate golf day costs	<input type="radio"/>
Golf tour fees	<input type="radio"/>
Opportunity cost (lost potential for networking in other ways)	<input type="radio"/>
Revenue loss through lost productive time	<input type="radio"/>
Deterioration of business relationships / broken trust	<input type="radio"/>
Deterioration of brand perception	<input type="radio"/>
Internal political conflict	<input type="radio"/>
None of the above	<input type="radio"/>



Social networking - Golf

* 2. I regard the following as **ORGANISATIONAL BENEFITS** of my social networking activities on the golf course:

	Organisational benefit
New business deals / opportunities	<input type="radio"/>
Improved business relationships	<input type="radio"/>
Touch-point on status of business relationships	<input type="radio"/>
Relationship management (Partners, customers, competitors)	<input type="radio"/>
Creation of long-term / strategic business relationships	<input type="radio"/>
Increased control over business partnerships	<input type="radio"/>
Direct ties created with external organisations	<input type="radio"/>
Direct ties created with governmental / regulatory organisations	<input type="radio"/>
Improved access to key decision makers	<input type="radio"/>
Exchange of business critical information	<input type="radio"/>
Forewarning of potential business opportunities	<input type="radio"/>
Positive influence on business performance	<input type="radio"/>
Creation of team dynamic across organisational boundaries	<input type="radio"/>
Creation of problem-solving / solution-orientated environment	<input type="radio"/>
Improved efficiencies within the organisation	<input type="radio"/>
Improved brand perception	<input type="radio"/>
Break-down of business tensions	<input type="radio"/>
Break-down of political tensions	<input type="radio"/>
Break-down of cultural tensions	<input type="radio"/>
Break-down of gender tensions	<input type="radio"/>
Access to diverse information across organisations / industries	<input type="radio"/>
Improved customer offering through improved service, referrals etc.	<input type="radio"/>
Increased knowledge sharing	<input type="radio"/>
Assessment of potential business partners / relationships	<input type="radio"/>
Employee wellbeing	<input type="radio"/>
None of the above	<input type="radio"/>

* 3. Please rate the following associated with your organisation's golf social networking activities:

	High	Medium	Low	None
Organisation's level of financial cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organisation's level of financial benefit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organisation's level of non-financial cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organisation's level of non-financial benefit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Social networking - Golf

6. Network structure and ties

* 1. Please indicate the number of direct contacts (for whom you have contact details) which you have made through social networking on the golf course.

* 2. Please indicate estimated network gender composition.

% Female network members

* 3. Please indicate estimated network ethnic composition.

% Black

% Coloured

% Indian/Asian

% White

% Other

* 4. What percentage of your existing golf network relationships do you consider to be:

% Friendships / Kinships

% Associates / People you feel
you can associate with

% Acquaintances (People you
have met)

% Disliked acquaintances



Social networking - Golf

7. Scale Rating

* 1. Please select the most appropriate option indicating how strongly you agree or disagree with the statements below.

	Disagree	Somewhat disagree	Somewhat Agree	Agree
My organization encourages social networking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization encourages social networking on the golf course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interactions on the golf course result in exchange of business related information and/or knowledge sharing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interactions on the golf course result in improved business relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interactions on the golf course result in empowerment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interactions on the golf course result in business deals (exchange of goods, services or revenues).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation's level of benefit derived from golf social networks is considered to be of a strategic nature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation's level of benefit derived from golf social networks is considered to be of a functional nature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation's level of benefit derived from golf social networks is considered to be of a operational nature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider my golf social network to be very diverse, spanning across skill-set, organization and industry boundaries.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often play with individuals that I have not met before e.g. in a random fourball.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find I can easily identify with other players.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I expect that members of my golf social network have similar values to my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I expect that members of my golf social network will behave in an appropriate manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I usually have a clear idea of what I would like to achieve through my interactions in the golf social network.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have formed trusting relationships with the members of my golf social network.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The relationships in my golf social network are mutually beneficial.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My golf social network increases ability to access resources (incl. information, knowledge base and skills).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX 4: *Tables and figures*

Figure A0-1. Network Properties as taken from Tichy, Tushman and Fombrun (1979).

Network Properties	
Property	Explanation
A. Transactional Content	Four types of exchange: <ol style="list-style-type: none"> 1. expression of affect 2. influence attempt 3. exchange of information 4. exchange of goods or services
B. Nature of the Links	
1. Intensity	The strength of the relation between individuals.
2. Reciprocity	The degree to which a relation is commonly perceived and agreed on by all parties to the relation (i.e., the degree of symmetry).
3. Clarity of Expectations	The degree to which every pair of individuals has clearly defined expectations about each other's behavior in the relation.
4. Multiplexity	The degree to which pairs of individuals are linked by multiple relations.
C. Structural Characteristics	
1. Size	The number of individuals participating in the network.
2. Density (Connectedness)	The number of actual links in the network as a ratio of the number of possible links.
3. Clustering	The number of dense regions in the network.
4. Openness	The number of actual external links of a social unit as a ratio of the number of possible external links.
5. Stability	The degree to which a network pattern changes over time.
6. Reachability	The average number of links between any two individuals in the network.
7. Centrality	The degree to which relations are guided by the formal hierarchy.
8. Star	The individual with the highest number of nominations.
9. Liaison	An individual who is not a member of a cluster but links two or more clusters.
10. Bridge	An individual who is a member of multiple clusters in the network (linking pin).
11. Gatekeeper	A star who also links the social unit with external domains.
12. Isolate	An individual who has uncoupled from the network.

