



International Journal of Sciences: Basic and Applied Research (IJSBAR)

ISSN 2307-4531
(Print & Online)

<http://gssrr.org/index.php?journal=JournalOfBasicAndApplied>



Knowledge Management in the light of Resource-Based View, Resource Dependence View, and Population Ecology View

Ummara Yousaf Ph.D*

Scholar University of Central Punjab Lahore Pakistan

Lecturer GIFT University: Address, Pindi Bypass Gujranwala Pakistan, Postcode, 52250 Pakistan

Email: umara_yousaf@hotmail.com

Abstract

The paper aims to study Knowledge Management (KM) in the light of three theoretical frameworks, Resource-based View (RBV), Resource Dependence view (RDT) and Population ecology of the organizations. The paper is divided into four parts. In the first part, Knowledge Management is defined and described, the knowledge management process is defined, and the Knowledge management capability of the organizations is discussed. In the second part, knowledge management is discussed from the viewpoint of the Resource-based view of the organizations, Resource-based view from its origin is discussed and then knowledge management is viewed from the RBV perspective. In the third part, the Resource dependence view (RDT) is discussed and knowledge management is viewed from the RDT perspective. In the fourth part, the Population ecology of the organizations is discussed from its origin to present, and KM is viewed from the ecological perspective. The conclusion is drawn based on these three perspectives, that how these three perspectives view Knowledge management, how they make difference in their approaches and what is the basis, these three perspectives separately provide to the knowledge management construct or the field. Knowledge management is the basic resource as required by organizations to get competitiveness as per the RBV perspective. Organizations highly depend on their experienced employees and their structures to get sustainability as per the perspective of RDT. If the organizations do not make considerable efforts for knowledge management they become a victim to Immortality as per the perspective of the Population ecology of the organizations.

Keywords: Knowledge Management (KM); Resource-based View (RBV); Resource Dependence View (RDT); Population Ecology of Organization (PE); Sustainability; Competition.

* Corresponding author.

1. Introduction

Institutionalization is a process in which organizations are differentiated through embedding standards and procedures in all of its functional areas. An organization if following some standards and procedures cannot be considered as institutionalized or habitual to perform certain functions but when standards embedded in all organizational functions and organizational identity becomes as standardized then it is called an institution and it is carried out through gathering cumulative knowledge of the organization through knowledge management. Knowledge management recognized itself as a field in 1990, when corporations started making institutional efforts by indulging themselves in knowledge management operations. Knowledge management as a field is an integration of various recognized fields like human resource management, organizational development, change management, brand management, reputation management, performance measurement, information technology and evaluation [1].

Sustainability as the ultimate good of this era finds Knowledge management as a tool to embrace it fully. Organizations are striving to get standardized approaches and make maximum influence over their competitive environments. The main objectives of this conceptual paper are to generally understand Knowledge management and to understand Knowledge management in the light of three perspectives, Resource-based View of the firms, Resource Dependence View of the firms and Ecological perspective of the organizations. Knowledge management is being the basic resource for the organizations through which they can get a competitive advantage, this view is based on the resources based view of the firms. Organizations start depending on their knowledge resources and make efforts to reduce their dependencies over the external environment consisting of knowledge management resources. The knowledge may rest in the organizational employees, organizational processes, or organizational routines. Organizations depend on such knowledge for their operations and ultimate survival. Such concepts of dependence get influence from the Resource Dependence theory of the organizations. Knowledge and knowledge management as an Ecological perspective opens up new avenues for organizations to think over. As organizations adopt whatever is prevailing in their environment and adjust their operations according to the environmental contingencies. If they do not involve in such adaptation they rarely survive and for survival, they adapt things, which is part of their general environment. Knowledge management has become a part of the general environment, therefore, organizations have to adapt whatever are prevailing trends in the environment. One of the bigger challenges of this time is the innovation, companies are successful which are offering innovative products and knowledge management becomes a tool to lead to innovation. Innovation is not possible if knowledge management is not conceived by organizations [2: 20-29]. This paper will help in understanding the concept of knowledge, knowledge management, its creation, its processes and its utility and importance for organizational use. Besides, knowledge management will be visualized in the light of three theoretical frameworks, Resource-Based view, Resource Dependence view and ecological perspective of the organizations.

2. Knowledge

Defining Knowledge becomes different when we take it in commercial terms rather than philosophical or scientific terms. Knowledge is the justified belief according to epistemologists, and it helps to separate overall

good from the false. Knowledge is considered as a justified human process through which the truth of nature can be explored and awareness about absolute permanent facts is gathered for the logical understanding of human nature [3: 5-16]. In the commercial context, the motive of the utilization of knowledge is effective performance and not the attainment of eternal truths. The commercial knowledge rests with the organizational studies and it is traded and is being considered as the currency of this time. This commercial knowledge is social and organizations are investing for their sustainable managerial [4: 374-384]. All companies have to rely on some resources for developing their policies, procedures and setting norms for their organizations. Such bodies who provide such knowledge are the knowledge economies that work parallel with the organizations [5: 973-993]. Knowledge repositories are humans and it rests with the experience of individuals working in the organization, and organizational knowledge becomes the capability that these members develop with time on its basis they perform their daily operations. This property of organizations draws a distinction among them when a comparison is carried out with other organizations [5: 973-993]. Knowledge is created through the process of flow of information based on an individual's beliefs, how individuals perceive reality becomes the part of knowledge. Hence we can say knowledge is related to human actions that they perform in the organization.

Davenport and Prusak in 1998 provided a very comprehensive definition of knowledge, accordingly, 'Knowledge is the pool of recorded experiences, values, information related to organizational context and experts dealing with the situations, to become a benchmark for new experiences' [6]. The people know, knowledge originates within them, it is sometimes stored in documents, organizational routines, processes, practices and established norms [7]. Hence we can say knowledge is both an outcome, framework, a process and considering new experiences of individuals that are in their minds and context of information from where knowledge generated. To be competitive organizations need knowledge which is now being considered as a key to success.

Knowledge, if created from raw data facts and figures and by adding contextual elements in it, is made understandable, its relation with the context is studied in this regard. Knowledge information is combined with the experiences of the employees and their patterns are made understood based on this knowledge and in the end, knowledge is made helpful for future decision making [8: 4].

