Tacit knowledge-management practices in a South African media company

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ABSTRACT

The purpose of the research was to explore how tacit knowledge is perceived, understood and managed within a media company in South Africa. The research was conducted as a case study through an interview process. The case study was specific to a single media organisation, MultiChoice Subscriber Management Services (Pty) Ltd. (referred to as “MultiChoice”).

This report represents the MultiChoice staff members’ view of what they considered tacit knowledge to mean and the practices in place at MultiChoice to capture and retain the knowledge.

Fifteen candidates were interviewed. They were specifically chosen as they are purported to be specialists in their respective fields and are retention candidates within the organisation. The interviews were summarised and the key findings analysed.

On the basis of the review of the literature and the interviews with the 15 interviewees the following emerged:-

- The interviewees understood and supported the perception of the term tacit knowledge as described in the literature review;
- Indirect/informal practices were in place to monitor, capture and retain the tacit knowledge; and
- Interviewees were willing and prepared to adopt tacit knowledge practices if these are implemented formally.

It appears that there was a common understanding among interviewees that tacit knowledge practices were the competitive advantage in which an innovative company should invest. This investment was the key to grow and develop staff and the potential to be an innovative company. The overall impression was that tacit knowledge practices are becoming increasingly in demand in organisations and companies as well as employees were gaining awareness within the work environment.

DECLARATION

I, Anita Manharlal Patel, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Anita Manharlal Patel

Signed at ……

On the …….. day of …… 2011

DEDICATION

For my mum, Kumud, and my dad, Babu

ACKNOWLEDGEMENTS

I wish to express my gratitude and heartfelt Thank You to:

- Kumud and Babu, my parents, who have stood by me through thick and thin, for their sheer understanding, constant encouragement and patience;
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1.1. Purpose of the study

The purpose of the research was to explore how tacit knowledge was perceived, understood and managed within a media company in South Africa. The research was conducted as a case study through an interviewing process. The case study was specific to a media organisation, MultiChoice Subscriber Management Services (Pty) Ltd. (referred to as MultiChoice).

1.2. Context of the study

> *Increasingly, there is less and less return on the traditional resources, labour, land and (money) capital. The only – at least the main – producers of wealth are information and knowledge (Drucker, 1993:167)*

Knowledge is the central resource of many organisations. The operating core of organisations consists to a large extent of specialists and their expert knowledge. Knowledge transfer among the members of an organisation is a basic necessity (Wilkesmann et al., 2011:96).

Drucker (2001) suggested that “knowledge” would replace machinery, equipment, capital, raw material and labour to become the most important factor for the productive element in industry. In other words, the traditional bases of economic power are no longer the critical success factors for business; knowledge will become the core competence and intangible asset for achieving sustainable competitive advantage (Sherif et al., 2006). Furthermore, knowledge-management increases the availability and accessibility of valuable knowledge at the right time to the right person and provides the knowledge for a business to quickly adapt to new market conditions. Many enterprises have implemented knowledge-management to increase organisational agility. Thus it is important to develop a framework and process for identifying, capturing and

diffusing important knowledge in a structured way within an adaptable organisational culture (Huseby and Chou, 2003; Tseng, 2009:269-267).

Tacit knowledge underlies many competitive capabilities. The experience, stored as tacit knowledge, often reaches consciousness in the form of insights, intuitions and flashes of inspiration. The remarkable capacity of the mind to make sense of a previous collection of experiences and to connect patterns from the past to the present and future is essential for the innovation process.

Tacit knowledge, or implicit knowledge, as opposite to explicit knowledge, is far less tangible and is deeply embedded in an organisation's operating practices. It is often called 'organisational culture' (Meyer, 1998).

Meyer further explains what tacit knowledge entails,

> *Tacit knowledge includes relationships, norms, values, and standard operating procedures. Because tacit knowledge is much harder to detail, copy, and distribute, it can be a sustainable source of competitive advantage….. What increasingly differentiates success and failure is how well you locate, leverage, and blend available explicit knowledge with internally generated tacit knowledge.*

Tacit knowledge encapsulates the strength and the heartbeat of a company and is the key differentiator between success and failure for any organisation. Tacit knowledge needs to be groomed, horned into, captured and should be sued as a tool to encourage staff members' to share

In some professional organisations much of the most useful knowledge may be tacit in nature. Although critical to organisational decisions, tacit knowledge is difficult to measure and has been infrequently studied (Brockmann and Anthony, 1998). While technology may facilitate the storage of explicit knowledge, tacit knowledge resides only in the minds of people and its availability and use depends upon individual decisions and relationships (Cross and Baird, 2000; Fahey and Prusak, 1998; Hinds and Pfeffer, 2001; Lucas, 2005).

Tacit knowledge is difficult or impossible to gain access to, it is used as a form of protection from competitors unless key individuals are enticed to leave and join competitor.

The general matrix of knowledge-management strategies is outlined in Figure 1

NOTE: Based on a model co-developed by APQC and Arthur Anderson, 1995

Figure 1:Matrix of knowledge-management strategies (O' Dell et al., 1999)

The creation and implementation of knowledge strategies start with ensuring that an organisation is aware of knowledge-management enablers and knowledge-management processes that are required for success. As highlighted in figure 1 the enablers are technology, culture, measurement, and strategy and leadership. These are common to most, if not all, companies, but each organisation has to make sure that a factor within each of these is unique to create distinction from another organisation.

The knowledge-management process to create awareness, identify potential of key staff members', collect and collate information, organise information, share knowledge, training and development programmes, adapt policies and use practices that are available, has to be entrenched within working environments. These practices need to be embedded in everyday work within a learning organisation.

This research also aligns with the researcher's personal experience in the corporate world where year on year in various highly technologically evolving organisations, it has been noted that tacit knowledge is being lost; mistakes that were made are not captured as lessons learnt and the organisation takes a few steps back whenever additions are made to existing technologies.

As is clear from the various authors, as more and more companies increase their presence in the market and become global players, the more companies realise that there is a gap in capturing and implementing tacit knowledge-management systems. These processes, procedures and systems have to be accepted, understood and used by one and all within the organisation.

Macintosh (1998) highlights five drivers for knowledge-management: competition, customer focus, the challenge of a mobile workforce, equity in the work place and the global imperative. Since knowledge is critical in obtaining competitive advantage within enterprises (Sang and Hong, 2002) enterprises should consider knowledge to be a critical resource and leverage it judiciously (Gupta et al., 2000:17-21; Liebowitz, 2003:1-8).

It is generally accepted that knowledge comes from the meaningfully organised accumulation of information (messages) through experience, communication, or influence (Zack, 1999:45-58). In order to facilitate the accumulation process, enterprises should reform their culture and reward systems so that employees are encouraged and willing to share their experience and knowledge with others, meanwhile accumulating their knowledge as an organisational asset. Therefore, the activities of knowledge-management should enable the creation, communication, and application of knowledge; and they should drive the

capability of creating and retaining a greater value in core business competencies (Tiwana, 2001).

The arguments set out above highlight the fact that MultiChoice has to identify practices to capture and manage tacit knowledge for the successful implementation of knowledge-management systems. These systems could enhance the effectiveness of incorporating new experiences, learning and information to intensify the contents and contexts of the company's assets.

1.3. Problem statement

1.3.1. Main problem

The purpose of the research was to understand how the staff within MultiChoice perceived and understood tacit knowledge and to identify practices in the management of tacit knowledge within this media organisation in South Africa: MultiChoice Subscriber Management Services (Pty) Ltd.

1.3.2. Sub-problems

The first sub-problem was to understand how the staff within MultiChoice perceived and understood tacit knowledge.

The second sub-problem was to identify practices that are already in place (in an indirect way) and new ones that can be applied in the management of tacit knowledge.

1.4. Significance of the study

> *Central to effective knowledge-management, as a source of competitiveness, is an appreciation of the skills and processes involved in the application, communication, development and retention of tacit knowledge in the workplace. Much of the knowledge employees gain through experience is not recorded, shared or effectively used (Tsoukas, 2003:410).*

From the various readings it was gauged that in recent years most companies have come to realise that people are part of the company assets and that a value was attached to these individuals when a company is being valued and evaluated. This study provides a guideline to knowledge-management practices that can be used by any company to identify, retain and capture tacit knowledge; it also helps to highlight gaps (if there are any) within the processes used to identify, retain and capture tacit knowledge.

Knowledge has been widely recognised as a key resource for success in modern organisations. As a result, the question of how to better create, transfer and utilise knowledge has become an important concern for management research and practice in the 21st century. There is a growing demand from management research to determine key elements of knowledge-management and their interactions, and provide knowledge-management practice with effective knowledge-management initiatives to improve organisational performance in an ever-changing global environment (Handzic, 2011:198).

1.5. Delimitations and limitations

1.5.1. Delimitations

The scope of the research comprised a review of journals and peer-reviewed articles to form the basis of knowledge of knowledge-management practices. Interviews were conducted with individuals within an entertainment/media organisation. The case study has thus only captured this particular organisation's staff views and not those of any other company. The feedback from these was used to help identify the gaps for knowledge-management practices within this specific company.

The study did not cover reward systems, remuneration or the challenges faced by individuals, such as time constraints or a lack of skills.

The barriers that were encountered to knowledge sharing were not considered.

This research is an exploratory study. For this reason the results cannot be generalised.

1.5.2. Limitations

The methodology selected was typically qualitative and was in the form of interviews with a random sample size within the organisation.

The number of responses received might have been lower than the actual number that was required for the study's purposes.

Operational gaps and gaps within current knowledge-management practices that were identified were not to be solved. Rather, recommendations have been made and some direction has been given.

The research was a case study and was conducted within one company only.

Only certain individuals were interviewed on the basis of their level of speciality within their specific environment and departments. Levels of seniority were not taken into account.

And length of service and whether or not a candidate was a retention candidate had no bearing or impact on this case study.

1.6. Definition of terms

Knowledge – meaningfully structured accumulation of information, information that is relevant, actionable, and based at least partially on experience.

Tacit knowledge – knowledge-in-practice, developed from direct experience and action; highly pragmatic and situation specific; subconsciously understood and applied; difficult to articulate; usually shared through highly interactive conversation and shared experience.

Tools – pieces of equipment that typically provides a mechanical advantage in accomplishing a physical task; items designed to facilitate the use of a standard or data. Tools can be text files containing explanatory information, database

reference tables, programmes, macros, and instruments: the means whereby some act is accomplished.

Capture – succeed in representing or expressing something intangible.

Manage – pull off, be successful, achieve a goal, and cope: come to terms or deal successfully with, oversee: watch and direct.

Knowledge worker – are individuals whose work effort is centred on creating, using, sharing and applying knowledge.

