

# **Development of a Quality Management System in the Film Industry**

by

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## **Executive Summary**

The production of a film or television program is a big financial undertaking and carries a lot of risk. Film production in South Africa is relatively young if compared to overseas. Because of the fact that the industry is still young and very competitive it has yet to develop a standard set of rules or guidelines. Everyone is doing their own thing, which is fine if a person works alone, but in the production of a film many different crews from different companies have to work together. They tend to get in each other's way and struggle to communicate. It is often not clear who is responsible for what and this could cause confusion and time delays.

The need for a system that will make production more organised and structured in South Africa is a reality. The development of a Quality Management System will benefit the film industry by giving it structure, standard procedures and processes. It will define the responsibilities and compare different technologies through their quality and costs. The Quality Management System will serve as an overall guideline of the production process to people in the industry. A Quality Management System will greatly improve the chances of success for a film and the overall working conditions of the crew during the film production.

After an in-depth literature review on the history of quality management, TQM, QMS, ISO 9001, EFQM Excellence Model ® and Process Management the student gained comprehension on the project development, the theory behind the project and the purpose of the project. It became apparent that process mapping, responsibilities of key personnel and documentation will play a big part in the project.

The QMS took shape in the form of a scope, terms and definitions, organisation chart, roles and responsibilities, the pre-production sequence, the principal photography sequence, the post production sequence, information and process maps of key procedures in these phases.

With this QMS which will serve as a guide the responsibilities of each crew member will become more clear, it will give an overall picture of each phase and its main activities, it can improve the consistency of the workflow, mistakes can be traced easier and its main use is that it will serve as a handy guide for newcomers to the film industry.

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# Chapter One

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## 1. Project Proposal

### 1.1 Introduction and Background

The production of a film or television program is a big financial undertaking and carries a lot of risk. There are six basic stages during film or television production, although the processes within each stage can differ from production to production, for the most part the basic stages are present at most productions. Firstly it is the development stage, which is when the script is conceived, the film is planned and the finances are obtained. Should investors not be satisfied with the script, planning or other ideas, they will not invest in the film. The next stage is preproduction, this is where the crew starts to come together, a schedule is developed, location scouted, production is planned and resources are assembled. Stage 3 is the production stage, also known as principal photography; this is when the actual shooting takes place on set or on location. This is also where the cast comes in. The production stage is the stage known to most people, but strange enough it is the shortest stage, that is if well planned and no major setbacks arise. The next stage is the postproduction stage where visual effects are added, the film is edited and sound is added. The last two stages are the distribution, which includes marketing, and the exhibition stages.

Film production in South Africa is relatively inexperienced if compared to overseas. The industry is an extremely tough and very competitive environment where the phrase "kill or be killed" comes to mind. Because of the fact that the industry is still young and very competitive it has yet to develop a standard set of rules or guidelines. Everyone is doing their own thing, which is fine if you work alone, but in the production of a film many different crews from different companies have to work together. They tend to get in each other's way and struggle to communicate. It is often not clear who is responsible for what and this could cause confusion and time delays. It is clear that a solution to this problem must be found. The development of standard guidelines concerning processes, procedures and responsibilities is necessary in order to solve this problem.





Therefore it is determined that a Quality Management System will greatly improve the chances of success for a film and the overall working conditions of the crew during the film production.

Movies and programs can either be shot on film, which is analogue, or in digital format. The movies in South Africa are mostly shot in digital, but television broadcasting is still in analogue. South Africa is in the process of migrating from analogue television to digital television (Higham, 2010). This process should be completed by 2014 and free up a lot of bandwidth once completed, since digital takes less bandwidth. Digital production is clearly the future, therefore this project will concentrate on digital production.

## **1.2 Project Aim**

The aim of the project is to develop a quality management system for use in the film industry. This quality management system will act as a guideline to the different procedures and processes found in the production of a film or television program.

## **1.3 Project Scope**

The scope of the project will focus on the production of a film or television program from the preproduction stage to postproduction stage. The development, distribution and exhibition stages will not be part of the scope. The scope will focus on the following:

- An in-depth study and review on the South African Film industry.
- An in-depth study of the principles, concepts and applications for a Quality management system.
- The overall project will be on production of a digital video rather than an analogue film.
- The identification of the different responsibilities of key production personnel.
- The production process in preproduction, production and postproduction.
- The different procedures linked to key production personnel.



The scope of the project does not include the following:

- The financing stage of a film project also called the "green lighting process".
- The overall cash flow of a film.
- A customer satisfaction survey for a film that is implementing the quality management system.
- The implementation of the project in the film industry.

#### **1.4 Anticipated Benefits**

The following stakeholders will benefit from this project:

- Production personnel, since it will serve as a guideline as to what is expected from them and to ensure they don't forget or miss a responsibility during production.
- The producer and director, since it will help them manage the production and trace any mistakes back to its source.
- The investors, since it will give them peace of mind that careful planning is involved because of the guidelines set out by the quality management system.
- People and students new to the industry, since it will guide them as to what is expected of them.
- Postproduction crew, since it will ensure that all possible steps are taken during production itself regarding quality, instead of just trying to fix everything in postproduction. This in turn will make editing the film afterwards a much less daunting task.
- The film itself, since it will ensure that all possible measures were taken to ensure a high quality film given the amount of resources available.



#### 1.4.1 Advantages of the Project

- The production of a film will be less chaotic.
- The responsibilities of each individual will be clear.
- It will give an overall picture of the film production.
- It will improve the quality and the consistency of everyone's work.
- Mistakes can be more easily traced.
- Will serve as a guide to all personnel (especially producers) or newcomers to the industry.

#### 1.4.2 Disadvantages and Risks of the Project

- Experienced producers have already set in their own ways of filmmaking and will not easily adopt any new procedures or systems.
- It is a harsh industry and will be difficult to get the quality management system accepted.
- Since the film industry is so big it is possible to miss something important.

This system will take time to gain acceptance in the industry and will be best put to use if it is gradually implemented by newcomers to the industry.

### 1.5 Feasibility

The South African film industry is still very young and inexperienced if compared to India, Europe or the United States of America. The production of a film in South Africa is still a bit chaotic and people tend to step on each other's toes, whereas in Britain the production of a film is much more process driven and organised (Higham, 2010). An organised production runs like a well oiled machine, which in turn saves time and money. The need for a system that will make production more organised and structured in South Africa is a reality. Therefore this project is feasible since it will in the end benefit the film industry.

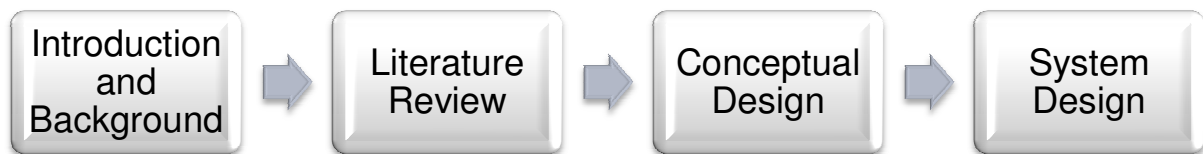
The greatest challenge during the project will be to gather all the data needed to develop the quality management system.

This is because data on processes and procedures are scarce, except for technical specifications and procedures, which is only a part of the production.

## 1.6 Chapter One Conclusion

Currently there are no Quality Management Systems implemented in the South African film industry. The development of a Quality Management System will benefit the film industry by giving it structure, standard procedures and processes. It will define responsibilities and compare different technologies and their quality and costs. The Quality Management System will serve as an overall guideline of the production process to people in the industry. The intended benefit of this project is for it to save time in film production, to minimise confusion and inevitably save money and increase the quality of the product (film being produced).

## 1.7 Report Outline



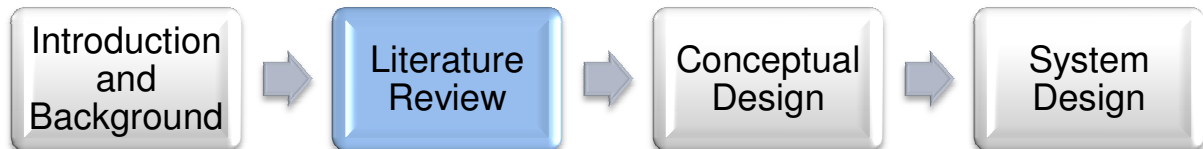
Chapter 2 consists of an in-depth study and literature review on quality, the history of quality management, Total Quality Management, Quality Management Systems, ISO 9001, EFQM Excellence Model ® and process management.

Chapter 3 discusses the possible problems of a QMS in the film industry, reasons for its necessity and a newly developed possible structure for the QMS in the film industry.

Chapter 4 is the design of the QMS, only partially completed for first draft.

# Chapter Two

## 2. Literature Review



### 2.1 A Literature Review on Quality Management and Process Management

For a business to be successful it must provide services or products that:

- Meet a distinct need
- Conform to acceptable standards
- Satisfy customer's expectations
- Are presented at a reasonable price
- Comply with the general public's requirements
- Are offered at a price which will yield profit

(Muir, 2010)

Before one can review Quality Management Systems one must first understand the most basic concept: what is quality? According to Mohamed Elashri (2008) quality is defined as the level to which a collection of natural attributes satisfy the requirements. According to the ISO 8402 (1986) standard quality can be defined as *"the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs"*. The latter definition is more specific to a business environment and therefore more applicable in this case. When in context with a business, quality is often perceived as the quality of the product, in other words does the product satisfy the customer's needs? This is a very narrow observation of quality, for quality is not just confined to the final product, it includes every aspect of the business.



To assess how quality management is viewed and implemented in businesses around the world today, one must first look at the history behind quality management.

### 2.1.1 The History of Quality Management

In the early years manufacturing plants inspected the products for defects to decide whether to accept or reject that specific product. As the manufacturing plants became larger the inspection of products became harder and permanent inspectors needed to be employed. Problems such as the lack of skills of workers and inspectors and technical problems soon surfaced. These problems made it clear that there was a need for a whole inspection department in large manufacturing plants. With this inspection department a new arsenal of functions became available, such as training, standards, calibration of measuring tools and data logging. Soon defect detection turned into defect prevention, which is the fundamental concept of Quality Management today.

The application of statistics to quality control began in the 1920's. In 1924 Stewhart was the first to draw a control chart for a process, although statistical process control would only be utilised to its full potential in the late 1940's. Later on Deming was the one who took the work of Stewhart to the next level to develop statistical process control. Other gurus who contributed to this technique were Romig and Dodge.

During the 1940's Japan's industrial system was in ruins as they were known for manufacturing cheap imitation goods. They soon realised that something had to be done and called in quality experts, Deming, Feigenbaum and Juran, to assist them with their problem.

During the 1950's quality control developed quickly and by the 1960's it became the standard practice throughout Japan. In the late 1960's Western civilisation's and Europe's markets were flooded with Japan's higher quality, cheaper products. This called for action from America and Europe and in 1969 the first quality control conference was held in Tokyo. Quality gurus such as Feigenbaum and Ishikawa attended this conference and this was the first time the term "total quality" came to light. This term referred to quality control throughout a company and not just in production. Japan was the first to employ this method and it became common practice in Japan during the late 1970's.



Western Civilisation took much longer before implementing quality control and it was only in the early 1980's that total quality management started to play a bigger role in the industry.

The total quality management philosophy was soon accompanied by the need for quality standards. In 1979 the first quality standards were published. Although not known too many, South Africa was the first to publish a quality standard called the SABS 1057, based on British standards (Muir, 2010). It was only about a day after South Africa, that Britain published their standard called the BS 5750.

The ISO 9000 standard soon followed and is internationally recognised and accepted today. It has also become one of the most used standards regarding quality management systems. Another framework that gained acceptance in Europe was the "Business Excellence" Model referred to as EFQM Excellence Model ®. It was developed by the British Quality Foundation.

(United Kingdom Department of Trade and Industry, 2005)

### 2.1.2 Total Quality Management

Total Quality Management (TQM) is the management of processes and people at all the stages throughout the business to ensure that the customer is satisfied. (United Kingdom Department of Trade and Industry, 2005)

A full consensus is yet to be reached on the exact content and definition of a Total Quality Management System (Yong & Wilkinson, 2001), although it is agreed that Total Quality Management is not possible within an organisation without a commitment from the top management (Kelkar, 2008).

Business Process Re-engineering is often compared with Total Quality Management where the difference lies in that Total Quality Management is a more gradual change and improves on what is already there. In the case of Business Process Re-Engineering the company seeks for a major and rapid break-through. Some authors describe Total Quality Management as a dying management philosophy (Yong & Wilkinson, 2001), but it is still holds merit according to many other authors.



One of the reasons for Total Quality Management being criticized is because many people try and fail to implement a Quality Management philosophy and therefore it is blamed on the philosophy and not on their own competence. It is not something to be entered into lightly, since its implementation involves the entire company and will require commitment from everyone.

The driving force behind TQM is continuous improvement. There are seven main areas that are optimised through TQM. They are: management/leadership, customer driven approach, systems, human resource development, process improvement and control, product improvement and control and resource utilisation. (Haider, 2009)

To aid in the implementation of TQM, businesses use Quality Management Systems to facilitate TQM. A Quality Management System is structured clearly and follow processes and procedures. A QMS is also documented thoroughly which assists in its overall implementation.

### **2.1.3 Quality Management Systems**

A Quality Management System (QMS) can be described as the tasks employed to continuously control and guide the company in such a way that overall efficiency and effectiveness are improved. The end objective of the QMS is to satisfy the customer and to attract more customers to the company.

A Quality Management System guarantees that all activities regarding quality are planned. What is a management system? It is the matter of organising elements to achieve a specific goal. A Quality Management System consists basically of an organisational structure, responsibilities, procedures, processes and resources for implementing quality management. More focus will be given on processes later on in this study. The objective of a Quality Management System is for the continuous improvement of quality in an organisation and therefore it is implied that a Quality Management System reaches all parts of an organisation and is not just isolated to one area of the business.