2.1 Knowledge Management

As a scientific discipline, Knowledge Management emerged in 1990. Many fields of business administration gave input and form knowledge management as a field in 1991. These fields include information systems, management, library, knowledge management research, information and media, computer science, public policy, and information science. The main objective of knowledge management is the improvement in the organizational processes and performance and establishing a competitive advantage for the firms. Knowledge management efforts give rise to organizational learning that leads to sustainability. In 1999, personal knowledge management as a term was introduced which was about managing knowledge at an individual level. Knowledge Management was first supported by practitioners, in which a designation of chief Knowledge officer was announced, whose duties included management and maximization of intangible assets of the organization after this new field of Knowledge management was formed. Knowledge management concept arrived in management

literature after fortune 500 magazine published article, in which Thomas A Stewart an editor of Harvard Business Review, wrote about the importance of preservation of intangible assets of the organization. Knowledge management key components around which this field surrounds are the people, the culture they form after interaction means their social network, management processes, and practices they follow, organizational structure, intellectual capital or experienced employees they employ, and the technology they pursue the preservation of knowledge management efforts.

Knowledge management can be traced very deep into the history of management by the ways it was codified and stored, they included on the job discussions, formal pieces of training related to the job, forums where innovation was recommended, libraries of corporates, professional training, and mentoring programs. With the inauguration of the computer industry in the second half of the 20th century, each knowledge management effort started to be structured and stored in a computer, hence new software was adapted to handle specific knowledge with ease of its later access. When the process of writing case studies on the organization was started, the importance of knowledge management started to be recognized at the organization level. It was recognized that people and the culture that is developed after their interaction influences the knowledge creation process. People play their role in knowledge creation, knowledge dissemination and application and help to establish benchmarks for the organizations to operate by the standards. So we can say, Knowledge management is so helpful for the organizations if they are gathered purposefully and by keeping actions to be performed in their perspective.

Knowledge management is the dynamic process that becomes a mean to turn unreflective organizational practices into reflective, by making a guide, developing rules, and collective understanding of procedures at all organizational levels. Knowledge management may be propositional or Heuristic. Propositional knowledge is the knowledge that is stored in the minds of organizational members and when applied at the organizational level it becomes tacit knowledge. Tacit knowledge got its origin in humans, and its job specific, related to context, difficult to fully express, and poorly documented but highly operational in the minds of the possessor. Heuristic knowledge is the knowledge which is formalized up to a maximum extent, and its availability is ensured organization-wide in the form of organizational policy manuals and values, it is also called explicit knowledge [9: 6].

The structured and codified knowledge is called explicit knowledge and unstructured and unmodifiable is the tacit knowledge [9: 311-321]. Explicit knowledge is exhibited in the form of company manuals related to each operation of the organization while Tacit knowledge is related to human's personal experience, and highly related to job and its context, difficult to transfer in one go to other individuals and difficult to document in the form of manuals and highly dependent on its processor [9].

2.2 Knowledge Management Process

The first step in the knowledge management process is the creation of knowledge which is done through discovering key elements of knowledge, realizing that the knowledge exists, making a discussion on that and positively concluding to make that considerable. The second step in the knowledge management process is the

capturing of knowledge through using documents, digitizing that knowledge and storing it for further use. The third step is the proper organization of knowledge through catalogs, structuring them and analyzing their utility for further use. The fourth step is Access. Making knowledge accessible to other people so they can use it when required. The fifth step is collecting feedback and making improvements with time to increase its utility according to the new contexts, improving performance, learning from experiences and improving its serviceability [3: 5-16].

Knowledge management is the process of creating knowledge, sharing knowledge throughout the organization and managing the information of the organization. It is a multidisciplinary approach to which organizations use to best use their knowledge. Knowledge management process is categorized into four stages through which it becomes operationalize, they include, discerning knowledge, choosing a container, dissemination and use made of knowledge. To make this process successful its proper support from the top management and proper measurement is required. Multiple networks are involved in knowledge creation, knowledge is tacit or shared depended on people's perception, environment, and culture. It moves from softer form to hard form. Knowledge can only be useful if distributed and impacts company performance after it is stored [4: 374-384].

Tacit knowledge is that category of knowledge which an individual does not consciously know but explicit knowledge is that type which is known by the individuals and they can transfer that to other people. Knowledge has to pass through a cycle in which implicit knowledge is extracted to convert it to explicit knowledge. This spiraling cycle is called the SECI model which stands for, Socialization, Externalization, Combination, and Internalization [11]. It is also called spiraling interaction between explicit knowledge and tacit knowledge.

When individuals interact with each other and share some information or knowledge, this process is called socialization. The tacit knowledge which is in the minds of individuals is exposed when the individuals tell each other about it in this process of socialization. Experiencing similar situations in similar sorts of activities and their sharing gives rise to this socialization stage of knowledge creation. What sort of problems customers face and how they tell about the sort of problem is known by the customer service represented? And the manager could only know about the specific customer and his problem after he will interact with the customer representative employee. This information about the customer and his problem and how it is solved by the customer representative and manager becomes a part of knowledge which is created through the interaction of the people [12: 40-54].

How the tacit knowledge is expressed, in the form of documents, documentaries, case studies or something else which could help other people to understand, is called the process of externalization. Tacit knowledge expression in any form is the externalization [12: 40-54].

The combination as stage three of knowledge creation involves the conversion of explicit knowledge along with capturing and integration of new knowledge. At this stage new knowledge from inside and outside of the company is collected and is combined with already existing explicit knowledge, it is edited and makes it more useful for its further use. This may be in the form of reports, market analysis reports, new customized plans or introduction to new practices [12: 40-54].

The final stage of internalization involves, conversion of explicit knowledge into the organization's tacit knowledge. This is done through conducting new training at the organization level, making new things learn to the employees. And through training, the practices are embedded in the new organizational practices [12: 40-54].

Knowledge Management has two perspectives like content perspective and context perspective. Content perspective is of the view that knowledge could be easily stored and codified, while context perspective is of the view that, relational elements may not be ignored which could help organizations their distinguishing characteristic and become difficult for competitors to copy and shareable to other organizations [13: 185-214.].

2.3 Knowledge Management Capability

Knowledge management capability integrates technology, organizational structure, organizational culture and the process of acquiring, conversion, protection, and application [13: 185-214], which provide a basis for knowledge management in the organizations. As much an organization is efficient in maintaining its knowledge management process, that much norms and routines are established in the organization and that much efficient is the knowledge management implementation process. Knowledge management capability improves an organization's ability to innovate, coordination efforts are improved and commercialization of new products in the market [14: 185-214.].

