

# Knowledge Management Plan at Educational Organization: A Case Study of Qassim University

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**Abstract**— Knowledge management has become a modern-day approach to solving the problems of redundancy and non-performance that often negatively influence the products or services of a particular organization. This paper provides a case study and investigates the current situation of knowledge management in Qassim University. It emphasizes its analysis and comparison with the usual practices in the academic world. This paper suggests the techniques of knowledge management in order to position an educational organization for greater profitability and efficiency.

**Keywords:** Knowledge Management, innovation, profitability, efficiency.

## I. INTRODUCTION

Knowledge management (KM) involves creating, applying, capturing and applying knowledge in an organization to best use knowledge internally and externally. Every organization that aspires to maximally utilize all its resources (both human and materials) with the hope of achieving high efficiency should be able to put in place a knowledge management plan: a plan that would identify the sources of knowledge, and the processes of knowledge development and improvement within the concerned organization [14].

This case study investigates the current situation of knowledge management in our organization (Qassim University), with a great emphasis on its analysis and comparison with the usual practices in the academic world. New suggestions about the techniques of knowledge management are offered at the end of the paper in order to position our university for greater profitability and efficiency.

### 1. OVERVIEW OF QASSIM ORGANIZATION'S RECENT PERFORMANCE

Some years ago, Qassim University was one of the best in respect to the quality of our educational services, and our organizational efficiency was a thing other institutions envied. But since four years ago, things have become a little inefficient: our educational services have got some unfavorable reviews from both parents and the students. Our organizational efficiency may go a little down. It is time to ask this important question: what can we do to harness all the capabilities of our resources (both human and material) so as to optimize our production processes?

The answer lies in working hard on improving our knowledge management processes so as to harness our human resource potentials while utilizing the material resources to forge a success-oriented plan. Below is the current situation of things in our university.

## II. ANALYSIS OF QASSIM UNIVERSITY'S CURRENT SITUATIONS

Lately, the following observations have been made about our university's processes which have resulted in unexpectedly poor efficiency on the part of our educational programs and services: students, parents and parental associations have been lately critical about our educational services as well as our customers' relationship programs which connects the university with the parents and other guardians. The explanations highlighted below are the pointers to the fact that something is quite wrong with our university's mode of operations:

### A. Employees' Attitude

A survey carried out three years ago revealed a dismal figure of how the morale of the employees in the university has been dwindling. And this is a serious problem that had discouraged workers from demonstrating their capabilities or skills at the workplace [6]. Judging from the percentages of responses below, which our employees gave to the questionnaires distributed by the Human Resources Department containing some strategic questions, it is clear that Qassim University is facing a serious problem that might be linked to workers' lack of motivation:

Workers suffering from skill fatigue	45%
Workers experiencing lack of motivation	32%
Workers developing bad attitude to job	48%
Workers forgetting the working procedures	35%
Workers developing hatred for their jobs	22%
Workers willing to look for another job elsewhere	32%
Workers receiving enough benefits	45%

Looking at the data above, it is possible to conclude that bad attitude to work may have reduced the motivation for working effectively in our university. It requires dedication and willingness on the part of employees to commit all knowledge to their work in order to make their organization succeed. The survey above portrays a dismal condition of disconnection between personnel and the individual job employees carried out in our university. What may be responsible for this low level of motivation includes having less knowledge of their proposed benefits while joining the university, as the case is that newest employees are full of unrealistic optimism when applying to work for our university. They may have also engaged in hiding their useful skill and intelligence as they jostle for seemingly cushy jobs at our university. Then the question of whether they are professionally fit or compatible with the requirements for efficiency in our university comes up.

Therefore, have the university's interviewers overlooked vital emotional expression while selecting who would work in our university or they had been deceived by the interviewees' fake expressions, which later underscore their ability to contribute meaningfully to our university's day-to-day demanding operations [5].