A good Quality Management System can achieve the following: greater efficiency, reduced cost, better performance, less unplanned work, fewer disputes, improved visibility, reduced risk, problems show up earlier, better quality, improved customer confidence, portable and reusable products and better control over contracted products. If the QMS is properly documented, the organisation will benefit because the customers will be ensured of the organisation's ability to supply the desired goods and to continually meet the customer's requirements. (United Kingdom Department of Trade and Industry, 2005)

Currently there are two different ways to define a Quality Management System. One can either choose the home grown approach or choose from an existing model such as ISO 9000, SEI-CMM, EFQM and MB-NQA. These models can then be adapted to fit the organisation (Kelkar, 2008). Some of the advantages in having a documented Quality Management System are: it is reviewable, it can be revisited for improvement, serves as training material, serves as reference material and it enables repeatability and uniformity across instances/locations. The level of detail to which a particular practice should be documented depends on the practice itself. A quality policy forms part of a Quality Management System and is usually the main focus around which the rest of the Quality Management System is developed. Prior to certification, audits are performed on the Quality Management System to ensure that implementation is satisfactory and that it complies with the contracted requirements. Audits can be performed by first, second or third party auditors. First party audits are basically performed in house by people working for the organisation, but not on that particular project. Second party audits are performed by the customer, this way the customer can evaluate your organisation in order to see if it meets their specific requirements. This shifts the power to the customer. Third party audits are conducted by certification agencies for example if the organisation is doing the ISO 9000 certification.



A Quality Management System has several uses namely: a means to communicate the vision, values, mission, policies and objectives of the organisation, a means of showing how the system has been designed, a means of showing linkages between processes, a means of showing who is responsible for what, an aid to training new people, a tool in the analysis of potential improvements and a means of demonstrating compliance with external standards and regulations. Further attention will be given to ISO 9001 and the EFQM Model.

#### 2.1.4 ISO 9001

The ISO 9000 has its roots in the military specifications of the US towards the end of the Second World War and the Ministry of Defence standards in the UK. After the war the US and UK realised that this thing worked very well and decided to put it together as a standard called the AQAPS (Allied Quality Assurance Specifications) right around 1960. In 1979 the South African SABS 1057 and the British BS 5750 standards were established and shortly after that the ISO 9000 series was developed and published.

According to many authors one should aim for quality assurance not just quality control, in other words, doing the right thing right every time. Organisations have the need to reach and maintain the desired quality at the lowest rate possible. This implies that once the optimum quality level is reached the organisation will strive for consistent quality. The processes should thus not be changed once the desired quality is reached, since one does not tamper with a winning recipe. The ISO 9001 standard gives the requirements for the Quality Management System to be implemented by the organisation. According to D.I. Muir (2010) everything an organisation does must be toward the reduction, elimination and prevention of quality deficiencies in order to achieve its goal. In most cases the primary objective of any profit driven organisation is to satisfy its customers and stakeholders, because without them the organisation cannot exist.

The ISO 9001 is supported by two other documents, namely the ISO 9000, which is the fundamentals and vocabulary and the ISO 9004, which is the guidelines for the implementation of ISO 9001.

The ISO 9001 standard uses a process approach. This approach recognizes the customer's requirements as inputs and also monitors the customer's satisfaction with the final product/service to determine if all the requirements have been met. See Figure 2 for the Process Model of ISO 9001.

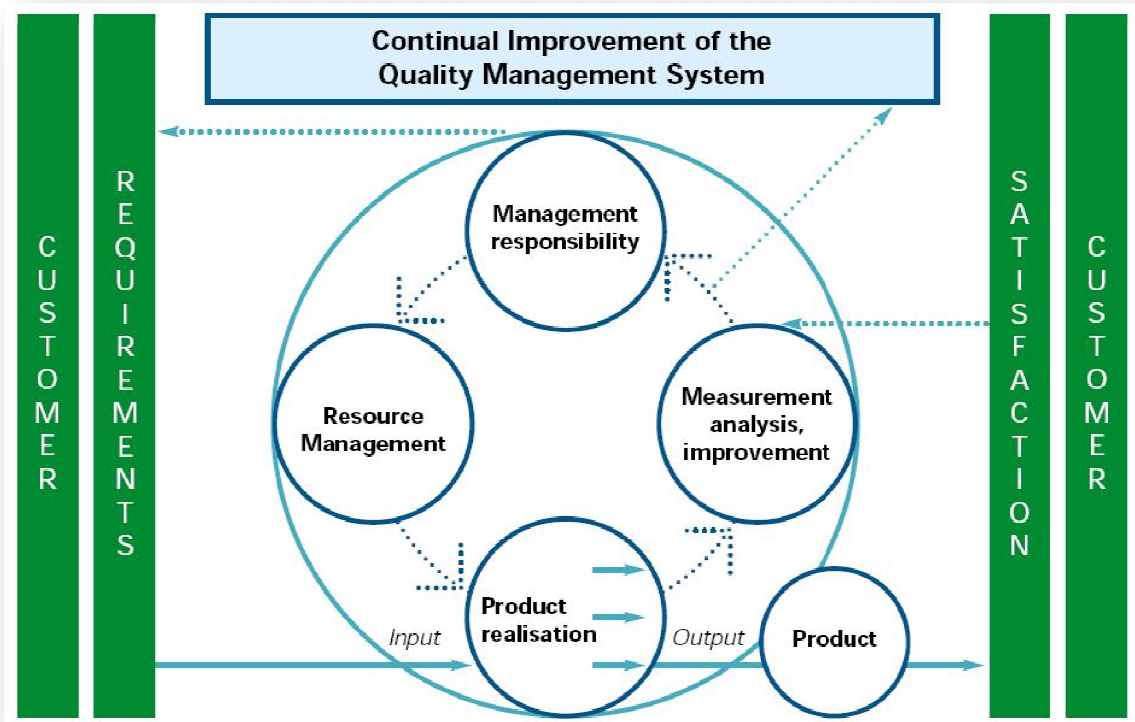


Figure 1: ISO 9001 Process Model

The clauses and sub-clauses of the ISO 9001 are as follows (ISO, 2009):

Section 1 – Scope

Section 2 – Normative Reference

Section 3 – Terms and Definitions

Section 4 – Quality Management System

General Requirements

Documentation Requirements



Section 5 – Management Responsibility

Management commitment  
Customer focus  
Quality policy  
Planning  
Responsibility, authority and communication  
Management review

Section 6 - Resource management

Provision of resources  
Human resources  
Infrastructure  
Work environment

Section 7 - Product realization

Planning of product realization  
Customer-related processes  
Design and/or development  
Purchasing  
Production and service operations  
Control of measuring and monitoring devices

Section 8 - Measurement, analysis and improvement

General  
Planning  
Monitoring and measurement  
Control of non-conforming product  
Analysis of data  
Improvement

The ISO 9000 standards are based on the 8 Quality Management Principles:

- Customer Focused Organisations
- Leadership
- People Involvement
- Process approach



- A Systems Approach to Management
- Continuous Improvement
- Factual Approach to Decision Making
- Mutually Beneficial Supplier Relationships

(Muir, 2010), (United Kingdom Department of Trade and Industry, 2005)

As already discussed in the Quality Management System section the ISO 9001 standard requires that audits be done to ensure that the actual processes and methods used in the organisation conforms to the ISO 9001 standard. This is a requirement for all companies who wishes to become ISO 9001 certified. The general steps used in audits are: initiation, preparation, execution, convey and conclusion. (United Kingdom Department of Trade and Industry, 2005)

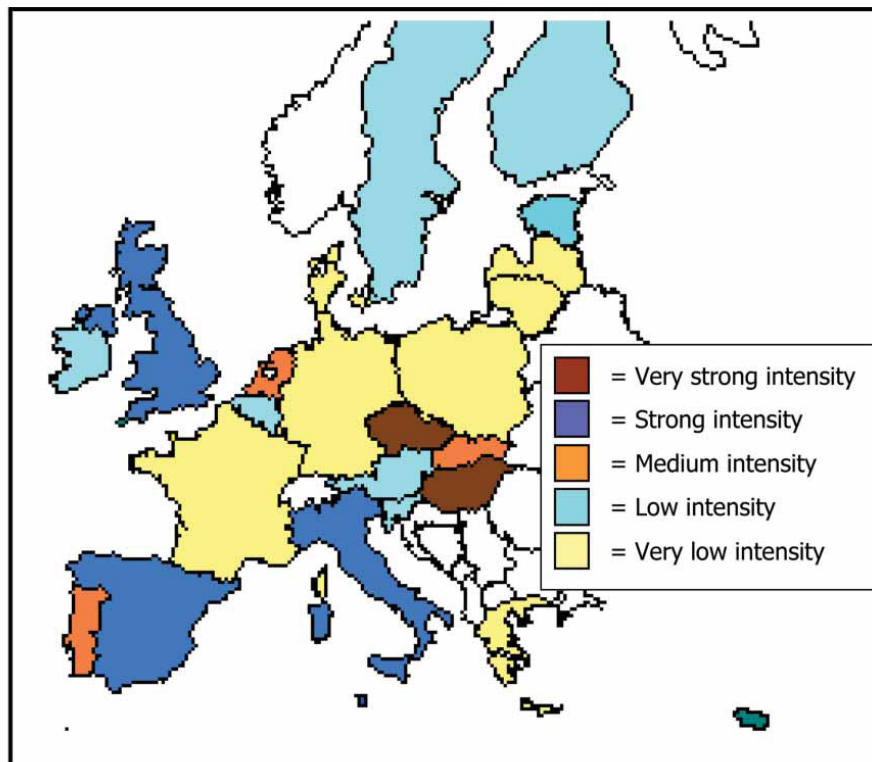
Some organisations already implementing the ISO 9001 Quality Management System are wondering is it worth maintaining and what significance does it hold for the company? Empirical studies have shown that Quality Management does indeed have a positive effect on the various business functions (Piskar & Dolinsek, 2006) and therefore calls for a deeper look. The empirical studies were undertaken through questionnaires during 2002 in Slovenia. 212 Companies that were already implementing the ISO 9001 system were asked to participate in this study. The results obtained from this study were analysed and compared by the various authors. In conclusion all the authors were in favour of the Quality Management System (Piskar & Dolinsek, 2006). Table 2 gives the benefits identified from this study.


**Table 1: Benefits of ISO 9001 (Piskar & Dolinsek, 2006)**

Order	Main advantages gained by companies that acquired ISO 9001	Companies, that have circled (N)
1	Improved overview of processes is achieved	179
2	Quality of products and services has improved	157
3	Company reputation has improved	120
4	Customers satisfaction has improved	99
5	Information system has improved	98
6	Cooperation with buyers has improved	88
7	Employees satisfaction and effect on morale and behavior have improved	58
8	Heightened employee motivation for improving the quality of services rendered has been achieved	55
9	The number of innovations in business process has improved (continuous improvement)	52
10	Business results have improved	52
11	Customers loyalty has improved	34
12	Others	4
	Total	996

**Table I.**  
 Main advantages gained  
 by companies that  
 acquired quality  
 certificate

Plenty of research and studies have been conducted on the growth of quality management and standards throughout the world. Over the past 10 years the number of companies becoming ISO 9001 certified has increased dramatically (Siazarbitoria, 2006). It should be noted that for these quality standards, although globally spread, the initial growth started in the European Union, which was the focus of the ISO reports in 2003. To compare the results obtained from the ISO (2003) reports a certification intensity has been compiled, which illustrates the "percentage of ISO 9000 certificates from each country and its percentage of contribution to the European GDP" as stated in (Siazarbitoria, 2006). Figure 3 illustrates the certification intensity distribution over Europe.



Source: Prepared from data obtained from ISO (2003) reports, information from EUROSTAT (2004).

Figure 2: ISO 9000 certificates distribution (Siazarbitoria, 2006)

### 2.1.5 EFQM Excellence Model ®

Throughout Europe organisations are pressured to increase their performance and to concentrate on the customer while measuring up against international standards. Therefore more businesses have started to implement some kind of TQM model. The EFQM Excellence Model ® was developed by the British Quality Foundation. See Figure 4 below for an overview of the model. (United Kingdom Department of Trade and Industry, 2005)

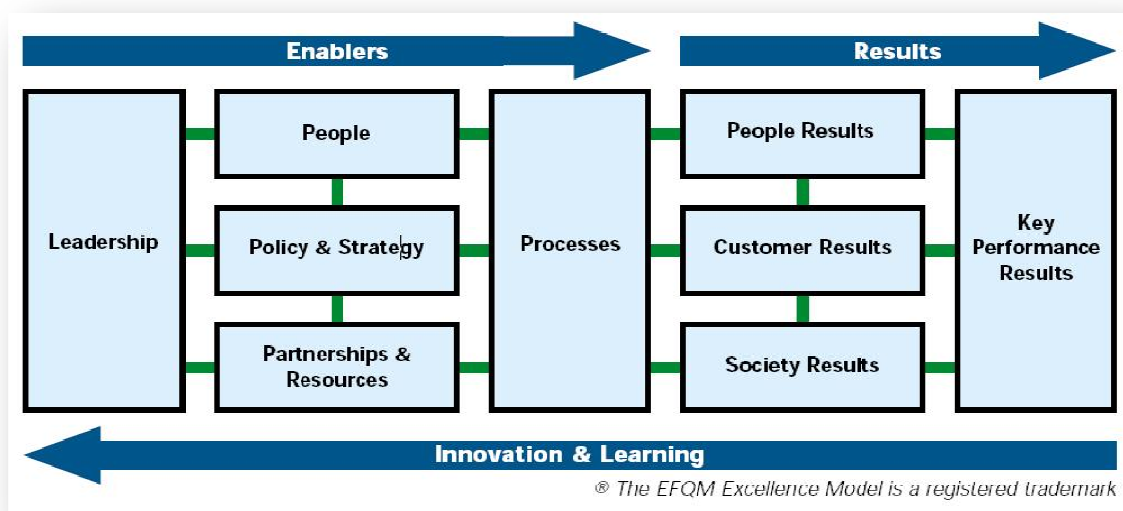


Figure 3: EFQM Excellence Model ®

The EFQM Excellence Model ® adheres to the following criteria when implemented in a business (United Kingdom Department of Trade and Industry, 2005):

- Leadership
- Strategy and Policy
- Employees
- Resources and Affiliations
- Processes
- Customer Satisfaction
- Employee Satisfaction
- Society Satisfaction
- Key Performance Results



The model can be used for the whole organisation, in other words all the areas and levels of the organisation should be included.