The following highlights, the main objectives of the study.

1. To analyze Knowledge management in the light of Resource-Based View
2. To analyze Knowledge management in the light of Resource Dependence Theory
3. To analyze Knowledge management in the light of the Ecological Perspective of organizations.

3. Knowledge Management as per the theoretical Lens of Resource-Based View

The sustainable competitive advantage of the firms is obtained by focusing on the core competencies of the organization. Knowledge is one of the core competencies of the organization and it is seen as a strategic asset with a high potential of its being a competitive advantage for the firms. General acceptance regarding knowledge management as a source of competitive advantage in the 21st century is obvious from the title which is given to the century as a Knowledge era. Knowledge management through its application can help in promoting creativity in organizations [15: 3]. It is a strategy to gather the right knowledge of the right people at the right time to improve organizational performance. Its basic purpose is to influence organizational intellectual capital to help to make sustainable competitive advantage for the firms.

The resource-based view of the firms, RBV concerns the resources internal to the organization which creates sustained competitive advantage for the firm. As per the claims of RBV, resources of an organization should be rare, valuable, Imperfectly imitable and not substitutable. And firm resources are heterogeneous means all firms

cannot have the same type of resources. Most of the time if an organization manages to attain the required resources then still it is possible that it would not be able to use that resources to its potential as such the competitor is utilizing. There are two types of resources, tangible include Physical resources like machinery, infrastructure, or building, human resource and intangible which include the reputation of firm, goodwill of the firm and employees and organizational culture. All physical resources are replaceable but the human resource having specialized skills is very rare and hardly imitable. The same is the case with all intangible assets of the organization, including Knowledge [16: 75-86]. It is possible that the potential machinery usage rests with the specialized labor and that becoming a cause of competitive advantage for the firm, the same is the case with a unique leadership presence in the market. Causal ambiguity may exist in which it becomes very hard for the competitors to analyze the subject's reason for attaining a competitive advantage.

Competitive advantage is to implement a value-creating strategy that is not being implemented by its competitors at the same time and sustainable competitive advantage is the period that lasts for a long time [15: 18]. The resources may be rare in one or in another industry in a particular period of time may not give a competitive advantage to another industry. Sustained competitive advantage is not possible if the resources are evenly distributed across all competing firms. Hence resources must be heterogeneous and immobile to maintain a sustained competitive advantage for the firms. Valuable means efficiency and effectiveness of the firm have increased due to some resources which prove as a value for the firm. Rare means not widely available to all firms in the industry. Imperfectly imitable means the capability of the organization to develop such a product which is not easy to copy for competitors. Not substitutable means a firm can make such a product whose substitute is not available in the market.

Warner felt in 1984 did an analysis of the firm from a resource point of view while the prevailing perspective was to view firms from the product side. the concepts of resource position barrier mean identifying resources that can lead a firm to get maximum profits. Larger firms are directed to study their core resources and development of them based on any limitation to existing ones. It is viewed that rare resources are purchased which can help firms in generating good profits. Growth strategies are made which could help firms in designing resources in such a way that could generate better profits [18: 171-180]. The theory of the growth of the Firm by Penrose in 1959 originated from the Theory of Firms after Penrose realization that the existing theory of firms is limited to explain the growth of the firms [15: 183-191]. The positioning school [16] prevailed in the 1980s when a Resource-based view got its attention through Barney's article of 1991. Barney was influenced by Birger Werner felt's work published in 1984 titling 'A Resource-Based View of the Firm [17: 99-120]. This article analyzed firms from the resource side instead of the product side and explained resource positioning as barriers which means the firms which have resources already in hand get a cost advantage over the firms which acquire them later on. Before Resource-Based view got its importance, Industrial-organizational concept which had its roots in economics and in theory of the firm which drew boundaries late on between internal and external organizational environments already prevailed in literature. Internal to the firm included internal research and development, renewal and reorganization and External to the firm included economic regulations, antitrust laws, governance laws for property rights, competition and organizational structure. RBV specifically addressed the environment internal to the organization resources, which can produce sustained competitive advantage for the firm and which are valued, uncommon, imperfectly imitable and non-

substitutable. RBV targets the strengths and weaknesses of an organization while industrial-organizational view highlights opportunities and threats to the organization from the external economic environment [17: 99-120]. For a decade or two Industrial-organizational concept prevailed in literature due to the presence of Michael Porter's study on five competitive forces that were established concepts of 1980. Strategic management field literature gets its roots in the RBV and Industrial organization's perspective of the organization.

If the RBV history is viewed from three lenses, New Classical, Evolutionary economics and SCP based theories, then the following structure can be visualized. No doubt these three lenses share some common characteristics as well. Like resources and capabilities may be heterogeneously distributed across firms and these differences will be long-lasting as prescribed by Jay Barney in Firm Resources and sustained competitive advantage, 1991. They conclude up to the same point as to how few firms outperform others. But they also differ as per their definition of performances. Also, the different empirical literature is produced by these three lenses.

Neo-Classical Microeconomics of Ricardo since 1971, views resources as factors of production like land, labor, and capital and that they are elastic in supply which means as prices increase the resources in the market increase as well while RBV claims over the gradual development of resources with time and considered it path-dependent.

Evolutionary economics of Nelson and Winter since 1982, emphasized the concept of routines and exported this concept to RBV. It examined variation, selection, and retention. Firm heterogeneity is also a common concept of both RBV and evolutionary economics. This school has been predominated by ecology theory at that time and influenced due to the ecology theory.

The Structure Conduct Performance SCP based view relating to theories of Competitive advantage by Porter, since 1980, emphasized the industry's structure like the growth of demand and barriers to entry on the performance of producers like pricing and the performance of both the industry and the producers. It also focuses on crafting antitrust policies for the government. Jay Barney was influenced from these theories when he published an article in 1991 firm resources and competitive advantage.

Firms make strategic choices based on their internal resources and capabilities. Adding value in the customer's value chain, new product development and expanding in new markets to develop sustained competitive advantage. Not all resources of a firm may be equally strategic and act as a source of competitive advantage. Resource heterogeneity and immobility are the key factors that help organizations to make their competitive advantage. Heterogeneity refers to if the organization process different resources throughout the industry and Immobility refers to the inability of competitors to take resources from the firm or moving resources from one firm to another [22: 4].

