Knowledge Management in Call Centres

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Abstract: Call centres, or their contemporary successors contact centres, are the preferred and prevalent way for many companies to communicate with their customers, but perhaps the greatest challenge of running a call centre, is to ensure that customers are provided with the right information in a timely fashion. Knowledge management has a number of practical tools and strategies to meet this challenge but to leverage the potential of these tools organisations must understand how to implement knowledge management especially in their call centre department. This research paper focuses on five main roles of knowledge management namely; knowledge acquisition, utilisation, adaptation, dissemination and generation, while knowledge management is achieved by identifying and managing these roles efficiently in an organisation. The primary data comprises interviews with managers of the call centre department of two largest car makers in Iran. Using case study approach, this research tries to describe and illustrate how participating companies are managing their organisational knowledge in their call centres, which items are supported under their supervision and which items have not been covered.

Keywords: Knowledge management, customer relationship management, knowledge acquisition, knowledge adaptation, knowledge dissemination, knowledge generation, knowledge utilisation.

1. Introduction

In support and customer service departments like call centres, knowledge management (KM) refers to the strategies and tasks associated with developing and delivering relevant knowledge, efficiently and quickly, to meet evolving customer and support needs. Effective support of knowledge management optimises knowledge creation, knowledge dissemination and consequently knowledge utilisation. Although, there has been consistent effort to instil quality into call centres through knowledge management implementation, but until now the high volume transaction-based view of the call centre has always overshadowed this issue. This paper identifies how two largest Iranian car makers are managing different roles of knowledge in their call centres to improve the quality of their customer services. The five main roles/attributes of knowledge management are derived from the model developed by Dr S.C.L. Koh, BEng (Hons), Dr Angappa Gunasekaran, Antony Thomas, Dr S. Arunachalam (2004) based on Tsoukas and Vladimirou's (2001) finding. The roles are: Knowledge acquisition, utilisation, adaptation, dissemination and generation.

1.1 Objective of the research

The objective of this research investigation was: To examine and analyse the provisions call centres utilise to manage different roles of knowledge in order to reach the optimum efficiency and competitive advantage through the customer satisfaction and retention at the same time.

The primary data collected in the study consists of interview with call centres' CEO of two different car manufacturer companies. Nowadays, technology has provided many facilities for both the call centre professionals and the customers. Some sort of technologies has enabled call centres to make quantum leap improvements, while others have missed the mark because the industry or consumers were not ready for them yet. On the other hand, new technology has put more information in the hands of customers, as never before has a customer had so much information about a company's products and services and never before has a customer been able to identify and switch to a competitor as easily as they can today. During the interaction between customers and call centres through all the possible channels, companies could gather lots of information, which could be changed to the meaningful knowledge if companies know the rules of game. In this regard, three different kind of knowledge that could be gained by call centres through the interaction with customer are;

- Knowledge for customers is required in customer relation processes to satisfy knowledge needs of customers. Examples include knowledge about products, markets and suppliers.
- Knowledge about customers is accumulated to understand motivations of customers and to address them in a personalised way. This includes customer histories, connections, requirements, expectations, and purchasing activity.
- Knowledge from customers is knowledge of customers about products, suppliers and markets.

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2. Call centres – A customer interaction channel

The origins of CRM can be traced back to the management concept of Relationship Marketing (RM) (Levitt, 1983). Relationship Marketing is an integrated effort to identify, build up and maintain a network with individual customers for the mutual benefit of both sides (Senger.E, 2002). CRM is a process designed to collect data related to customers, to grasp features of customers, and to apply those qualities in specific marketing activities (Swift, 2001).Further Swift (2001) looks it as recursive process, changing customer information into customer relationship through use of and learning from the information. He further mentioned that CRM starts from building customer knowledge and results in high impact customer interactions. Business and government agencies establish, manage long-term, resource, profitable customer relationships by using this process. Swift (2001) divides this process into four stages:

- a) Knowledge discovery,
- b) Market planning,
- c) Customer interaction,
- d) Analysis and Refinement.