1.7. Assumptions

- That individuals responding to the interview gave honest feedback and comments.
- That all individuals involved in the research interview had an understanding of what tacit knowledge is and of knowledge-management as a whole.
- MultiChoice was not following current practices that might be in place within individual departments to capture tacit knowledge
- Individuals did not realise that tacit knowledge was manageable.
- The practices currently recognised internationally are assumed to be the correct practices for the management of tacit knowledge.

2. LITERATURE REVIEW

2.1. Introduction

A review of the relevant literature was necessary to ascertain what is already known about tacit knowledge and the practices that are available for the retention, capture and sharing of knowledge. The awareness of what is already known about tacit knowledge and the practices available forms an essential part of a research proposal report.

2.2. Topic definition

Organisations are facing a turbulent business environment and need to develop all the resources they have (Stewart, 1997). These resources include cash, plant, equipment, land and employees. One of the most important resources within an organisation is the employees (Saint-Onge, 1996; Stewart, 1997a). Employees have knowledge and the knowledge that resides in the employees' minds is known as tacit knowledge (Nonaka, 1991; Nonaka and Takeuchi, 1995). Tacit knowledge is defined as "… being understood without being openly expressed" (*Random House Dictionary of the English Language, 1971),* or, knowledge for which people do not have words. It is obtained by internal individual processes like experience, reflection, internalisation or individual talents (Haldin-Herrgard, 2000).

Nonaka (1994) defines tacit knowledge as knowledge that is internal to a person, including cognitive learning, mental models and technical skills.

Sanderson (2001) states that the point where tacit knowledge is most commonly shared is between persons who have the trust of each other, normally these individuals have known common interests, regular personal contact and commit to some common goals.

Saint-Onge (1998) suggests that tacit knowledge directly affects an organisation by:

- Influencing the way its leaders view their industry and their organisation's position in it;
- Affecting how an organisation makes decisions; and
- Shaping the collective behaviour of its members.

In order for any of the above to be successful, people within an organisation need to share tacit knowledge, which in turn provides cohesiveness within the organisation. Shared knowledge also influences and shapes how an organisation faces and responds to challenges, the market and the ever-changing economy.

Key to both formal and informal tacit knowledge transfer is the willingness and capacity of individuals to share what they know and to use what they learn (Foos et al., 2006; O'Dell et al., 1998; Szulanski, 1995, 1996). Barriers may arise that limit the transfer of tacit knowledge (Lucas, 2005). These include: a lack of co-worker willingness to share and/or use tacit knowledge; limited awareness of the tacit knowledge an individual possesses; difficulty in expressing tacit knowledge that is tied to mental and/or physical action; and difficulty of applying content-specific tacit knowledge in other contexts (Argote, 1999; Fahey and Prusak, 1998; Nidumolu et al., 2001; Nonaka and Takeuchi, 1995; Stenmark, 2000, 2002).

For a company to achieve knowledge sharing it has to have tools/systems in place that enable tacit knowledge to be converted to explicit knowledge. Companies also have to have processes in place that allow for the capture and management of tacit knowledge.

2.3. What is understood and perceived by the "term tacit knowledge"?

This sub-problem referred to what was understood and perceived by the term tacit knowledge. From the various readings and journal articles there are a minimum number of practices currently being used to establish which resources are key, that is, which resources are knowledge workers and these have proven to be successful within the context these have been applied in.

2.3.1. Methods for establishing which resources are key knowledge workers

> *Only if we understand what knowledge workers do and in what way they use knowledge and information to create value, we can solve the problem of knowledge worker productivity. But despite all the efforts that have been put into knowledge-management, our understanding of knowledge work, concrete approaches to improving knowledge workers' productivity and, strangely enough, even measurement for knowledge workers' performance are still lacking (Davenport, 2003).*

A knowledge worker is a new kind of employee who is characterised by being paid not to create, produce or manage a tangible product and/or service, but rather to gather, develop a process and apply information that generates profitability to the enterprise (Smith et al., 2004:146).

Nonaka (1991) describes knowledge as the fuel for innovation, but is concerned that many managers fail to understand how knowledge can be leveraged. Companies are more like living organisms than machines, Nonaka (1991) argues, and advises that most companies view knowledge as a static input to the corporate machine. Nonaka (1991) advocated a view of knowledge as renewable and changing; and sees knowledge workers as agents for that change. Knowledge-creating companies, he believes, should be focused primarily on the task of innovation.

This viewpoint laid the foundation for the new practice of knowledge-management which evolved in the 1990s to support knowledge workers with standard tools and processes.

The hierarchy of knowledge work ranges from tasks performed by individual knowledge workers to global social networks. This framework, as shown in Figure 2, spans every class of knowledge work that is being or is likely to be undertaken. There are seven levels or scales of knowledge work.

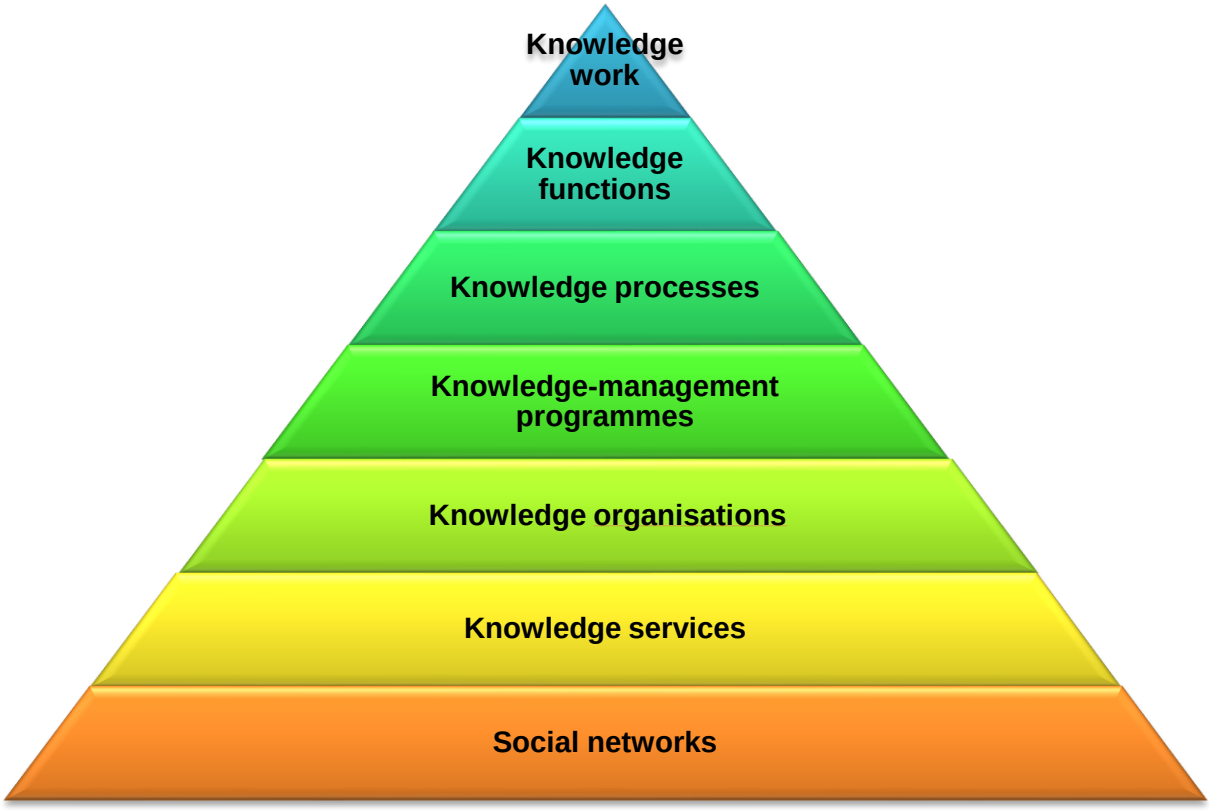

Figure 2:Hierarchy of Knowledge Work (author unknown)

Knowledge work, (e.g. writing, analysing, and advising) is performed by subject-matter specialists in all areas of an organisation. Although knowledge work began with the origins of writing and counting, it was first identified as a category of work by Drucker (1973).

Knowledge functions (e.g. capturing, organising, and providing access to knowledge) are performed by technical staff, to support knowledge process projects. Knowledge functions date from c. 450 BC, with the library of Alexandria, but their modern roots can be linked to the emergence of information management in the 1970s (McGee and Prusak, 1993).

From a functional perspective within a learning organisation, knowledge workers are the key generators of information and data. Companies need to leverage and reuse this information and data, and this can is done through capturing, organising and preserving this information and data.

Infrastructures are crucial and need to be in place to assist in the capture and organising of data and information. Processes and procedures form part an integral part of this infrastructure. The objective for any company is to be a learning organisation, promoting individual, group and team learning. A learning culture not only promotes shared understanding, but also allows and makes room for growth and development of staff and in-directly the company, thus leading to innovation.

Simard et al., (2007) describe five functions of a knowledge-service organisation. These are to:

1. Generate content;
2. Transform content into useful products and services;
3. Preserve and manage content to enable organisational use and external transfer ;
4. Use content to achieve organisational goals; and
5. Transfer content externally, in the form of products and services.

Simard et al., (2007) recommend that functions 1, 3, and 5 are essential and cannot be bypassed.

Knowledge processes (preserving, sharing and integration) are performed by professional groups, as part of a knowledge-management programme. Knowledge processes have evolved in concert with general-purpose

technologies, such as the printing press, mail delivery, the telegraph, and telephone networks (Mumford, 1961).

Knowledge sharing can be defined as individuals sharing organisationally relevant experiences and information with one another. Although knowledge sharing is neither prescribed nor required in advance for a job, it significantly increases the resources of an organisation and reduces time wasted in trial and error. It has been indicated that knowledge sharing is a precious intangible resource that holds the key to competitive advantage (Grant, 1996). Whereas knowledge sharing makes an organisation become more competitive in the market, the unwillingness to share knowledge causes fatalities for organisational survival (Lin, 2007:457).

Knowledge-management programmes link the generation of knowledge (e.g. from science, synthesis, or learning) with its use (e.g. policy analysis, reporting, programme management) as well as facilitates organisational learning and adaptation in a knowledge organisation. Knowledge-management emerged as a discipline in the 1990s (Leonard, 1995).

Knowledge organisations transfer outputs (content, products, services and solutions), in the form of knowledge services, to enable external use. The concept of knowledge organisations emerged in the 1990s (Davenport and Prusak, 1998).

A knowledge organisation is a management idea, describing an organisation in which people use systems and processes to generate, transform, manage, use and transfer knowledge-based products and services to achieve organisational goals. A knowledge organisation also links the past, present and the future by capturing and preserving knowledge in the past, sharing and mobilising knowledge today, and learning and adapting to sustain itself in the future.

