

Optimal Growth and Development of Companies through Knowledge Management Value Chain

M.V.Shetty¹, Aurilla Aurelie Arntzen Bechina² and Kalaivani Radakrishnan¹

¹Multimedia University (MMU), Selangor, Malaysia

²Buskerud University College HIBU, Norway

Abstract

The tools and techniques in Knowledge Management (KM) are powerful measures for enhancing the growth and development of the company if it is well directed. It may also if not handled appropriately reflect inefficiency in work sapping the energy of employees who may not see the objective of these initiatives in the right perspective and be critically inclined towards it and may try opting out of it. Michael Porter's Value Chain had created an environment of empowering major corporations, but with the tremendous power of internet the opportunity of developing KM has been phenomenally enhanced. The actual power naturally lies in canalizing the forces of knowledge gained by employees across the organization that is presently neglected. The present Value Chain would work, however the question is- "Is the Value Chain of a KM organization similar or different to Michael Porter's?" The paper notes that the success of the KM system if appropriately designed would be an assured one in spite of growing competition. With this in perspective the paper attempts to review reflectively on the situation as to what would be the issues and factors that ensure the success.

Keywords: Knowledge Management System, Value Chain in a KM organization, Growth and Development in Companies

Introduction

Knowledge Management (KM) tools and techniques are powerful measures for enhancing the growth and development of the company, but unless it is well directed it may result in frittered energy and extra unproductive work sapping the energy of employees who may not see the objective of these initiatives in the right perspective and be critically inclined towards it and may try opting out of it. This would lead to contra results in spite of the best efforts of the company. Michael Porter's Value Chain, when it was introduced, had created an environment of empowering major

corporations, but with the internet the power brought into play by the Internet (NET) is multifold, whereby the opportunity of developing KM has been phenomenally improved/enhanced. However few corporations are developing it appropriately using KM tools and techniques, for their growth and development, and if any it is sporadic and at best by virtue of on-line business and e-mail management.

The actual power naturally lies in canalizing the forces of knowledge gained by employees across the organization that is presently ignored or neglected. Learning organization is attempting this but not through proper

canalization of the expertise and skill sets and knowledge of the employees. Here again Value Chain would work, but is the Value Chain of a KM organization similar or different to Michael Porter's? A peep into the literature and reflective analysis born of discussions may throw a greater light into the real Value Chain that would be suitable for a Knowledge Corporation that empower the organizational growth and development amidst the crushing competition of the world today. With this in perspective the paper attempts to review reflectively on the situation.

Research Objectives

- To create a KM Value Chain that is simple and yet empowering and can be implemented by all types of organization.
- To develop the Value Chain based on first principles so that the gaps if any in the company would be totally smoothed on the lines of what KM is targeted to achieve and not perceived as fitting.
- To further develop this into a working model on suitable refinements born of experiences of many researchers are included.

KM and Value Chain

Before proceeding with the review, it is important to note the premises on which KM and Value Chain is made be defined for congruence of understanding.

KM could be defined as the creation, development, maintenance (monitoring) and updating of the required knowledge in an organization, self generated creatively/innovatively by the employees operating enthusiastically out of a strong commitment to contribute to Society, inspiring each other towards fulfillment of the Vision and Mission of the company.

Value Chain is defined as the framework and systems that empower the employees to continuously add value spontaneously in

their relationships and work, guided and inspired by the strong force of commitment towards the KM system.

Hence each critical Component of the Value Chain is to be reviewed for its role and significance when designing the system so that it is handled as per its role.

The Components

The major components include and not restricted to the following:

- a) The target (bull's eye) toward which all efforts of the KM system is to be directed namely the Vision and Mission of the Company.
- b) The players- The major/key stakeholders, suppliers/ subcontractors, distributors or cybermediaries/franchisees, and the employees that form the blood stream of the Company.
- c) The key purpose- the Customer or the King of the KM system and companies performances.
- d) The Barriers- Govt. or fiscal policies and statutory regulations.
- e) The objective- Brand Enhancement with a KM system of continuous improvement and empowerment of the employees in their routine performance to creatively perform even in their routine activities.
- f) The mode of Optimal benefits- Networking interactively (both knowledge wise and information wise) – A system or framework is crucial for spontaneous development.
- g) The infrastructure- IT and technology (State of the Art) driven operating in a convergent or integrated manner, and continuously upgraded. Tools of evaluation of status, ongoingly, to assess/ascertain the progress made, by the company members, so that monitoring becomes easy.
- h) Mandatory conditions (unique for I.T. and Knowledge Management system in the company) for credibility and success/acceptability- Security issues (Management of Technology), Privacy issues (Protection) and regular updating of the knowledge system.