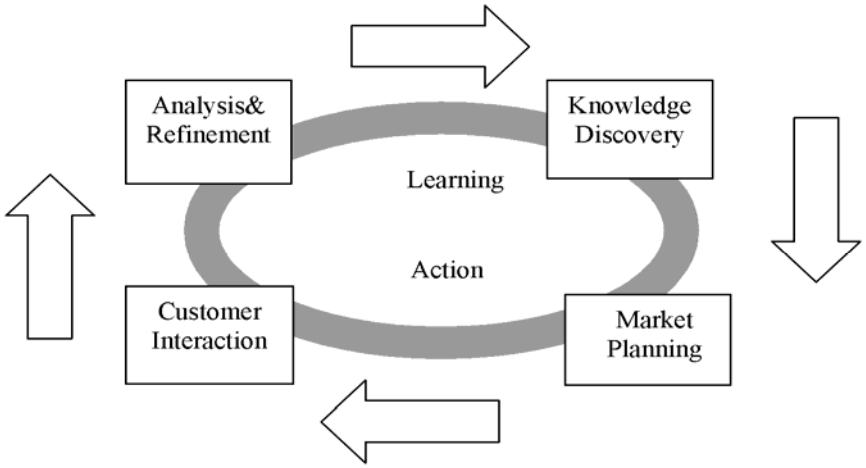

Figure 1: Swifts Model

Swift (2001) explains each process as follows.

Knowledge Discovery: At this stage the customer is analysed to identify specific market opportunities and investment strategies. Customer identification, customer segmentation, and customer prediction is done. Marketing personnel uses knowledge discovery to analyse the detailed customer information including historical information and customer characteristics for better decision-making. At this stage data warehouse is required to pre-understand customer buying behaviour. Data warehouse provides detailed collected data about different customer interactions and transactions throughout the business locations. It transforms data into information, gives it concept to become knowledge that is useful for the management and planners. Data warehouse helps the organisation, saves time by providing right message at the right time (ibid).

Market Planning (and offer planning, Marketing planning, and Communications Planning): This process helps organisation by providing specific customer offers and distribution channels, which organisation uses for customer interaction and channels, treatment plans, and products and services. This process also enables in strategic communication development plans and to put the knowledge into action (ibid).

Customer Interaction: At this stage customer related information and offers are managed by using a variety of channels and front office applications, including customer care applications, sales applications. Customer is reached by using different interaction channels which includes Sales agent, retail branch, direct mail, Kiosk, Call centre, Internet, ATM. The channel(s) that customers prefer to utilise is important. Through advanced technologies and ongoing introductions of technology change in the marketplace, the information

about customers will be collected by channels. Thus, it becomes easy to deliver marketing messages and sales opportunities, and to handle service issues through these channels (ibid).

Analysis and Refinement: At this stage the organisation learns about customer dialogs collected by capturing and analysing data from customer interactions and refining messages, communications, prices, volumes, locations, approaches, and timings, and understanding specific responses to customer stimulus (ibid).

So call or communication centres are one of the main components of modern CRM, which in many companies consolidate the communication channels phone, fax and email serving a geographically dispersed client base as indicated in figure (CRM/IT integration). According to Waite (2002) strategically, the call centre is the point of entry for most customer communication. This is where a customer can make an inquiry or contact and expect a meaningful response. The processes, technology and people with the skills, training and motivation, all exist to serve this relationship. Once available to do business, a company establishes and advertises an entry point where an inquiry from a prospect or customer can expected to be answered. Through the telephone it can be either by a response via a toll-free number (a call not charged to the customer, commonly known in the US and UK as an 800 number) or an outbound telephone solicitation (where the company representative calls a customer or a prospect). (ibid)