### 2.1.6 Process Management

Process Management forms part of any QMS as can be seen in the Quality Management System section above.

Processes and procedures are ever present in our everyday life and many of us don't even realise it. Sometimes it is more noticeable, like when you follow instructions to bake a cake, and other times it has become such a habit, like brushing your teeth, you don't even notice it. So what exactly are a process and a procedure? A process describes what we do in what sequence (Cunat & Graig, 2000), for instance when baking a cake the process would be to mix the dry ingredients, then to mix the wet ingredients, then to mix the dry and wet together, then scoop it into a cake pan and finally place it in the oven. A procedure on the other hand explains to one how to do a task (Cunat & Graig, 2000), for instance when baking a cake one of the procedures would be to sift the dry ingredients together and to use a whisk rather than a spoon to mix the wet ingredients with the dry ingredients to ensure the batch is smooth throughout. A Quality Management System consists of different areas, including processes and procedures.

A process consists of a sequence of actions that transforms an input into value-added output. A process map is the visual representation of a process in such a way that the flow of work/activities can be clearly seen. According to Anjard 1996, processes were not usually documented, continually improved, standardised or managed in the 1990's, but today (2010) with the increased popularity in Quality Management Systems process mapping has started to become more customary and even required in some organisations. A process map gives a better idea of the bigger picture and assists in the identification of areas requiring improvement. It highlights the main steps to achieve a desired output and facilitates process improvement where necessary to achieve higher quality. Several advantages can result from process improvement, such as: less rework, increased productivity, improved quality and decreased costs.



According to Gitlow (2005), it is important that processes should have feedback loops. A feedback loop relates information back to another stage in the process with the intention that decisions are made based on the analysis of the information. A process without a feedback loop is destined to decline and crumble, since there is no feedback data from which the process can be improved or even reinvented over time. Every process can be studied, classified, documented, standardised, improved and innovated (Gitlow, Oppenheim, Oppenheim, & Levine, Quality Management, 2005).

Processes should be used when the responsible person in a process knows how to do the activities, but want to achieve a desired result. When documenting a process one should ask the following questions:

- To whom does the process belong to or who is responsible for the process?
- What is the scope of the process? Defining a scope helps to keep the process in the specified boundaries and thus makes it easier to map.
- How does the process flow? Process flow is mapped with flowcharts, which is the primary aspect of process mapping.
- What is the goal of the process?
- Is all the data collected to map the process accurate?

Process maps should be developed from the top down, in other words the highest level tasks should be mapped first to give a better idea of the scope of the process within the system (Anjard, 1996). Different flowcharts are available for process mapping such as system flowcharts and layout flowcharts. Some of the benefits of flowcharts are: it assists in communication between departments and people, since it is an universal form of communication, helps with the planning phase of projects, gives one the bigger picture of a system, gets rid of clutter, which can shift ones focus in the wrong direction, defines responsibilities, reveals the relationships between different processes, improves the logical layout and sequencing of a process, helps to identify errors in the system and it documents the process.

See Figure 5 for an example of a very basic process map (flow chart format) in a business.

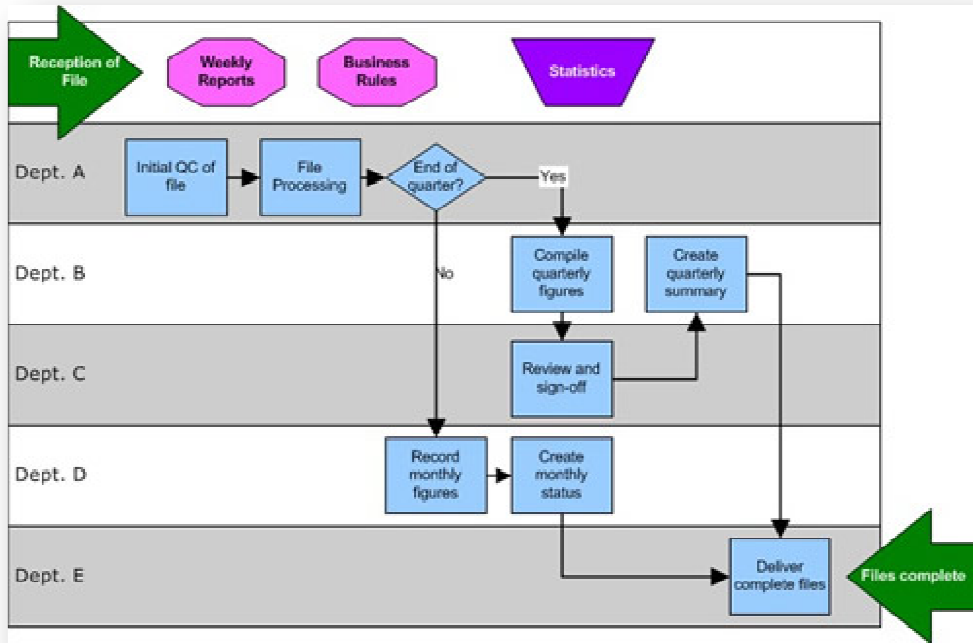


Figure 4: Process Map (PharmaPro Inc.)

According to the United Kingdom Department of Trade and Industry (2005) a process consists of the following elements: title, process purpose, process scope, inputs, outputs, controls and resources as seen in Figure 6 (United Kingdom Department of Trade and Industry, 2005).

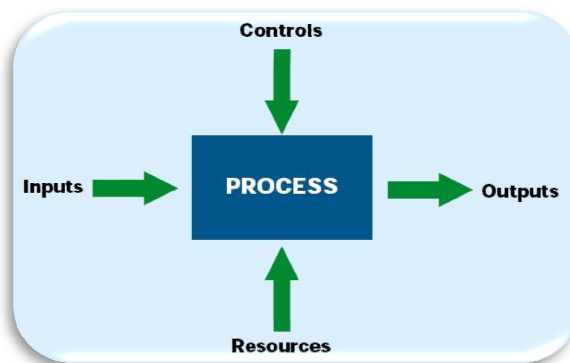


Figure 5: Process Elements

Through the identification and mapping of processes, deficiencies can easily be identified and the process improved.

Procedures is more of a how to guide and is mostly utilised by people new to the process and the tasks thereof. Procedures don't illustrate how the described task fits into to bigger picture. Table 3 below gives an overview of the differences between processes and procedures.

Table 2: Process vs. Procedure (Cunat & Graig, 2000)

Process	Procedure
Answers "What?" questions	Answers "How?" questions
Describes events or a sequence of activities/tasks that someone needs to be aware of.	Describes steps that someone follows in order to accomplish a task.
Usually involves more than one person.	Usually involves a single person (although multiple people may perform the same steps).
Provides an overall understanding of what happens and in what order.	Does not include enough information for one to understand where the task fits in the bigger picture.
Lacks the level of detail required for someone to understand how to perform a task.	Includes enough detail that a person can complete a task with little or no additional information.

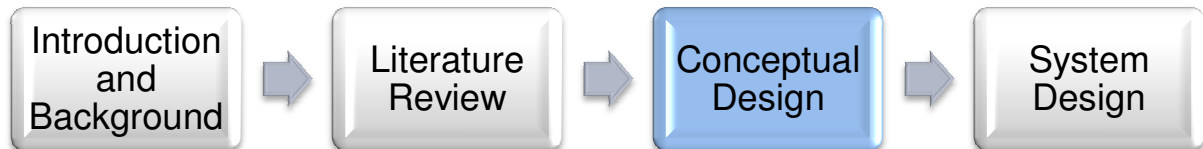


## 2.2 Chapter Two Conclusion

The literature study revealed the following information. The development of quality management in a business environment started at the end of World War II. The first method was based on defect detection and only focused on the product itself. Overtime the use of quality management has grown, which resulted in the further development of quality management methods. From this growth TQM was developed which concentrated on the management of people and processes throughout the whole organisation to meet the customer's needs. The implementation of TQM is aided by documented processes and procedures called Quality Management Systems. Different QMSs exist throughout the world, but the most popular one is the ISO 9001 standard. Many companies throughout the world implement the ISO 9001 standard to gain a competitive advantage or to catch up to their competition who is already implementing it. Quality Management Systems helps with the management of processes. The processes throughout the business should be identified, analysed, mapped and if possible improved. Process mapping is a great way to identify deficiencies and to get a bigger picture.

# Chapter Three

## 3. Conceptual Design



### 3.1 Difficulty with QMS and the Film Industry

It is clear that one cannot use a QMS as is for the film industry. The film industry for one does not function like a normal organisation or business. It will therefore be very difficult to design a QMS for the film industry. The most probable outcome for this project will be a generalized QMS, specifically developed for the film industry, to function as a guide in the film industry for the improvement of efficiency and quality. The main reason for this is that during film production many organisations and people come together to shoot the film. A film is rarely shot by just one company. It is therefore impossible to implement a QMS every time a film or television programme is shot, since it will mean everyone involved in the production of the film will have to firstly study the QMS beforehand. It will also mean that a new QMS will have to be developed for every film production to cater to that specific film's needs. It is thus decided that the QMS will rather focus on general rules, processes and procedures during production as well as the responsibilities of some of the key production personnel. Some of the problems or reasons for why a QMS will be difficult to implement in the film industry:

- A film is rarely produced by a single company
- A company is rarely responsible for the entire production of a film and the supply of all the cast and crew
- It is not possible to teach everyone working on the film a QMS beforehand
- The production of each film is unique in some ways



- The creative crew such as the director, writers and actors cannot be expected to follow procedures, since it will inhibit their creativity
- It will be difficult for old timers to accept new ways of doing things
- It is what one would call a cutthroat industry

When looking at the before mentioned problems one might ask the question: why would the development of a QMS for the film industry even be considered?

To answer that question one must first look at two major problems within the South African film industry. One: The production of a film is very chaotic and many communication gaps exist. Two: Newcomers to the industry find it difficult to integrate and to know exactly what is expected of them, since most of the time no one bothers to help them.

There is clearly a need for a system to which a person can refer to for guidance in the industry. This system must describe the different processes during film production and describe the main responsibilities of key production personnel. This is to ensure that everyone knows what is expected of them and everyone knows who does what and when.

It was therefore decided that a QMS will be used as the basis on which this system will be developed, although it will probably differ in many ways from a normal QMS.

### **3.2 Conceptual Design of QMS Structure to be used in the Film Industry**

This basic QMS design will be amended and expanded throughout the duration of this project. This is to only serve as a guideline to emphasize the main areas of the QMS, it will be developed in more detail over time.

#### Scope

- General
- Application

#### Terms and Definitions

#### Quality Management system

- General Requirements
  - Organisation Chart
  - Key production personnel responsibilities



- Pre-production Process
- Production process
- Postproduction process

Measure, Analyse and Improve

### **3.3 Chapter Three Conclusion**

Through thorough investigation of the literature concerning TQM, QMS, ISO 9001, EFQM Excellence Model ® and Process Management a conceptual structure for the film industry QMS could be developed. The detailed development of such a QMS will prove difficult for the film industry and focus should be given to processes en personnel responsibilities.

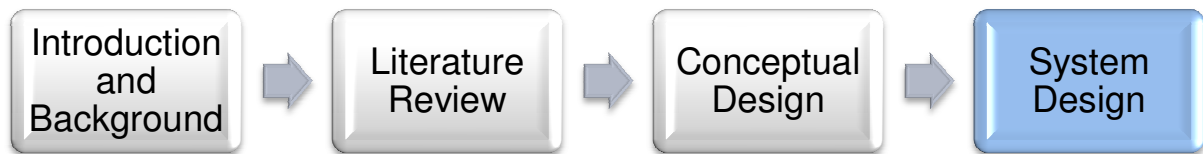


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# Chapter Four

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## 4. System Design



### 4.1 Scope

#### 4.1.1 General

The main objective of this document is to provide a better understanding of the film production process. A better understanding of the film production process could improve the communication and efficiency of a production team.

This document covers the pre-production, production and postproduction phases. It does not cover the development or distribution phase.

#### 4.1.2 Application

The utilisation of this document is aimed at newcomers to the film industry, but is not limited to newcomers to the film industry. It is intended to serve as a guideline only, since the production of a film can differ greatly from film to film.

This document is meant to be expanded even further and eventually to be printed as a guideline and handed out at film schools across the country.


This document is based on the production of a feature film, which has more resources and crew than a independent film.