- i) The Means/ Mobility/ diffusion - Training and demonstration with periodic review to all the employees and also stakeholders.
- j) The Outcome- A perfected KM system with Brand continuously improving in spite of competition (in fact a spontaneously developed, self-generating creatively, learning organization with motivated and inspired people with focus of contribution to Society beyond monetary considerations).

With the above components in perspective the Model was created and proposed for adoption and trial by the Corporate keen in KM us for growth and development. Cases Examples of companies with sound and professionally designed KM system (Value Chain analyzed in retrospective).

Literature Review

Frameworks in practice today, process transformation using KM tools [1], environmental influences in KM use [2], procedures of KM use [3], interactive networking, optimizing relationships and performance [4], developing new design and managing customer experience [5] is reviewed in this section.

Interactive designs and fusion of technology [6], with greater customer involvement in design and styles of automobiles has invariably enhanced customer experiences and thus relationships [7]. The aforementioned was adopted by leading automobiles like BMW [8]. Similarly, other leading automobiles companies have focused their attention on service/delivery relationships, pre-launch campaigns [9] and media support [10]. Several automobile manufacturers have resorted to subcontracting/outsourcing of expertise [11]. Such a move ensuring optimization of plants, as attempted by Indian automobile companies [12] is becoming increasingly commonplace today [11]. It is also observed that compliances needed for corporate social responsibility (CSR) today have been drilled into Multi National Companies (MNCs)' procurement agenda

[13]. Consequently, domestic regulatory compliances, imposed by special interest groups and the international governing fraternity are now mandatory for automobile manufacturers. In the same way, factors/barriers interplay [14], supporting auxiliary bodies in value enhancement of relationships is a key element to ensure sustained growth [15].

Together with the aforementioned, there are other areas often paid little attention to but crucial for enhancing/optimizing relationships within a value chain. These include good crucial governance, monitoring and managing knowledge retention and growth, state of the art technology (optimizing convergent technology), communicating with stakeholders through the NET, value chain based KM framework and use of appropriate technology [16].

Spanning across the value chain, brand building exercises often undertaken by most automobile manufacturers today among others include sponsorship, high impact events, loyalty programs, media, web blogs or NET [17]. The marriage of value chain and KM tools espoused in this paper is crucially supported by the use of AIDA (Awareness, Interest, Desire, Action) model [18]. Such an alliance propagates value enhancement with relatively low increase in customer cost resulting in increased customer experiences.

Networked relationships when proactively managed enable an organization to position itself effectively [19]. This coupled with sound corporate strategy, when well networked across the value chain augurs well for sustained growth and boost an organisation's competitive advantage [20]. However, for the aforementioned to be realized, organizations must consider leveraging on appropriate KM tools as an effective means for networking [21].

Similarly a review of KM applications in tourism can be highlighted as below: Through a review of "Applying a Knowledge Management Framework to Tourism

Research”, Lisa Ruhanen and Chris Cooper (1999) attempts to define the KM value Chain, but as per the researcher though it appears a good development, it falls short of expectation. It is based on needs identification as a starting point, and thus a survey is needed and likely gaps in identification of the real need may make the KM another dynamic Change Management exercise in futility. The knowledge value chain model (Weggaman model, 1997) that is used in their approach and discussions later would throw light on the shortfall while TV Singh (2001) highlights the application of the same but for a specific purpose. Trends of use in marketing and data mining indicates the role of KM in Marketing (Michael Shaw et al, online 19th March 2001) and thus some of the likely features of the Value Chain but it is too detailed for a framework of an universal nature, underlying its use as a Value Chain.