2.1 Managing customers' knowledge

As it is stated by Swift (2001) at the all the stages of customer interactions, different sort of data will be collected that need to be managed, but this is the responsibility of organisations to transform these data into information and gives them concept to become knowledge and obviously manageable. So what is really happening into the collected customers' data is customer knowledge management. In this way organisations could save time by providing right message at the right time to the customers, develop marketing plan to put customer's information into action, deliver and refining marketing message, communications, prices, volume and so on. What is clear here is the role of knowledge management in customer relationship management through different channels. In fact it shows how knowledge that gains from customers through call centres could help to improve all three aspects of CRM which are marketing, sales and services. In this research, the focus was on the service elements because of the objective of call centres in two largest Iranian car makers, which is mainly after sales services for their cars in domestic market rather than sales and marketing.

2.2 Using knowledge in call centres

The flow of information is not just one-way. Call centre employees have direct interaction with customers and the public, so they understand customers better than most others and will know their specific needs and complaints. Process must be put in place to feed this information back to the relevant areas within the organisation, such as sales and marketing units. They are an invaluable source of market intelligence. By doing so it becomes possible to close the loop and to create an integrated knowledge culture within the organisation. Providing a feedback on the organisation's knowledge base systems is another role of call centre staffs as they are the ones actually using the information in practice. By implementing simple feedback mechanisms the repositories of knowledge within the organisation will be more accurate and up to date. On the other hand people in call centres need to understand the issue or problem before they can deliver an accurate answer – they not only need access to answers, they need the right knowledge to understand the questions that are being asked and the issues which are being posed. One of the key benefits of a structured knowledge base is that people in call centres can focus more on troubleshooting questions and minimise the diagnosis phase, enabling them to quickly get to the answer delivery phase of the customer experience. This is crucial to achieving efficiency. Since structured knowledge allows them to determine if he or she has properly diagnosed the customer's issue before delivering an answer, it is distinctly preferable to mere access to unstructured information, which, by definition, can only help with the answer.

Call centres staff often use informal methods to research inquiries and deliver answers to customers (manuals, binders, sticky notes, case histories, etc.). However, these methods are not optimal because they do not promote knowledge sharing or knowledge reuse. Optimum contact centre efficiency can only be achieved by capturing answers to previously asked questions and building structured knowledge from this experience. The process of building knowledge does not necessarily require the presence of a formal knowledge engineer or subject matter expert. A well-defined process and tools that enable agents to contribute knowledge are recommended. In most contact centres, a question, which is being asked, has usually been asked before, and most likely will be asked again. A knowledge management system, which is built upon knowledge contributed by skilled agents and based upon actual experience, will facilitate efficient

responses to customer inquiries by experienced and inexperienced agents alike. With such a system, a "new" agent has immediate access to all of the knowledge of even the most experience agent. Also, in case experienced agents churn out of the contact centre, legacy knowledge has been captured in a readily usable and accessible form. So in order to achieve optimal contact centre efficiency, people in call centres need accurate knowledge about their organisation, customers, products, services and also market. Embedding knowledge management into the activities of call centres changing it to knowledge centre for the organisation that serves the entire enterprise in receiving, recording, resolving and reporting on issues from all internal and external customers seems to be necessary but how they could reach to their required knowledge? How they could fulfil the customer's need after a call?

2.3 Model for managing knowledge in call centres

Many models of KM can be found in the KM literature, the most widely quoted among them are the ones developed by Wiig (1993), Nonaka (1994), Edvinsson and Sullivan (1996), Carayannis (1999) and Despres and Chauvel (2000) Tsoukas and Vladimirou (2001). A KM model used in this research is developed based on Tsoukas and Vladimirou's (2001) but I've also used other KM professionals theories like Oluic-Vukovic (2001), Paisley (1993), Hendriks (2004), Huysman (2002), Snowden (2000) and Wiig (1993) to give more depth to my research. At the core of Tsoukas and Vladimirous (2001) model is personal knowledge classified into tacit, explicit and cultural. At the outset are the various roles associated with knowledge and KM is achieved by identifying and managing these roles efficiently in an organisation.