## 4.2 Terms and Definitions


Table 3: Crew Abbreviations

1AD	1st Assistant Director	MC	Music Composer
2AD	2nd Assistant Director	MCO	Music Conductor
A	Accountant	ME	Music Editor
AA	Assistant Accountant	MU	Make-up
AD	Art Director	MUS	Musicians
ADR	ADR Supervisor	P	Producer
ALM	Assistant Location Manager	PC	Production Coordinator
APC	Assistant Production Coordinator	PD	Production Designer
B	Boom	PM	Production Manager
BB	Best Boy	PO	Production Office
C	Catering	PPS	Post Production Supervisor
CA	Casting Assistant	PR	Props
CD	Casting Director	PS	Production Secretary
CL	Clapper / Loader	PT	Actors / Principal Talent
CO	Camera Operator	R	Researchers
CP	Continuity Person	RN	Runners
D	Director	S	Security
DE	Dialogue Editor	SA	Sound Assistant
DG	Dolly Grip	SC	Stunt Coordinator
DOP	Director of Photography	SCS	Set Constructor
EA	Editor Assistants	SD	Set Designer
ED	Editor	SE	Sound Engineer
FF	Follow Focus	SED	Sound Editor
FS	Foley Supervisor	SM	Safety Manager
G	Gaffer	SR	Sound Recordist
GR	Grip	SS	Script Supervisor
H	Hair	TM	Transport Manager
KC	Key Crew / Department Heads	VA	Video Assistant
KG	Key Grip	VS	Visual/Special Effects Supervisor
LM	Location Manager	W	Writer
M	Mixer / Mixing Engineer	WD	Costume/Wardrobe Designer

The abbreviations in round brackets, for example (DOP), indicates who is mainly responsible for that process or activity.

The round circles  are references to the appendix for more detail on that subject matter.

The grey blocks  represent processes or activities that are not always applicable or necessary.

The white blocks  represent processes or activities that are applicable most of the time with a feature film.



### 4.3 Quality Management System

#### 4.3.1 Organisation Chart

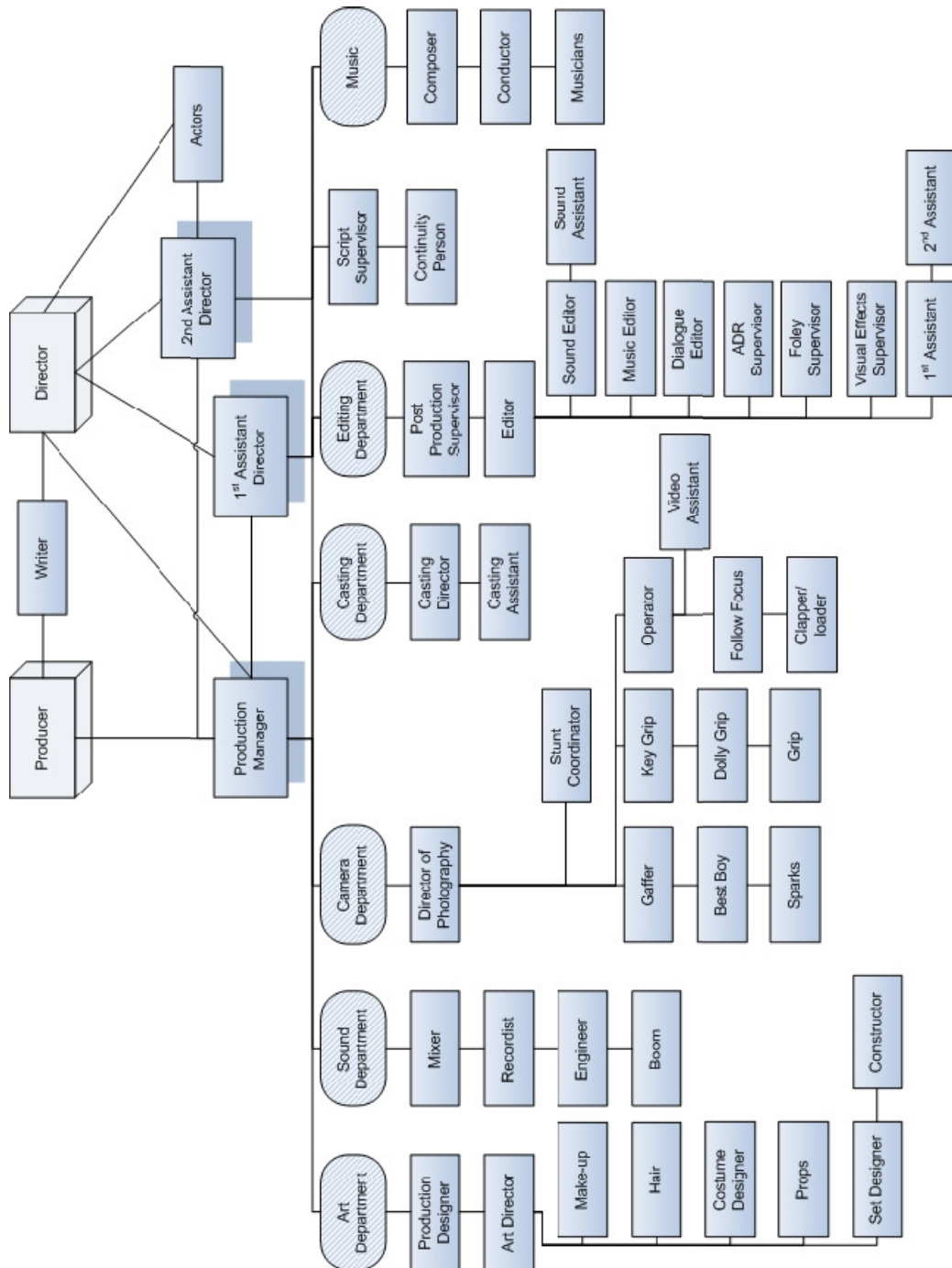


Figure 6: Organisation Chart - Main

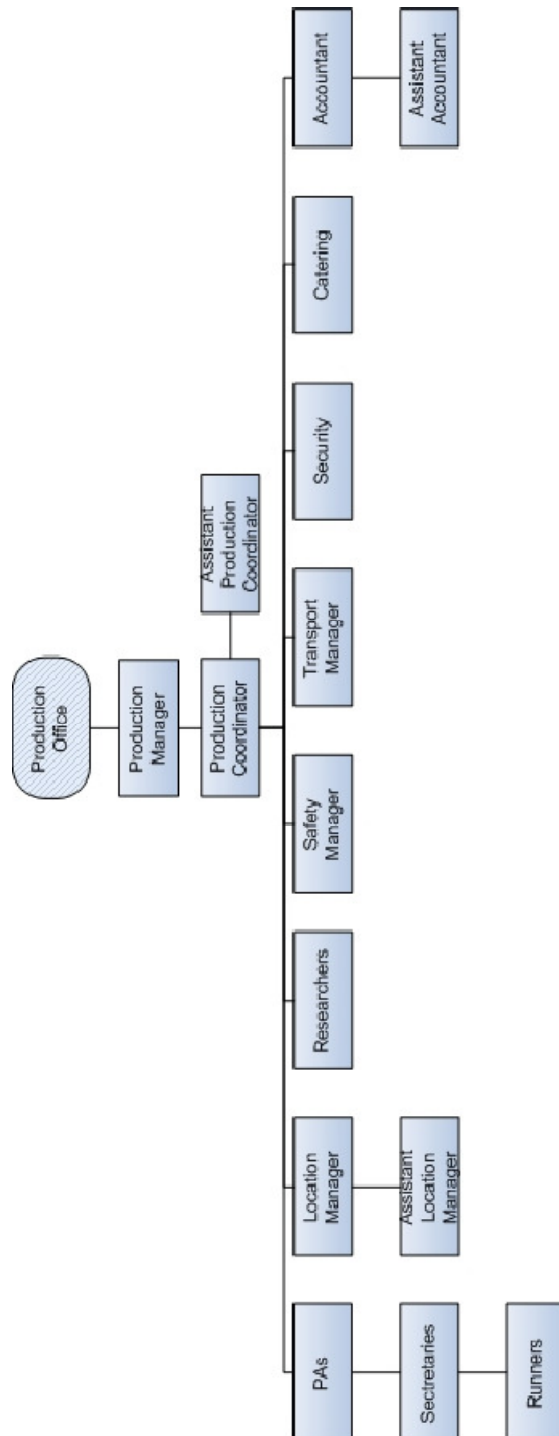


Figure 7: Organisation Chart - Production Office



### 4.3.2 Roles and Responsibilities

These are only brief summaries of the responsibilities of the key crew members. Should one go into detail, it would easily take more than five pages for each major crew member.

#### Producer

- Initiates film project
- In charge of financial aspects of film
- In charge of administrative aspects of film
- In charge of technological aspects of a film
- Have considerable influence on script, locations, production design, music, editing, marketing, costumes, crew and cast selections etc.
- Require the rights to a script/story
- Sells the idea to a studio
- Establish the legal structure
- Negotiate with unions and sign contracts
- Responsible for the delivering of the finished film
- Works closely with Director and balances the creative vision with the schedule and finances

#### Director

- Controls creative aspect of film production
- Assists with or contributes to scheduling, storyboard, casting, production design and script
- Do rehearsals with Actors
- Do blocking
- Guides and assists Actors with script and performance
- In control of the shoot
- Decides on what takes will be used
- Supplies creative input during Post Production
- Advises the Director of Photography and other technical crew



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### Production Manager / Line Producer / Unit Production Manager

- Assists Producer
- Liaison between crew and Producer
- Prepare budget and schedule
- Must be an efficient problem solver
- Effective negotiator
- Has to sign off on expenditures
- In charge of hiring crew
- Supervise all aspects of production
- Monitor and manage budget

### First Assistant Director

- Assists Director
- Liaison between the crew and the Director
- Issue the final shooting schedule
- Supervises the shooting locations selection
- Runs the set during the principal photography phase
- Calls for silence on set

### Second Assistant Director

- Works closely with casting, location manager and head of departments
- Assists with breakdowns
- Controls paperwork on-set
- Controls paperwork to be sent to production office
- Issue call sheets
- During principal photography responsible for actors, stand-ins and extras
- Supervises PAs, interns and second second assistant director
- Ensures everything is ready on-set



### Production Coordinator

- Setup production office
- Runs production office
- Hires and supervises Assistant Production Coordinator
- Hires and supervises other production office personnel not hired by Production Manager
- Assists Department Heads
- Assists Production Manager with hiring of crew
- Places bids on equipment and services
- Orders equipment and services
- Coordinate and manage accommodation and travel
- Assists Transportation Manager with shipping and transport arrangements
- Manages paperwork
- Communicates with studio, vendors, set, agents and actors etc.
- Takes care of actors
- Oversee insurance matters
- Prepares contracts for extras and stand-ins
- Coordinates dailies and the screening thereof

### Casting Director

- Evaluate potential cast for film
- Setup auditions for cast
- Help with contract negotiations regarding actors

### Post Production Supervisor

- Oversees Post Production





### Director of Photography

- Manages camera and lighting operations
- Creates desired atmosphere and mood for shot
- Light the set
- Direct technical aspects such as camera angles
- Works closely with Director
- Choose photography crew

### Location Manager

- Scouts shooting locations
- Obtain permits for shooting locations

### Music Composer

- Writes score of film
- Oversees musicians
- Oversees music editing, mixing and recording

### Mixer / Sound Mixer / Sound Designer

- Oversees all audio elements of a production
- Operates mixing board

### Production Designer

- Create the overall look and feel of the film
- Works closely with Director
- Head of Art Department

### Art Director

- Reports to Production Designer
- Oversees and manages craftsmen and artists
- Oversees wardrobe, props, hair and make-up



### Script Supervisor

- Makes notes on all the scenes during the shoot
- Checks continuity of shots and scenes
- Keeps track of the scenes , script pages, setups and deviation from script for the day

### Gaffer

- Chief Lighting Technician on-set
- Setup lighting on-set
- Ensures lighting needs are met
- Reports to Director of Photography

#### 4.3.3 The Pre-Production Phase

The pre-production phase is one of the most complicated and most important phases during film production. It is often deemed unnecessary, by some filmmakers, to give so much attention to this phase, but most of them had to pay the price for this attitude during the production/shooting phase.

In pre-production all the planning is done. Shooting a film without proper planning can be disastrous for the budget and the schedule, which is exactly what pre-production is all about. During this phase all the planning is done regarding the budget, schedule, crew, locations, equipment, design, post production, safety, travel, accommodations, special requirements and casting etc.

Figure 9 gives a general sequence layout of the pre-production phase.

Some of the processes/activities does not necessarily need to take place in pre-production. For example "Hire Director" could take place in the development phase depending on the circumstances.