Schlegelmilch and Penz (2002) by outlining the use in Marketing, Roger Bennet and Helen Gabriel (1999) in outlining the organizational factors of KM that promote or encourage tourism a research specific to the title, a review of “Features-Growing your Marketing Department into a Knowledge Management Team: Aim to Hire Assets not overhead” where Linda S. Orton (1998) analyzes the role of Marketing professionals in law firm improving their outputs with knowledge management are all of specific applications with no indication of Value Chain as any basis. Discussions of the importance of Knowledge Management, even in crisis and disasters where Nina Mistilis and Sheldon P, outlines steps to handle it as indicated in “Knowledge Management for Tourism Crisis and Disasters” the analysis is of a specific nature for those occasions with no generalized approach. Through “Knowledge management and tourism” Chris

Cooper (2004) highlights the use of KM in tourism and the critical aspects as well again with no indication of a value chain universal approach.

Similarly studies of literature indicate either general or targeted approaches to KM but no model of a universal nature redefining a suitable Value Chain has been noted. This makes it interesting to reflect into a possible Value Chain and create or attempt to create one born on first principles.

Research Problem

The above literature review raises some fundamental issues like:

- How would a Value Chain in a KM perfected organization be?
- How can one make a creative Value adding system that would empower even Small and Medium Enterprise (SME) and large alike to an approach for enhancement of their growth and development on contemporary lines using KM tools and techniques?
- How can one have a framework and system simple in nature to propagate and diffuse in the organization and to the customers and other stakeholders, for easy implementation and yet empowering when implemented?

These and similar questions set the researchers thinking into a paper put across in the following pages.

Conceptual (Theoretical) Framework

Schematically the approach to research would be as follows:

$A + B + C \Rightarrow D$ where

A—The status of KM of the employees as on date and the system existing.

B—The best practices suitable for the organization for growth and development.

C—The KM tools and techniques developed/customized(would be ideal for the organization)

D—The expected outcome of an empowered organization perfected for growth and development using the best KM tools and techniques (and also a dynamic learning organization as a consequence)

Research Methodology

General Managers and Senior Manager levels were discussed with in an informal environment of convenience. The manner these were conducted though convenient and informal had the full attention of the participant and thus could capture their opinions clearly. Though the exact number was not noted as no formal notings were made, it is expected to be over 25 people's opinion were reviewed., including professors from Universities.

A few cases of automobile companies (Malaysian origin or having a strong presence in Malaysia) was reviewed through personal discussion with top management and decision makers around a semi-structured framework of their use of KM.

Discussions with experts indicate that it would be favorable, but difficult to implement. This is because fundamental attitudinal changes on the conservative nature of those involved are deemed essential. They felt that after the initial euphoria of practices, the freshening of the contents (regular updates) crucial for its success gets sadly abandoned. The incentives had to be substantial for adherence to the changes needed (which are not in line with existing culture). Unlike in implementation of International Standards Organization (ISO) series or of six sigma, where compliances were mandatory/ obligatory by the authorities, KM tools in contrast, have built-in principles with intentions of being customer oriented (both internal and external).

In detailed discussions in confidence, a couple of manufacturers indicated the proactive initiative of KM tools as a part for their project (mandatory in their annual reviews). A quick study of these indicated a

lot of similarity with the proposal put forward in this paper, except that it was sectorized in nature (i.e. limited) while the proposed framework presented a holistic review of the same. It was also uncovered that the notion of introducing values through interactivity and innovations were thought of, but not seriously noted though it was well appreciated. In another revelation, while the top management agreed and appreciated KM initiatives forwarded by the managers, they turned it down as too intense with the view that the company was not ready for such "grand" initiatives. Observation and revelations uncovered from discussions provided much needed catalyst in meeting objectives outlined in the paper. Automobile companies were in varying stages of KM implementation with regards to their value chain. It was noted that while two of the companies examined had a fairly structured rigorous KM implementation (albeit not holistic), one company was ad-hoc and sporadic in nature and that too limited to their training unit.

Further, some of them felt that articulation and compliance is a cultural fit, while informal and proactive support is demanding in nature. Thus there is a need for attitudinal changes/orientation, beyond what is achievable in orientation or regular training programs. As NET savviness is crucial towards successful KM implementation, a large section of people were not receptive to change from comfortable paper based to contemporary electronic approaches.

The KM Value Chain Model

Figure 1 gives Shetty's KM Value Chain Model (proposed) born of first principles.

Discussion and Comparison with Weggeman's Model (1997) described by Michael Shaw (1999) of the KM Value Chain.