3. Proposed outset factors

As is evident, there are different sets of factors involved in process of managing knowledge in call centres. They can be grouped into a number of generic factors in knowledge management efforts such as knowledge acquisition, knowledge generation, knowledge distribution, knowledge adaptation and knowledge utilisation.

3.1 Discussion

Knowledge acquisition. A model proposed by Oluic-Vukovic (2001) outlines five steps in the knowledge processing chain: gathering; organising; refining; representing; and disseminating. This model covers nearly a complete range of activities involved in the organisational knowledge flow. It closely resembles information life-cycle processes. First, the "gathering" step has been separated into three different processes, each of which is distinct from the other: discovery, acquisition, and creation of knowledge. Based on the Tsoukas and Vladimirou's model we focus on knowledge acquisition in order to shape the frame for later references in data analysis chapter. Acquisition involves bringing knowledge into an organisation from either internal or external sources. The creation of new knowledge may be accomplished in several ways. First, internal knowledge may be combined with other internal knowledge to create new knowledge. And secondly, information may be analysed to create new knowledge. This is adding value to information so that it is able to produce action. One example of this knowledge creation process is competitive intelligence. Technologies are useful at this stage because they can facilitate the creation of new knowledge through the synthesis of data and information captured from diverse sources (Oluic-Vukovic, 2001). Regarding the call centres conditions, sources of acquisition has no limits; it could be from other superiors, customers, advertisements, magazines, newspapers, television, etc.

Knowledge utilisation. A variety of authors have proposed theories, or models, of the way in which knowledge utilisation works. Paisley (1993), for example, contrasts two models that he labels as the diffusion model, which emphasises the disseminator of information, and the information-seeking model, which emphasises the roles of users in seeking solutions. Wingens (1990) notes that one of the first major utilisation studies in the field of sociology (Caplan, Morrison, and Stambaugh, 1975) divided existing theories into three major categories: knowledge-specific theories, policymaker constraint theories, and two-community theories. According to Wingens and others, the latter theory, which focuses on the gaps in culture, need, and belief between the two "communities" of researchers and users, remains "the most prevalent theory to be found in utilisation research"? There are at least some major changes to consider as Paisley (1993) notes, "Many of the problems that challenge knowledge utilisation have changed little since the 1960s and 1970s. However, the communications environment of knowledge utilisation has changed dramatically". The proliferation of electronic communications, in particular the widespread use of personal computers, has given rise to a number of new questions and issues about equity, access, and effectiveness. In addition, perspectives about the process of knowledge utilisation have shifted in important ways. Edwards (1991) points out, "Today the complexities and the dynamic, transactional aspects of knowledge utilisation have become more widely recognised". Hutchinson and Huberman (1993) describe the changes since

Havelock's (1969) research-development-dissemination-evaluation model "cast the flow of knowledge as a one-way process"

No single theory or model has gained ascendancy. In fact, Wingens (1990) asserts that: The state of the art of theory-building in knowledge utilisation has remained on a low level and is, at best, mediocre. There is no elaborate utilisation theory, let alone one that has proved its explanatory power by empirical testing. By the way the cycle of knowledge management is neither complete nor successful if no efforts are made to ensure the use of stored and shared knowledge, which means knowledge utilisation. Today's pressure is to deliver cost-effective support that is seamless and consistent to the customers or employees. To accomplish this, we must capture the knowledge that exists in everyone's head — before those heads disappear! To deliver a consistent, quality end-user experience that improves the support organisation's image, perception and value proposition, we must utilise knowledge repeatedly — before the customers go elsewhere or employees throw up their hands in frustration. To deliver against committed service-levels, we must get the maximum return from deployed resources and investments — before the demand overburdens supply and causes frustrated customers and professionals. So, the value proposition is to create knowledge that is usable and scalable; meaning the more people that use it — regularly — to solve their problems or answer their questions, the more valuable it is.