**Pre-Production Sequence Diagram**

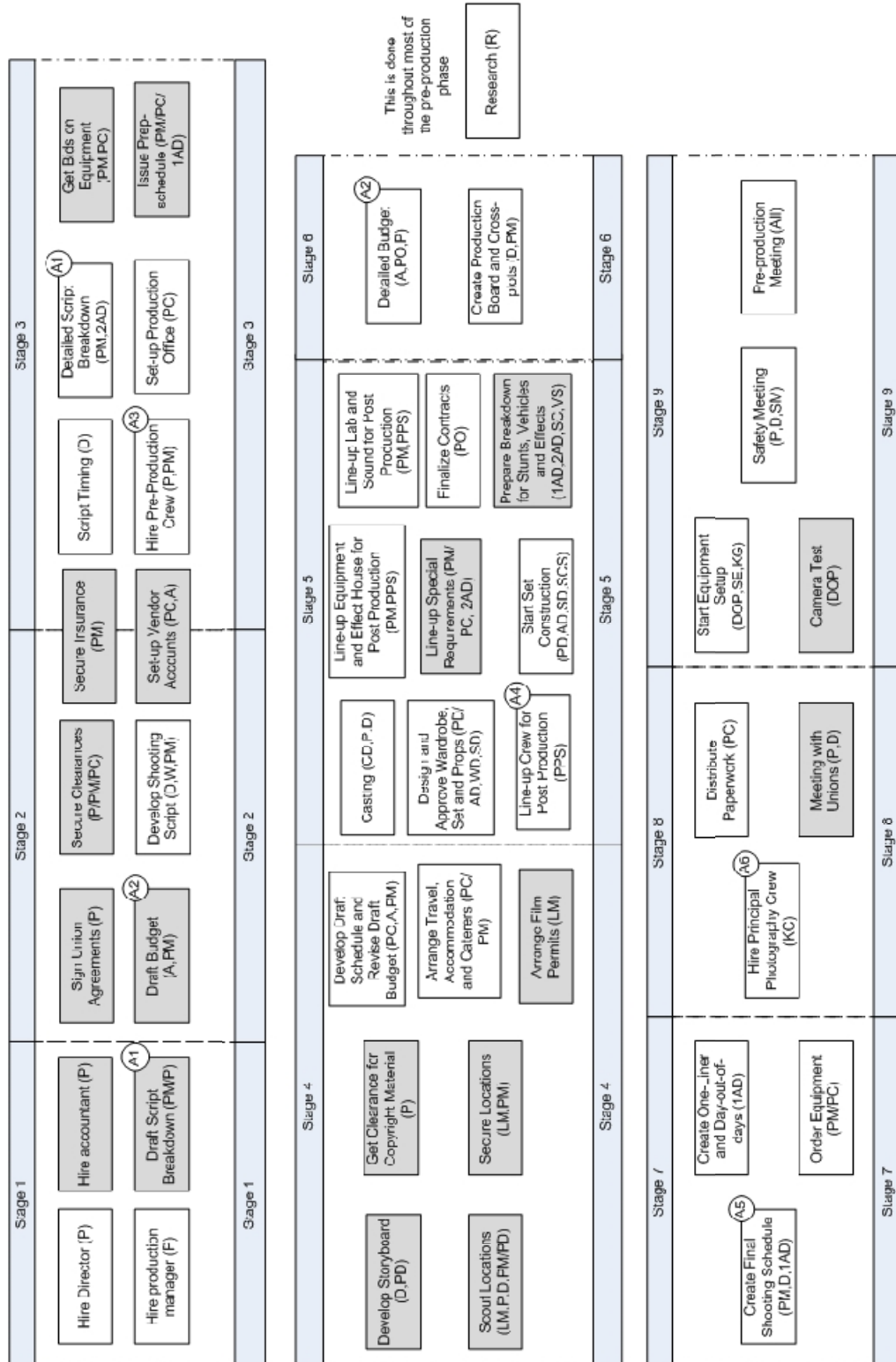


Figure 8: Pre-Production Sequence

#### 4.3.4 The Principal Photography Phase

Principal photography (aka Production) is the phase that are known to most people. This is when the actual shooting occurs, but this is just a part of the principal photography phase. Preparations doesn't stop with pre-production, it continues during this phase as changes occur. Although the production office is still hard at work, during the shoot all eyes are on the set. This is where everything could go horribly wrong or where the vision of the film is finally realised. It all depends on how thorough the planning was during pre-production phase. One of the main objectives during this phase is to keep within budget and schedule, this will take commitment from the whole production crew. The most important aim or desire for this phase is for the director to achieve his/her creative vision for the film.

The figures on the following pages gives a better picture of what happens during the production phase.

Figure 11 gives an overview of the daily routine of the production office.

Figure 12 gives an overview of the daily routine of the set.

Figure 13 gives an overview of the shooting of a scene.

Figure 14 gives an overview of final wrap of the principal photography phase.