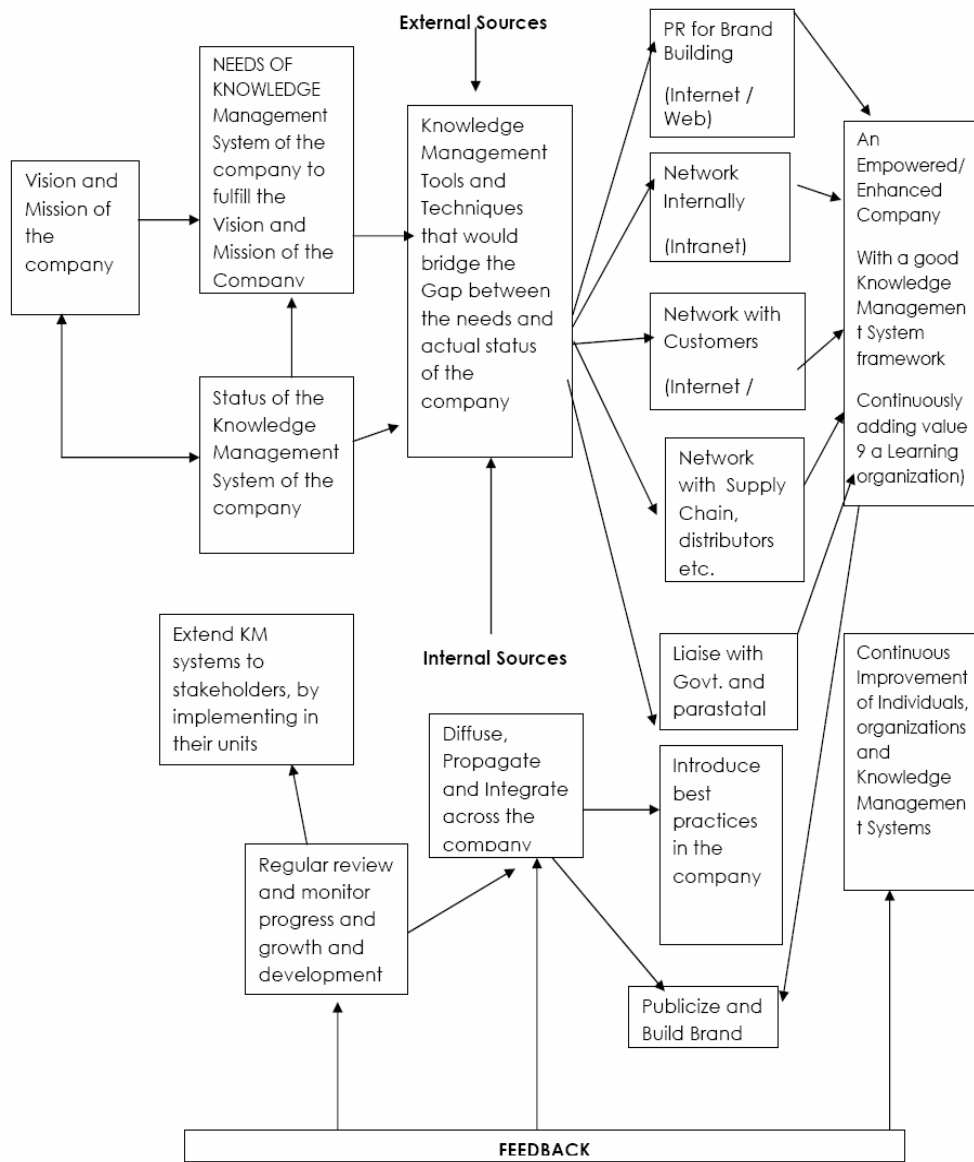


Figure 1. Shetty's KM Value Chain Model

Table 1: Comparative highlights of the two models

No.	Weggeman's Model	Proposed Shetty's Model
1.	<p>Originates from the needs to be identified and gaps (noted between needs and perceived KM system). Provides wider gaps of perception between observations of status and of needs.</p> <p>The KM system needs perspective and the understanding of the service provider cumulatively thus adding to get a total gap (Services Gap)</p> <p>It may worsen if communication also has gaps.</p>	<p>The KM Value Chain would originate from the Vision and Mission of the company and built around a perfected KM system preferably by professionals/experts.</p> <p>The shortfall or gaps would lie in the inadequate or unclear perception of the Vision and Mission of the company, which would result in fruitful interaction and a better understanding of the Vision and Mission of the company.</p> <p>This leads to continuous focus and self directional efforts to achievement and if the top management (with some key stakeholders) get involved would result in a spiral growth toward a well designed and purposive KM system. It is therefore born of first principles crucial for any success.</p>
2.	<p>It aims at narrowing the knowledge gap by developing new knowledge is a general statement of objective and not easy to implement.</p> <p>There may be resistances from the employees who see no purpose in this exercise or find no personal gains in the efforts.</p> <p>This would thus be akin to a survival approach/strategy with unnecessary push and pulls within.</p> <p>This may be akin to any Change Management process.</p>	<p>It aims at identifying tools and techniques (suitable for the organization if professionally designed).</p> <p>This ensures bridging the gap in a complete and long term manner, crucial for any change management initiatives to excel. This would be a developmental approach/strategy and would be acceptable to all as there cannot be non acceptance unless the employee is clearly against the professional interests of the company and even then to show non-identity would be difficult. Presently there are high level tools for specific KM need addressed that has been developed through similar research and reflective analysis, which unfortunately was not available in Weggeman's time, when KM was very much in its infancy stage or embryo (caterpillar) stage.</p>
3.	<p>It is mentioned that diffusion across organization which is appropriate but not the commercialization program expected.</p> <p>It may not attract stakeholder interest</p>	<p>It insists on propagating along with diffusion (AIDA equivalent) by all modes of communication and building PR through professionals for Brand building so that it is more objective</p>

	adequately in view of their objectives in investment or participation being more returns oriented than interest to build upon losses (or reduce profits) on a long term perspective that a commercialization program of this KM stage would entail.	oriented. It may win stake holder's time and greater level of participation crucial at this stage.