Knowledge organisations can be viewed from a number of perspectives: their general nature, networks, behaviour, human dimensions, communications, intelligence, functions and services.

Knowledge services support other organisational services, yield sector outcomes and result in benefits for citizens in the context of knowledge markets. Knowledge services emerged as a subject in the 2000s. (Simard et al., 2007).

Social networks enable knowledge organisations to co-produce knowledge outputs by leveraging their internal capacity with massive social networks. Social networking emerged in the 2000s (Tapscott and Williams, 2007).

Figure 2 provides a comprehensive glance at which functional areas are required within a company in order to achieve a knowledge sharing and knowledge-service organisation.

MultiChoice could use the methods described in sections 2.3.1.1 to 2.3.1.3 for establishing who its key knowledge workers are.

2.3.1.1. Knowledge processes

Knowledge processes, based on the framework for knowledge work analysis developed by Lilia Efimova (Efimova, 2004) (Figure 3) can be used to assess the role or part an individual plays within the framework. Depending on the outcome of the assessment, that is, the level of importance the individual has scored, a judgement can be made on whether the individual has the knowledge and skills that are essential for core business processes and practices. If the answer is yes, then that particular resource is a key to the capture of tacit knowledge.

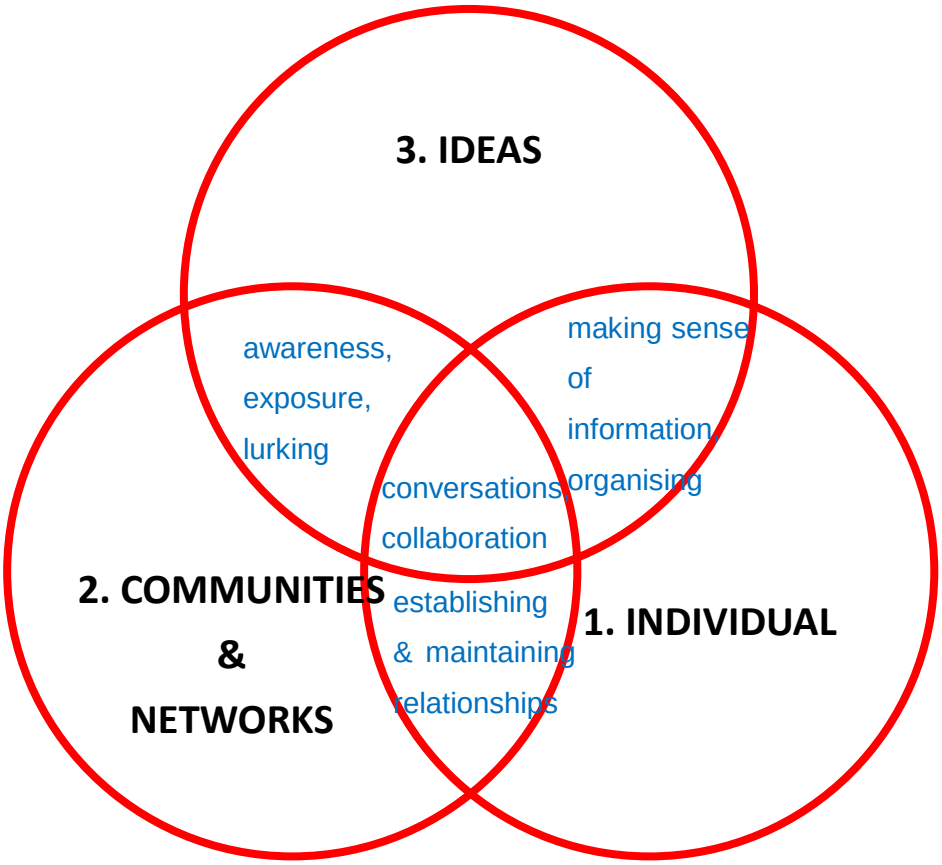

Figure 3: Framework for Knowledge Work Analysis (Efimova, 2004)

"Knowledge transfer" is the most common term in the literature to describe knowledge exchange processes. Therefore, researchers' use this term even though the terms "data transfer" or "information transfer" are more adequate (Aamodt and Nygard, 1995, Wilke, 1998). If this statement is taken into account, knowledge transfer signifies the creation of new knowledge through the exchange of information.

> *We also have to consider that only the person who obtains information can decide whether information transfer leads to knowledge transfer. We define knowledge transfer as a multilevel phenomenon that can be realised at the individual, intra-organisational, or inter-organisational level (Wilkesmann et al., 2009a).*

2.3.1.2. Knowledge mapping

Knowledge mapping, according to Grey (1999), is an on-going quest within an organisation (including its supply and customer chain) to help discover the location, ownership, value and use of knowledge artefacts, to learn the roles and expertise of people, to identify constraints to the flow of knowledge, and to highlight opportunities to leverage existing knowledge. Knowledge mapping is an important practice consisting of survey, audit and synthesis. It aims to track the acquisition and loss of information and knowledge. It explores personal and group competencies and proficiencies. Grey (1999) further states that it illustrates or "maps" how knowledge flows throughout an organisation.

Knowledge mapping helps an organisation to appreciate how the loss of staff influences intellectual capital, to assist with the selection of teams and to match technology to knowledge needs and processes.

Figure 4 provides some guidance and a framework that a company could use to assist with knowledge mapping. This framework allows the company to ask the correct questions, to understand what it entails to conduct a knowledge mapping exercise and to some extent provide insight into what the requirements are for implementation of knowledge mapping.

Context

- Communities of Practice within a knowledge organisation

Key Questions

- What do we know we know?
- What don't we know that we know?

Participants

- Individual knowledge workers
- Pairs of work mates
- Organisational sub-groupings (for example, work unit, department, section)

Objectives

- Developing
  - Knowledge identification skills
  - Knowledge sharing skills
  - Knowledge-filtering skills
  - Knowledge-enthusiasm mindsets
  - Skills of linkage to organisational goals

Performance Discussions Components

- Within sub-group
  - Personal knowledge tree construction
  - Personal knowledge tree sharing
  - Community knowledge tree building

Outcomes

- Identification of information useful within and across work unit knowledge
- Identification of systematic knowledge sharing processes

Time Frame

- 4 – 6 weeks

Figure 4: An Example of the Layout that can be Used for Knowledge Mapping (Henry and Smith, 2004)

2.3.1.3. Performance criteria and measurement in knowledge work context

According to Sink (1983), the overall performance of a firm (or an organisation) comprises seven criteria:

1. Effectiveness – having the right solution on the right scale to a problem defined by a customer;
2. Efficiency – understood in its economic sense, i.e. a solution is produced with a minimum of input;
3. Quality – the accuracy of a solution;
4. Productivity – the number of the output of accurate solutions;
5. Quality of work life – work performed under conditions that help and encourage workers to do their best;
6. Innovations – guaranteed in a state where workers aim to construct new and better solutions to problems rather than mechanically apply old ones; and
7. Profitability – revenues exceeding costs.

The criteria are necessary factors and even the lack of one decreases overall performance. Performance is a preferable concept when examining the process of knowledge work, as an output/input-ratio is not very informative. Sink's (1983) criteria can also be applied to work processes or even to an individual worker.

In Okkonen et al., (2002) it was suggested that performance measurement be used to translate an organisation's strategy into concrete objectives; how important it is to communicate these objectives to employees; thereafter to guide and focus employees' efforts accordingly as these objectives are achieved and to control whether the strategic objectives are reached.

Companies can also use double-loop learning to challenge the validity of the strategy itself and visualise how each individual employee's effort contributes to the overall business objectives.

The performance criteria and measures will highlight top performers and individuals with key tacit knowledge.

2.3.2. Conclusion

In summary, the literature suggests that leveraging a learning organisation's culture, its processes and its outcomes becomes a matter of linking these to the broad set of organisational goals, sub-goals and to the culture that lies within organisational units. Strategic and operational plans themselves need to be revisited to ensure that the development and recognition of knowledge, knowledge workers and knowledge processes become an important part of the organisation's vision, mission, strategy and goals.

2.3.3. Proposition

During the interview, in order to gauge what the interviewee understood and perceived the phrase tacit knowledge to mean within the MultiChoice environment, the following needed to be taken into account:

- Do interviewees understand the strategic nature of MultiChoice?
- Do interviewees know what knowledge processes entail?
- Do interviewees explore personal and group competencies and efficiencies?

2.4. Practices identified to manage tacit knowledge

This sub-problem refers to the various types of knowledge-management practices that are considered to be most powerful and have been successful in the management of tacit knowledge in organisations. According to the literature, there are numerous practices available, but the decision as to which practices

are key, relevant and can be successfully implemented is dependent on the company in question. The company would need to assess existing policies, procedures and practices as well as investigate what kind/type of technologies and/or tools are readily available or need to be made available to action the implementation of knowledge-management practices.

2.4.1. Knowledge-management practices used to capture and manage tacit knowledge

Approaches identified to manage tacit knowledge are technologies, broadly defined, which enhance and enable knowledge generation, codification and transfer (Ruggles, 1997). The main technological instruments are:

2.4.1.1. Decision support technologies.

These are tools such as data mining, simulators, artificial intelligence, or the integration of all of them in an Online Analytical Processing (OLAP).

> *By making the right information available at the right time to the decision-makers in the right manner, data warehousing and decision support technologies empower employees to become knowledge workers with the ability to make the right decisions and solve problems, creating strategic leverage for the organisation (Shams and Farishta, 2001:24).*

These tools can be used by the company's knowledge workers to discover and reveal what they perceive the strategic business opportunities are. The knowledge workers can monitor the performance of products, explore potential problem areas in the existing business operations, understand changing customer requirements and needs, and manage customer relationships and expectations as and when required (Heinrichs and Lim, 2003).

2.4.1.2. Groupware.

This term has been generally been applied to a variety of computer-based systems designed to allow people to communicate with each other, to

collaborate on projects (Gunnlaugsdottir, 2003) and to help individuals exchange information and choose for example, whether they work together in the same room at the same time or work across the internet from different places and at different times (Hilmer and Dennis, 2001).

The main non-technological instruments are:

2.4.1.3. Spontaneous knowledge transfer initiatives.

These encourage knowledge sharing by localising individuals who generally work together close to each other. Knowledge sharing, the involvement of all individuals, systems and tools is also the collective capability and efforts of groups and networks. It is very important to have onsite locations or work stations where people can connect with others through meetings and information-sharing discussions. Producing innovative hardware and software to share knowledge is effective only when people talk to one another regularly at work, network, and serve on forums, business councils or attend conferences and knowledge fairs. “An organisation is what it knows. What it knows is what it gets from learning” (Bonner, 2000a).