Figure A0-2. Critical linkages in the Corporate Strategy Triangle as adapted from Collis and Montgomery (2005) Fig 7.1 p194

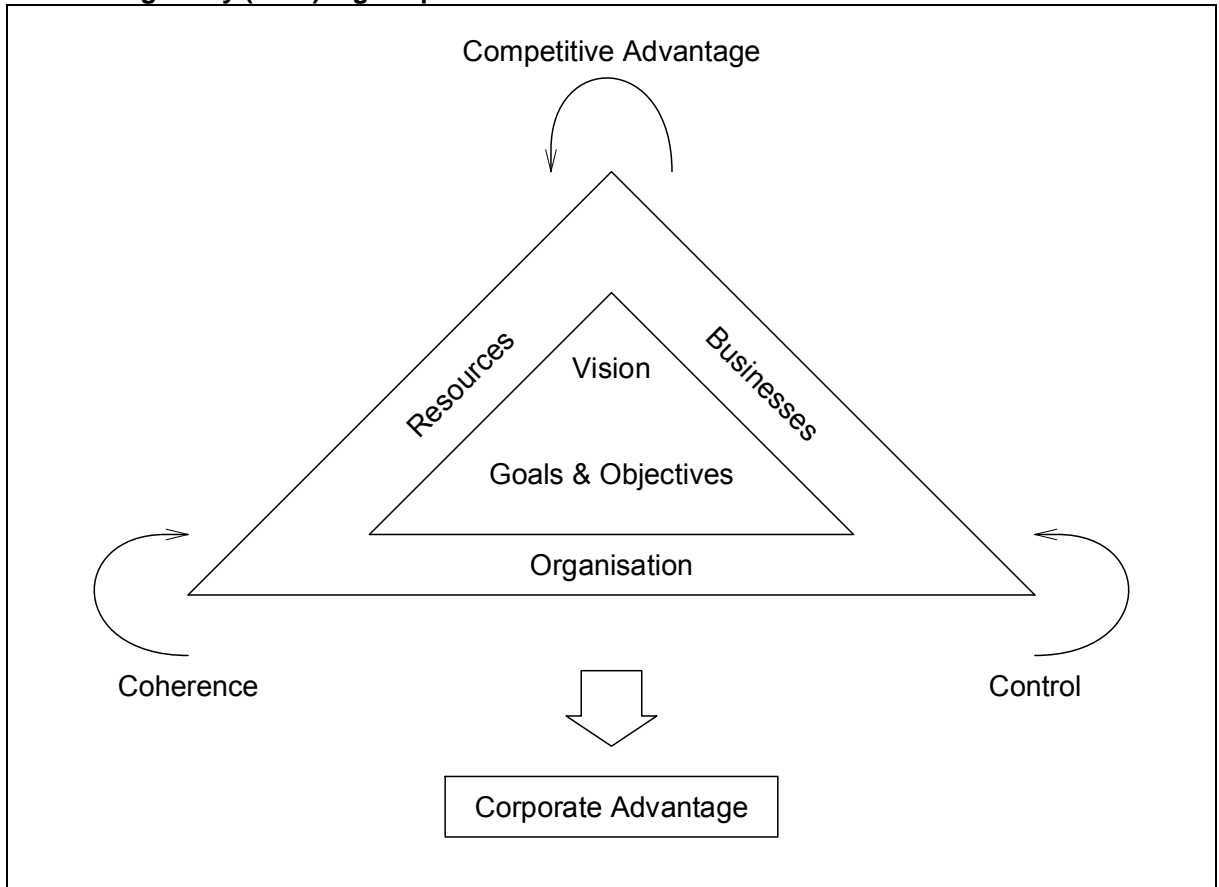


Figure A0-3. Conceptual model of Social Capital as taken from Adler and Kwon (1999).

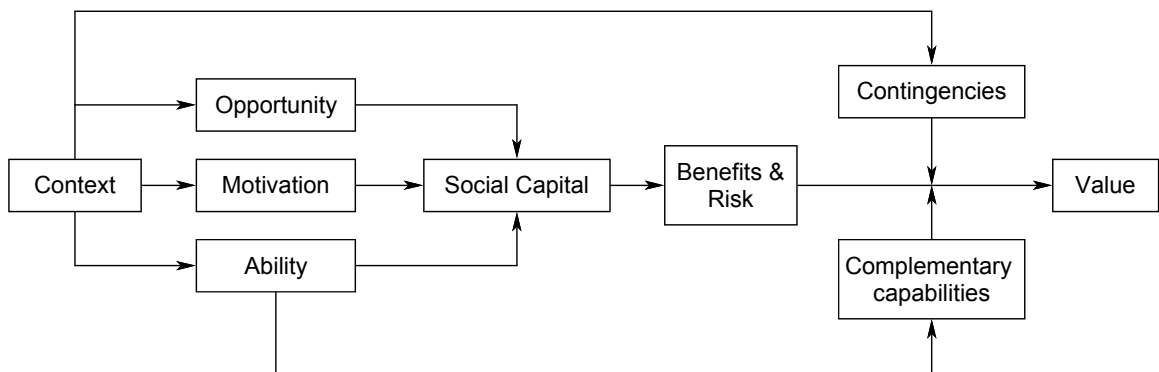


Table A0-1. Relation of resource type, currency of value and social network theory.

Resource Type	Currencies of Value	Social Network Theory
Tangible Assets	Goods, Services and Revenue (GSR)	Resource Exchange
Intangible Assets	Knowledge	Knowledge Transfer
Organisational capabilities	Intangible benefits	Trust

Table A0-2. Cost-benefit of tangible and intangible values - adapted from Allee (2007).

	Tangible	Intangible
Benefits	<ul style="list-style-type: none"> • Direct revenue generation • Improved quality of product or services • Reduced costs 	<ul style="list-style-type: none"> • Enhanced or improved store of knowledge • Collaboration, learning and skill development • Increased intellectual capital or intangible assets • Increased human competence • Building internal structures • Improved business relationships or brand recognition • Strategy optimization, reinforced values and identity • Good citizenship, socially and environmentally
Costs & risks	<ul style="list-style-type: none"> • Financial investments or operating capital • Time and materials • Facilities and equipment 	<ul style="list-style-type: none"> • Human skills and competence • Internal structures and systems • Business relationships • Brand and identity

APPENDIX 5: Statistical variable calculations

Cognitive trust variable calculation

The following questions were summed:

7.12 I find I can easily identify with other players.

7.13 I expect that members of my golf social network have similar values to my own.

7.14 I expect that members of my golf social network will behave in an appropriate manner.

The results of the summation can be seen in the table below.

Table A0-1. Summed cognitive trust variable.

	Min sum	1 st Quartile	Median	3 rd Quartile	Max sum
Summed value	3	5.25	7.5	9.75	12

Bin size = 2.25

The sum for each respondent was then banded into a 4 point Likert scale indicating the level of cognitive trust within the golf social network, as shown in the following table.

Table A0-2. Likert scale transformation for cognitive trust variable.

Summed value	Likert scale	There is a high level of cognitive trust within the golf social network
3 – 5.25	1	Disagree
5.25 – 7.5	2	Somewhat Disagree
7.5 – 9.75	3	Somewhat Agree
9.75 - 12	4	Agree

Cognitive trust cross tab

Table A0-3. Cross tabulation of the personal level of non-financial/intangible cost with the personal level of non-financial/intangible benefit layered by cognitive trust.