Resource heterogeneity among the firms in an industry creates a strategic advantage with the time which helps firm managers to generate rents from its different strategies [18: 179-191]. Firm's strategic resources can become a source of competitive advantage for the firms if they are scarce, specialized, valuable, rare, difficult to imitate, non-substitutable and appropriate [17:99-120]. Michael Porter in 1980 used industry profitability as a

key predictor of five forces, like entry barriers, the threat of substitute products, bargaining power of buyers, bargaining power of suppliers and positioning rivalry among competitors [19: 25-41]. Low entry barriers help firms making more profit as compared to firms with high entry barriers as empirical shreds of evidence prove this also the firms are profitable if price competition is more as compared to firms with low price competition [20: 57-66]. Resource-Based View of the Firm RBV literature ignored the elements of the natural environment from its boundaries for example interaction with environmental factors pollution-related prevention measures related to firms, product care elements and development which could be sustained over a longer time. Care for natural environments can also be a competitive advantage for the firms in addition to the resource-based view of the organizations [21: 966-1014].

When Resource-based view of firms is applied to *knowledge* management then we can say it must be fulfilling all five requirements as prescribed by resource-based view of the competitive advantage of the firms that are, knowledge must be rare, it must be valuable, it must be non-transferable, non-imitable and non-substitutable by this it proves as a competitive advantage for the firms [22: 75-86]. Knowledge management is now being considered as a key approach to bring innovation which is a challenge being faced by many businesses today [19]. Knowledge management Infrastructure includes corporate culture, the leadership of the organization, information technology system of the organization, communities of practice of the organization, organizational structure, common knowledge inherent in the organizational processes and physical environment in which organization is working [22:75-86]. When knowledge is taken in commercial terms and the terms it is traded, then the organizational quality of functions is seen as the strength of the organization, its quality of not being competitive is seen as weaknesses of the organization. Keeping in mind distinguished competitors based on knowledge, they are considered as threats to the organization and its potential attainment for the benefit of the organization, it becomes an opportunity for the organizations. Hence, all these properties of knowledge must be rare, valuable, non-imitable, non-substitutable, and non-transferable will help organizations make their knowledge as competitive that ultimately can lead to sustainable competitive advantage [16: 78].

4. Knowledge Management as per the theoretical lens of Resource Dependence View

Knowledge management literature finds its roots in the Resource dependence theory by utilizing the concept of 'dependence'. The organizations are highly dependent on the knowledge resources and capabilities of their employees, it provides a spacious basis for knowledge management literature [28: 136–157]. Organizations feel a dependence on knowledge and knowledge management functions in their organizations. It is due to the competitive forces present in the market, when organizations depend on knowledge management sources to create a competitive advantage for them they feel a dependence on knowledge. And knowledge becomes a resource on which the organization depends. Knowledge management is a core capability of the firms and knowledge rests with the humans working in the organization for a long time.

Organizations have their knowledge repositories in the form of humans or employees they own. Organizations depend on their employees which are knowledgeable, differentiated and holds crux of the dealings on which organizational performance depends [20]. Organizations seem retaining their valued employees for the good of the company. Organizations depend on their human resources and various physical assets for running their

functions tactfully. As organizations feel dependence they strive to acquire those resources to minimize their dependence. The organization makes retention policies to minimize their dependence on valued employees and mostly acquire those resources on which they highly depend.

Multiple resource dependence is inherent in organizational life, and they depend on structure, humans, and material for their existence in the external environment [20]. Organizations plan strategically to influence the external environment, by increasing their power over environmental elements like suppliers, customers, employees, governments, and board of directors, etc [21: 21–42]. They may involve in horizontal or vertical integrations with other organizations to influence them and reduce their dependence [22: 229–249]. The organization's ultimate mission is to make customers happy by differentiation or by innovation therefore, they rely on critical resources from the environment. Manager's performance in organizations is dependent on customers in addition to organizations [23], for example, employees get a boost in their careers over the positive feedback from their customers.

Resource dependence theory characterizes the organization more than telling the performance of the organization, still, it gets its influence from transaction cost economics where performance is analyzed in terms of cost and benefit [24]. Specifically to RDT, organizational success is judged based on power, as much power organizations get that much successful they are [25]. Due to this character, Resource dependence theory has influenced many disciplines like management, sociology, health care, public policy, knowledge management and many more [21: 21–42].

The three main ideas around which RDT revolves are, first, Social context of the organization means the interaction of the organization with its main actors which are internal as well as external from the organization, for example, environment, employees, customers, suppliers, policymakers board of directors and competitors. Second, strategic moves of organizations to get influence over its key actors by controlling resources and increasing their interests in the market [26]. Third, power is increased by organizations by involving in mergers or making alliances with related organizations [27]. Knowledge management literature also gets its creation from the process of socialization and then it is codified to make it explicit from the implicit form.

If Resource dependence theory is Visualized as a tree which is providing fruits to various fields, then its roots are found in Max Weber theory of power, Social exchange theory, Emerson's theory of Power, Open system's Perspective, and economic theories of Mergers and Acquisitions, these are briefly discussed below. Resource dependence has its roots in Max Weber's concept of Power, presented in 1947. He argued that organizations get success if they have power [37: 216]. The concept of power was utilized by Pfeffer in his work of 1972, in which he talks about the management of inter-organizational interdependencies, which were studied ten years ago by Emerson in 1962 [28: 31-41]. Resource dependence theory finds its roots in social exchange theory established in 1958 by Homans as well, which talks about the exchange relations, dependence and power as its main constructs. RDT takes these concepts by referring to the behavioral aspects of the organizations. RDT points out that organizational behavior becomes a constraint to establish control over the critical resources of the organization [29: 1-24].