2.4.1.4. Mentoring.

Mentoring is on-the-job training and is perceived as assisting in the transfer of knowledge, organisational learning and cross-departmental communication (Singh et al., 2002) from mentor to protégé. Mentoring is beneficial for mentors, trainees, mentees, interns and the whole organisation, although informal mentoring is likely to bring longer-term advantages to the organisation (Singh et al., 2002).

2.4.1.5. Teams and communities of practice.

A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals and approach for which they hold themselves mutually accountable (Katzenbach and Smith, 1993). Through a team structure, diverse knowledge and expertise of individuals at various locations in an organisation can be assembled,

integrated and applied to the task at hand (Alavi and Tiwana, 2002) and facilitate creativity (Bain et al., 2001). Another kind of group, especially used in a knowledge-management context, is “communities of practice” (CoPs). These communities are formed by members regularly engaged in sharing and learning, while people in teams are assigned by superior managers. Teams are formed to focus on a specific objective, whereas the purpose of CoPs is to develop member capabilities and to build and exchange knowledge. Besides, CoP last as long as their members want them to last (Wenger and Snyder, 2000).

In recent years it has been recognised that knowledge-management requires a social approach (Brown and Duguid, 2000; Conrad and Poole, 2002) to capture tacit knowledge (Van Krogh et al., 2000). A CoP is a set of people who “share a concern, a set of problems, or a passion about a topic, who deepen their knowledge and expertise in this area by interacting on an on-going basis” (Wenger et al., 2002:4). It is an informal aggregation defined not only by its members, but also by the shared manner in which they do things and interpret events (Brown and Duguid, 1991; Eckert, 1993; Lave and Wenger, 1991).

The recognition of CoP commences with the acknowledgement that employees in the place of work do not learn exclusively from formally organised learning activities, such as attending a workshop, taking online or practical training courses or watching an instructional video. Organisational learning is also about face-to-face discussions, every day on-the-job interaction within the work environment and with other employees. An employee also learns the most relevant know-how by watching and talking to other employees. Employees participate and contribute more openly within an informal and culturally comfortable environment. “The idea of CoPs helps us to understand the processes by which the transmission of tacit knowledge and of knowledge-in-action takes place, by stressing that these processes are simultaneously social and cognitive” (Retna et al., 2011:41-59).

It is therefore important to nurture these communities so that individuals and companies can manage knowledge efficiently and effectively. To do so, as

the name “community of practice” suggests, there are three important components to be emphasised (Wenger et al., 2002):

1) *Domain* – the area of knowledge that provides a common focus and relates to the critical business of the organisation
2) *Community* – the relationships among people that enable collective learning; and
3) *Practice* – the activities that anchor the knowledge in what people do.

2.4.1.6. Change performance measurement and reward systems by implementing equitable recognition and reward processes built on trust and commitment.

An organisational culture that supports people’s needs for self-fulfilment also increases their level of trust. Different sets of cultural norms that are supported by software and by performance measurement and reward systems can be designed to fit the organisation’s culture or sub-culture (Quinn et al., 1996).

The reward concept is one which can create, motivate or de-motivate employees. It requires commitments from all parties in order for it to work or else it should be removed as a concept from company policies completely.

Taking into account both technological and non-technological instruments, it is possible to map the use of tacit knowledge in the workplace as is reflected in Table 1.

Table 1: Use of tacit knowledge in the workplace (Smith, 2001)

Tacit knowledge – practical action-orientated knowledge or' "know-how" based on practice, acquired by personal experience, seldom expressed openly, often resembles intuition	
Work practice	Spontaneous, improvised, web-like, responds to a changing, unpredictable environment, channels individual expertise, creates knowledge
Learn	Supervisor or team leader facilitate and reinforces openness and trust to increase sharing of knowledge and business judgement
Teach	One-on-one, mentor, internships, coach, on-the-job training, apprenticeships, competency based, brainstorm, people to people
Type of thinking	Creative, flexible, unchartered, leads to divergent thinking, develop insights
Share knowledge	Altruistic sharing, networking, face-to-face contact, video-conferencing, chatting, storytelling, personalise knowledge
Motivation	Inspire through leadership, vision and frequent personal contact with employees
Reward	Incorporate intrinsic or non-monetary motivators and rewards for sharing information directly, recognise creativity and innovation

Tacit knowledge – practical action-orientated knowledge or' "know-how" based on practice, acquired by personal experience, seldom expressed openly, often resembles intuition	
Relationships	Open, friendly, unstructured, based on open, spontaneous sharing of knowledge
Technology	Tool to select personalised information, facilitate conversations, exchange tacit knowledge, invest moderately in the framework of IT, enable people to find one another
Evaluation	Based on demonstrated performance, on-going, spontaneous evaluation

Table 1 summarises basic ways tacit knowledge is used in the workplace and groups major concepts into ten general categories. A learning organisation can use the grouped major concepts as is and prioritise according to organisational requirements. Alternatively, the major concepts can be used as a basis to establish which is pertinent to the learning organisation and add new concepts as the organisation learns and grows to understand knowledge-management.

2.3.1. Conclusion

In summary, the literature suggests that knowledge is created when people transfer and share what they know, make it a cornerstone and apply what they know to day-to-day activities, continuously build on existing relationships and establish new relationships to facilitate learning. Knowledge sharing should be recognised and rewarded [monetary (financial, e.g. bonuses, percentage of corporate profit) or non-monetary (peer recognition)]. Ultimately success is determined by supervisors, team members, partners, shareholders, colleagues,

stakeholders and many others in the value chain. These observations also highlight the fact that in order for an organisation to capture and manage tacit knowledge, the organisation has to be a learning organisation.

2.3.2. Proposition

To understand and gauge from interviewees which practices are in place within MultiChoice to manage tacit knowledge the following would need to be looked into:

- Is there any support technology available;
- Do these systems allow for communication between individuals, groups and throughout the company?
- Are there any spontaneous knowledge sharing and/or transfer initiatives in place?
- How do teams function and are there opportunities for mentoring and creation of CoPs?

In certain instances these practices might not be evident, but key personnel might feel that indirectly they serve as a practice.

3. RESEARCH METHODOLOGY

This section describes the methodology that was utilised to answer the research propositions posed in the previous section. To describe the methodology the following is discussed in detail:

- Research methodology/paradigm
- Research design
- Population and sample
- Data collection
- Date analysis and interpretation
- Validity and reliability.

3.1. Setting of case study

The organisation in question was MultiChoice Subscriber Management Services (Pty) Ltd. MultiChoice provides premium digital media entertainment, content and services via multiple devices, which includes pay television.

MultiChoice as a broadcaster transmits information via analogue, terrestrial and/or digital means. These technologies are rapidly advancing on a daily basis in the modern era. As modern technology grows, the television industry becomes aware of major issues, namely, the lack of technical skills. This industry is ever changing, thus it has been noted that employees may lack or hoard the advanced technical knowledge required for future development. Broadcasting companies must become much more competent, innovative and creative, which indirectly implies that its employees must be willing to develop themselves, people around them and others within the organisation to sustain the industry.

Current skills shortages in the media industry are a result of:

- An ageing workforce
- A lack of people with the right skills and qualifications entering the media sector
- Technological developments
- A demand for specialist knowledge.

With a dynamic technology platform and excellent offering of services, MultiChoice has resulted in building a company with a significant presence across countries in sub-Saharan Africa. MultiChoice is one of the outstanding examples of a pioneering South African company, owned by Naspers, an international player providing entertainment, technology and e-commerce services.

The theme of knowledge-management is central to the core of the MultiChoice strategy and it has to form the foundation of MultiChoice's growth and innovation efforts. Knowledge-management has been identified as one of the strategic tools (comprising a combination of people, processes, information and technology) to support organisational goals and objectives.

We live in a world where information has become the key advantage. In today's environment, information can travel anywhere, anytime, at great speed and in so many different ways, thus unlocking unimaginable potential to share and provide information. MultiChoice constantly looks for innovative ways and pushes boundaries to deliver information and content that is not only entertaining but also informative.

M-Net and SuperSport are part of the MultiChoice stable, which delivers premium content to a growing number of subscribers. DStv Media Sales, DStv Mobile, MWEB, DStv Online, CommerceZone, SmartVillage and NMSCom also form part of the MultiChoice group.

MultiChoice's involvement in South Africa is also extended through its corporate social investment initiatives; the company actively participates in social transformation and through technology, enables individuals and communities to help themselves, ultimately leading to growth of the economy of the country.

To succeed in today's highly competitive, technology-driven media environment, MultiChoice must attract and keep the best people, that is, people who thrive on challenges and continually strive for excellence.

With technology at the core of MultiChoice's business, it is imperative that skills development is the crux within the organisation. MultiChoice is developing learner ship programmes incorporating vocational education and training modules that have facilitated the linkage between structured learning, work experience and on the job learning.

3.2. Research methodology/paradigm

The purpose of the research was to explore what the words tacit knowledge meant to staff within a media organisation, that is, MultiChoice and the practices that have been identified in managing tacit knowledge.

This analysis was best suited to qualitative research and was done in a case study format, as the research was confined to an interview process. According to Cohen et al., (2000) the case study is intended to depict; analyse and interpret the distinctiveness of individuals and situations through convenient explanations and to present and represent a true reflection of the environment and surroundings.

Wallace (1998:164) suggests that case study research is aimed at:

- Solving particular problems
- Applying theories to practice
- Generating hypotheses
- Providing illustrations.

“Many action researchers favour case study research in that case study concentrates on what is **unique** (with individual units). So the specific focus of the case study therefore becomes a positive advantage for action researchers” (Wallace, 1998:161).

A case study, when it is planned or designed, usually follows the typical framework of research arranged by Morrison (193, cited in Cohen et al.):

- Orienting decisions
- Research design and methodology
- Data analysis
- Presenting and reporting the results.

Adelman et al., (1980) suggest the following issues should be taken into careful consideration in conducting case studies:

- The use of primary and secondary sources
- The opportunities to check data
- Triangulation (including peer examination of the findings, respondent validation and reflexivity)
- Data collection methods
- Data analysis and interpretation and, where appropriate, theory generation
- The writing of the report.

Nisbet and Watt (1984:78) suggest three main stages in undertaking a case study. In order to catch the dynamics of unfolding situations, researchers need to commence with a very wide field of focus, an open phase, without selectivity or pre-judgement. Hence, in the second stage, progressive focusing enables a narrower field of focus to be established, identifying key foci for subsequent study and data collection. At the third stage, a draft interpretation is prepared, which needs to be checked with respondents before appearing in the final form.