				Personal level of non-financial benefit				Total
				None	Low	Medium	High	
Low trust	Personal level of non-financial cost	None	Count	1				1
			Row %	100.00				100.00
			Column %	100.00				100.00
			% of Total	100.00				100.00
	Total		Count	1				1
			Row %	100.00				100.00
			Column %	100.00				100.00
			% of Total	100.00				100.00
Trust	Personal level of non-financial cost	None	Count	3	1	0	0	4
			Row %	75.00	25.00	0.00	0.00	100.00
			Column %	75.00	10.00	0.00	0.00	10.81
			% of Total	8.11	2.70	0.00	0.00	10.81
		Low	Count	1	6	4	7	18
			Row %	5.56	33.33	22.22	38.89	100.00
			Column %	25.00	60.00	36.36	58.33	48.65
			% of Total	2.70	16.22	10.81	18.92	48.65
		Medium	Count	0	3	7	3	13
			Row %	0.00	23.08	53.85	23.08	100.00
			Column %	0.00	30.00	63.64	25.00	35.14
			% of Total	0.00	8.11	18.92	8.11	35.14
High	Count	0	0	0	2	2		
	Row %	0.00	0.00	0.00	100.00	100.00		
	Column %	0.00	0.00	0.00	16.67	5.41		
	% of Total	0.00	0.00	0.00	5.41	5.41		
	Total		Count	4	10	11	12	37
			Row %	10.81	27.03	29.73	32.43	100.00
			Column %	100.00	100.00	100.00	100.00	100.00
			% of Total	10.81	27.03	29.73	32.43	100.00

Table A0-4. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of financial/tangible benefit layered by cognitive trust.

				Organisational level of financial benefit				Total
				None	Low	Medium	High	
Low trust	Organisational level of financial cost	None	Count	1				1
			Row %	100.00				100.00
			Column %	100.00				100.00

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Total		% of Total	100.00				100.00
		Count	1				1
		Row %	100.00				100.00
		Column %	100.00				100.00
		% of Total	100.00				100.00
Trust	None	Count	4	1	1	0	6
		Row %	66.67	16.67	16.67	0.00	100.00
		Column %	80.00	16.67	7.14	0.00	16.22
		% of Total	10.81	2.70	2.70	0.00	16.22
	Low	Count	0	5	4	6	15
		Row %	0.00	33.33	26.67	40.00	100.00
		Column %	0.00	83.33	28.57	50.00	40.54
		% of Total	0.00	13.51	10.81	16.22	40.54
	Medium	Count	1	0	8	5	14
		Row %	7.14	0.00	57.14	35.71	100.00
		Column %	20.00	0.00	57.14	41.67	37.84
		% of Total	2.70	0.00	21.62	13.51	37.84
	High	Count	0	0	1	1	2
		Row %	0.00	0.00	50.00	50.00	100.00
		Column %	0.00	0.00	7.14	8.33	5.41
		% of Total	0.00	0.00	2.70	2.70	5.41
Total		Count	5	6	14	12	37
		Row %	13.51	16.22	37.84	32.43	100.00
		Column %	100.00	100.00	100.00	100.00	100.00
		% of Total	13.51	16.22	37.84	32.43	100.00
		% of Total	13.51	16.22	37.84	32.43	100.00

Table A0-5. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of non-financial/intangible benefit layered by cognitive trust.

			Organisational level of non-financial benefit				Total	
			None	Low	Medium	High		
Low trust	Organisational level of financial cost	None	Count	1				1
		Row %	100.00				100.00	
		Column %	100.00				100.00	
		% of Total	100.00				100.00	
	Total	Count	1				1	
	Row %	100.00				100.00		
	Column %	100.00				100.00		
	% of Total	100.00				100.00		

			Organisational level of non-financial benefit				Total
			None	Low	Medium	High	
Trust	None	Count	4	0	2	0	6
		Row %	66.67	0.00	33.33	0.00	100.00
		Column %	100.00	0.00	11.76	0.00	16.22
		% of Total	10.81	0.00	5.41	0.00	16.22
	Low	Count	0	4	6	5	15
		Row %	0.00	26.67	40.00	33.33	100.00
		Column %	0.00	50.00	35.29	62.50	40.54
		% of Total	0.00	10.81	16.22	13.51	40.54
	Medium	Count	0	4	8	2	14
		Row %	0.00	28.57	57.14	14.29	100.00
		Column %	0.00	50.00	47.06	25.00	37.84
		% of Total	0.00	10.81	21.62	5.41	37.84
	High	Count	0	0	1	1	2
		Row %	0.00	0.00	50.00	50.00	100.00
		Column %	0.00	0.00	5.88	12.50	5.41
		% of Total	0.00	0.00	2.70	2.70	5.41
Total	Count	4	8	17	8	37	
	Row %	10.81	21.62	45.95	21.62	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	10.81	21.62	45.95	21.62	100.00	

Table A0-6. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of financial/tangible benefit layered by cognitive trust.

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Low trust	None	Count	1				1
		Row %	100.00				100.00
		Column %	100.00				100.00
		% of Total	100.00				100.00
Total	None	Count	1				1
		Row %	100.00				100.00
		Column %	100.00				100.00
		% of Total	100.00				100.00
Trust	None	Count	4	1	0	0	5
		Row %	80.00	20.00	0.00	0.00	100.00
		Column %	80.00	16.67	0.00	0.00	13.51
		% of Total	10.81	2.70	0.00	0.00	13.51
	Low	Count	0	2	7	8	17



			Organisational level of financial benefit				Total	
			None	Low	Medium	High		
		Row %	0.00	11.76	41.18	47.06	100.00	
		Column %	0.00	33.33	50.00	66.67	45.95	
		% of Total	0.00	5.41	18.92	21.62	45.95	
	Medium	Count	1	2	5	2	10	
		Row %	10.00	20.00	50.00	20.00	100.00	
		Column %	20.00	33.33	35.71	16.67	27.03	
		% of Total	2.70	5.41	13.51	5.41	27.03	
		High	Count	0	1	2	2	5
			Row %	0.00	20.00	40.00	40.00	100.00
	Column %		0.00	16.67	14.29	16.67	13.51	
		% of Total	0.00	2.70	5.41	5.41	13.51	
		Total	Count	5	6	14	12	37
Row %			13.51	16.22	37.84	32.43	100.00	
Column %	100.00		100.00	100.00	100.00	100.00		
	% of Total	13.51	16.22	37.84	32.43	100.00		

Table A0-7. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of non-financial/intangible benefit layered by cognitive trust.