Knowledge adaptation. Knowledge always leads to changed behaviour, e.g. the call centres people modify their action with experience, and this is obvious in many ways. A simple example would be that all call centres' employees have to follow certain procedures while dealing complaints based on the nature of complaints. They get this information from the complaints procedure manual. They also have to interpret the situation and adapt these rules to respond according to the situation. An optimised knowledge delivery process leverages the natural inputs and interactions involved in identifying and resolving a question, quickly and effectively bridging the gap between what a customer or support agent knows and the best information available at any point to satisfy the evolving context of the question. An optimised knowledge development process provides inherent input to expand and extend the system to meet evolving business needs, both by stimulating content creation and by providing visibility into customer and product trends. The key tasks in support knowledge management relate to the gathering, structuring and delivery of content to meet specific support needs. A robust system must be capable of defining a valid support context for knowledge, pulling in all relevant sources from across the organisation, and driving improvements through views into customer and product trends. Tasks include:

- Creating a knowledge base: a structured support-specific view into high-value content - Integrating auxiliary resources into the support experience when relevant
- Jumpstarting knowledge creation for new issues, products, areas of focus
- Leveraging incoming information to drive knowledge development
- Developing knowledge workers and knowledge assets
- Getting clear visibility into trends, opportunities and issues in knowledge
- Developing relevant self-help knowledge interactions
- Relating product knowledge to the customer context
- Creating effective interfaces to elicit and scope customer needs

Knowledge distribution. Knowledge sharing is a complex process involving the contribution of knowledge by the organisation or its people, and the collection, assimilation, and application of knowledge by the organisation or its people (Hendriks 2004; Huysman and De Wit 2002). Four key perspectives on knowledge sharing are codification, personalisation, community, and power. Codification proposes that certain types of knowledge (explicit knowledge) can be codified and stored, and later retrieved, reconstructed, and assimilated by receivers (Hansen et al. 1999). Critics argue, however, that explicit knowledge cannot represent the valuable tacit knowledge that receivers often need (Tsoukas 2003) and reduces learning opportunities (Swan et al. 2002). In personalisation, knowledge sharing is interactive (Hansen et al. 1999), facilitating meaning negotiation and stimulating knowledge creation, knowledge integration, and learning (Koschmann 1999; Swan et al. 2002). Community perspective, knowledge exists only in terms of the community, which produces, shares, and applies it (Wenger et al. 2002). A fourth perspective conceives knowledge sharing in terms of the power thus transferred. Sharers may hoard knowledge in order to preserve status and position (cf. Husted and Michailova 2002; Hall 2004). Plato's view was that power should be shared according to the prevailing hierarchy so as to maintain the most apt leaders (Quinn 1998). However, Freire advocates non-discriminatory sharing in pursuit of social equality (Freire 1985). In organisations, management of power issues can reduce such filters and enable more democratic distribution of knowledge. A range of Information, communication facilities are available to support knowledge sharing –

for example, portals, intranets, email, and groupware. Such technologies can provide access to stored knowledge, connect sharers and receivers for sharing and collaboration (e.g. communities of practice), and support business process improvement. An intranet is an example of a popular knowledge technology, with receiver difficulties including search and navigation, low quality content, information/knowledge overload, knowledge silos, and insufficient context (Edwards and Shaw 2004; Kautz and Mahnke 2003; Stenmark and Lindgren 2004).