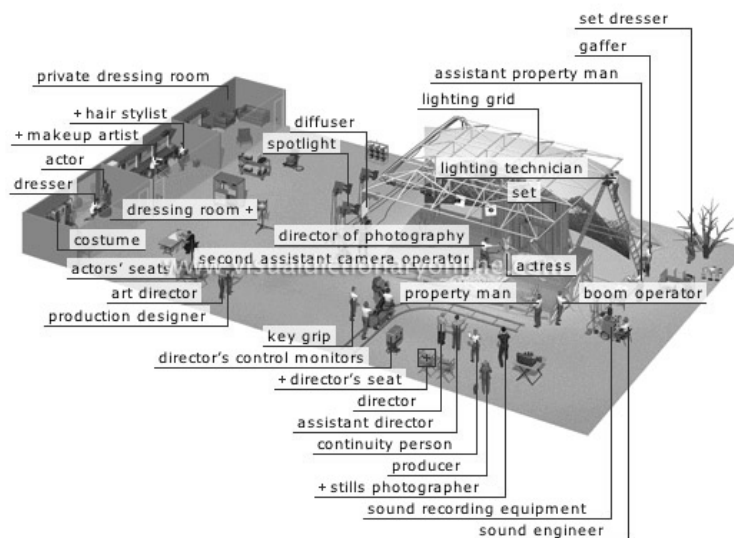


Figure 9: Sample of Film Set



**Production Office Daily Routine**

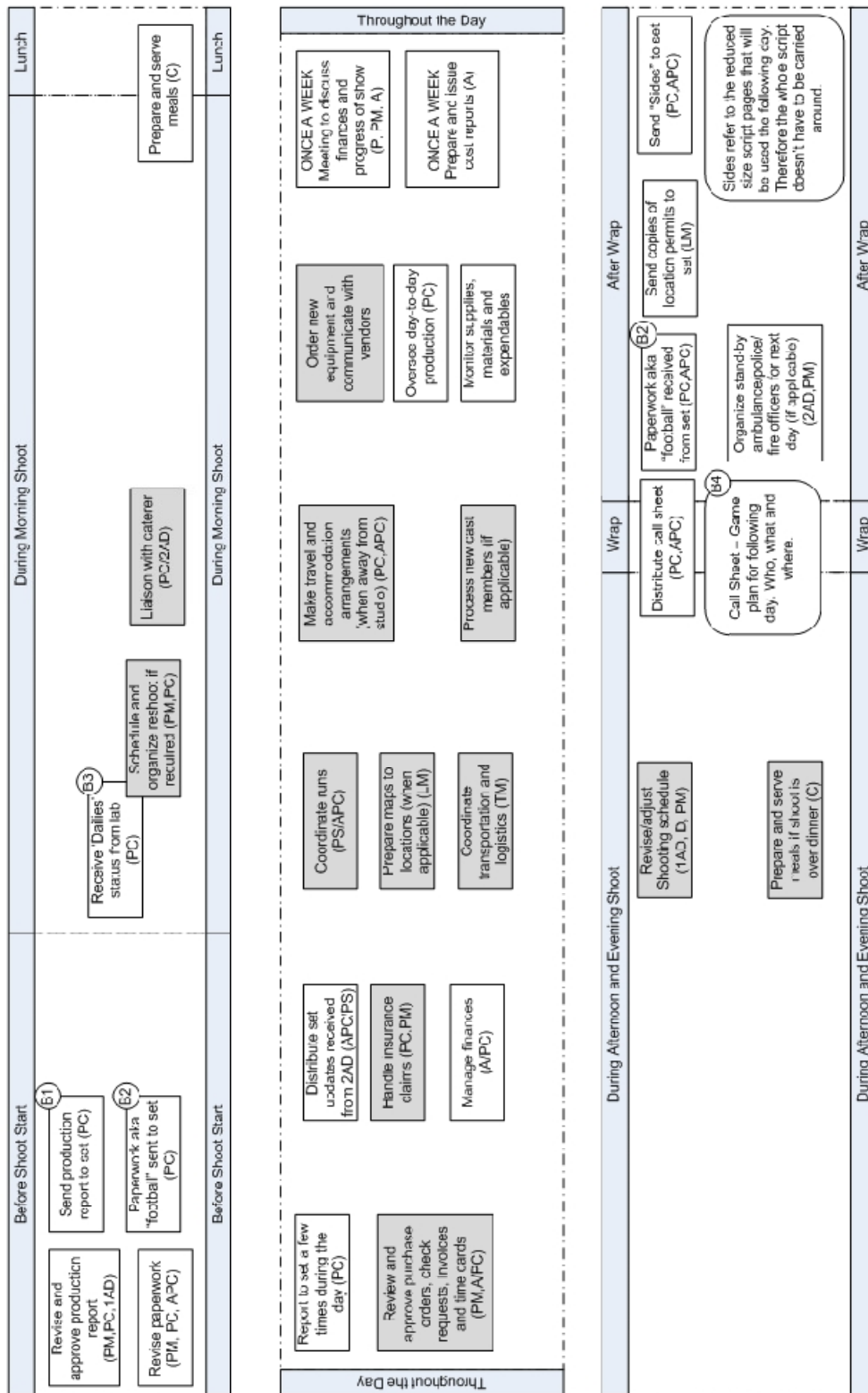


Figure 10: Production Office Daily Routine



**Film Set Daily Routine**

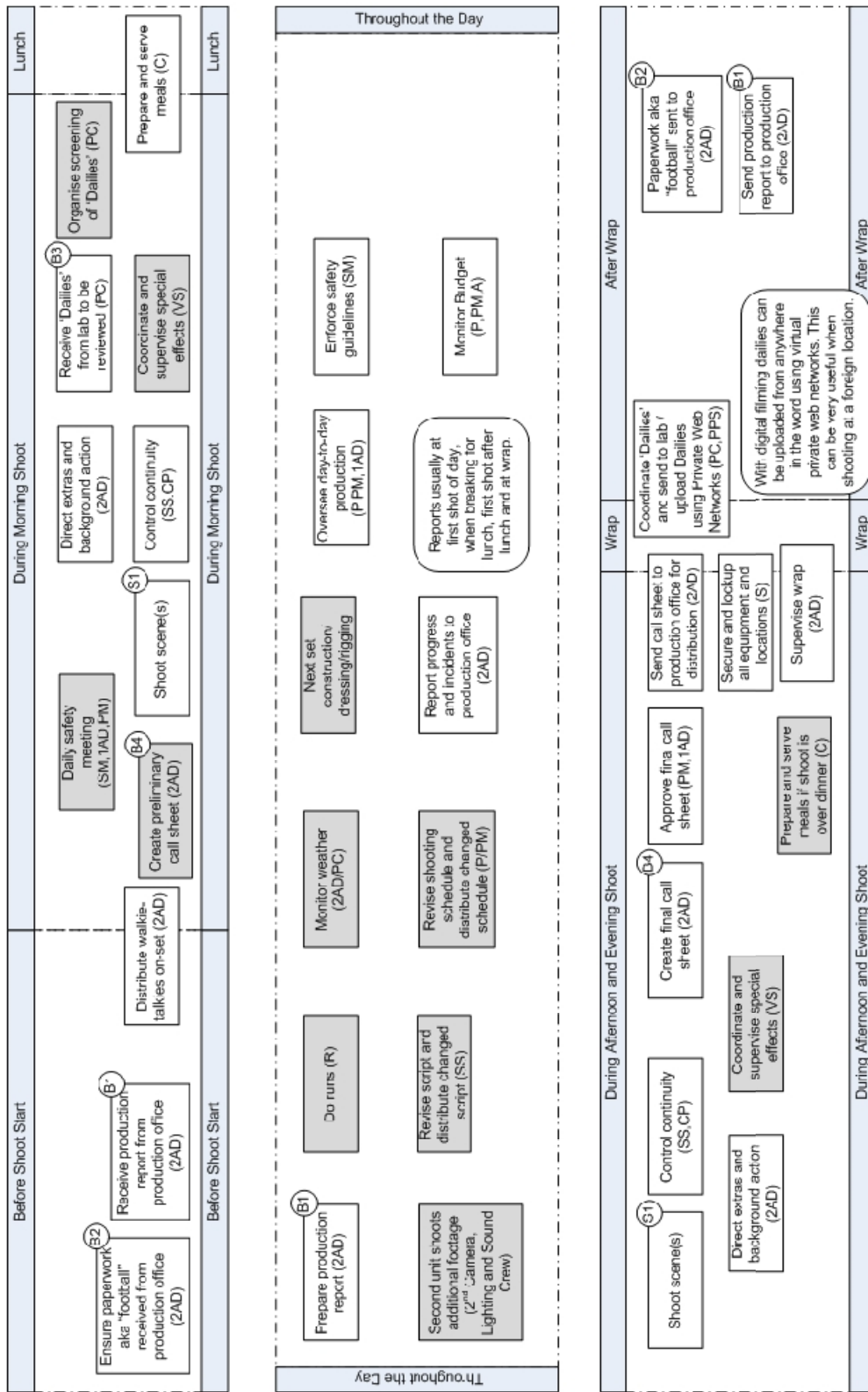


Figure 11: Film Set Daily Routine

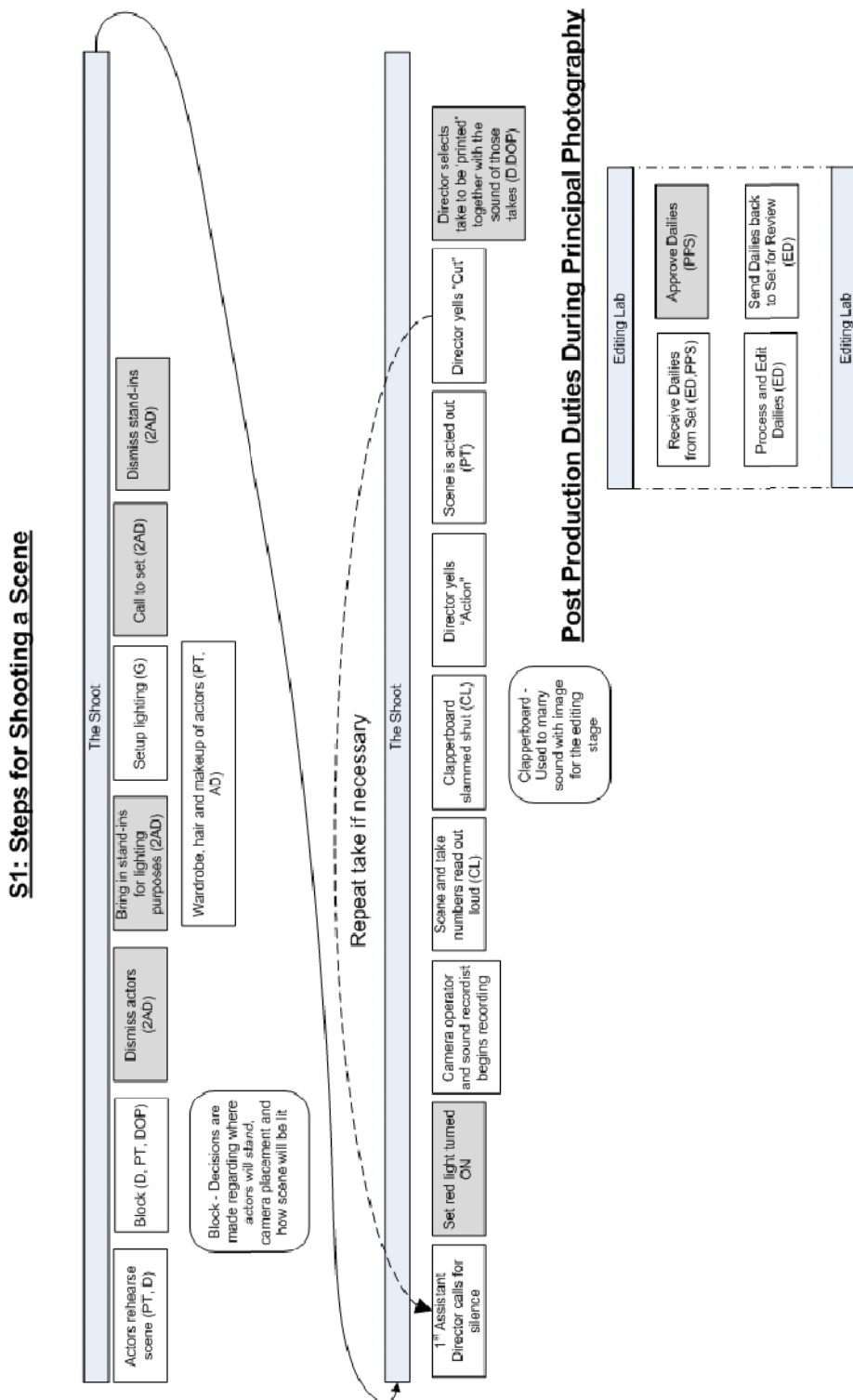


Figure 12: Shooting a Scene

## Principal Photography Wrap

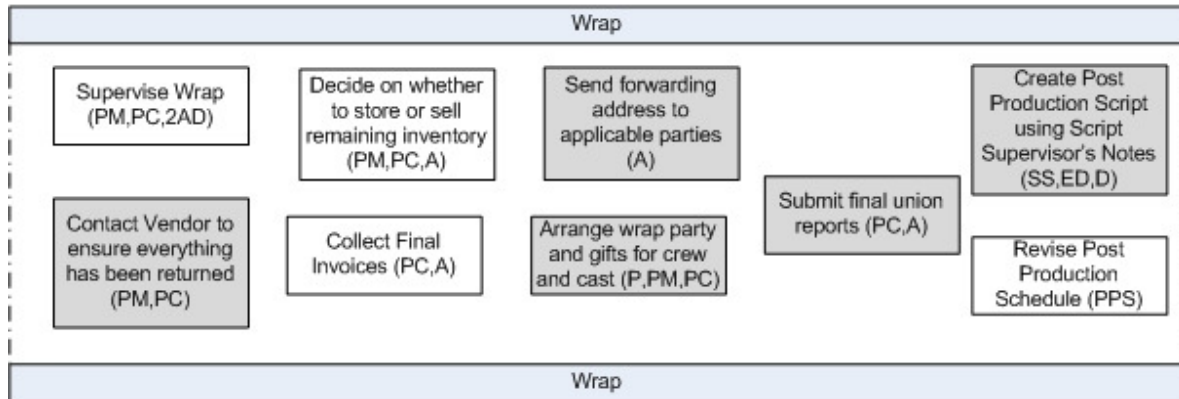


Figure 13: Wrap

### 4.3.5 Post Production Phase

This is the phase where all the elements come together. The post production phase was not meant for the correction of all the mistakes made during the principal photography phase. Mistakes should already be minimised during the production phase, before it reaches post.

Post production doesn't start at the end of the production phase, it starts after the first day of shooting. Why? It saves a great deal of time when the editor edits every day's footage as it comes in, this is called 'dailies'.

The post production of a film is extremely technical and there are many different ways in which it could be done. Now with the introduction of digital editing and digital footage, the options are even more.

One has to decide on crew, equipment, type of editing, music, type of special effects, effects house, type of format and type of software. It can be a very daunting task, but luckily when hiring a crew, one can rely on the fact that each member knows his/her own area of expertise.

Figure 15 gives an overview of post production flow, although this can change dramatically from film to film.







#### **4.4 Measurement and Analysis**

These diagrams can prove very useful in the industry for newcomers. They were compiled through extensive research on the internet and in books. The research done for these diagrams established in its own right the need for these diagram, since no such diagrams or similar entities could be found.

These diagrams are not meant to be used as is, but are meant to serve as a guide in the right direction. The reason for this, is because each film production differ from the previous and the next film production, no two are alike. Film production is a creative exercise and cannot be bound by boundaries such as set processes and procedures. Budget constraints, size of crew, country in which the film is produced, time constraints and type of film will all play a big role in the process and can therefore greatly impact the sequence and the number of activities in the diagrams.

#### **4.5 Improvement**

This QMS is only the start and there is still great room for improvement. This improvement can only be obtained through extensive knowledge of film production, it can therefore be concluded that research on this subject matter has reached its limit. To continue to improve the accuracy and range of these diagrams, knowledge will need to be gained by means of film school or actual work experience in the film industry.



# Chapter Five

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## 5. Conclusion

The Quality Management System will serve as an overall guideline of the production process to people in the industry. A Quality Management System will greatly improve the chances of success for a film and the overall working conditions of the crew during the film production.

The QMS took shape in the form of a scope, terms and definitions, organisation chart, roles and responsibilities, the pre-production sequence, the principal photography sequence, the post production sequence, information and process maps of key procedures in these phases.

With this QMS which will serve as a guide the responsibilities of each crew member will become more clear, it will give an overall picture of each phase and its main activities, it can improve the consistency of the workflow, mistakes can be traced easier and its main use is that it will serve as a handy guide for newcomers to the film industry.



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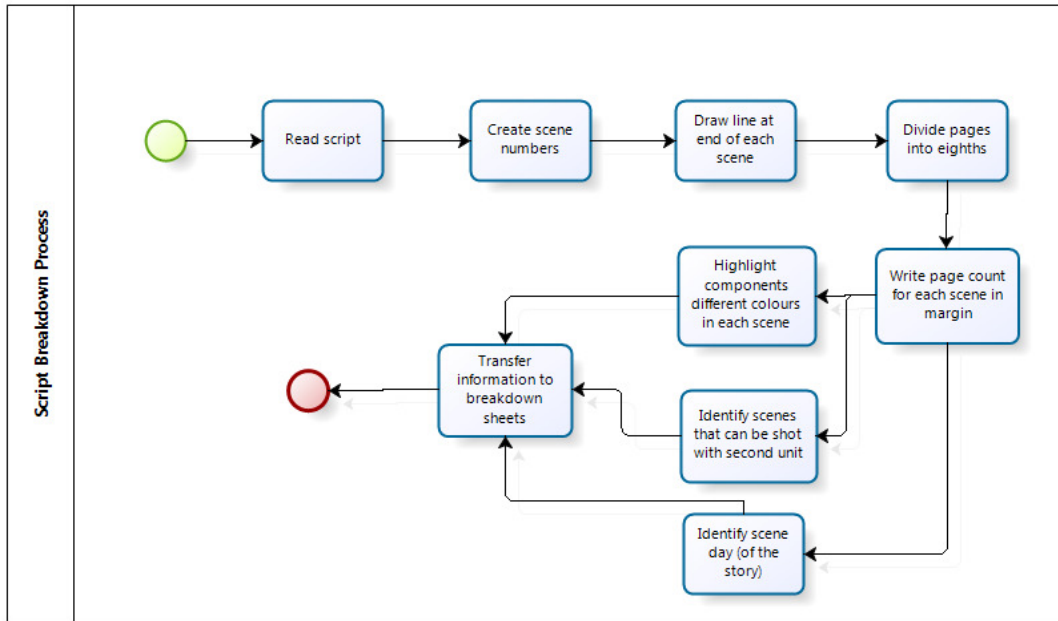
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## 7. Appendix

### 7.1 A1: Script Breakdown Process



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BizAgi  
Process Modeler

Figure 15: Script Breakdown

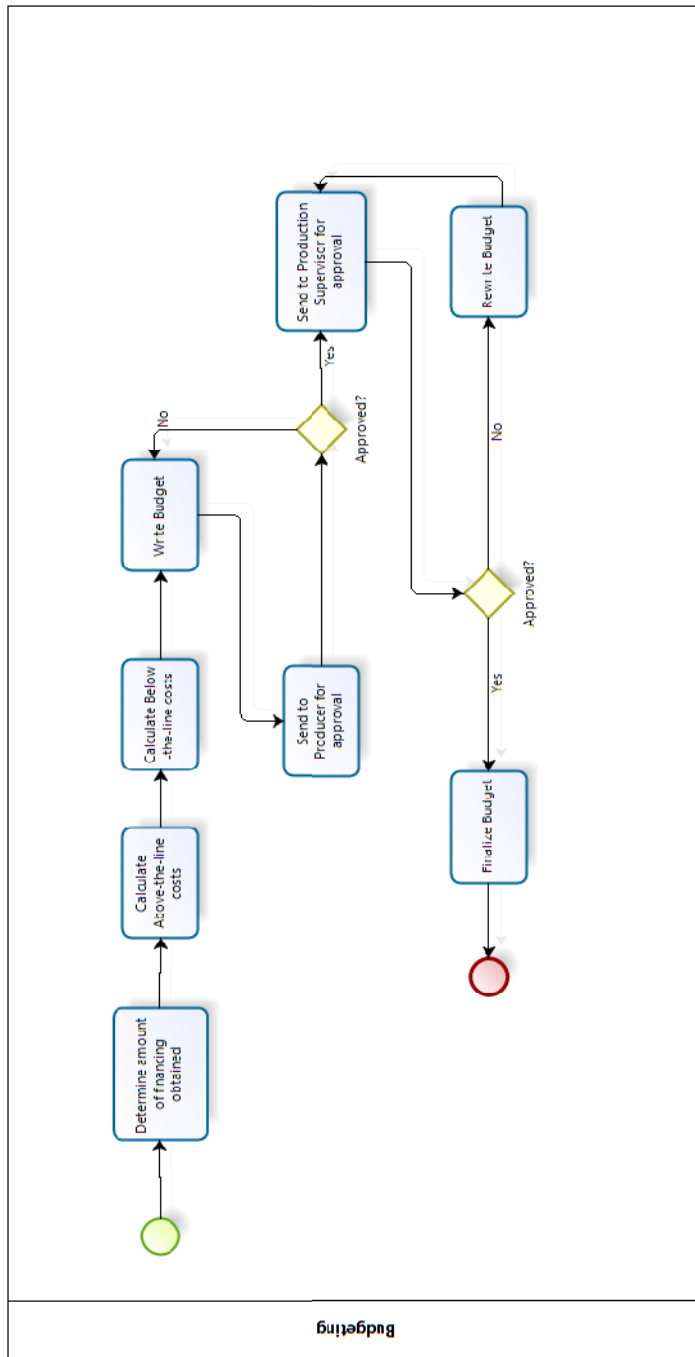


- 20 EXT. LAURA'S HOUSE/BACKYARD - DAY 1/8
- LAURA, the woman in the window, is a beautiful woman about 30 YEARS OLD, and in marvelous shape. She's coming out of the house. She's wearing a white BIKINI. She carries a MAKE-UP BAG and has a TOWEL over one arm. She checks her BLACKBERRY for messages as she walks across the lawn toward the end of the swimming pool, closest to the fence.
- LOCATION
- 
- 21 EXT. ALLEY/FENCE - DAY 2/8
- The boys take turns looking through the opening between the loose boards in the fence. Jed pulls away as Laura nears.
- ALL THREE... CONSTRUCTION?
- JED  
(whispers)  
Duck, she's coming this way.
- The boys press tightly against the fence until they're sure they're safe, then they resume watching.
- 
- 22 EXT. LAURA'S BACKYARD - DAY 1/8
- She spreads her towel on the back of a lounge chair and sits down - picking up a magazine that had been sitting on a small table next to the chair. She places her Blackberry and makeup bag on the table, lies back and starts flipping through the magazine. She's wearing designer sunglasses.
- 
- 23 EXT. ALLEY/FENCE - DAY 2/8
- This is a good game, spying on someone. It's scary but exciting, too. They wait quietly, then Jed sneaks a peak. After a moment, Marc pushes him aside and looks. He just gets set when the patio door opens again.
- MARC  
A man's coming.
- 
- 24 EXT. LAURA'S BACKYARD - DAY 1/8
- STEVE is a handsome man, also about 30 YEARS OLD. Dressed in SLACKS and a SPORT SHIRT he has a SPORT COAT draped over his arm. He's angry as he approaches Laura and stands over her.
- 
- 25 EXT. FENCE - DAY 1/8
- Marc is looking through the fence.
- HERBY  
Let me see.