4.	The mode used in the propagation and most effective tool today of technology and IT driven modes of interactive participation across geographical boundaries. During that time it was in its infancy.	The mode used for Interactive knowledge sharing (through intranet, internet and extranet) with a 24/7/365 availability to communicate has made the globe a small place to work in.

Discussions

Let us have a brief review in the following Table 1 as to why this model would be more relevant than Weggeman's Model.

Hence the only major issues to be addressed in such systems (not seen in Porter's as well) is the emphasis of credibility building and communicating the safety measures of the communication namely, handling security issues, privacy issues and updating issues that may break efforts of plagiaristic interests of individuals). Thus specific result-oriented KM system needs to be drawn up customized to the respective company's Vision and Mission. Adequate care is to be taken of the Government. as well as special interest groups (like the nature conservationists etc.) and statutory needs (pollution level, reporting of tax returns, work permits etc.) in time so that they do not result in any emergency, and disrupt the real Knowledge Management system for want of attention. Progress would thus be certain and natural. With progress born of natural and contributory approach generates enthusiasm and innovativeness that as a team leads to inspirational approach leading to the real joy that work is supposed to give and empower. As a consequence there would be continuous improvement in all activities of the company, some of them rich in innovativeness. Learning process becomes spontaneous thus creating a self-generating learning organization leading to continuous Brand

building (if PR is supported appropriately) amidst the tight competition around but would not deter this company, who would be operating like market leaders. Specially as other companies may not be so designed as to handle situations likewise, in spite of the best competencies. A specific example is the victory (though short lived) of the dot com over the MNC's especially in the market capitalization of their intellectual capital, which however failed due to their lack of focus on the king (the customer) and lack of experience in handling such rigorous changes in (of) the market place. The only threat is outcomes of breakthrough technology of competitors born of outputs of R and D that may cut into the vitals of one's company.

Implementation of the Model

With the above schematic view of the Model, drawing up an implementation plan is a routine procedure, but none the less is highlighted here for purposes of ease of implementation of what one would call as the blue print of System implementation.

- a) Perfect the Vision and Mission of the company by a board review as it would be the foundation of the KM system.
- b) Using professionals and brain storming sessions along with top management members, draw up a KM system reflecting expectations

form employees in the present environment. Here taking cognizance of other companies in the line or similar line or from international sources to get the best practices as a hall mark may be useful.