Concept of Power in Resource dependence theory is imported from Emerson's exchange-based theory of power, where he elaborates the importance of controlling valued resources, as much B organization has dependence over an organization, to the same extent A will have power over B organization [28]. The argument in RDT builds that A's dependence on B is equal to the B's power on A [30]. Main theory of resource dependence discussed the concept of interdependencies only by Jeffrey Pfeffer in 1978, while Emerson in 1972 categorized it in to two parts as power imbalance and Mutual dependence, power imbalance means A has some power on B but B do not have the same amount of dependence on A and Mutual dependence means sum of dependencies of B on A and many others. Dependence of A on B is directly proportional to A's motivational investment in B and inversely proportional to the availability of resources of A to arrange resources other than the A-B relationship [31]. Open system's [32] assumption also focuses on the importance of the environment for understanding the organizations, it is the same as the assumption for external control of the organization's perspective in resource dependence theory by Jeffrey Pfeffer in 1978. According to Pfeffer in his studies of 2003, resource dependence was originally developed as an alternative to economic theories of mergers and board interlocks which helped in understanding inter-organizational relations with suppliers and customers [33]. In 1970 Rothman argued that the organizations which are dependent on other organization for the availability of their basic resources, the motive of these organizations will be to reduce dependence by merging or making alliances. To which organizations will make mergers or alliances will depend on the type of interdependence with that organization as prescribed by Litwak, in 1970. Pfeffer in his article of 1972 discussed the inter-organizational activity to manage the organization's interdependence and they are carried out through mergers, Joint ventures or alliances. Pfeffer in his work of 1972 and 1973 discussed that organizations make linkages with other organizations in many different ways like the board of directors are swapped or the director of one company may also be a director of competitor company or a supplier company, he named this sort of swap as interlock [34]. The interdependence motive may be to achieve economies of scale, sharing risk with other organizations, fulfilling gaps in resources available and to reduce the technical risk associated with a specific project [35]. Uncertainty is reduced through a horizontal merger from the competition while dependencies are eliminated through vertical integration [36]. The external control of the organization a resource dependence perspective was introduced by Pfeffer and Salancik in 1978 [20]. The social context of the organization had been a central theme of the article and it emphasizes its importance in the existence of the organization. It discusses issues like the hiring of people from the environment, the board of director's composition, making necessary alliances and mergers with other organizations and the concept of Power [20].

The main arguments of Resource dependence theory [20] are, organizations are dependent on other organizations for the provision of resources these resources are ultimately a part of the external environment of the organization. Organizations feel constraint from other organizations, suppliers, customers and competitors, etc which are the part of the external environment of the organization and the resources in the organizations are considered scarce, valued and critical [33: 1-24]. The organization with extensive resources will tend to influence other dependent organizations and will enjoy the power over them [27]. Power of one organization is equal to the dependence of other organizations on which power is claimed, hence power is relational, dependent on the situation and potentially mutual [28]. Organizations try to minimize the influence of other organizations or power of other organizations and for the purpose they make strategies to maximize their power through

acquiring, merging, politically influencing, making corporate governance strategies, etc [37]. These strategies are made to minimize the influence of other organizations over them as well. External resources of the organization affect the behavior of the organizations, as organizations seek to provide themselves with the external resources, the strategic and tactical aspects play their due role [38]. RDT explains the structure of the organization, selection of the board of members, critical human resource selection or executive succession, strategies regarding production, how organizations get control over the resources and links with external environments to seek power [29]. The main crux of theory surrounds the dependence of one organization on the external environment, internal environmental components and overall concept of power [29: 1-24]. Organizations with more resources have power over other organizations with fewer resources. Organizations tend to minimize their influence over others and therefore make strategies for that. As organizations change their environments to reduce interdependencies, they bump in to new type of interdependencies, for example, if an organization makes merger with suppliers to reduce interdependence then they reduce one type of interdependence and increase their area to be managed and that may be in the form of new structuring and new employee's management [39: 21-42]. The focus is also on power, which emphasize on inter-organizational relations between the stakeholders of the organization. Resource dependence emphasized that some organizations have more power over the others and hence defines their influence over them [40: 31-40]. For example, if the government is at power to supply various key resources to some industries then the industries will be dependent on the government for their resources and the government will have power over the industries. Hence organizations try to have control over resources to minimize their dependence on other organizations, or they try to control specific resources to increase the dependence of other organizations over them [41: 404-423]. Resource dependence theory explains the organizational process and structure, behavior, organizational stability and changes in the organizations [52: 9-32]. The empirical evidence shows that the theory is empirically confirmed and it explains its arguments to the maximum extent. But at the same time it is argued that, not all arguments of resource dependence theory are empirically possible, for example, dyadic nature of RDT cannot be proven empirically as there exists an imbalanced relationship between organizations A and B, they tend to check the effect of one on another but fail to explain the effect of B on A at the same time and same situations prevailing in the market, like A, has power on B but at the same time B do not have same amount of dependence on A [53: 167-199]. Still, where organizations have to involve in power, the concept of RDT supports this as organizations try to decrease their dependence and increase their influence over other organizations and hence try to increase their power by acquiring the resources and merging or making joint ventures with other organizations [27]. Knowledge management has its relevance with total quality management where all the standards are based on the knowledge that organizations have to pursue [42: 49-64]. To standardize operations and to put the organization on learning grounds, knowledge management is carried out in each function of the organization.

5. Knowledge Management as per the Theoretical lens of Ecological Perspective of the Organizations

In the last two decades, Knowledge management literature got distinguished attention. The field defined its processes, its characteristics, its methods of sharing, its repositories, and applications of explicit and implicit knowledge. With time it got its recognition as a huge perspective to think over. Presently each organization seeks out ways to manage their knowledge and knowledge related antecedents. Two centuries ago with the

advent of the management field, the concept of efficiency got importance and efficiency was considered as the ultimate 'good of universe'. The management field found its basis in 'efficiency' and most of the literature was written to promote this concept in relevance with the organization studies. Now the era has moved from efficiency to sustainability. The sustainability is now the good of this era, organizations strive to attain this and make efforts in this regard. Knowledge management is being considered as a tool to attain sustainability in organizations.

When things get promoted generally in the general environment, they influence specific environments of the organizations and this perspective lies in the ecological frameworks of the organizations. Things get their influence from the external environment, knowledge management is such a thing that is influencing all the organizations and playing its role as an external environment. Organizations that will not adapt knowledge management in their operations could question their survival. The population ecology of organizations that gets its origin from population ecology perspective of biology talks about the selection and adaptation perspectives. The environment makes selection and organizations adapt. If the organizations do not adopt they become a victim of selection. Hence organizations have to focus on what is going on in the environment otherwise they will become a victim to mortality.