The MultiChoice case study was based on interviews, using a questionnaire as guidance. Voorhees (2008:6) stipulates that skilful interviews can yield helpful qualitative information for the strategic-planning process. A necessary first step is for the interviewer to establish an understanding and relationship with the interviewee. Careful structuring of these interviews ensures that achievable data are captured from a wide variety of sources and the basic fundamentals are consistent.

A case study approach was deemed a suitable method for this research as it involved the examination of the daily workings of staff. The case study draws on in-depth interviews with 15 staff members, ranging from operational management to senior management and the interviews were structured through the questionnaire. This case study was conducted to explore perceptions and to illustrate and describe which practices staff deemed to be necessary to manage tacit knowledge. Each interview was done face-to-face with individual interviewees at a time and interviews on average took about an hour and a half.

The key findings derived from this case study reaped what the perceptions are of tacit knowledge and explored the implementations of identified gaps within practices that are examined and highlighted.

According to Denscombe (2003:31), this is “the real value” of the case study approach as “it offers the opportunity to explain why certain outcomes might happen – more than just find out what those outcomes are”.

3.3. Research Design

Rowley (2002:18) defines research design as the “logic that links data to be collected and the conclusions to be drawn to the initial questions of a study”.

This research was conducted qualitatively through an interview-based questionnaire. Initial approval (ethical, research, confidentiality and any other requirements) had to be gained from the organisation.

The questionnaire used during the interview was a guidance to gauge what the interviewees understood by the phrase tacit knowledge and which practices they felt comfortable using to manage tacit knowledge.

The disadvantage of this method pertaining to this particular research was the interpretation of questions asked of interviewees, how the questions were phrased, what the interviewee perceived the interview required of them and how interviewees followed through with the guidelines that were provided.

Bell (2005:157) proclaims that the

> *"One major advantage of the interview is its adaptability. A skilful interviewer can follow up ideas, probe responses and investigate motives and feelings, which the questionnaire can never do. The way in which a response is made (the tone of the voice, facial expression, hesitation, etc.) can provide information that a written response would conceal. Questionnaire responses have to be taken at face value, but a response in an interview can be developed and clarified*".
>
> *"….. the interview can yield rich material and can often put flesh on the bones of questionnaire responses".*

3.4. Population and sample

3.4.1. Population

The population for the interviews was staff within MultiChoice.

3.4.2. Sample

The sample comprised 15 candidates, who were specifically chosen as these individuals are purported to be specialists in their respective fields and are retention candidates within the organisation. Table 2 provides a brief job description for each interviewee.

Table 2: List of people interviewed

Role	Brief job description
Senior Management	
Senior Manager: Technical Operations	Responsible for all technical broadcast platforms within the Naspers group, which includes satellites, terrestrial, DTT (digital terrestrial transmission), mobile and IPTV.
Senior Manager: Broadcast Engineering	Dealing with the architecture of the broadcast technical components in the value chain of broadcasting. The design, deployment of acquired content, equipment, infrastructure, systems, up-linking and the distribution of satellite and terrestrial transmitter networks across all platforms, that is, satellite, terrestrial, DTT, mobile and internet protocol television (IPTV). End-to-end integration and testing on all the platforms.
Business Intelligence Manager	The integration of data from various systems and warehouses, creation of reports thereof for easy usage across the business, understanding of what exist across the various platforms, and the management and maintenance of these reports. Introduction of the concept knowledge-management within the organisation, creating

	the strategy and, in the near future, implementing this strategy into the day-to-day workings.
Senior Manager: Decoder Product Development	Responsible for all decoders that are put out in the market, creating the decoder roadmap, continuous improvement of existing decoders, including legacy boxes. Continuously researching and benchmarking internationally the pricing, decoder functionality and possible connectivity of decoders to other devices.
Regulatory Compliance Manager	Ensure compliance of licence conditions across the various entities as stipulated and as per published regulations by the Independent Communications Authority of South Africa (Icasa). Responsible for the implementation and education of staff regarding the laws that govern the Icasa Act, Electronic Communications Act, Consumer Protection Act and Personal Protection Act.
Content Manager	Investigate and research existing content on international platforms, benchmark, evaluate and monitor. Write up proposals with findings and make recommendations. Responsible for content acquisition across a number of platforms, for example, mobile, online, video-on-demand, satellite.

Management	
Satellite Operations Manager	Accountable and responsible for the technical infrastructure that handles backhaul feeds and uplink facilities (operational and technical responsibilities). Backhaul feeds are local and international. Manage and monitor different satellites at various sites.
Corporate Affairs Manager	Responsible for issue management across the various entities, for communication to relevant stakeholders and the interaction with customers/subscribers. Is the central point of contact for all social media queries. Identifies and is aware of issues that will or might impact the business, has to be proactive and build relationships internally and externally to create a customer-centric approach.
Terrestrial &Transmission Engineering Manager	Responsible for all terrestrial and transmission broadcast platforms within the Naspers group, which includes DTT and mobile.
Head-End Manager:Technical Operations	End-to-end testing and quality assurance management of broadcast systems (video encoding, encryption and decryption) and decoders (decoder behaviour, test new software downloaded to decoder and smartcard control). Consulting to rest of business on new business strategies and provide recommendations and possible scenarios based on benchmarking international trends, potential within the African

	market and new business opportunities.
Manager:Product Management (decoders, remotes and other devices)	Investigate and research the availability of different products (hardware and software) in the market, creation of product roadmaps in conjunction with research results. Write up and compile user-requirement specifics.
Operational	
Systems Architect Manager (Head-End compression and Multiplexing)	Research and design broadcast value chain systems. System synergy between various platforms, that is, satellite, terrestrial, digital video broadcast handheld (DVB-H), video on demand. Monitoring, supporting and maintaining existing systems and infrastructures. The implementation of new systems within existing infrastructures, the continuous monitoring of capacity usage, the layout of architecture, wiring and setting up of networks.
Broadcast Systems Engineering Manager	Overall responsibility and ownership and rapid resolution of head-end service issues. These systems ensure services are encrypted and allow the enabling of viewing of specific channels for subscribers across the various platforms that are in operation. Establish, implement and maintain operational processes for compression digital television (CDTV), interactive and conditional access (CA) operations.
Conditional	Ensure operational stability across all satellite platforms. Formulation and implementation of

Access/DVBH Specialist	operational procedure. Effective implementation of new services and software: • CA systems • CDTV systems • Pay-TV industry knowledge and experience • DVB-H systems • Digital television systems
Compression Digital Television (CDTV) Specialist	Operational support of the CDTV systems. Local area network (LAN) and wide-area network (WAN) specialised support. Network and server administration and recovery. Database administration.

3.5. Data collection

Data was collected through personal interviews with the respondents listed in Table 2 above.

As a guideline the core questions listed in Table 3 below were used. It was anticipated that there would be some probing questions, over and above the ones listed in Table 3 below, which were dependent on the responses received.

These questions were asked at the respective interviewees' offices and it was anticipated that the interview would take between one to two hours each. Prior to the first question being asked the interviewee was informed as to the purpose of this research.

If the interviewee was unsure of the meaning of tacit knowledge, a simple explanation was provided prior to the interview to facilitate the interview.

> *"Tacit knowledge is the knowledge that is gained from experience that is not found in books or readily available. It is knowledge that is part of an individual's being, his/her values and standard of operating" (Nonaka and Konno, 1998:40).*

Table 3: Suggested interview guidelines

#	**Interview Questions**
1	Understand the role and responsibilities within the specific job environment.
2	Within the specific job environment and from an organisational point of view, explore the understanding of the term tacit knowledge.
3	How can tacit knowledge be retained or captured?
4	Do you capture tacit knowledge, and, if yes, what practices do you use to capture tacit knowledge?
5	If tacit knowledge is not captured, can you make suggestions or recommendations as to what practices the organisation should use to capture tacit knowledge?
6	Please provide some specific examples of how you would like tacit knowledge to be managed.
7	What would you consider to be key operational processes and procedures within the organisation?
8	What is your role within these processes and procedures?
9	Can you list examples of support materials, documents, procedures,

	manuals, checklists that are relevant?

3.6. Data analysis and interpretation

The use of data from the interviews takes into account individual perspective which allows for a more objective and holistic understanding of the data. According to Yin (1994) the use of these sources of evidence will allow the researcher to develop “converging lines of inquiry”, called data source triangulation.

The analysis of the interview evidence also consisted of “examining, categorising, tabulating or otherwise recombining the evidence to address the two propositions of the study” (Yin 1994).

Data was categorised into technological or non-technological data and findings outside of the research has been captured as additional findings.

3.7. Validity and reliability

“Validity” refers to the “accuracy, meaningfulness, and credibility” of the measurement instruments and of the research process as a whole, and is concerned with whether what was meant to be measured has been measured, and whether the measures will lead to valid conclusions concerning the research questions (Leedy and Ormrod, 2001).

The instruments used in this research were interviews and the validity concern is whether the data collected has led to valid conclusions in identifying what tacit knowledge means for MultiChoice staff and the practices used in the management of tacit knowledge.

3.7.1. External validity

The external validity of a research study is the extent to which its results apply to situations beyond the study itself – in other words, the extent to which the conclusions drawn can be generalised to other contexts (Leedy and Ormrod, 2005:99).

The purpose of this research was to determine what MultiChoice staff understood by the words, tacit knowledge and to identify practices used for the management of tacit knowledge. The conclusions drawn from this research are valid only for the organisation in question and are thus unlikely to be used outside of this context.

3.7.2. Internal validity

The internal validity of research is the extent to which its design and the data it yields allow the researcher to draw accurate conclusions about cause and effect and other relationships within the data (Leedy and Ormrod, 2005:97).

“Internal validity” refers to the unintended relationships between the various data elements. Leedy and Ormrod (2005:99) also suggest that triangulation is a viable plan of action to substantiate the researcher’s conclusions with the interpretations made.

Constructive validity in qualitative research was subject to interpretation; thus it was a concern that certain characteristics were not directly observed, but could only be inferred from patterns in the interviewee’s behaviour.

3.7.3. Reliability

According to Merriam (1998), “reliability” refers to the extent to which research findings can be replicated. In other words, if the study is repeated will it yield the same results? Reliability in research design is based on the assumption that there is a single reality and that studying it repeatedly will yield the same results.

Reliability is the ability to replicate the research and achieve similar results. Saunders et al., (2007:609) define reliability as “the extent to which data collection technique or techniques will yield consistent findings; similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data.”

The results of this research were subject to the understanding of the questions compiled by the researcher and thus, in theory provide the format through which this research could be replicated.

The researcher’s objective was to answer the question whether people understood the term tacit knowledge and what practices were effective in the capture or retention of tacit knowledge. This objective further contributes to the existing knowledge of and theory on this topic.