Knowledge sharing involves the transfer of knowledge from one (or more) person to another one (or more). Knowledge sharing is often a major preoccupation with knowledge management and is frequently addressed in the literature. Not only most organisations abandon the idea that all knowledge should be documented, but they should also be ready to implement different methods for sharing different types of knowledge (Snowden, 1998). Although knowledge can be acquired at the individual level, to be useful a community, often described as a community of practice, must share it. For instance, if there is only one person knowing organisational rules and procedures, such rules and procedures would be useless and meaningless. On the other hand, rules and procedures emanate from communities and exist precisely to regulate group activities. Knowledge sharing is then crucial when new employees arrive and others quit. The management of information does not really focus on information sharing and is more oriented toward the control, preservation, and retention of information. One could also argue that the usefulness and the meaningfulness of information do not depend as much on its collective consumption or sharing: its individual consumption and use could be very effective from an organisational point of view. In fact, too much distribution of information can lead to information overload, which could paralyse all the activities. The primary goal of knowledge management for call centre staff must be to effectively disseminate knowledge from central management, out to all branches and centres. Of course this is more than just sending out information. Delivering the information is one thing, getting staff to act upon it is quite another. Thus the focus is on communicating knowledge, whereby the staff take on the updated information and processes being disseminated.

As mentioned before a communications infrastructure can easily deliver information, it can also easily overload call centre staff with a flood of information. With little available time, staffs are then unable to keep up. The knowledge must be disseminated in a form that is tailored for the specific needs of front-line staff, which means brief, concise and clear communications. The next research question would go into describing this important issue.

Knowledge generation. Knowledge generation is closely interrelated with all the other roles. The process of knowledge generation draws extensively from the existing knowledge base, i.e. transformation of explicit, tacit and cultural knowledge to new knowledge. It is a function of prior knowledge as it is of received inputs (Wiig, 1993). When management tries to resolve an issue by finding a solution, it results in knowledge generation. To find a solution, the management should have thorough knowledge of the problem. Similarly, the solution may also be found by call centre employees, this is also considered a type of knowledge generation. Once a solution has been found and implemented successfully, the new knowledge can be made available organisationally by the management. Such practice will enable continual shift in the culture within an organisation as new knowledge is diffused in an organisation.

3.2 Empirical assessment of factors

Aside from the theoretical justification of the proposed factors, an empirical evaluation provided further support. Based on the discussion above, all the factors and their underlying issues and elements were carefully shaped into an interview questions. This was then used to empirically investigate the knowledge management circumstances in two cases, which have been selected in my study. The type of study was exploratory and descriptive as it describes and explains how the process of converting customers' information to the useful and structured knowledge occurs in two biggest automobile manufacturers. In both cases the CEO and their assistant was selected to participate in the interview. Before reaching to the time of interview and in order to make the participants more familiar with the context of study some emails with short discussion and guidance sent to the interviewees.

4. Conclusion

The table in the next page is a representation of the five components of selected model while the theory and models from other researchers also are exhibited. On taking a glimpse of the table it can be clearly noticed that both companies are slightly similar in terms of five components implementation. The table has explained each option of the individual company as regards to the points put up in the literature. In each of the

component both similarities and differences regarding the current situation of managing knowledge in call centre of each company has been presented.