Knowledge management literature is taken in the ecological perspectives and all processes of knowledge creations are proposed through a DICE model, this DICE model is represented in the form of knowledge ecology model [47: 11-22]. DICE is the abbreviation of distribution, interaction, competition, and evolution of its knowledge populations. This new perspective has opened many new research dimensions to explore. For example, how different knowledge distribution will influence organizational performance and productivity. The organizations where Knowledge management is implemented is proposed that they must switch their attention from basics like KM process of socialization, externalization, combination, and internalization to a new paradigm of knowledge management which includes, knowledge distribution, knowledge related interactions of individuals, competition among the knowledge possessors, people and organizations and knowledge evolution [56: 1-13]. It is proposed that organizations should focus on sources of knowledge so they could make policies regarding that and evolutionary aspects attached to the knowledge, for example, where knowledge is created and who are the people who hold that knowledge, that can influence the overall functioning of the organization. All types of knowledge are not the source of competitive advantage for the firms but the critical ones, that are more cost-effective and help to enhance core areas of the organization are tremendously important and the purpose of the organization is to make a differentiation between effective and all knowledge areas [55:3].

Population ecology is a science that studies the relationship between the members of the community, organizational species and their interaction with the environment. The study of species is central to the population ecology while organizations and their different forms are the central points of study in organizational ecology [57: 1]. Population Ecology of Organizations focuses on how the environment affects the organizational structure, how the selection by the environment and adaptation by the organization is carried out in the stable or dynamic environments [43]. And how the following phenomenon occurs in the organizational lives,

- Rate of birth of new organizational species or forms

- Rate of death of organizational species or forms
- Rate of change of organizational species or forms

The population ecology of the organizations is a rich theory in its concepts and configuration. Keeping in mind the little scope of this article the concepts like, selection and adaptation, founding and mortality of organizations are discussed with a brief relevance with Knowledge Management.

5.1 Selection and Adaptation

The population ecology of organizations studies the relationship between the organizations and the environment. Organizations are taken at three levels like individual organizations, groups of organizations performing the same sort of functions (Population), and the presence of different organizations performing different functions in a community [44: 929-964]. The basic concept of Selection and adaptation elaborates that the environment makes selection and organizations adapt according to the environment. The adaptation which is carried out at all three units of analysis is different. At individual level adaptation is taken in the form of behavior of individuals present in a single organization, and that they adapt their behavior according to the environmental requirements. Adaptation at the population level will be considered that all organizations in the industry adapt according to the environment or environmental pressures. And if the unit of analysis of organizations is taken at the community level, how the political environment or general environment influences all the organizations present in a community. The whole theory of ecology of organizations deals with the basic these two concepts selection and adaptation [60: 79-105].

Organizational leaders make strategies to make organizations adapt to the environmental exigencies, it is possible if the organization has adaptive behavior or the tendency of learning. Organization gets influence from the environment as the managers or leaders make decisions for the organization to adjust as per the requirements of the environment [45].

Knowledge management is an environmental exigency, if it will not be adopted by the organizations, their survival can be influenced. Knowledge management helps to establish standards of performing tasks and help to attain maximum utilization of organizational resources to be distinctive and could run on sustainability grounds.

Knowledge management requires high advancement in technology implemented in organizations. Organizations can't manage knowledge without the help of technology, as the performance of operations is required to record at each step of the organization. The organizations which are deficient in technological issues could not be able to manage their knowledge of the organizations. Knowledge rests with the individuals, it is recorded and analyzed by individuals and utilized by individuals for further use. The people in the organization must be well trained to help to manage the knowledge. The older organizations feel inertial pressures and their internal politics among the employees do not let employees make organizations as learning organizations and focusing on knowledge management. It is the reason organizations feel reluctant when knowledge management implementation comes into consideration. Population ecology studies at three levels Individual, Population and community but the organization's ecology is studied at five levels, members, subunits, individual organizations,

the population of organizations and communities of the organization [59: 929-964] These additional levels of members and subunits create complexity in organizational ecology. It is due to the reason that, members or employees of the organization do not genetically take information from the ancestors but each individual being unique pursue things according to its values, experiences, and educations. Hence all managers in the organizations do not decide on the same patters to create complexity. The restructuring if required in the organization due to environmental pressures, even regarding knowledge management implementation, then subunits or organizational existing departments create constraints as they resist change and hardly accept any change [44: 929-964].

5.2 Organizational Mortality

Mortality means the death of the organizations after it passes through the business life cycle like growth and decline, in the presence of specific environmental conditions that did not support that organization and resulted in its mortality. Jitendra V Singh in 1990, elaborated six approaches to organizational mortality, which are Fitness set theory, Liability of newness, Density dependence, resource partitioning, the liability of smallness and effects of founding conditions [46: 95-161].

6. Discussion

The paper describes the Knowledge Management construct and how the three theoretical perspectives view Knowledge management as a field, as a tool, or as a resource for competitive operations. Knowledge Management in the organizations is considered as a currency of this time. Commercial knowledge which is used by organizations is different from philosophical knowledge. One of the main objectives of knowledge management is to improve organizational processes and establishment of organizational learning. KM is of two types, Propositional knowledge and Heuristic knowledge. Propositional knowledge is stored in the minds of individuals working in the organizations and when they apply this knowledge it becomes tacit knowledge. While Heuristic knowledge is formalized knowledge of the organization's life policy manuals, their values and it is also called explicit knowledge. Knowledge management surrounds around the process of creating knowledge, sharing knowledge organization-wide, and managing information organization-wide. Tacit knowledge is that category of knowledge to which the employees do not know by themselves, but when they interact with other employees, in the process socialization, it is shared among organizational members.

When organizations are viewed from competitive point of view, rare knowledge about utilization of resources, that maybe machines or technology, non-substitutable knowledge skills of organizational workers, the resources that create competitive value for the organization, that may be the reputation of the employees and their goodwill floating in the market, the resources of the organization that are nontransferable to other organizations or possession of such a knowledge which the other organizations could not imitate . In this case, knowledge management of the particular organization becomes a source of competitive advantage for organizations as prescribed by the resource-based view (RBV) of the organizations.