			Organisational level of non-financial benefit				Total	
			None	Low	Medium	High		
Low trust	Organisational level of non-financial cost	None	Count	1			1	
		Row %	100.00				100.00	
		Column %	100.00				100.00	
	Total	% of Total	100.00				100.00	
		Count	1				1	
		Row %	100.00				100.00	
Trust	Organisational level of non-financial cost	None	Column %	100.00			100.00	
			% of Total	100.00			100.00	
			Count	4	0	1	0	5
		Low	Row %	80.00	0.00	20.00	0.00	100.00
			Column %	100.00	0.00	5.88	0.00	13.51
			% of Total	10.81	0.00	2.70	0.00	13.51
	Medium	Count	0	8	5	4	17	
		Row %	0.00	47.06	29.41	23.53	100.00	
		Column %	0.00	100.00	29.41	50.00	45.95	
		% of Total	0.00	21.62	13.51	10.81	45.95	
		Medium	Count	0	0	9	1	10
			Row %	0.00	0.00	90.00	10.00	100.00



		Organisational level of non-financial benefit				Total
		None	Low	Medium	High	
	Column % of Total	0.00	0.00	52.94	12.50	27.03
	Count	0	0	2	3	5
	Row %	0.00	0.00	40.00	60.00	100.00
	Column % of Total	0.00	0.00	11.76	37.50	13.51
High	Count	0	0	2	3	5
	Row %	0.00	0.00	40.00	60.00	100.00
	Column % of Total	0.00	0.00	11.76	37.50	13.51
	Count	4	8	17	8	37
Total	Row %	10.81	21.62	45.95	21.62	100.00
	Column %	100.00	100.00	100.00	100.00	100.00
	Count	4	8	17	8	37
	Row %	10.81	21.62	45.95	21.62	100.00

Motivation variable calculation

The following questions were summed:

7.1 My organisation encourages social networking.

7.2 My organisation encourages social networking on the golf course.

7.15 I usually have a clear idea of what I would like to achieve through my interactions in the golf social network.

The results of the summation can be seen in the table below.

Table A0-8. Summed motivation variable.

	Min sum	1 st Quartile	Median	3 rd Quartile	Max sum
Summed value	3	5.25	7.5	9.75	12

Bin size = 2.25

The sum for each respondent was then banded into a 4 point Likert scale indicating the level of motivation to utilise the golf social network to create benefits, as shown in the following table.

Table A0-9. Likert scale transformation for the motivation variable.

Summed value	Likert scale	There is a high level of motivation to utilise the golf social network to create benefits.
3 – 5.25	1	Disagree
5.25 – 7.5	2	Somewhat Disagree
7.5 – 9.75	3	Somewhat Agree
9.75 - 12	4	Agree

Motivation cross tab

Table A0-10. Cross tabulation of the personal level of non-financial/intangible cost with the personal level of non-financial/intangible benefit layered by motivation.

		Personal level of non-financial benefit				Total
		None	Low	Medium	High	
None	Count	2	1		0	3



		Personal level of non-financial benefit				Total	
		None	Low	Medium	High		
motivated level of non-financial cost		Row %	66.67	33.33		0.00	100.00
		Column %	100.00	33.33		0.00	33.33
		% of Total	22.22	11.11		0.00	33.33
	Low	Count	0	2		3	5
		Row %	0.00	40.00		60.00	100.00
		Column %	0.00	66.67		75.00	55.56
	High	Count	0	0		1	1
		Row %	0.00	0.00		100.00	100.00
		Column %	0.00	0.00		25.00	11.11
	Total	Count	2	3		4	9
Row %		22.22	33.33		44.44	100.00	
Column %		100.00	100.00		100.00	100.00	
Motivated Personal level of non-financial cost	None	Count	2	0	0	0	2
		Row %	100.00	0.00	0.00	0.00	100.00
		Column %	66.67	0.00	0.00	0.00	6.90
	Low	Count	1	4	4	4	13
		Row %	7.69	30.77	30.77	30.77	100.00
		Column %	33.33	57.14	36.36	50.00	44.83
	Medium	Count	0	3	7	3	13
		Row %	0.00	23.08	53.85	23.08	100.00
		Column %	0.00	42.86	63.64	37.50	44.83
	High	Count	0	0	0	1	1
		Row %	0.00	0.00	0.00	100.00	100.00
		Column %	0.00	0.00	0.00	12.50	3.45
	Total	Count	3	7	11	8	29
Row %		10.34	24.14	37.93	27.59	100.00	
Column %		100.00	100.00	100.00	100.00	100.00	
		% of Total	10.34	24.14	37.93	27.59	100.00

Table A0-11. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of financial/tangible benefit layered by motivation.

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Not motivated	None	Count	2	0	1	0	3
		Row %	66.67	0.00	33.33	0.00	100.00
		Column %	100.00	0.00	50.00	0.00	33.33
		% of Total	22.22	0.00	11.11	0.00	33.33
	Low	Count	0	4	0	1	5
		Row %	0.00	80.00	0.00	20.00	100.00
		Column %	0.00	100.00	0.00	100.00	55.56
		% of Total	0.00	44.44	0.00	11.11	55.56
	Medium	Count	0	0	1	0	1
		Row %	0.00	0.00	100.00	0.00	100.00
Column %		0.00	0.00	50.00	0.00	11.11	
% of Total		0.00	0.00	11.11	0.00	11.11	
Total	Count	2	4	2	1	9	
	Row %	22.22	44.44	22.22	11.11	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	22.22	44.44	22.22	11.11	100.00	
Motivated	None	Count	3	1	0	0	4
		Row %	75.00	25.00	0.00	0.00	100.00
		Column %	75.00	50.00	0.00	0.00	13.79
		% of Total	10.34	3.45	0.00	0.00	13.79
	Low	Count	0	1	4	5	10
		Row %	0.00	10.00	40.00	50.00	100.00
		Column %	0.00	50.00	33.33	45.45	34.48
		% of Total	0.00	3.45	13.79	17.24	34.48
	Medium	Count	1	0	7	5	13
		Row %	7.69	0.00	53.85	38.46	100.00
		Column %	25.00	0.00	58.33	45.45	44.83
		% of Total	3.45	0.00	24.14	17.24	44.83
	High	Count	0	0	1	1	2
Row %		0.00	0.00	50.00	50.00	100.00	
Column %		0.00	0.00	8.33	9.09	6.90	
% of Total		0.00	0.00	3.45	3.45	6.90	
Total	Count	4	2	12	11	29	
	Row %	13.79	6.90	41.38	37.93	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	13.79	6.90	41.38	37.93	100.00	

Table A0-12. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of non-financial/intangible benefit layered by motivation.