- c) Draw up supportive technology and IT features into the system based on the perceived best practices, eg. intranet, extranet and Web page for enhancing the speed and convenience of operations into an interactive real time mode.
- d) Review and draw up the actual status of KM perceptions and acceptability for the employees, using specialists in house (trained for the purpose) or third party consultant who may be unbiased. It is important that they do not know the KM system or needs outlined by the top management.
- e) Bring out the gaps between the two systems, one of top management (perception) based on Vision and Mission needs and the other as observed by the specialist or consultant.
- f) Highlight the tools and techniques that would bridge the above gaps between the two (idealized one and observed as existing).indications of costs, time, priority levels case references of industries in practice of KM system (in the sector), is crucial to plan out outcomes and approaches. If constrained by budgets (as in cases of SME sector) this exercise would be useful to prioritize and chalk to a scheduled growth plan.
- g) Prioritize the programs and work out a detailed plan with activities, project leaders, budget and time framework. Generally 12 to 18 months framework is ideal Have n ongoing program of increasing awareness levels of employees of the KM system.
- h) Implement the above by executing it as per the designed plan with periodic reviews and monitored controls (by measuring against targets and deadlines set) like in any other management programs. This has to be periodically reviewed with feedback obtained from all sources, so that the status, progress made and direction in which the KM system is moving is in order.
- i) Work out a PR system of communication with all stakeholders and customers to ensure greater brand development, increased loyalties, easier acceptance of the KM system and companies programs and consequential improved relationship and performances.
- j) Extend the KM system as needed to the distributors and franchisees, suppliers and contractors are all integrated with the companies KM system. Initially special incentives may have to be provided to encourage initiatives till they have experienced the fruit of a well organized KM system. Once they are in synch there would be a spiral growth upward with enhanced team performance (akin to a learning organization). Network interactively with all stakeholders for updating, as well as feedback, customer trends, ideas and suggestions etc. that empower the performance of stakeholders beyond monetary considerations.

Conclusions

In brief, we have noted form the reflective exercise that the improved nature of the new model proposed born of first principles, is easy to implement and of a universal application to large sectors as well as SMEs based on their own priorities. KM system can thus have a simple framework and monitor growth and development promoting a team based approach and create a inspirational body of work force (employees) continuously

improving their performances and operating with an innovative approach enthusiastically born of a sense of fulfillment fo being contributory to society. Improved relationship with stakeholders is easy leading to improved performances and greater level of cooperation (cooperative efforts) crucial to handle competition.

Ease of sue of State of the Art Technology and IT driven systems with a rich media platform for communication that enhances the perception of the employees and others studying the system. Hence Doubting Thomases and resistant employees would be nullified in the process with adequate clarity of purpose and commitment around.

Being based on Vision and Mission of the company, top management involvement (crucial for change Management success) would be high and a clearer perception of Vision and mission would emerge across the organization improving the commitment to the company.

The value addition process would be a continuous one, naturally happening in all relationships. Spontaneity of the action would be translated to the customer in all the offerings in view of the nature for customer focus of the organization.

Thus the success of the KM system so designed would be an assured one in spite of growing competition. Except where any of the competitor have a breakthrough research findings through technological innovation born of R and D that would have a distinct superiority at lowered cost to the customer. But for this even better players may not be so designed for growth and development. A detailed working of the KM system in practice need to be drawn up in this framework for all sectors and the underlying features noted so that differentiation of the KM system may be for specific sectors or purpose.

Future Research

This could be considered to be two fold: Segmentation study of the KM system with the above Value Chin model in place in various sectors say health care, education, tourism, financial services etc. so that the individual nuances (differentiating factors) can be brought into focus distinctively for other sectors to note.

Experiences of these implementing the above can be shared through a special network or knowledge ware or in conferences for others to benefit from the experiences and learnings so that a planned improvement by the beneficiaries in their KM system would result in handling problems and challenges if introducing dynamic Km system.

References:

- [1] Heiseg, P., European Guide to Good Practice in Knowledge-Frameworks on Knowledge Management, Franunhofer Institute Produktionsanlagen und Kostruktionsstechnik (Brussels), Berlin, October 2002.
- [2] Tay, W. and Chan, C., Trans Knowformance - The Art and Practice of Knowledge Management, The Media Shoppe Sdn. Bhd., March 2002.
- [3] Anjewierden, A., Hoog, RD., Brussee, R., and Efimova, L., Detecting Knowledge Flows in Weblogs, Metis Project, Telematica Institute, Basel and Oce, CeTIM, Netherlands., July 2005, Kassel University Press.
- [4] Mitra, A. and Lau J., Challenges of Developing Interactive Knowledge Warehouse within the Media Industry: Significance of Emergent Frameworks, University of Salford, UK. , In Proceedings of the European Conference on Information Systems, Turku, Finland, June 14 -16, 2004.