Organizations seem to depend on knowledge management related resources and therefore, seem dependent on

knowledge workers, and knowledge management personnel for their competencies. Organizations seem to acquire and invest in critical resources so that they could gain power over other organizations for influencing multiple resources. An ecological perspective of the organizations regarding knowledge management efforts of the organizations seems in alignment with gaining knowledge resources for their survival and their adaptability according to the prevailing environmental conditions. These relations of knowledge management in the light of these three theoretical frameworks are made conceptually clear through this article. The knowledge management as a dependence resource seems to originate from resource dependence theory and flourished as making a competitive element for most of the organizations and a source of survival in the presence of external environment of the organizations. Organizations have to focus on their internal environments as well as the external environment to implement knowledge management in their organizations. Knowledge management implementation without the help of technology is of no use. Knowledge is of no use when it is not retrievable, it is only possible when technology is implemented in the organizations. Organizations need to invest in knowledge management antecedents and will have to make their organization capable like technology if they want to travel on the grounds of Innovation. Innovation is the challenge that organizations are facing in this fast running era where each move is dependent on technology and technological advancements. Knowledge management either is a competitive resource; either it has created dependence for the organization but they have to implement knowledge management initiative in one way or another to not let the organization become a victim to organizational mortality by a selection of environmental exigencies.

7. Conclusion

Knowledge management is comprehended from the three theoretical perspectives, Resource-based view, Resource dependence view and Population ecology of an organization's perspective. The resource-based view takes knowledge management as a basic resource that organizations need to maintain their functions and operate in this era. RBV provides KM the basis for competitiveness, as no organization can be competitive until it makes serious measures for knowledge management efforts and makes a complete check over the business through its retrieval functions. Resource dependence view provides the basis for Knowledge management, as organizations depend on the knowledge management tools like technology and people and cannot operate without them, as they have to function by them. The third perspective of the population ecology of the organizations, provides the basis to Knowledge management, in a sense that, organizations suffer from immortality without making efforts for knowledge management (KM). Hence knowledge management is the challenge as well as the opportunity of this era as the organizations strive for innovation and want to maintain their sustainability. The price for sustainability is Knowledge management efforts that organizations can make for their survival.

8. Constraints and Limitation

- This conceptual paper is inscribed to make an understanding of Knowledge management from different theoretical aspects like Resource-Based view, Resource Dependence view and Population Ecology of organization view. It clarifies how different theories in literature put their stance on knowledge management at the organizational level.

- Knowledge management from the viewpoint of various other theories like Social Exchange Theory, Technological Evolution theory and Sustainability theory can be inscribed.
- Knowledge management emphasis cultural change in the organizations through organizational learning, hence KM can be studied from the viewpoint of the Cultural theory of organizations.
- Knowledge management efforts made by any organization are not empirically possible fully as employee's experiences and their insights regarding their job could not be documented.
- There are various other knowledge management aspects through which an organizational success can be measured, they include customer satisfaction, triple bottom line areas which include, financial, social and environmental aspects for knowledge management that needed to be reviewed to make the KM concept more viable for the organizations.
- Empirical pieces of evidence can be collected through an exploratory study of organization regarding their KM efforts and Effective business process could be inscribed to make them one of the efforts of the organization regarding their KM measures.

References

- [1] W. R. a. W. R. L. Bukowitz, "The Knowledge Management Fieldbook," Upper Saddle River, N.J.: Financial Times, Prentice-Hall, 1999.
- [2] M. Du Plessis, "The role of knowledge management in innovation," *Journal of knowledge management*, pp. 20-29., 2007.
- [3] J. L. Andreea M. Serban, "Overview of Knowledge Management," *New directions for institutional research*, pp. 5-16, 2002.
- [4] M. Demarest, "Understanding knowledge management.," *Long-range planning*, , pp. 374-384., 1997.
- [5] H. & V. E. Tsoukas, "What is organizational knowledge?," *Journal of management studies*, pp. 973-993., 2001.
- [6] D. T. H. a. Prusak, "Working Knowledge," Cambridge, MA: Harvard University Press, 1998.
- [7] T. Davenport, "Enterprise 2.0: The New, New Knowledge Management?," *Harvard Business Review*, 2013.
- [8] J. J. V. L. K. M. a. J., S. L. Kidwell, "Applying Corporate Knowledge Management Practices in Higher Education," *EDUCAUSE Quarterly*, pp. 4, 28-33., 2000.
- [9] Kreiner, "Knowledge and mind," *Advances in Management Cognition and Organizational Information processing*, pp. 6, 1-29, 1999.
- [10] Elizabeth.Smith, "Theroleoftacitand explicit knowledge in the workplace," *JournalofKnowledgeManagement*, pp.311-321, 2001.
- [11] T. Nonaka, "The Knowledge-Creating Company: How Japanese Companies create the dynamics of Innovation," New York, NY: Oxford University Press, 1995.
- [12] N. K. Ikujiro Nonaka, "The concept of "Ba": Building a foundation for knowledge creation," *California management review*, pp. 40-54., 1998.