				Organisational level of non-financial benefit				Total
				None	Low	Medium	High	
Not motivated	None	Count	2	0	1	0	3	
		Row %	66.67	0.00	33.33	0.00	100.00	
		Column %	100.00	0.00	33.33	0.00	33.33	
	Low	Count	0	1	2	2	5	
		Row %	0.00	20.00	40.00	40.00	100.00	
		Column %	0.00	50.00	66.67	100.00	55.56	
	Medium	Count	0	1	0	0	1	
		Row %	0.00	100.00	0.00	0.00	100.00	
		Column %	0.00	50.00	0.00	0.00	11.11	
	Total	Count	2	2	3	2	9	
Row %		22.22	22.22	33.33	22.22	100.00		
Column %		100.00	100.00	100.00	100.00	100.00		
Motivated	None	Count	3	0	1	0	4	
		Row %	75.00	0.00	25.00	0.00	100.00	
		Column %	100.00	0.00	7.14	0.00	13.79	
		% of Total	10.34	0.00	3.45	0.00	13.79	
	Low	Count	0	3	4	3	10	
		Row %	0.00	30.00	40.00	30.00	100.00	
		Column %	0.00	50.00	28.57	50.00	34.48	
		% of Total	0.00	10.34	13.79	10.34	34.48	
	Medium	Count	0	3	8	2	13	
		Row %	0.00	23.08	61.54	15.38	100.00	
		Column %	0.00	50.00	57.14	33.33	44.83	
		% of Total	0.00	10.34	27.59	6.90	44.83	
	High	Count	0	0	1	1	2	
Row %		0.00	0.00	50.00	50.00	100.00		
Column %		0.00	0.00	7.14	16.67	6.90		
% of Total		0.00	0.00	3.45	3.45	6.90		
Total	Count	3	6	14	6	29		
	Row %	10.34	20.69	48.28	20.69	100.00		
	Column %	100.00	100.00	100.00	100.00	100.00		
	% of Total	10.34	20.69	48.28	20.69	100.00		

Table A0-13. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of financial/tangible benefit layered by motivation.

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Not motivated	None	Count	2	0	0	0	2
		Row %	100.00	0.00	0.00	0.00	100.00
		Column %	100.00	0.00	0.00	0.00	22.22
		% of Total	22.22	0.00	0.00	0.00	22.22
	Low	Count	0	2	2	1	5
		Row %	0.00	40.00	40.00	20.00	100.00
		Column %	0.00	50.00	100.00	100.00	55.56
		% of Total	0.00	22.22	22.22	11.11	55.56
	Medium	Count	0	1	0	0	1
		Row %	0.00	100.00	0.00	0.00	100.00
		Column %	0.00	25.00	0.00	0.00	11.11
		% of Total	0.00	11.11	0.00	0.00	11.11
	High	Count	0	1	0	0	1
Row %		0.00	100.00	0.00	0.00	100.00	
Column %		0.00	25.00	0.00	0.00	11.11	
% of Total		0.00	11.11	0.00	0.00	11.11	
Total	Count	2	4	2	1	9	
	Row %	22.22	44.44	22.22	11.11	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	22.22	44.44	22.22	11.11	100.00	
Motivated	None	Count	3	1	0	0	4
		Row %	75.00	25.00	0.00	0.00	100.00
		Column %	75.00	50.00	0.00	0.00	13.79
		% of Total	10.34	3.45	0.00	0.00	13.79
	Low	Count	0	0	5	7	12
		Row %	0.00	0.00	41.67	58.33	100.00
		Column %	0.00	0.00	41.67	63.64	41.38
		% of Total	0.00	0.00	17.24	24.14	41.38
	Medium	Count	1	1	5	2	9
		Row %	11.11	11.11	55.56	22.22	100.00
		Column %	25.00	50.00	41.67	18.18	31.03
		% of Total	3.45	3.45	17.24	6.90	31.03
	High	Count	0	0	2	2	4
		Row %	0.00	0.00	50.00	50.00	100.00
		Column %	0.00	0.00	16.67	18.18	13.79
		% of Total	0.00	0.00	6.90	6.90	13.79



		Organisational level of financial benefit				Total
		None	Low	Medium	High	
Total	Count	4	2	12	11	29
	Row %	13.79	6.90	41.38	37.93	100.00
	Column %	100.00	100.00	100.00	100.00	100.00
	% of Total	13.79	6.90	41.38	37.93	100.00

Table A0-14. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of non-financial/intangible benefit layered by motivation.

			Organisational level of non-financial benefit				Total
			None	Low	Medium	High	
Not motivated	None	Count	2	0	0	0	2
		Row %	100.00	0.00	0.00	0.00	100.00
		Column %	100.00	0.00	0.00	0.00	22.22
		% of Total	22.22	0.00	0.00	0.00	22.22
	Low	Count	0	2	2	1	5
		Row %	0.00	40.00	40.00	20.00	100.00
		Column %	0.00	100.00	66.67	50.00	55.56
		% of Total	0.00	22.22	22.22	11.11	55.56
	Medium	Count	0	0	1	0	1
		Row %	0.00	0.00	100.00	0.00	100.00
		Column %	0.00	0.00	33.33	0.00	11.11
		% of Total	0.00	0.00	11.11	0.00	11.11
	High	Count	0	0	0	1	1
		Row %	0.00	0.00	0.00	100.00	100.00
		Column %	0.00	0.00	0.00	50.00	11.11
		% of Total	0.00	0.00	0.00	11.11	11.11
Total	Count	2	2	3	2	9	
	Row %	22.22	22.22	33.33	22.22	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	22.22	22.22	33.33	22.22	100.00	
Motivated	None	Count	3	0	1	0	4
		Row %	75.00	0.00	25.00	0.00	100.00
		Column %	100.00	0.00	7.14	0.00	13.79
		% of Total	10.34	0.00	3.45	0.00	13.79
	Low	Count	0	6	3	3	12
		Row %	0.00	50.00	25.00	25.00	100.00
		Column %	0.00	100.00	21.43	50.00	41.38
		% of Total	0.00	20.69	10.34	10.34	41.38
	Medium	Count	0	0	8	1	9
		Row %	0.00	0.00	100.00	100.00	100.00
		Column %	0.00	0.00	26.67	100.00	33.33
		% of Total	0.00	0.00	26.67	11.11	33.33