- [5] Nonaka, I., A Dynamic Theory of Organizational Knowledge Creation, *Organization Science* (5:1), 1994, pp. 14-37.
- [6] Proton-Edar Sdn. Bhd (2009), Welcome to Proton Edar, retrieved April 28, 2009, from <http://www.proton-edar.com.my/index.php?page=campaign&action=view&id=58>.
- [7] Nambisan S., Designing Virtual Customer Environments for New Product Development: Toward a Theory, *The Academy of Management Review*, Vol. 27, No. 3, 2002, pp. 392-413.
- [8] McNeill, A., Haberl, J., Holzner, M., Strutz, T. and Tautenhahn, U., Current Worldwide Side Impact Activities – Divergence versus harmonization and the Possible Effect on Future Car Design, proceedings from 19th ESV Conference, 2005.
- [9] Proton-Edar Sdn. Bhd (Producer), Overview of Proton Exora, April 28, 2009, video retrieved from http://www.proton-edar.com.my/index.php?page=sc&sub=tvc_exora.
- [10] Chips, Proton Exora Tested!, Motor Trader, March 15, 2009, retrieved from http://www.motortrader.com.my/NUS/articles/article_1821/page_m.asp.
- [11] Andrade, A. and Furtado, J., Innovation and Manufacturing in Assembly Industries: a comparative analysis of outsourcing approaches on automobiles and electronics, GERPISA 14th International Colloquium - Are automobile firms market-oriented organisations? Myths and realities, Paris, 2006, retrieved May 2, 2009, from http://geein.fclar.unesp.br/tv/Gerpisa2006_AndradeC_Furtado.pdf
- [12] Singh, R. K., Garg, S. K. and Deshmukh, S. G., Strategy development for competitiveness: a study on Indian auto component sector, *International Journal of Productivity and Performance Management*, 2007, Vol. 56, Issue: 4, pp. 285 – 304.
- [13] Duran, S. and Carrillo, J., MNCs Strategies and their linkages with SMEs, proceedings from IV Globelics Conference at Mexico City, September 22-24 2008, retrieved from http://globelics_conference2008.xoc.uam.mx/papers/Clemente_Ruiz_MNC_Strategies.pdf
- [14] Baumol, W J. and Willig, R D., Fixed Costs, Sunk Costs, Entry Barriers, and Sustainability of Monopoly, *The Quarterly Journal of Economics*, Vol. 96, No. 3 (Aug, 1981), pp. 405-431.
- [15] Cronin J J., Brady MK. and Hult GT., Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments, *Journal of Retailing*, Volume 76, Issue 2, Summer 2000, pp. 193-218.
- [16] Meso, P. and Smith, R., A resource-based view of organizational knowledge management systems, *Journal of Knowledge Management*, Vol.: 4, Issue: 3, 2000, pp. 224 – 234.
- [17] Lee, H. and Choi, B., Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination, *Journal of Management Information Systems*, Volume 20, Number 1, 2003, pp. 179 – 228.
- [18] Algesheimer, R., Dholakia, UM. and Herrmann, A., The Social Influence of Brand Community: Evidence from European Car Clubs, *American Marketing Association*, Vol.: 69 Issue: 3, July 2005, pp. 19-34.
- [19] Bellinger, G., Knowledge Management Emerging Perspectives, 2004, retrieved April 22, 2009 from <http://www.systems-thinking.org/kmgmt/kmgmt.htm>
- [20] Marwick, AD., Knowledge Management Technology, *IBM Systems Journal*, Vol 40 No. 4, 2001, Retrieved April