4: PRESENTATION OF RESULTS

4.1 Introduction

Interviews were conducted with MultiChoice staff, ranging from senior management to staff at an operational level. The interviewees' designation and brief job descriptions are listed in Table 2 in Section 3.3.2. The data collected was based on opinions, facts, and views and details experienced and expressed by the interviewees.

Questions have been grouped together so that information from the interviews focus on the specific area related to the sub-problems in question (refer to Table 5 in Section 4.2).

Analysis of the interview data revealed themes and patterns. These themes can be related back to the research question and thus most importantly to the main problem which was to explore how tacit knowledge was perceived and understood and managed within a media company in South Africa. The research was conducted as a case study through an interviewing process. The case study was specific to a media organisation, MultiChoice Subscriber Management Services (Pty) Ltd. (referred to as MultiChoice) (refer to Section 1.3.1).

A full summary of the interview feedback appears in Appendix A.

The conclusion of the sub-problems has been combined with the conclusions of the literature review in Chapter 5 of this report.

4.2 Synopsis of the interview questions in relations to the research questions

Table 4: Grouping of themes and patterns

The questions and feedback were grouped so that themes and examples could be identified.

Title	**Tacit knowledge-management practices in a South African media company**
Main problem	**The purpose of the research was to explore how tacit knowledge is perceived and understood and managed within a media company in South Africa. The research was conducted as a case study through an interview process. The case study was specific to a media organisation, MultiChoice Subscriber Management Services (Pty) Ltd. (referred to as MultiChoice).**
Sub-problem 1	**The first sub-problem is what was understood and perceived by the term tacit knowledge.**
Proposition	During the interview, in order to gauge what the interviewee understood and perceived the phrase tacit knowledge to mean within the MultiChoice environment, the following needed to be taken into account: • Do interviewees understand the strategic nature of MultiChoice? • Do interviewees know what knowledge processes entail? • Do interviewees explore personal and group competencies & efficiencies?

Interview question 1	Understand the role and responsibilities within the specific job environment.
Interview question 2	Within the specific job environment and from an organisational point of view, explore the understanding of the term tacit knowledge.
Interview question 3	How was tacit knowledge retained or captured?
Interview question 7	What would you consider to be key operational processes and procedures within the organisation?
Interview question 8	What is your role within these processes and procedures?

Title	**Tacit knowledge-management practices in a South African media company**
Main problem	**The purpose of the research was to explore how tacit knowledge was perceived and understood and managed within a media company in South Africa. The research was conducted as a case study through an interview process. The case study was specific to a media organisation, MultiChoice Subscriber Management Services (Pty) Ltd. (referred to as MultiChoice).**
Sub-problem 2	**The second sub-problem was to identify practices in the management of tacit knowledge.**

Proposition	To understand and gauge from interviewees which practices are in place within MultiChoice to manage tacit knowledge the following would need to be looked into: • Whether there is any support technology available; • Whether these systems allow for communication between individuals, groups and throughout the company? • Whether any spontaneous knowledge sharing and/or transfer initiatives are in place. • How teams function and whether there are opportunities for mentoring and creation of CoPs?

Interview question 4	Do you capture tacit knowledge and, if yes, what practices do you use to capture tacit knowledge?
Interview question 5	If tacit knowledge is not captured, can you make suggestions or recommendations as to what practices the organisation should use to capture tacit knowledge?
Interview question 6	Please provide some specific examples of how you would like tacit knowledge to be managed.
Interview question 9	Can you list examples of support materials, documents, procedures, manuals and checklists that are relevant?

4.3 Results pertaining to Proposition 1 - Understanding how MultiChoice staff perceived tacit knowledge

During the interview, in order to gauge what the interviewee understood and perceived the phrase tacit knowledge to mean within the MultiChoice environment, the following needed to be taken into account:

- *Do interviewees understand the strategic nature of MultiChoice?*
- *Do interviewees know what knowledge processes entail?*
- *Do interviewees explore personal and group competencies & efficiencies?*

Fifteen staff members were interviewed; they represent the sample as 100%.

Q1. Understand the role and responsibilities within the specific job environment

Findings: Of all the people interviewed, 100% were fully aware of what their role is within their work environment and the responsibilities attached to the role.

- What was evident was that only 20% of the sample took into account the entire value chain of the business, that is, the business strategy, what impact it had on the department and individual thereafter.

- Approximately 53% had a customer-centric approach and were aware that their deliverables were interconnected with requirements from internal and external customers.

- The remainder of the 27% approached their roles and responsibilities as a job that needs to be done and is part of their KPIs (key performance indicators).

Q2. Within the specific job environment and from an organisational point of view, explore the understanding of the term tacit knowledge.

Findings: The understanding of the term tacit knowledge was wide spread, the spectrum or level of comprehension varied from individual to individual.

The understanding of tacit knowledge was personalised from experience to problem-solving and as far as team work. Majority of the interviewees agreed that they would link tacit knowledge to on-the-job learning. This was enhanced through trial and error, practicality, sharing problems with colleagues and troubleshooting.

Many identified with tacit knowledge as intellectual property.

Q3. How can tacit knowledge be retained or captured?

Findings: The general consensus was that processes and procedures, mentoring and coaching (skills transfer), forum discussions, networking, documentation, and retention programmes were the most essential.

The chosen method varied from person to person, the level they operated on and, most importantly, time and the constraints around time.

Q7. What would you consider to be key operational processes and procedures within the organisation?

Findings: The commonality here was systems, reports, relationships, documentation, communication, roadmaps and maintenance.

A total of 35% considered systems, maintenance of these systems and maintenance of existing documents as part of the key operational processes and procedures.

At least 30% felt weekly/monthly reports, documentation and, most importantly, roadmaps were necessary.

The remaining 35% expressed that the key operational processes and procedures were people, the relationships that have been developed and needed to be in place, and communicated, especially company-wide.

Q8. What is your role within these processes and procedures?

Findings: Participant; initiator; approver; guardian; leader; manager; support; co-ordinator; implementer; influencer; monitor.

In many instances the role was dependent on the project and what was required of the individual.

4.4 Results pertaining to Proposition 2 - Identified practices in the management of tacit knowledge

To understand and gauge from interviewees who practices are in place within MultiChoice to manage tacit knowledge the following would need to be looked into:

- *Is any support technology available;*
- *Do these systems allow for communication between individuals, groups and throughout the company?*
- *Are there any spontaneous knowledge sharing and/or transfer initiatives in place?*
- *How do teams function and are there opportunities for mentoring and creation of CoPs?*

Fifteen staff members were interviewed; they represent the sample as 100%.

Q4. Do you capture tacit knowledge, and, if yes, what practices do you use to capture tacit knowledge?

Findings: At least 60% of the interviewees felt that tacit knowledge was being captured to some extent only within their areas and being leveraged off.

There are no formal processes in place within MultiChoice to capture tacit knowledge. Responses received were more departmental specific:

- Through existing processes, networking, succession planning and lessons learnt, thus ensuring there is not a re-occurrence of the problems or issues that are experienced
- Key process structures were in place, which have helped to identify relevant and key people who were responsible for documenting information via a database
- Mentoring and coaching programmes, information management systems
- To a small extent via two tutorials per annum and reports
- Documents, example, articles
- Specification (functionality, software, hardware) roadmaps, product development group (meet every two weeks)
- Presentations, proof of concept documentation, present and send out reports to relevant parties, digital video broadcasting (DVB) specifications, right attitude and being proactive plays a huge role
- Cross-skilling by sharing responsibilities, shadowing
- Frequently asked questions (FAQs) documents, social media like twitter, facebook and website forums.

Q5. If tacit knowledge was not captured, can you make suggestions or recommendations as to what practices the organisation should use to capture tacit knowledge?

Findings: The remaining 40% of the interviewees felt that tacit knowledge was not being captured at all. Their view was that processes and procedures are guidelines used on a day-to-day basis to ensure the operational side of the business is taken care of. The interviewees also felt that no formal documentation was in place, thus supporting the common perception among the individuals that tacit knowledge was not being captured within their specific departments or company-wide.

Some of the suggestions and recommendations are outlined in Chapter 5.

Q6. Please provide some specific examples of how you would like tacit knowledge to be managed?

Findings:

- Business Owners Council (BOC) if it works as intended, it will be a very crucial key to managing tacit knowledge
- Part of staff members KPIs
- Buy in from business, require guidance on how to transfer skills
- Manage through systems – consider up-time vs. down-time
- Documentation: document repository, log books, monthly reports, capturing and documenting any changes to operations, architecture and supplier site acceptance test reports
- Open communication, create a knowledge sharing culture
- Accountability
- Information management systems
- Automation of systems with capability to provide reports

- Training
- Forming informal relationships, networking.

Q9. Can you list examples of support materials, documents, procedures, manuals, checklists that are relevant?

Findings:

Examples given as support materials: Internet – online tutorials, forum and discussions; network, systems and architecture diagrams; consumer and market research reports; Sedibeng (in-house intranet site).

Documents that are being used: standard operating procedures (SOPs); Human Resources (HR) policies, company objective documentation; audit reports; documented workflows; issues and risks matrices, FAQs (frequently asked questions); decoder, business and strategy roadmaps.

Checklist examples: external and internal customers serve as a checklist and management by tasks lists.

Manuals usually required operationally are equipment installation manuals; equipment operation manuals; supplier user manuals; standards and procedures documents that govern the broadcasting industry (national and international governing bodies dictate these); government regulations and Acts standards and manuals.

5. DISCUSSION OF THE RESULTS

5.1 Introduction

The main problem at the onset of the research report was to understand how the staff within MultiChoice perceived and understood tacit knowledge and to identify practices in the management of tacit knowledge: a case study of MultiChoice Subscriber Management Services (Pty) Ltd.

5.2 Understand how staff perceive tacit knowledge

During the interview, in order to gauge what the interviewee understood and perceived the phrase tacit knowledge to mean within the MultiChoice environment, the following needed to be taken into account:

- *Do interviewees understand the strategic nature of MultiChoice?*
- *Do interviewees know what knowledge processes entail?*
- *Do interviewees explore personal and group competencies & efficiencies?*

As illustrated in Figure 1:Matrix of knowledge-management strategies, a company requires and needs to be aware of knowledge-management enablers and knowledge-management processes. It was evident from the interviews only a few of the interviewees were fully aware of the strategic objectives and leadership direction for MultiChoice as an organisation. Individual strategic objectives were clearly defined and captured, but were not translated to reflect how these contributed to the overall business objectives. All interviewees understood the importance of the technology used to enable them to perform their day-to-day duties, the measurements that have been allocated and put in place; which are required to reach the goals/objectives set for the individual and that a learning culture is what enables them to carry out their specific role and responsibilities.