		Organisational level of non-financial benefit				Total	
		None	Low	Medium	High		
	Row %	0.00	0.00	88.89	11.11	100.00	
	Column %	0.00	0.00	57.14	16.67	31.03	
	% of Total	0.00	0.00	27.59	3.45	31.03	
	High	Count	0	0	2	2	4
	Row %	0.00	0.00	50.00	50.00	100.00	
	Column %	0.00	0.00	14.29	33.33	13.79	
	% of Total	0.00	0.00	6.90	6.90	13.79	
	Total	Count	3	6	14	6	29
	Row %	10.34	20.69	48.28	20.69	100.00	
Column %	100.00	100.00	100.00	100.00	100.00		
% of Total	10.34	20.69	48.28	20.69	100.00		

Affective trust variable calculation

The response to the percentage of friendships within the network was banded into a 3 point Likert scale as indicated in Table A0-15.

Table A0-15. Banded affective trust variable.

% Friendships	Likert scale	The level of affective trust in the golf social network is:
0 – 33.3%	1	Low
- 66.6%	2	Medium
- 100%	3	High

Affective trust cross tab

Table A0-16. Cross tabulation of the personal level of non-financial/intangible cost with the personal level of non-financial/intangible benefit layered by affective trust.

			Personal level of non-financial benefit				Total		
			None	Low	Medium	High			
Low	Personal level of non-financial cost	Low	Count		4	2	3	9	
		Row %		44.44	22.22	33.33	100.00		
		Column %		66.67	66.67	100.00	75.00		
			% of Total		33.33	16.67	25.00	75.00	
		Medium	Count		2	1	0	3	
		Row %			66.67	33.33	0.00	100.00	
		Column %			33.33	33.33	0.00	25.00	
			% of Total		16.67	8.33	0.00	25.00	
		Total	Count		6	3	3	12	
	Row %			50.00	25.00	25.00	100.00		
	Column %			100.00	100.00	100.00	100.00		
		% of Total		50.00	25.00	25.00	100.00		
Medium	Personal level of non-financial cost	None	Count	1	0	0	0	1	
			Row %	100.00	0.00	0.00	0.00	100.00	
			Column %		50.00	0.00	0.00	0.00	7.69
			% of Total		7.69	0.00	0.00	0.00	7.69
			Low	Count	1	1	0	1	3
		Row %	33.33	33.33	0.00	33.33	100.00		
		Column %		50.00	50.00	0.00	25.00	23.08	
		% of Total		7.69	7.69	0.00	7.69	23.08	
		Medium	Count	0	1	5	2	8	
	Row %	0.00	12.50	62.50	25.00	100.00			
		Column %		0.00	50.00	100.00	50.00	61.54	
		% of Total		0.00	7.69	38.46	15.38	61.54	
	High	Count	0	0	0	1	1		
Row %	0.00	0.00	0.00	0.00	100.00	100.00			

			Personal level of non-financial benefit				Total
			None	Low	Medium	High	
Total		Column % of Total	0.00	0.00	0.00	25.00	7.69
		Count	0.00	0.00	0.00	7.69	7.69
	Row % Column % of Total	Count	2	2	5	4	13
		Row %	15.38	15.38	38.46	30.77	100.00
		Column % of Total	100.00	100.00	100.00	100.00	100.00
	Total	15.38	15.38	38.46	30.77	100.00	
High	None	Count	3	1	0	0	4
		Row %	75.00	25.00	0.00	0.00	100.00
		Column % of Total	100.00	50.00	0.00	0.00	26.67
		Total	20.00	6.67	0.00	0.00	26.67
	Low	Count	0	1	2	3	6
		Row %	0.00	16.67	33.33	50.00	100.00
		Column % of Total	0.00	50.00	50.00	50.00	40.00
		Total	0.00	6.67	13.33	20.00	40.00
	Medium	Count	0	0	2	1	3
		Row %	0.00	0.00	66.67	33.33	100.00
		Column % of Total	0.00	0.00	50.00	16.67	20.00
		Total	0.00	0.00	13.33	6.67	20.00
	High	Count	0	0	0	2	2
		Row %	0.00	0.00	0.00	100.00	100.00
		Column % of Total	0.00	0.00	0.00	33.33	13.33
Total		0.00	0.00	0.00	13.33	13.33	
Total	Count	3	2	4	6	15	
	Row %	20.00	13.33	26.67	40.00	100.00	
	Column % of Total	100.00	100.00	100.00	100.00	100.00	
	Total	20.00	13.33	26.67	40.00	100.00	

Table A0-17. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of financial/tangible benefit layered by affective trust.

				Organisational level of financial benefit				Total
				None	Low	Medium	High	
Low	Organi sationa l level of financi al cost	None	Count	1	0	1	0	2
			Row %	50.00	0.00	50.00	0.00	100.00
			Column % of Total	100.00	0.00	16.67	0.00	16.67
			Total	8.33	0.00	8.33	0.00	16.67
	Low	Count	0	1	2	2	5	
		Row %	0.00	20.00	40.00	40.00	100.00	
		Column % of Total	0.00	100.00	33.33	50.00	41.67	
		Total	0.00	8.33	16.67	16.67	41.67	