- [13] A. H. M. A. & S. A. H. Gold, "Knowledge management: An organizational capabilities perspective.," *Journal of management information systems*, pp. 185-214., 2001.
- [14] A. H. M. A. & S. A. H. Gold, "Knowledge management: An organizational capabilities perspective," *Journal of management information systems*, pp. 185-214., 2001.
- [15] Y. Y. K. a. J. T. Mahoney, "Edith Penrose's (1959) Contributions to the Resource-based View of Strategic Management," *Journal of Management Studies*, pp. 183-191, 2004.
- [16] A. A. R. .. J. Trout, "Positioning: The Battle for Your Mind," McGraw-Hill, 1981.
- [17] Barney, "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, pp. 99-120, 1991.
- [18] M. Peteraf, "The cornerstones of competitive advantage: a resource-based view," *Strategic management journal*, pp. 179-191, 1993.
- [19] N. Wickramasinghe, "Do We Practice What We Preach? Are Knowledge Management Systems in Practice Truly Reflective of Knowledge Management Systems in Theory?," *Business Process Management*, pp. 1463- 7154, 2003.
- [20] G. R. S. Jeffrey Pfeffer, *The External Control of Organizations: A Resource Dependence Perspective*, Stanford University Press, 1978.
- [21] G. F. D. a. J. A. Cobb, "Resource Dependence Theory: Past and Future," *Research in the Sociology of Organizations*, pp. 21-42, 2015.
- [22] J. Benson, "Interorganizational network as a political-economy.," *Administrative Science Quarterly*, pp. 229-249, 1975.
- [23] T. P. M. J. Casciaro, "Power Imbalance, Mutual Dependence, and Constraint Absorption: A Closer Look at Resource Dependence Theory.," *Administrative Science Quarterly*, pp. 167-199, 2005.
- [24] R. H. Coase, "The problem of social cost.," *Journal of Law and Economics*, pp. 1-44. , 1960.
- [25] J. Pfeffer, "Power in organizations," Marshfield MA: Pitman., Vol. 33, 1981.
- [26] J. & S. G. Pfeffer, "The external control of organizations: A resource dependence perspective," New York: Harper & Row, 1978.
- [27] P. Blau, "Exchange and power in social life," New York John Wiley, 1964.
- [28] R. M. Emerson, "Power dependence relations," *American sociological review*, pp. 31-41, 1962.
- [29] M. W. a. B. J. C. Amy J. Hillman, "Resource Dependence Theory: A Review," *Journal of Management*, pp. 1-24, 2009.
- [30] T. C. M. J. Piskorski, "Power Imbalance, Mutual Dependence, and constraint Absorption: A closer look at resource dependence theory," Johnson Graduate School, Cornell University, pp. 167-199, 2005.
- [31] Emerson.R.M, "Exchange theory, part II Exchange relations and networks," *Sociological theories in progress*, pp. 58-87, 1972.
- [32] D. & K. R. Katz, "The social psychology of organizations," New York: John Wiley., 1966.
- [33] T. & P. J. Menon, "Valuing internal vs. external knowledge: Explaining the preference for outsiders.,"

- Management Science, pp. 497-513., 2003.
- [34] A. I. H. T. Daiziel, "Board of Directors and Firm Performance: Integrating Agency and Resource dependence Perspective," *Academy of Management Review*, pp. 383-396., 2003.
- [35] J. P. a. P. Nowak, "Joint Ventures and In- organizational Interdependence," *Administrative Science Quarterly*, pp. 398-418, 1976.
- [36] J. A. C. a. & H. E. A. b. Tyler Wry a, "More than a Metaphor: Assessing the Historical Legacy of Resource Dependence and its Contemporary Promise as a Theory of Environmental Complexity," *The Academy of Management Annals*, pp. 441-488, 2013.
- [37] S. Barley, "Building an institutional field to corral a government: A case to set an agenda for organization studies," *Organization Studies*, pp. 777–805, 2010.
- [38] J. & L. A. Pfeffer, "Resource allocations in United funds: Examination of power and dependence," *Social Forces*, pp. 775–790., 1977.
- [39] G. F. D. a. J. Cobb, "Resource Dependence Theory: Past and Future," *Stanford's Organization Theory Renaissance*, pp. 21-42, 2015.
- [40] R. M. Emerson, "Power-dependence relations," *American Sociological Review*, p. 31–40, 1962.
- [41] Pfeffer.J, "Understanding the role of power in decision making. Power in organizations," Marshfield, MA Pitman, pp. 404-423., 1981.
- [42] *. D. P. S. C. C. Prakash J. Singha, "A resource dependence theory perspective of ISO 9000 in managing organizational environment," *Journal of Operations Management*, pp. 49-64, 2010.
- [43] M. T. F. J. Hannan, "Organizational Ecology," Cambridge, Mass: Harvard University Press, pp.20-22, 1989.
- [44] J. F. Michael T. Hannan, "The Population Ecology of Organizations," *American Journal of Sociology*, pp. 929-964, 1977.
- [45] H. a. J. P. Aldrich, "Environments of organizations," *Annual Review of Sociology*, pp. 11: 79-105, 1976.
- [46] C. J. L. Jitendra V. Singh, "Theory and research in organizational ecology," *Annu. Rev. Social*, pp. 95-161, 1990.
- [47] J. E. A. R. V. M. Leila A. Halawi, "Resource-Based View of Knowledge Management," *The Electronic Journal of Knowledge Management*, pp 75-86, 2005.
- [48] B. Wernerfelt, "A Resource-based View of the Firm," *Strategic Management Journal*, pp. 171-180, 1984.
- [49] P. M. Madhani, "Resource-Based View (RBV) of Competitive advantage an overview," *ICFAI Business School Research Gate*, pp. 3-22, 2010.
- [50] M. Porter, "The Five competitive forces that shape strategy," *Harward Business Review*, pp. 25-41, 2008.
- [51] J. B. Richard L. Priem, "TAUTOLOGY IN THE RESOURCE-BASED VIEW AND THE IMPLICATIONS OF EXTERNALLY DETERMINED RESOURCE VALUE: FURTHER COMMENTS," *Academy of Management Review*, pp. 57-66, 2001.
- [52] S. L.Hart, "A Natural resource-based view of the firm," *Academy of Management Review*, pp. 966-1014,

1995.

- [53] J. K. E. M. J. J. C. A. D. M. Hanqing Fang, "The pursuit of international opportunities in family firms: Generational differences and the role of knowledge-based resources," *Strategic Management Society*, p. 136–157, 2017.
- [54] V. S. E. Pareto, "Sociological writing," New York: Praeger., p. p. 216, 1966.
- [55] W. Nienhüser, "Resource Dependence Theory – How Well Does It Explain Behavior of Organizations? **," *Management Revue*, pp. 9-32, 2008.
- [56] T. & P. M. J. Casciaro, "Power imbalance, mutual dependence, and constraint, absorption: A close look at resource dependence theory," *Administrative Science Quarterly*, pp. 167–199, 2005.
- [57] D. N. L. T. P. & L. B. Chen, "An ecological model for organizational knowledge management.," *Journal of Computer Information Systems*, pp. 11-22, 2010.
- [58] T.-P. L. B. L. Deng-Neng Chen, "An Ecological Model For Organizational Knowledge Management," *Journal of Computer Information Systems*, pp. 1-13, 2010.
- [59] R. C. Young, "Is Population Ecology a Useful Paradigm for the Study of Organizations?," *American Journal of Sociology*, pp. 94(1), 1-24., 1988.
- [60] L. S. I. a. J. E. A. Babita Gupta, "Knowledge Management: Practices and Challenges," *Industrial Management and Data Systems*, Vol. 100, pp. 17-21, 2000.
- [61] M. E. a. V. E. M. Porter, "How information gives you the competitive advantage," pp. 4-24, 1985.