The knowledge-management processes identified within Figure 1 are to create, identify, collect, organise, share, adapt and use. These processes are clearly embedded within the MultiChoice culture and this, in turn, has a very powerful impact on the communication of strategy as understood by each individual within his/her work environment. This strategy is departmental specific, which does filter into the overall company strategy, but individuals did not view it from that perspective. Most interviewees perceived that the departmental strategy (their day-to-day operational work) is the overall company strategy.

The understanding of the term tacit knowledge was wide spread and at various levels. It was personalised from experience to problem solving, trouble shooting and inclusive of team work. Many felt that on-the-job learning, interaction with peers/colleagues, decisions and experiences learnt through trial and error also largely contributed to their understanding of tacit knowledge. This variety was also evident in the literature reviewed. The literature suggested that there were many ways in which tacit knowledge can be defined. For example, Nonaka (1994) defines tacit knowledge as knowledge that is internal to a person, including cognitive learning, mental models and technical skills.

> *The point where tacit knowledge is most commonly shared is between persons that have the trust of each other, normally with known common interests, regular personal contact and commitment to some common goals (Sanderson, 2001).*

When asked how would the interviewees retain and/or capture tacit knowledge, responses varied and this was based on individual experiences, the position and the level at which the individual operated and, most importantly, time constraints. Processes and procedures play a major part, mentoring and coaching assist in skills transfer, documentation (SOPs, change control systems, request for service) and retention programmes are extremely key within a learning organisation. This is supported in the literature where some authors advocate organisations need to follow a hierarchy of knowledge work (refer to Figure 2:section 2.3.1). Knowledge work, knowledge functions and knowledge processes form an integral part of processes and procedures. Mentoring and coaching assist in the creation of knowledge-management

programmes and a knowledge organisation. Forum discussions internally and with external suppliers, and networking (building relationships with peers, colleagues, suppliers and clients) are the basis to enable social networking.

There was consensus amongst the respondents that tacit knowledge was also about people, that is, about staff, customers, and clients internally and externally. There was also an understanding that relationships and communications further allowed individuals and teams to contribute to learning and the experiences gained in the process. Similarly, in the literature reviewed, commonalities seemed to include that the most important resources within an organisation are the employees (Saint-Onge, 1996; Stewart, 1997a).

In general the interviews revealed that the interviewees are very aware of what is perceived by the term tacit knowledge, even though the company's overall strategy and objectives are not being communicated effectively nor explained and unpacked further down in the operational value chain.

The connection between the literature review and the responses were indisputable; most respondents and authors conveyed confidence in their understanding and interpretation of the term tacit knowledge.

5.3 Identify practices in the management of tacit knowledge

To understand and gauge from interviewees which practices are in place within MultiChoice to manage tacit knowledge the following would need to be looked into:

- *Investigate if there is any support technology available;*
- *Do these systems allow for communication between individuals, groups and throughout the company?*
- *Are there any spontaneous knowledge sharing and/or transfer initiatives in place?*

- *How do teams function and are there opportunities for mentoring and creation of CoPs?*

In the interviews each respondent had strong convictions and beliefs about which practices were being used to capture and manage tacit knowledge. It was also very evident that MultiChoice per se does not have any formal processes in place to capture tacit knowledge, but departments within MultiChoice found it necessary to have practices in place as it has a huge impact on the day-to-day operational workings and for the department to promote and motivate a learning culture.

It was also very evident that many of the interviewees felt tacit knowledge within the organisation and/or within their department was not being captured or managed at all.

There was an overall consensus about the practices that are being used or can be used by MultiChoice for capturing tacit knowledge. These views were shared by all interviewees, even those who felt that tacit knowledge was not being captured. Some of the key and vitally important practices highlighted were the existing processes, networking with internal and external clients and suppliers, succession planning for key staff, and ensuring lessons were learnt, thus ensuring there is no re-occurrence of the problems or issues that have been experienced to date.

Respondents also felt that key process structures are in place, which help identify relevant and key people who are responsible for documenting information via a database. These processes are audited, a gap analysis is done during the audits and action is taken to overcome the identified gaps.

The information derived from the interviews was also evident in the literature review. For example, the main technological instruments are decision support technologies that empower employees to become knowledge workers with the ability to make the right decisions, which in turn can be used as tools to uncover strategic business opportunities (Shams and Farishta, 2001, Heinrichs and Lim, 2003).

In the interviews, the respondents also cited skills transfer via mentoring and coaching sessions; job shadowing and sharing of certain responsibilities within same working environment; troubleshooting with colleagues and/or peers; and team work that were also practices that captured tacit knowledge.

These practices, known as non-technological instruments, are generally supported by the findings in the literature review too. Spontaneous knowledge transfer initiatives (Bonner, 2000a); Mentoring is on-the-job training and is perceived as assisting in the transfer of knowledge, organisational learning and cross-departmental communication (Singh et al., 2002) from a mentor to protégé, teams and communities of practice (Alavi and Tiwana, 2002), just to name a few.

In this proposition it was explicit that there was a good understanding of the term tacit knowledge, as this was the essence of the starting point of finding out what practices are in place and that are being used or, alternatively, even if the interviewees felt that there were no practices in place, they were able to identify what they deemed to be necessary practices.

5.5 Conclusion

In summary, after having reviewed an extensive range of literature and having conducted detailed interviews, the main problem at the onset of this research report was satisfactorily undertaken. In most occurrences the literature review supported the statements and declarations made by interviewees. Areas where there was an understanding that practices were not in place, were also very valuable in that these aspects for development were identifiable.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions of the study

This research report has revealed that MultiChoice is considered to be a learning organisation, but in theory only, as there are no formal processes in place that support the perception. The staff members were fully aware of the term tacit knowledge, what the overall implications were of this knowledge and how it could be used within their specific environment, but they were not sure how this could be leveraged as a whole to fit into the overall company strategy and the other departments with which they interact.

Knowledge processes were clearly identified at departmental levels, which greatly assisted in cultivating a culture that encouraged and provided opportunities for the communication of ideas, knowledge and experiences.

Fundamentally, both formal and informal tacit knowledge transfer required the willingness and capacity of individuals to share what they know and to use what they learn.

Overall the information gathered for this research report has given the researcher some insight into the current standing within MultiChoice of the understanding of tacit knowledge, the implications of this understanding and which practices the staff perceived to be relevant.

6.2 Recommendations

This research report has revealed that MultiChoice staff understood what the term tacit knowledge means. Interviewees were also fully aware that there is no formal company process in place to motivate and inspire the capture and retention of tacit knowledge.

The outcome of this research report suggests the following list for consideration:

- Formalise a learning organisation culture by setting up a knowledge-management department and allocate a knowledge champion within each department.
- Research, investigate and leverage off factors and practices that will contribute to the creation of a learning culture organisation and implement a learning strategy.
- Knowledge transfer among staff is a basic necessity, thus the organisation needs to support knowledge transfer activities for its staff and facilitate exchange between experts and novices through formal practices.
- Strategy objectives needs to be communicated in a transparent and clear manner that allows each participant to internalise the relevance and create meaning for them, whilst aligning it with that of other individuals, departments and across platforms.
- Create an environment for collaborative knowledge sharing.
- This paper opens the opportunity for further research to investigate the relationship between individual and organisational learning and the practices that are required to transfer knowledge and continuously innovate.

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APPENDIX A

SUMMARY OF INTERVIEWS

1. **Understand the role and responsibilities within the specific job environment**

Senior Management

1. Senior Manager:Technical Operations
   Responsible for the entire broadcast value chain (excluding production) for services across all the technical platforms within the MultiChoice group. This includes satellites, terrestrial, DTT (digital terrestrial transmission), mobile and IPTV.

2. Senior Manager: Broadcast Engineering
   Dealing with the architecture and set up of the infrastructure for the broadcast technical components within the broadcasting value chain. Creating and finding technical engineering solutions, which include the design and deployment of acquired content. Installing broadcasting equipment, providing support for systems, up-linking and the distribution of satellite and terrestrial transmitter networks across all platforms. These are satellite, terrestrial, DTT, mobile and IPTV. The end-to-end integration of systems and testing across all the platforms.

3. Business Intelligence Manager
   The integration of data from various systems and warehouses, creation of reports thereof for easy usage across the business, understanding of what exists across the various platforms, and the management and maintenance of these reports. Introduction of the concept knowledge-management within the organisation, creating the strategy and, in the near future, implementing this strategy into the day-to-day workings.

4. Senior Manager: Decoder Product Development

   Responsible for all decoders that are put out in the market, creating the decoder roadmap, continuous improvement for existing decoders, including legacy boxes. Continuously researching and benchmarking internationally the pricing, decoder functionality and possible connectivity of decoders against other devices.

5. Regulatory Compliance Manager

   Ensure compliance of licence conditions across the various entities as stipulated and as per published regulations by the Independent Communications Authority of South Africa (Icasa). Responsible for the implementation and education of staff regarding the laws that govern the Icasa Act, Electronic Communications Act, Consumer Protection Act, Personal Protection Act.

6. Content Manager

   Investigate and research existing content on international platforms, benchmark, evaluate and monitor. Write up proposals with findings and make recommendations. Responsible for content acquisition across a number of platforms, for example, mobile, online, video-on-demand and satellite.

Management

7. Satellite Operations Manager

   Accountable and responsible for the technical infrastructure that handles backhaul feeds and uplink facilities (operational and technical responsibilities). Backhaul both local and international services and feeds. Manage and monitor different satellites at various sites. Continuously monitor, support and maintain existing structures, also building and improving on the infrastructures. Co-ordinate satellite capacity activities and design the architecture

and install new uplink facilities at the various satellite sites. Find solutions arising from satellite access facilities and signal routing.

8. Corporate Affairs Manager

   Responsible for issue management across the various entities, communication to relevant stakeholders and the interaction with customers/subscribers. Is the central point of contact for all social media queries. Identifies and is aware of issues that will or might impact the business, has to be proactive and build relationships internally and externally to create a customer-centric approach.

9. Head-End Manager:Technical Operations

   End-to-end testing and quality assurance management of broadcast systems (video encoding, encryption and decryption) and decoders (decoder behaviour, test new software downloaded to decoder and smartcard control). Consulting with the rest of business about new business strategies, and provide recommendations and possible scenarios based on benchmarking international trends, the potential within the African market and new business opportunities.

10. Manager:Product Management (decoders, remotes and other devices)

    Investigate and research the availability of different products (hardware and software) in the market, creation of product roadmaps in conjunction with research results. Write up and compile user-requirement specifics.