			Organisational level of financial benefit				Total	
			None	Low	Medium	High		
	Medium	Count	0	0	3	2	5	
		Row %	0.00	0.00	60.00	40.00	100.00	
		Column %	0.00	0.00	50.00	50.00	41.67	
		% of Total	0.00	0.00	25.00	16.67	41.67	
		Total	Count	1	1	6	4	12
Total	Row %	8.33	8.33	50.00	33.33	100.00		
	Column %	100.00	100.00	100.00	100.00	100.00		
	% of Total	8.33	8.33	50.00	33.33	100.00		
	Medium	None	Count	1	1	0	0	2
			Row %	50.00	50.00	0.00	0.00	100.00
Column %			33.33	50.00	0.00	0.00	15.38	
% of Total			7.69	7.69	0.00	0.00	15.38	
Organisational level of financial cost			Low	Count	1	1	0	1
	Row %	33.33		33.33	0.00	33.33	100.00	
	Column %	33.33		50.00	0.00	20.00	23.08	
	% of Total	7.69		7.69	0.00	7.69	23.08	
	Medium	Medium		Count	1	0	3	2
Row %			16.67	0.00	50.00	33.33	100.00	
Column %			33.33	0.00	100.00	40.00	46.15	
% of Total			7.69	0.00	23.08	15.38	46.15	
Total			High	Count	0	0	0	2
	Row %	0.00		0.00	0.00	100.00	100.00	
	Column %	0.00		0.00	0.00	40.00	15.38	
	% of Total	0.00		0.00	0.00	15.38	15.38	
	Count	3		2	3	5	13	
Row %	23.08	15.38	23.08	38.46	100.00			
Column %	100.00	100.00	100.00	100.00	100.00			
% of Total	23.08	15.38	23.08	38.46	100.00			
High	Organisational level of financial cost	None	Count	3	0	0	0	3
			Row %	100.00	0.00	0.00	0.00	100.00
			Column %	100.00	0.00	0.00	0.00	20.00
			% of Total	20.00	0.00	0.00	0.00	20.00
			Low	Count	Count	0	3	2
Row %	0.00	37.50			25.00	37.50	100.00	
Column %	0.00	100.00			40.00	75.00	53.33	
% of Total	0.00	20.00			13.33	20.00	53.33	
Medium	Count	Count			0	0	2	1
		Row %	0.00	0.00	66.67	33.33	100.00	
		Column %	0.00	0.00	40.00	25.00	20.00	
		% of Total	0.00	0.00	40.00	25.00	20.00	

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
Total	High	% of Total	0.00	0.00	13.33	6.67	20.00
		Count	0	0	1	0	1
		Row %	0.00	0.00	100.00	0.00	100.00
		Column %	0.00	0.00	20.00	0.00	6.67
		% of Total	0.00	0.00	6.67	0.00	6.67
	Total	Count	3	3	5	4	15
		Row %	20.00	20.00	33.33	26.67	100.00
		Column %	100.00	100.00	100.00	100.00	100.00
		% of Total	20.00	20.00	33.33	26.67	100.00

Table A0-18. Cross tabulation of the organisational level of financial/tangible cost with the organisational level of non-financial/intangible benefit layered by affective trust.

			Organisational level of non-financial benefit				Total	
			None	Low	Medium	High		
Low	Organisational level of financial cost	None	Count	1	0	1	0	2
			Row %	50.00	0.00	50.00	0.00	100.00
			Column %	100.00	0.00	33.33	0.00	16.67
		% of Total	8.33	0.00	8.33	0.00	16.67	
		Low	Count	0	3	0	2	5
			Row %	0.00	60.00	0.00	40.00	100.00
	Column %		0.00	60.00	0.00	66.67	41.67	
	% of Total	0.00	25.00	0.00	16.67	41.67		
	Medium	Count	0	2	2	1	5	
		Row %	0.00	40.00	40.00	20.00	100.00	
		Column %	0.00	40.00	66.67	33.33	41.67	
	% of Total	0.00	16.67	16.67	8.33	41.67		
Total	None	Count	1	5	3	3	12	
		Row %	8.33	41.67	25.00	25.00	100.00	
		Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	8.33	41.67	25.00	25.00	100.00		
	Low	Count	1	0	2	0	3	
		Row %	33.33	0.00	66.67	0.00	100.00	
Column %		50.00	0.00	28.57	0.00	23.08		
% of Total	7.69	0.00	15.38	0.00	23.08			



			Organisational level of non-financial benefit				Total
			None	Low	Medium	High	
	Medium	Count	0	1	4	1	6
		Row %	0.00	16.67	66.67	16.67	100.00
		Column %	0.00	100.00	57.14	33.33	46.15
		% of Total	0.00	7.69	30.77	7.69	46.15
	High	Count	0	0	0	2	2
		Row %	0.00	0.00	0.00	100.00	100.00
		Column %	0.00	0.00	0.00	66.67	15.38
		% of Total	0.00	0.00	0.00	15.38	15.38
	Total	Count	2	1	7	3	13
		Row %	15.38	7.69	53.85	23.08	100.00
		Column %	100.00	100.00	100.00	100.00	100.00
		% of Total	15.38	7.69	53.85	23.08	100.00
High	None	Count	3	0	0	0	3
		Row %	100.00	0.00	0.00	0.00	100.00
		Column %	100.00	0.00	0.00	0.00	20.00
		% of Total	20.00	0.00	0.00	0.00	20.00
	Low	Count	0	1	4	3	8
		Row %	0.00	12.50	50.00	37.50	100.00
		Column %	0.00	50.00	57.14	100.00	53.33
		% of Total	0.00	6.67	26.67	20.00	53.33
	Medium	Count	0	1	2	0	3
		Row %	0.00	33.33	66.67	0.00	100.00
		Column %	0.00	50.00	28.57	0.00	20.00
		% of Total	0.00	6.67	13.33	0.00	20.00
	High	Count	0	0	1	0	1
		Row %	0.00	0.00	100.00	0.00	100.00
		Column %	0.00	0.00	14.29	0.00	6.67
		% of Total	0.00	0.00	6.67	0.00	6.67
	Total	Count	3	2	7	3	15
		Row %	20.00	13.33	46.67	20.00	100.00
		Column %	100.00	100.00	100.00	100.00	100.00
		% of Total	20.00	13.33	46.67	20.00	100.00

Table A0-19. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of financial/tangible benefit layered by affective trust.