Table 1: Tsoukas and Vladimirou's (2001) KM Components in call centres

	Acquisition	Utilisation	Adaptation	Distribution	Generation
Frame Of Reference	Oluic-Vukovic (2001), Model Gathering steps: Discovery, Acquisition and creation. Tsoukas and Vladimirou (2001) , Model Training, Internal consulting, Periodical knowledge assessment, training with experts, encourage knowledge acquisition from external source, Promote customer service oriented culture, Dairy notes. ICT Internet/intranet, KM software, knowledge db, Print Media, magazine, notes, Newspaper, Space for informal/formal gathering, Learning rooms.	Paisley (1993), Model Diffusion and seeking information. Tsoukas and Vladimirou (2001) , Model Job rotation, Formal discussion, Temporary team leader assignment, Advisors participation in solving practical issues.	Tsoukas and Vladimirou (2001) , Model Using change management experts, Review of implementation of new practices, Encourage advisors to suggest new service oriented practice, Strict monitoring of rules and customer services.	Hendriks 2004 and Huysman and De Wit 2002 Codification, Personalisation, community, Power. Snowden 2000 Knowledge documentation Tsoukas and Vladimirou (2001) , Model Communities of practice, Expert observer in action, Personal stock knowledge notes encouragement, Encourage advisors to write down new knowledge for future use, encourage staffs to talk about errors and mistakes, remove bureaucracy.	Wiig 1993 Model, Use of existing knowledge base, Transformation of explicit, tacit and cultural knowledge to new knowledge. Tsoukas and Vladimirou (2001) , Model Encourage employees to solve practical issues and use innovative behaviour for customer services, Reward system for innovation and practical solutions.
Call centre 1	*Train new employees. *Periodical assessment with experts. *Use print media, magazine and intranet, Management information software	*Advisors help call centre staff t solve practical issues. *Every individual try to apply what have learnt by experience.	* use change management experts in other departments. *Use some experts to review and advise new practices.	*Using software, all data codified, personalisation and community in individual level. *Advisors help to write down new knowledge for future use.	*Advisors analyse both reports and existing knowledge in terms of papers, manuals, intranet and repair instructions, to transform explicit tacit and cultural knowledge to new knowledge

	Acquisition	Utilisation	Adaptation	Distribution	Generation
Call centre 2	*External sources, Train new employees, *Periodical assessment with experts. * Use print media, magazine and intranet, Management information software	*Advisors help call centre staff t solve practical issues. *Every individual try to apply what have learnt by experience.	*Use some experts to review and advise new practices.	*Using software, all data codified, personalisation and community in individual level. *Advisors help to write down new knowledge for future use.	*Advisors analyse both reports and existing knowledge in terms of papers, manuals, intranet and repair instructions, to transform explicit tacit and cultural knowledge to new knowledge

Research revealed that information management has not only helped both companies to improve their bottom-line but indeed enhanced their stride towards offering better customer service. In this regard both companies have focused on the management of explicit knowledge (designing, organising and providing access to a knowledge base), which is a foundational application for customer support. In terms of using experts to gain insightful and contextual knowledge more than what is available in documents or data record in their call centres, both companies have a systematic approach while they provide the capability to find and ask experts to improve their service levels from just giving the simple answer to a well-reasoned response. But in neither of companies, Management information software they use is able to provide statistical reports about the average handle time for call responses, first call resolution and other important metrics that show the efficiency of call centres. It also proves the fact presented in the theories that knowledge management definitely involves applying the collective knowledge and abilities of the entire workforce to achieve specific organisational objectives. It involves getting the right information to the right people at the right time, and helping people create and share knowledge and act in ways that will measurably improve individual and organisational performance. This emphasises the fact that between the three major components of knowledge management, people are the most important one that organisations have to focus on, as they are the main resources of knowledge in the today's organisations. Hence the study revealed that although the participating companies have invested a lot on technological issues but because of the current gap that exist between two other factors (People, Processes) and the latter one (Technology), what is happening there, is more likely a sort of information management rather than knowledge management. Organisations can certainly benefit from a more thorough understanding of the factors that are critical to the success of knowledge management in call centres. However; the adoption of factors, which are not suitable, can impede the achievement of the desired performance. As such, considerable care must be exerted in the development of processes which lead to easy transformation of individual knowledge to groups and finally to the whole of organisation. This study has proposed a set of five components, which is believed to be more appropriate for managing knowledge in, call centres. It has improved on initial studies by integrating insights and ideas drawn from them. The set of factors proposed in this study are in itself important because they could act as a list of items for call centres to address and deal with when accomplishing knowledge management. This helps to ensure that essential issues and factors are covered when they are planning and developing knowledge management programs. At a later stage, it can also provide a basis for them to evaluate their knowledge management practices. For academics, it provides a common language for the discussion and study of the factors underpinning the success of managing knowledge in call centres. Essentially, this study can be employed as a "springboard" for further empirical research.

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