11. Terrestrial & Transmission Engineering Manager

    Responsible for all terrestrial and transmission broadcast platforms within the Naspers group, which include DTT and mobile. Design all technical specifications for terrestrial and cell phone transmission, document business concepts for terrestrial and cell phone coverage, set up and build terrestrial and

transmitter sites. Investigate, do feasibility studies and research new technology, the implications and impact, and provide technical solutions.

Operational

12. Systems Architect Manager (Head-end compression and multiplexing)

    Research and design broadcast value-chain systems. System synergy between various platforms, that is, satellite, terrestrial, DVB-H, video on demand. Monitoring, supporting and maintaining existing systems and infrastructures. The implementation of new systems within existing infrastructures, the continuous monitoring of capacity usage, the layout of architecture, wiring and setting up of networks.

13. Broadcast Systems Engineering Manager

    Overall responsibility and ownership and rapid resolution of head-end service issues. These systems ensure services are encrypted and allow the enabling of viewing specific channels for subscribers across the various platforms that are in operation. Establish, implement and maintain operational processes for compression digital television (CDTV), Interactive and conditional access (CA) operations.

14. Conditional Access/DVBH Specialist

    Ensure operational stability across all satellite and cellular platforms. Formulate the operational procedures and implement thereafter. Effective implementation of new services and software:

    I. CA systems
    II. CDTV systems
    III. Pay-TV industry knowledge and experience
    IV. DVB-H systems
    V. Digital television systems.

15. Compression Digital Television (CDTV) Specialist
    Responsible for the maintenance and monitoring of the various CDTV systems and network equipment. Provide operational support; assist with recovery and administration of various networks, systems and servers.

2. Within the specific job environment and from an organisational point of view, explore the understanding of the term tacit knowledge.

- Experience gives rise to know-how.
- Knowledge that is gained through experience and is not available in textbooks, via internet, documentation.
- Not sure what is meant by the term, tacit knowledge.
- Experience, the ability to resolve issues on the run, working as a team, sharing of information in the “corridors/passages”.
- Knowledge gained via problem solving and trouble shooting.
- Intellectual property, not readily or freely available, knowledge that an individual possesses in executing his/her specific role and responsibilities.
- Knowledge not captured in systems, nor documented, knowledge used by individual to execute key functionalities.
- Responsibilities carried out through intuition, proactively, cannot be found in documents or in any other form, difficult to pass on.
- Knowledge gained over years, not found in books, knowledge accumulated through trial and error and/or by word of mouth.
- Combination of experience and basic knowledge, know-how gained by understanding systems in which an individual operates.

- Knowledge not specifically learned, but rather accumulated in meetings, one-on-one conversations, via colleagues, insight, experience and problem solving.
- Knowledge and experience found within people, not readily available. Being a leader in technology also helps create tacit knowledge.
- Comes with experience and intuition, theoretical learning applied practically and implementation also contributes to tacit knowledge.
- Experience, learning on the job, assistance from colleagues.
- Knowledge not written or recorded anywhere, but an individual or organisation possesses it. Innate or background knowledge.

3. How can tacit knowledge be retained or captured?

- Processes, networking, skills transfer.
- Via skills transfer, mentoring and coaching, minimise risks, don't become irreplaceable, and ensure managers with team's delegate.
- Centrally documented within procedures and processes, forums (meet and discuss informally, formalise by capturing), shadowing and mentoring, role rotation.
- Education via forums, continuous training, documentation, face-to-face sessions, knowledge sharing communities.
- Documentation, forum discussions, capture through monthly reports that highlight the issue(s), how it was solved and the time it took to resolve.
- Job satisfaction, working environment plays a huge role, financial rewards for sharing knowledge, apprenticeships.
- Key structured processes, identified relevant knowledge assets, formally capture via a database, have a learning organisation, retention policies, rewards and recognition (monetary, if possible) programme in place.

- Frameworks and guidelines, don’t make yourself indispensable, share knowledge within projects.
- Shadowing, individuals must take the initiative to learn from peers and colleagues, retention via operational career growth path.
- Articles, documentation, twice a year have technical reviews for information sharing, shadowing, and retention strategy.
- Meetings can be used to share knowledge, product specifications, test cases, risk matrices and resolutions, lessons learnt from projects, contracts (transfer as much risk as possible to supplier), people retention through monetary benefits, training and job flexibility.
- Discussion groups, knowledge sharing website like a wiki page, networking, formalise as part of key performance indicators (KPI), mentoring.
- Retention programmes (“put your money on the table”), keeping staff stimulated, knowledge transfer, architectural forums, record the scenarios used to resolve problems within a value chain.
- Capture via standard operating procedures (SOPs), retain by regularly benchmarking retention positions, perks and benefits like extra leave, shares, that is, more benefits compared with non-performers.
- Capture knowledge as manual, continuous motivation from executives, networking, retain via monetary benefits, flexibility of work hours and ensure work/life balance.
- Public or knowledge sharing forums, blogs, social media, knowledge-management portals, procedures and processes, one-on-one or group forums.

4. **Do you capture tacit knowledge, and, if yes, what practices do you use to capture tacit knowledge?**

   There are no formal processes in place within MultiChoice to capture tacit knowledge; responses received were more departmental specific:

- Through existing processes, networking, succession planning and lessons learnt, thus ensuring there is not a re-occurrence of the problems or issues that are experienced.
- Key process structures are in place, which have helped identify relevant and key people who are responsible for documenting information via a database.
- Mentoring and coaching programmes, information management systems.
- To a small extent via two tutorials per annum and reports.
- Documents, example, articles.
- Specification (functionality, software, hardware) roadmaps, product development group (meet every two weeks).
- Presentations, proof of concept documentation, present and send out reports to relevant parties, DVB specifications, right attitude and being proactive plays a huge role.
- Cross-skilling by sharing responsibilities, shadowing.
- Frequently asked questions (FAQs) documents, social media like twitter, facebook, website forums.

5. **If tacit knowledge is not captured, can you make suggestions or recommendations as to what practices the organisation should use to capture tacit knowledge?**

- Mentoring and coaching, Business Owners Council, practical transfer, integrates it into the company culture.
- Current processes and procedures are for guidance, cannot be considered a tool to capture tacit knowledge. Some suggestions are to formalise as part of KPIs, via knowledge sharing presentations, have a dedicated person within each department who will be responsible for knowledge sharing sessions and/or tutorials.
- Active discussion groups, meetings, training, education programmes.
- Currently only use RFS (Request For Service) system, but it does not capture how an issue/problem was resolved. Share and capture knowledge via working on different projects, skills transfer and development plans.
- Team work allows for information and experience sharing, multi-skilling, supportive roles.
- Make it part of the performance discussion document, structured training plans, find an alternative, for example, webinar (web seminars) that are cost effective, practical and time saving. Webinars can be most useful when looking at new technology and can also be used for international tutorials.
- Something that's so strategic should warrant special task team/focus groups.
- Attitude and flexibility play a key role to make it possible for tacit knowledge to be captured and retained.
- Internship programmes and part of the learning is the capturing and documenting of knowledge gained from experienced colleagues, reports with SOP intentions, focus groups, require a dedicated person to enable knowledge sharing, wiki portal.

6. **Please provide some specific examples about how you would like tacit knowledge to be managed.**

- Business Owners Council, if it works as intended, it will be a very crucial key to managing tacit knowledge
- Part of staff members' KPIs
- Buy-in from business, require guidance about how to transfer skills
- Manage through systems – consider up-time vs. down-time
- Log books, monthly reports
- Documentation, open communication, accountability
- Documentation and repository
- Information management systems
- Capture and document any changes to operations, architecture and supplier site acceptance test reports
- Automation of systems with capability to provide reports
- Create a knowledge sharing culture
- Training, documentations
- Forming informal relationships, networking.

7. **What would you consider to be key operational processes and procedures within the organisation?**

- The change control system that can be used as an audit tool
- Induction and orientation
- Manage expectations

- Reconciliation system that allows the comparison of active subscribers against billing system
- Maintenance of existing processes and procedures
- Standard operating procedures (SOPs)
- Audit networks across all platforms
- Change controls that allow monitoring of launches and termination of services across all platforms
- Communication
- Verbal cross-departmental/divisional synergy and co-operation
- Routine back-up of critical databases, for example, technical repository that houses documents that give guidance about system architecture and how it was built
- Update the disaster recovery tool box with latest systems configurations
- Monthly operational reports
- Capturing and monitoring risks, issues and bugs across all software and hardware systems, tracing resolutions
- Require systems in place to track existing and new developments in the market
- Monthly project review sessions, lessons learnt are captured and shared
- Managing customers and support thereof
- Relationships with various government departments are an integral part of the process
- Product roadmaps and sign off (reviewed continuously)
- Retention of knowledge and people is the most important process

- Documentation like flow diagrams, check points within systems and sign off at each specific stage with the system before moving onto next check point
- Email and SMS notifications for emergency changes
- Project management and defined strategy.

8. What is your role within these processes and procedures?

- Participant
- Initiator
- Approver
- Guardian
- Lead
- Manager
- Support
- Co-ordinator
- Implementer
- Influencer
- Monitor

9. **Can you list examples of support materials, documents, procedures, manuals and checklists that are relevant?**

- Customers (internal and external) serve as a checklist
- Management by tasks lists
- Equipment installation manuals
- Equipment operation manuals
- SOPs
- HR policies
- Company objectives documentation
- Supplier user manuals
- Internet – online tutorials, forum and discussions
- Audit reports
- Standards and procedures documents that govern the broadcasting industry (national and international governing bodies dictate these)
- Documented workflows
- Issues and risks matrices
- FAQs and core message documents
- Decoder, business and strategy roadmaps
- Network, systems and architecture diagrams
- Consumer and market research reports
- Government regulatory and acts standards and manuals
- Intranet.

APPENDIX B

Consistency matrix

Table 4: Consistency matrix

First sub-problem	Propositions	Source of data	Type of data	Analysis
To understand what is perceived as tacit knowledge	To evaluate what is understood and the perceptions of the phrase "tacit knowledge."	Interview questions as per Table 4 (Q1, 2, 3, 7 & 8)	Interview responses and observations Type of data will be nominal data	Organisation of facts and responses in a logical order Categorisation of data, that can help cluster data into meaningful groups Interpretation of single instances Identification of patterns Synthesis and generalisation, that is, conclusions are drawn
Second sub-problem	**Propositions**	**Source of data**	**Type of data**	**Analysis**
To identify practices in the management of tacit knowledge	To evaluate and gauge which processes the organisation feels comfortable using to manage tacit knowledge.	Interview questions as per Table 4 (Q4, 5 , 6 & 9)	Interview responses and observations Type of data will be nominal data	Organisation of facts and responses in a logical order Categorisation of data, that can help cluster data into meaningful groups Interpretation of single instances Identification of patterns