Figure 16: Script Breakdown Example

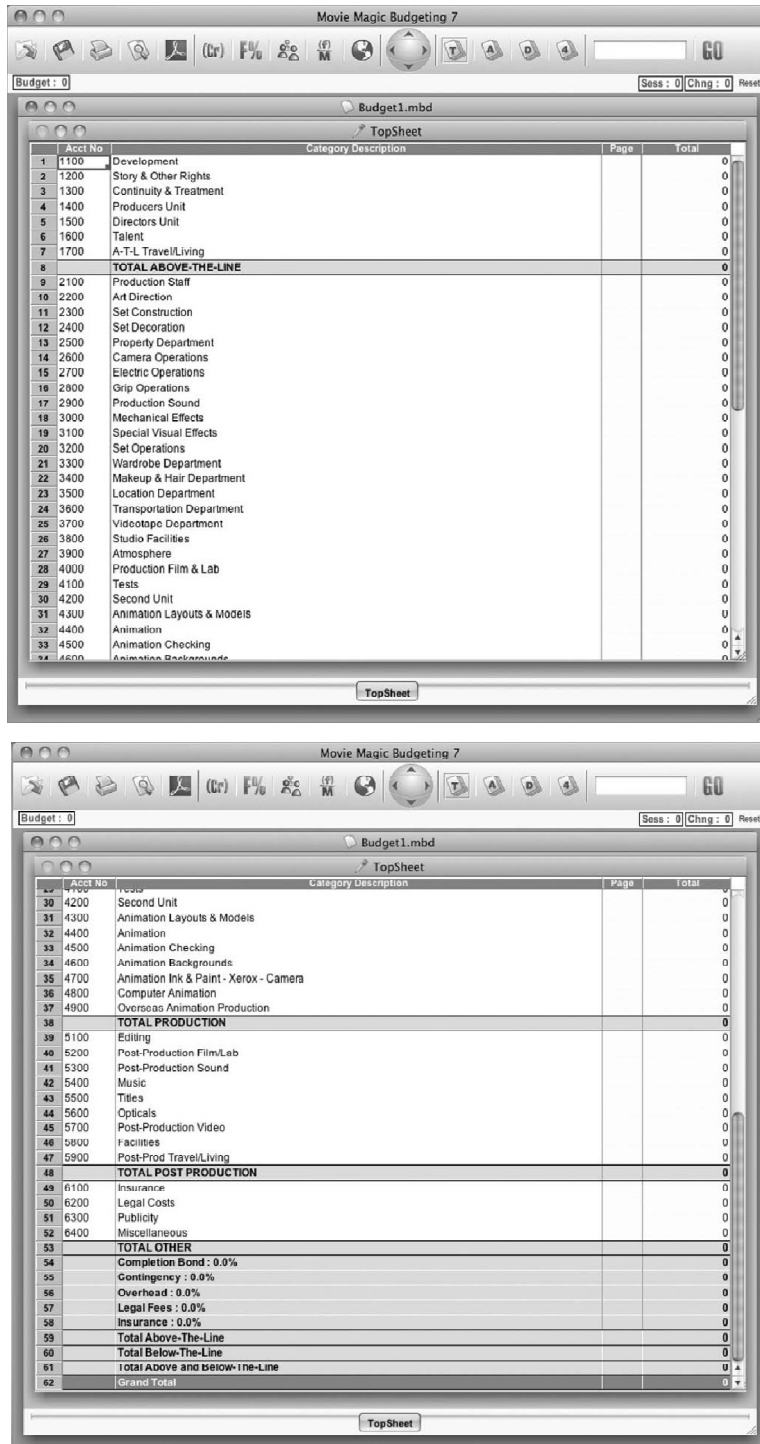


## 7.2 A2: Budgeting



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BizAgil  
Process Modeler

Figure 17: Budgeting Process



The image shows two screenshots of the Movie Magic Budgeting 7 software interface. The top screenshot displays a 'TopSheet' for 'Budget1.mbd' with a budget of 0. The bottom screenshot shows a more detailed 'TopSheet' for the same budget, including production and post-production costs, and a grand total of 0.

Acct No	Category Description	Page	Total
1 1100	Development		0
2 1200	Story & Other Rights		0
3 1300	Continuity & Treatment		0
4 1400	Producers Unit		0
5 1500	Directors Unit		0
6 1600	Talent		0
7 1700	A-T-L Travel/Living		0
8	<b>TOTAL ABOVE-THE-LINE</b>		<b>0</b>
9 2100	Production Staff		0
10 2200	Art Direction		0
11 2300	Set Construction		0
12 2400	Set Decoration		0
13 2500	Property Department		0
14 2600	Camera Operations		0
15 2700	Electric Operations		0
16 2800	Grip Operations		0
17 2900	Production Sound		0
18 3000	Mechanical Effects		0
19 3100	Special Visual Effects		0
20 3200	Set Operations		0
21 3300	Wardrobe Department		0
22 3400	Makeup & Hair Department		0
23 3500	Location Department		0
24 3600	Transportation Department		0
25 3700	Videotape Department		0
26 3800	Studio Facilities		0
27 3900	Atmosphere		0
28 4000	Production Film & Lab		0
29 4100	Tests		0
30 4200	Second Unit		0
31 4300	Animation Layouts & Models		0
32 4400	Animation		0
33 4500	Animation Checking		0
34 4600	Animation Backgrounds		0
35 4700	Animation Ink & Paint - Xerox - Camera		0
36 4800	Computer Animation		0
37 4900	Overseas Animation Production		0
38	<b>TOTAL PRODUCTION</b>		<b>0</b>
39 5100	Editing		0
40 5200	Post-Production Film/Lab		0
41 5300	Post-Production Sound		0
42 5400	Music		0
43 5500	Titles		0
44 5600	Opticals		0
45 5700	Post-Production Video		0
46 5800	Facilities		0
47 5900	Post-Prod Travel/Living		0
48	<b>TOTAL POST PRODUCTION</b>		<b>0</b>
49 6100	Insurance		0
50 6200	Legal Costs		0
51 6300	Publicity		0
52 6400	Miscellaneous		0
53	<b>TOTAL OTHER</b>		<b>0</b>
54	Completion Bond : 0.0%		0
55	Contingency : 0.0%		0
56	Overhead : 0.0%		0
57	Legal Fees : 0.0%		0
58	Insurance : 0.0%		0
59	Total Above-The-Line		0
60	Total Below-The-Line		0
61	Total Above and Below-The-Line		0
62	Grand Total		0

Figure 18: Budgeting Example



### 7.3 A3: Hire Pre-Production Crew

By this time the following crew are already hired:

Producer

Director

Accountant

Production Manager

Writer

At this stage the following crew should be hired:

Table 4: Pre-Production Crew

1st Assistant Director
2nd Assistant Director
Assistant Accountant
Art Director
Assistant Location Manager
Assistant Production Coordinator
Catering
Casting Assistant
Casting Director
Director of Photography
Location Manager
Production Coordinator
Production Designer
Post Production Supervisor
Production Secretary
Actors / Principal Talent
Researchers

### 7.4 A4: Line-up Post Production Crew

Some of the Post Production crew members are lined up at this stage. This will ensure that when Post Production commences the crew that you are interested in is available. It should be noted that the actual hiring of the crew will take place at a later stage. Post Production crew members that will be part of the Principal Photography phase are not included in this list.

Table 5: Post Production Crew

ADR Supervisor
Dialogue Editor
Editor
Foley Supervisor
Music Composer
Music Conductor
Music Editor
Musicians
Sound Editor

### 7.5 A5: Shooting Schedule Process

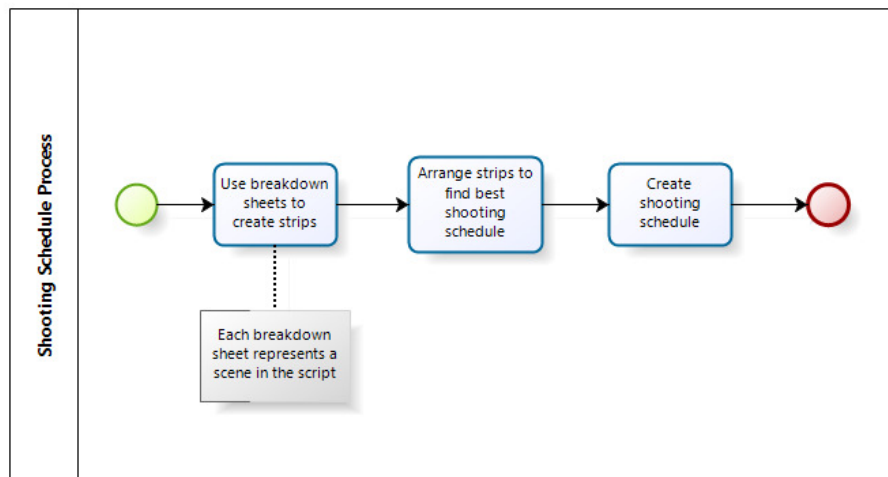


Figure 19: Shooting Schedule

## 7.6 A6: Hire Principal Photography Crew

The rest of the crew is hired for the Principal Photography phase.

Table 6: Principal Photography Crew

Boom
Best Boy
Clapper / Loader
Camera Operator
Continuity Person
Dolly Grip
Editor
Follow Focus
Gaffer
Grip
Hair
Key Grip
Mixer / Mixing Engineer
Make-up
Post Production Supervisor
Props
Actors / Principal Talent
Runners
Security
Sound Assistant
Stunt Coordinator
Set Constructor
Set Designer
Safety Manager
Sound Recordist
Script Supervisor
Transport Manager
Video Assistant
Visual/Special Effects Supervisor
Costume/Wardrobe Designer



### 7.7 B1: Production Report

The Production report is the formal record of what was shot during the day in terms of shooting locations, number of meals served, any incidents that occurred, delays, equipment and vehicle used, scene numbers, number of setups, total minutes, film and recorded sound.

Production Reports indicate the overall progress of the Principal Photography and the expenditure, it keeps track of meetings, checks time cards of cast and crew and verify invoices of vehicle and equipment used.

DAILY PRODUCTION REPORT										
	PRE-SHOOT	1st UNIT	2nd UNIT	TESTS	TRAVEL	HOLIDAYS	ADDED DAYS	TOTAL	STATUS OF SCHEDULE	
# Days Sched.									DAYS AHEAD	
# Days Actual									DAYS BEHIND	
Production Company:						Date:				
Show Title:					Prod#:	Day # of				
Director:						Start Date:				
Exec. Producer(s):						Scheduled Finish Date:				
Producer(s):						Estimated Finish Date:				
Production Co. Address/Phone:										
SETS			SCENES			LOCATIONS				
									Crew call:	
									Shooting call:	
									First shot:	
									Lunch in:	
									Lunch out:	
									First shot after lunch:	
									2nd meal in:	
									2nd meal out:	
									Camera wrap:	
									Last man out:	
SCRIPT SCENES & PAGES				RETAKE				SOUND		
	Scenes	Pages		Minutes	Setups	Added Scs.	Pages	Scenes	PREV.	
Script Total			Prev.						TODAY	
Taken Prev.			Today						TOTAL	
Taken Today			Total							
Total to Date	Scenes Completed:									
To be Taken	Partial Scenes Completed:									
	Scenes Scheduled, Not Shot:									
	Scenes Shot, Not Scheduled:									
Film Stock:	Good	No Good	Waste	Total	ON HAND		FILM INVENTORY Cumulative Totals			
PREV					REC'D TODAY		TOTAL RECEIVED			
TODAY					USED TODAY		USED TODAY			
TOTAL					ON HAND		TOTAL USED			
Notes:					TOTAL REC'D					
Film Stock:	Good	No Good	Waste	Total	ON HAND					
PREV					REC'D TODAY					
TODAY					USED TODAY					
TOTAL					ON HAND					
Notes:					TOTAL REC'D					
Film Stock:	Good	No Good	Waste	Total	ON HAND					
PREV					REC'D TODAY					
TODAY					USED TODAY					
TOTAL					ON HAND					
Notes:					TOTAL REC'D					

Figure 20: Daily Production Report





SHOW TITLE:				PRODUCTION CO:										
DATE:				DAY# of										
#	STAFF & CREW		IN	OUT	#	STAFF & CREW		IN	OUT	#	STAFF & CREW		IN	OUT
<b>PRODUCTION/DIRECTION</b>				<b>SOUND</b>				<b>POST PRODUCTION-EDITORIAL</b>						
DIRECTOR				SOUND MIXER				POST PROD SUPV'R						
UPM				BOOM OPERATOR				POST PROD COORD						
PROD SUPVR				CABLE UTILITY				EDITOR						
1ST AD				PLAYBACK				ASST. EDITOR						
2ND AD				UTILITY SOUND				ASST. EDITOR						
2ND 2ND AD								VFX EDITOR						
DGA TRAINEE				<b>GRIP</b>				EDITORIAL PA						
SCRIPT SUPV'R				KEY GRIP										
KEY SET PA				BEST BOY GRIP				<b>SET OPERATIOS</b>						
SET PA(S)				DOLLY GRIP				SET MEDIC						
				GRIP(S)				FIR (STUDIO)						
STUDIO TEACHER				GRIP(S)				POLICE (STUDIO)						
2ND UNIT DIR								SECURITY (STUDIO)						
2ND UNIT 1ST AD				KEY RIGGING GRIP				CRAFT SERVICE						
2ND UNIT 2ND AD				BB RIGGING GRIP				ASST CRAFT SER						
2ND UNIT SCRIPT				RIGGING GRIPS				ADDTL CRAFT SER						
2ND UNIT PA														
				<b>COSTUMES</b>				<b>LOCATIONS</b>						
<b>PRODUCTION OFFICE</b>				COSTUME DESIGNE				LOCATION MANAGER						
PROD COORDINATOR				COSTUME SUPV'R				KEY ASST LOC MGR						
TRAVEL COORDINATOR				ASST COST DESNR				ASST LOC MGR						
SHIPPING COORDINATOR				KEY COSTUMER				ASST LOC MGR						
ASST PROD COORD				SET COSTUMER				LOCATION SCOUT						
PROD SECT'Y				SET COSTUMER				LOCATION PA						
OFFICE PA								SECURITY (LOC)						
OFFICE PA				SEAMSTRESS										
ASST. TO EXEC PROD				AGER/DYERS				<b>CATERING</b>						
ASST. TO PRODUCER				SHOPPER				CHEF						
ASST. TO DIRECTOR				COSTUME PA				COOK(S)						
								COOK/DRIVER						
								COOKS' HELPER(S)						
								# BREAKFASTS SERVED						
								# LUNCHES SERVED						
<b>ACCOUNTING</b>				<b>ART DEPARTMENT</b>				<b>VISUAL EFFECTS</b>						
PROD. ACCOUNTANT				PROD. DESIGNER				VFX SUPERVISOR						
1ST ASST PROD ACCNT				ART DIRECTOR				VFX COORDINATOR						
2ND ASST PROD ACCNT				ASST ART DIR				VFX SURVEYOR						
ASSISTANT ACCNT								VFX PA						
PAYROLL ACCNT				SET DESIGNER										
ACCOUNTING CLERK				MODEL MAKER										
ACCOUNTING CLERK				ART DEPT COORD										
				ART REEARCH										
				ART DEPT PA										
<b>PUBLICITY</b>				<b>SET DECORATING</b>				<b>STUNTS</b>						
UNIT PUBLICIST				SET DECORATOR				STUNT COORD						
				ASST SET DEC				ASST STUNT COORD						
				LEADPERSON										
				BUYER				<b>ANIMALS</b>						
				SET DRESSERS				WRANGLER (S)						
				SET DEC COORD				TRAILER(S)						
								ANIMALS:						
<b>CASTING</b>														
CASTING DIRECTOR														
CASTING ASSOCIATE														
CASTING ASSISTANT														
<b>BACKGROUND CASTING</b>														
BG CASTING DIRECTOR														
BG CASTING ASST.														