- 22, 2009 from <http://www.research.ibm.com/journal/sj/404/marwick.html>
- [21] Dyer, JH., Specialized Supplier Networks as a Source of Competitive Advantage: Evidence from the Auto Industry, *Strategic Management Journal*, Vol. 17, No. 4, Apr., 1996, pp. 271-291.
- [22] Ishigami, E., Competition and Corporate Strategy in the Indian Automobile Industry with special reference to Maruti Udyog Limited and Suzuki Motor Corporation, proceedings of International Conference: Comparison of Japanese and Korean Firm in Indian Automobile Market, 2004, retrieved from http://www.adm.fukuoka-u.ac.jp/fu844/home2/Ronso/Shogaku/C49-3+4/C4934_0291.pdf
- [23] Nolte, T., Hansson, H. and Bello, LL, Automotive communications-past, current and future, proceedings of - 10th IEEE Conference on Emerging Technologies and Factory, 2005.
- [24] Friedlaender AF, Winston C and Wang K, The Bell Journal of Economics, JSTOR: The Bell Journal of Economics, Vol. 14, No. , 1983, pp. 1-20
- [25] Maier, R. and Remus, U., Towards a framework for knowledge management strategies: process orientation as strategic starting point, Proceedings of the 34th Annual Hawaii International Conference on System Sciences, 2001.
- [26] Riley, TB, Knowledge Management: An Evolving Discipline, National Research Council Canada, Ottawa, 2002.
- [27] Kline S. J. & Rosenberg, N., An overview of Innovation, The Positive Sum Strategy: Harnessing Technology for Economic Growth, The National Academy of Science, USA, 1986.
- [28] Eerikki, M., Exploring and Exploiting Knowledge: Research on Knowledge Processes in Knowledge-Intensive Organisation, Helsinki University of Technology (Dissertation), 2008.
- [29] Smith and McLaughlin M., Knowledge Management: People are Important!, *Journal of Knowledge Management Practice*, 2004.
- [30] Sukumaran, S & Hsu KO., Organisation Support Framework for Knowledge Elicitation, Proceedings of Knowledge Management International Conference and Exhibition, 2004.
- [31] Malhotra Y., Knowledge Management and New Organisation Forms: A Framework for Business Model Innovation, *Information Resources Management Journal*, 13(1), 5-14, January-March 2008.
- [32] Conway S. and Silgar, C., Knowledge Management – Unlocking Knowledge Assets (Solutions from Microsoft), Washington, 2008.
- [33] Francisco JF and Fatima G., A case study on the implementation of a knowledge management strategy oriented to innovation, Volume 9 Issue 3, 2002, pp. 162 – 171
- [34] Zack, Michael H., (1998), Developing a Knowledge Strategy, *California Management Review*, Vol 41, No. 3, Spring 1999, pp. 125-145.
- [35] Pieris Chourides, David Longbottom, William Murphy Excellence in knowledge management: An empirical study to identify critical factors and performance measures, Vol.: 7 Issue: 2, 2003, pp. 29 – 45.
- [36] Johannessen JA, Olsen, B. and Johan, O., Aspects of innovation theory based on knowledge-management , Vol.: 19, Issue 2, 1999, pp. 121-139.
- [37] Pieris Chourides, David Longbottom, William Murphy, Excellence in knowledge management: an empirical study to identify

critical factors and performance measures,
Vol.: 2, Issue: 2, 2003, pp. 29 – 45

[38] Lisa Ruhanen and Chris Cooper ,
“Applying a Knowledge Management
Framework to Tourism Research”, Vol.: 29,
Issue: 1, 2004, pp. 83 – 87.

[39] Michael J. Shaw, Chandrasekar
Subramaniam^a, Gek Woo Tan^a and Michael E.
Welge, Knowledge Management and data
mining for Marketing” , Decision Support
Systems, Vol.: 31, Issue: 1, 2001, pp. 127 –
137.

[40] Schlegelmilch and Penz , The use of
KM in Marketing, The Marketing Review,
Vol.; 3, No.: 1, pp. 5 – 19, 2002.

[41] Roger Bennet and Helen Gabriel
(1999): Organizational factors and KM within
large marketing departments: an empirical
study” Journal of Knowledge Management
Vol 3 (3), pp 212-225 .

[42] Linda S. Orton (1998) “Features-
Growing your Marketing Department into a
Knowledge Management Team: Aim to Hire
Assets not overhead”,

[43] Nina Mistilis and Sheldon Pauline;
“Knowledge Management for Tourism Crisis
and Disasters”

[44] Chris Cooper (2004): “Knowledge
management and tourism”

[45] T V Singh (2001): Applying a
Knowledge Management Framework to
Tourism Research, Tourism Recreation
Research