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
			None	Low	Medium	High	
Low	None	Count	1	0	0	0	1
		Row %	100.00	0.00	0.00	0.00	100.00
		Column %	100.00	0.00	0.00	0.00	8.33
		% of Total	8.33	0.00	0.00	0.00	8.33
	Low	Count	0	1	4	4	9
		Row %	0.00	11.11	44.44	44.44	100.00
		Column %	0.00	100.00	66.67	100.00	75.00
		% of Total	0.00	8.33	33.33	33.33	75.00
	Medium	Count	0	0	1	0	1
		Row %	0.00	0.00	100.00	0.00	100.00
		Column %	0.00	0.00	16.67	0.00	8.33
		% of Total	0.00	0.00	8.33	0.00	8.33
	High	Count	0	0	1	0	1
Row %		0.00	0.00	100.00	0.00	100.00	
Column %		0.00	0.00	16.67	0.00	8.33	
% of Total		0.00	0.00	8.33	0.00	8.33	
Total	Count	1	1	6	4	12	
	Row %	8.33	8.33	50.00	33.33	100.00	
	Column %	100.00	100.00	100.00	100.00	100.00	
	% of Total	8.33	8.33	50.00	33.33	100.00	
Medium	None	Count	2	1	0	0	3
		Row %	66.67	33.33	0.00	0.00	100.00
		Column %	66.67	50.00	0.00	0.00	23.08
		% of Total	15.38	7.69	0.00	0.00	23.08
	Low	Count	0	0	0	2	2
		Row %	0.00	0.00	0.00	100.00	100.00
		Column %	0.00	0.00	0.00	40.00	15.38
		% of Total	0.00	0.00	0.00	15.38	15.38
	Medium	Count	1	1	2	1	5
		Row %	20.00	20.00	40.00	20.00	100.00
		Column %	33.33	50.00	66.67	20.00	38.46
		% of Total	7.69	7.69	15.38	7.69	38.46
	High	Count	0	0	1	2	3
Row %		0.00	0.00	33.33	66.67	100.00	
Column %		0.00	0.00	33.33	40.00	23.08	
% of Total		0.00	0.00	7.69	15.38	23.08	
Total	Count	3	2	3	5	13	
	Row %	23.08	15.38	23.08	38.46	100.00	

			Organisational level of financial benefit				Total
			None	Low	Medium	High	
		Column % of Total	100.00	100.00	100.00	100.00	100.00
		Total	23.08	15.38	23.08	38.46	100.00
High	None	Count	3	0	0	0	3
		Row %	100.00	0.00	0.00	0.00	100.00
		Column % of Total	100.00	0.00	0.00	0.00	20.00
	Low	Count	0	1	3	2	6
		Row %	0.00	16.67	50.00	33.33	100.00
		Column % of Total	0.00	33.33	60.00	50.00	40.00
	Medium	Count	0	1	2	1	4
		Row %	0.00	25.00	50.00	25.00	100.00
		Column % of Total	0.00	33.33	40.00	25.00	26.67
	High	Count	0	1	0	1	2
		Row %	0.00	50.00	0.00	50.00	100.00
		Column % of Total	0.00	33.33	0.00	25.00	13.33
Total		Count	3	3	5	4	15
		Row %	20.00	20.00	33.33	26.67	100.00
		Column % of Total	100.00	100.00	100.00	100.00	100.00
		Total	20.00	20.00	33.33	26.67	100.00

Table A0-20. Cross tabulation of the organisational level of non-financial/intangible cost with the organisational level of non-financial/intangible benefit layered by affective trust.

				Organisational level of non-financial benefit				Total
				None	Low	Medium	High	
Low	Organisational level of non-financial cost	None	Count	1	0	0	0	1
			Row %	100.00	0.00	0.00	0.00	100.00
			Column % of Total	100.00	0.00	0.00	0.00	8.33
	Low	Count	0	5	1	3	9	
		Row %	0.00	55.56	11.11	33.33	100.00	
		Column % of Total	0.00	100.00	33.33	100.00	75.00	
	Medium	Count	0	0	1	0	1	
		Row %	0.00	0.00	100.00	0.00	100.00	
		Column % of Total	0.00	0.00	33.33	0.00	8.33	



			Organisational level of non-financial benefit				Total	
			None	Low	Medium	High		
	High	% of Total	0.00	0.00	8.33	0.00	8.33	
		Count	0	0	1	0	1	
		Row %	0.00	0.00	100.00	0.00	100.00	
		Column %	0.00	0.00	33.33	0.00	8.33	
		% of Total	0.00	0.00	8.33	0.00	8.33	
Total	Count	1	5	3	3	12		
	Row %	8.33	41.67	25.00	25.00	100.00		
	Column %	100.00	100.00	100.00	100.00	100.00		
	% of Total	8.33	41.67	25.00	25.00	100.00		
Medium	None	Count	2	0	1	0	3	
		Row %	66.67	0.00	33.33	0.00	100.00	
		Column %	100.00	0.00	14.29	0.00	23.08	
		% of Total	15.38	0.00	7.69	0.00	23.08	
	Low	Count	0	1	1	0	2	
		Row %	0.00	50.00	50.00	0.00	100.00	
		Column %	0.00	100.00	14.29	0.00	15.38	
		% of Total	0.00	7.69	7.69	0.00	15.38	
	Medium	Count	0	0	4	1	5	
		Row %	0.00	0.00	80.00	20.00	100.00	
		Column %	0.00	0.00	57.14	33.33	38.46	
		% of Total	0.00	0.00	30.77	7.69	38.46	
High	Count	0	0	1	2	3		
	Row %	0.00	0.00	33.33	66.67	100.00		
	Column %	0.00	0.00	14.29	66.67	23.08		
	% of Total	0.00	0.00	7.69	15.38	23.08		
Total	Count	2	1	7	3	13		
	Row %	15.38	7.69	53.85	23.08	100.00		
	Column %	100.00	100.00	100.00	100.00	100.00		
	% of Total	15.38	7.69	53.85	23.08	100.00		
High	Organisational level of non-financial cost	None	Count	3	0	0	0	3
			Row %	100.00	0.00	0.00	0.00	100.00
			Column %	100.00	0.00	0.00	0.00	20.00
			% of Total	20.00	0.00	0.00	0.00	20.00
	Low	Count	0	2	3	1	6	
		Row %	0.00	33.33	50.00	16.67	100.00	
		Column %	0.00	100.00	42.86	33.33	40.00	
		% of Total	0.00	13.33	20.00	6.67	40.00	
Medium	Count	0	0	4	0	4		
	Row %	0.00	0.00	100.00	0.00	100.00		



		Organisational level of non-financial benefit				Total
		None	Low	Medium	High	
	Column % of Total	0.00	0.00	57.14	0.00	26.67
	High	0.00	0.00	26.67	0.00	26.67
	Count	0	0	0	2	2
	Row %	0.00	0.00	0.00	100.00	100.00
	Column % of Total	0.00	0.00	0.00	66.67	13.33
Total	Total	0.00	0.00	0.00	13.33	13.33
	Count	3	2	7	3	15
	Row %	20.00	13.33	46.67	20.00	100.00
	Column % of Total	100.00	100.00	100.00	100.00	100.00
	Total	20.00	13.33	46.67	20.00	100.00