Figure 22: Daily Production Report 3





		ON-SET ART DEPT/SET DRESSING			TRANSPORTATION			A L L  C A L L S  P E R  T R A N S P O R T A T I O N  C O O R D I N A T O R	
<b>CAMERA</b>		GREENS FOREMAN				<b>TRANSPORTATION</b>			
DP		GREENSMAN				TRANSP COORD			
A CAMERA OPERATOR		STAND-BY PAINTER				TRANSPO CAPTAIN			
A CAMERA 1ST AC		ON-SET DRESSER				DISPATCHER			
A CAMERA 2ND AC						PICTURE CAR COORD			
B CAMERA OPERATOR		<b>PROPS</b>				TRANS DEPT ASST			
B CAMERA 1ST AC		PROPERTY MASTER				DRIVERS			
B CAMERA 2ND AC		ASST PROP MSTR				TRANSPO TRAILER			
STEADI CAM OPER		ASST PROPWEAPONS				CAMERA TRUCK			
LOADER		ARMORER				PROP TRUCK			
DIGITAL IMAGING TECH		PROP MSTR (2ND U)				GRIP TRUCK			
DIGITAL UTILITY		PROPERTY COORD				ELECTRIC TRUCK			
CAMERA PA		<b>CONSTRUCTION</b>				WARD TRAILER			
VIDEO ASSIST		CONST COORD				MAKE-UP TRAILER			
VIDEO ASSIST		GENERAL FOREMAN				SOUND/VIDEO			
TECHNOCRANE OPER		CONST BUYER				SFX TRAILER			
LIBRA HEAD TECH		MILL FOREMAN				FUEL TRUCK			
STILL PHOTOGRPHR		PROPMAKER FRMN				MECHANIC TRUCK			
		PROPMAKERS				WATER TRUCK			
		PAINT FOREMAN				MAXI VANS			
<b>ELECTRIC</b>		PAINTER				STAKEBEDS			
CHIEF LIGHTING TECH		SCULPTORS				HONEYWAGON			
LAMP OPERATOR(S)		PLASTERERS				BUS/ PEOPLE MOVER			
LAMP OPERATOR		LABORERS				3-RM TRAILERS			
DIMMER OPERATOR		<b>SPECIAL EFFECTS</b>				2-RM TRAILERS			
RIGGING GAFFER		SFX SUPERVISOR				SINGLE TRAILERS			
RIGGING BEST BOY		SFX COORD				POP-OUT TRAILERS			
RIGGING ELECTS		FOREMAN/ BUYER				DIRECTOR'S TRAILERS			
		SET FOREMAN				PRODUCERS' TRAILERS			
<b>MAKE-UP/HAIR</b>		POWDER GANG BOSS				SCHOOL ROOM			
DEPT. HEAD MU		SFX TECH/POWDER				GENERATORS			
KEY MU ARTIST		SFX TECH(S)				CRANE			
MU ARTIST		MOT. CONTROL TECH				CONDOR			
DEPT. HEAD HAIR		<b>COMMUNICATIONS</b>				SCISSOR LIFT			
KEY HAIR STYLIST		SATELLITE TECH				INSERT CAR			
ADDTL HAIR STYLIST						CAST CAR			
						CAST CAR			
SFX MAKE-UP						CAR CARRIER			
PROSTHETICS						PICTURE CARS			
Special Notes:						<b>SPECIAL EQUIPMENT</b>			
UPM		1ST ASST. DIR.				KEY 2ND ASST. DIR.			

Figure 23: Daily Production Report 4



## 7.8 B2: Paperwork

The paperwork that moves between the production office and the set is also known as the "football". This paperwork depends of the type and size of the film. The following paperwork represents the standard paperwork for a feature film.

- Petty cash envelopes
- Script supervisor's daily report
- Signed contracts
- Crew requests for equipment and expendables
- Box rental inventories
- Abbreviated production report (Daily Wrap)
- Vendor receipts
- Caterer's receipt
- Workers' compensation
- Auto accident reports
- Start slips
- Sound reports
- Extra vouchers
- Unapproved/approved production report
- Time cards
- Completed daily safety meeting reports
- Tax forms
- Skins
- Invoices
- Camera reports
- Completed check requests

## 7.9 B3: Dailies

Dailies are the takes selected from the day before. They are sent to lab each day to be edited and to check if reshoot is required. The Director normally views Dailies first. These Dailies are then finally used in the Post Production phase.





SPECIAL INSTRUCTIONS					
<i>CAMERA:</i>	<i>ART DEPT/SET DRESSING:</i>				
<i>GRIP/ELECT:</i>	<i>PROPS:</i>				
<i>SOUND:</i>	<i>TRANSPO:</i>				
<i>MU/HAIR:</i>	<i>SFX:</i>				
<i>WARDROBE:</i>	<i>VFX:</i>				
<i>LOCATIONS:</i>	<i>STUNTS:</i>				
<i>DIGITAL IMAGING:</i>	<i>MISC:</i>				
ADVANCE SCHEDULE					
DATE & SET	SCENE # S	CAST #S	D/N	PGS	LOCATION
UPM	1ST ASST. DIR.	KEY 2ND ASST. DIR.		SET CELL#	

Figure 25: Call Sheet 2



NO FORCED CALLS OR 6TH OR 7TH DAYS WORKED W/OUT PRIOR APPROVAL FROM UPM \* ALL CALLS SUBJECT TO CHANGE BY THE UPM OR ADS

SHOW TITLE:				PRODUCTION CO:							
DATE:				DAY# of							
#	STAFF & CREW	LV	CALL	#	STAFF & CREW	LV	CALL				
<b>PRODUCTION/DIRECTION</b>				<b>SOUND</b>				<b>POST PRODUCTION-EDITORIAL</b>			
	DIRECTOR				SOUND MIXER				POST PROD SUPV'R		
	UPM				BOOM OPERATOR				POST PROD COORD		
	PROD SUPV'R				CABLE UTILITY				EDITOR		
	1ST AD				PLAYBACK				ASST. EDITOR		
	2ND AD				UTILITY SOUND				ASST. EDITOR		
	2ND 2ND AD								VFX EDITOR		
	DGA TRAINEE								EDITORIAL PA		
	SCRIPT SUPV'R				<b>GRIP</b>						
	KEY SET PA				KEY GRIP						
	SET PA(S)				BEST BOY GRIP						
					DOLLY GRIP				<b>SET OPERATIONS</b>		
					GRIP(S)				SET MEDIC		
	STUDIO TEACHER				GRIP(S)				FIRE (STUDIO)		
	2ND UNIT DIR				GRIP(S)				POLICE (STUDIO)		
	2ND UNIT 1ST AD				KEY RIGGING GRIP				SECURITY (STUDIO)		
	2ND UNIT 2ND AD				BB RIGGING GRIP				CRAFT SERVICE		
	2ND UNIT SCRIPT				RIGGING GRIPS				ASST CRAFT SER		
	2ND UNIT PA								ADDTL CRAFT SER		
<b>PRODUCTION OFFICE</b>				<b>COSTUMES</b>				<b>LOCATIONS</b>			
	PROD COORDINATOR				COSTUME DESIGNE				LOCATION MANAGER		
	TRAVEL COORDINATOR				COSTUME SUPV'R				KEY ASST LOC MGR		
	SHIPPING COORDINATOR				ASST COST DESNR				ASST LOC MGR		
	ASST PROD COORD				KEY COSTUMER				ASST LOC MGR		
	PROD SECT'Y				SET COSTUMER				LOCATION SCOUT		
	OFFICE PA				SET COSTUMER				LOCATION PA		
	OFFICE PA				SEAMSTRESS				SECURITY (LOC)		
	ASST. TO EXEC PROD				SEAMSTRESS						
	ASST. TO PRODUCER				AGER/DYERS				<b>CATERING</b>		
	ASST. TO DIRECTOR				SHOPPER				CHEF		
					COSTUME PA				COOK(S)		
									COOK/DRIVER		
									COOKS' HELPER(S)		
<b>ACCOUNTING</b>				<b>ART DEPARTMENT</b>							
	PROD. ACCOUNTANT				PROD. DESIGNER					BREAKFAST READY ☺	
	1ST ASST PROD ACCNT				ART DIRECTOR					LUNCHES READY ☺	
	2ND ASST PROD ACCNT				ASST ART DIR						
	ASSISTANT ACCNT										
	PAYROLL ACCNT				SET DESIGNER				<b>VISUAL EFFECTS</b>		
	ACCOUNTING CLERK				MODEL MAKER				VFX SUPERVISOR		
	ACCOUNTING CLERK				ART DEPT COORD				VFX COORDINATOR		
					ART RESEARCH				VFX SURVEYOR		
					ART DEPT PA				VFX PA		
<b>PUBLICITY</b>				<b>SET DECORATING</b>				<b>STUNTS</b>			
	UNIT PUBLICIST				SET DECORATOR				STUNT COORD		
					ASST SET DEC				ASST STUNT COORD		
					LEADPERSON						
					BUYER						
					SET DRESSERS				<b>ANIMALS</b>		
					SET DEC COORD				WRANGLER (S)		
<b>BACKGROUND CASTING</b>											
	BG CASTING DIRECTOR								TRAILER(S)		
	BG CASTING ASST.								ANIMALS:		

Figure 26: Call Sheet 3



				ON-SET ART DEPT/SET DRESSING				TRANSPORTATION								
<b>CAMERA</b>				GREENS FOREMAN				<b>TRANSPORTATION</b>								
DP				GREENSMAN				TRANSP COORD					A L L  C A L L S  P E R  T R A N S P O R T A T I O N  C O O R D I N A T O R			
A CAMERA OPERATOR				STAND-BY PAINTER				TRANSPO CAPTAIN								
A CAMERA 1ST AC				ON-SET DRESSER				DISPATCHER								
A CAMERA 2ND AC				<b>PROPS</b>				PICTURE CAR COORD								
B CAMERA OPERATOR				PROPERTY MASTER				TRANS DEPT ASST								
B CAMERA 1ST AC				ASST PROP MSTR				DRIVERS								
B CAMERA 2ND AC				ASST PROP/WEAPONS				TRANSPO TRAILER								
STEADICAM OPER				ARMORER				CAMERA TRUCK								
LOADER				PROP MSTR (2ND U)				PROP TRUCK								
DIGITAL IMAGING TECH				PROPERTY COORD				GRIP TRUCK								
DIGITAL UTILITY				<b>CONSTRUCTION</b>				ELECTRIC TRUCK								
CAMERA PA				CONST COORD				WARD TRAILER								
VIDEO ASSIST				GENERAL FOREMAN				MAKE-UP TRAILER								
VIDEO ASSIST				CONST BUYER				SOUND/VIDEO								
TECHNOCRANE OPER				MILL FOREMAN				SFX TRAILER								
LIBRA HEAD TECH				PROFMAKER FRMN				FUEL TRUCK								
				PROFMAKERS				MECHANIC TRUCK								
STILL PHOTOGRPHR				PAINT FOREMAN				WATER TRUCK								
				PAINTER				MAXI VANS								
<b>ELECTRIC</b>				SCULPTORS				STAKEBEDS								
CHIEF LIGHTING TECH				PLASTERERS				HONEYWAGON								
LAMP OPERATOR(S)				LABORERS				BUS/PEOPLE MOVER								
LAMP OPERATOR(S)				<b>SPECIAL EFFECTS</b>				3-RM TRAILERS								
DIMMER OPERATOR				SFX SUPERVISOR				2-RM TRAILERS								
RIGGING GAFFER				SFX COORD				SINGLE TRAILERS								
RIGGING BEST BOY				FOREMAN/BUYER				POP-OUT TRAILERS								
RIGGING ELECTS				SET FOREMAN				DIRECTORS TRAILER								
				POWDER GANG BOSS				PRODUCERS' TRAILER								
<b>MAKE-UP/HAIR</b>				SFX TECH/POWDER				SCHOOL ROOM								
DEPT. HEAD MU				SFX TECH(S)				GENERATORS								
KEY MU ARTIST				MOT. CONTROL TECH				CRANE								
MU ARTIST				<b>COMMUNICATIONS</b>				CONDOR								
DEPT. HEAD HAIR				SATELLITE TECH				SCISSOR LIFT								
KEY HAIR STYLIST								INSERT CAR								
ADDTL HAIR STYLIST								CAST CAR								
								CAST CAR								
SFX MAKE-UP								CAR CARRIER								
PROSTHETICS								PICTURE CARS								
RADIO CHANNELS:																
Special Notes:																

Figure 27: Call Sheet 4



**The End**