#### *B. Operational Processes*

The core processes in our university is divided into many departments which include, Information Technology Department, Human Resources and Employee Development, Administration, Maintenance and Technical Department, Security and Customer Relationship Section: some of these departments have hit snags in recent years; many of our workers have been complaining about our laggard routine operational processes, which they had identified to be rigid and monotonous. As a university, the technologies and processes with which we deliver our educational services need to be flexible and widely applicable: they need to be high-performance oriented. But on the contrary, the weak operational processes through the use of monotonous technologies and rigid processes have drastically affected the quality of our outputs as a result of ineffective research and development (R& D). Lately, our R& D professionals have found themselves swapped up with the desire to innovate our educational programs and services but incapable of doing anything to help the quality of our educational activities because the current operational processes give no room for innovations [12]. Several faculties and colleges are complaining of short of ideas to transform the educational landscape of our university owing to the problem of inadequate modern facilities to engage in high-tech researches. There is no doubt that such lack of purposeful connection may result in squandering vital knowledge and skill that should have been harnessed with the hope of fostering technological miracle that would add true meanings to educational development in our university. And if this situation is allowed to persist, there is every possibility that our university would be able to retain the best minds in all the faculties and colleges who opt to seek employment in other universities that are well-equipped and sophisticatedly positioned to develop its academic programs and other important parts of the educational services [10]. Not only that this problem requires prompt solutions, groundwork for quick turn-around should begin from this moment in order to transform all the operational processes in our great institution. However, failure to quickly jumpstart such a re-engineering process may lead to further deterioration of all our departments, and in the long-term, our academic objectives for our students.

#### *C. Intra-Departmental Communication*

There is no doubt that poor communication among employees of different departments constitutes a serious problem in our university. The bad effects of inadequate or incomplete organizational communication could lead to slowness in process activities, or may cause in-house conflicts and delay in the passage of vital decisions down the educational lines. It requires smooth and well-presented information for knowledge to be transferred from one section of the organization to the

other.

However, Qassim university's in-house communication strategy has been rendered uncoordinated and requires re-engineering. The simple question every knowledge manager would ask is this: doesn't a university that aspires to achieve a high-level quality in its educational services require a functional department-to-department communication policy.

Communication, as an integral part of organizational development, involves a lot of things including the employees' emotional or passionate connection to the job on ground. A well-thought out communication system has the possibility of transporting intelligence within a society or an organization [2]. What has been lacking in our organization is the conscientious efforts to pass significant information from one department to the other; and doing so with enough passion that would later be transferred to better organizational performance. Naturally every employer in our university could be compared to a "container of knowledge"; and it requires great communication network and policies to encourage them to release the useful knowledge in them. But the fearful instances occurred when an organization lacks the modalities to encourage the containers of knowledge to divulge the wise and applicable facts within them. What our university has been slow to incorporate is an expansive system that could extract the best ideas from all the employees with the intention of suffusing our departments with viable opinions and knowledge that could be springboards to our university's sudden emergence into one of the world's frontline universities. Therefore, untapped talents would remain intact with the possessors, and such knowledge would never find its way into the mainstream of our [11].

#### *D. Customer Relationship*

Our University has been affected by poor customer relationship in recent years. This has created a little distrust on the part of our students and their parents or guardians. We need to establish a viable customer relationship strategy that would perpetually present our institutional mission statements in the presence of our many students, parents and parental organizations. So, our university requires a proactive policy of knowledge management whereby our employees would be instructed in the right approach to deal with the customers. This approach would make our organization battle-ready to confront other competitors in the academic arena. This entails that we put into practice workable models of practical learning that we can employ in our day-to-day business relationship with our students, their parents or guardians and parental associations [8].

There are important pieces of information that must be timely made available to the students: these include their admission status, financial issues, academic information, students' union guidelines, description of the university's codes of conduct, explanation of legally acceptable extra curriculum activities etc; also we need to update their parents about the manners and academic performance of their students; and parental organizations/associations would love to know about the latest academic principles, and how that affect their children's educational qualifications. Our employees need to be brushed

up on the importance of knowledge acquisition, processing and transmission from one end of the university system to the other. This indicates that our university administrators have slacked a bit in organizing knowledge and managing this information to be transmitted to the right people (students, parents and parental organizations) that highly require them [7].

#### E. Information Technology

The current IT architecture in use in Qassim University dated back to the early 90s when IT technology was its nascent development stage. However, several applications have been designed since then, new adaptabilities that promise higher efficiency than ever before have found their ways into the mainstream. Our university understands that we need IT to improve on our academic services: the global learning landscape has changed from traditional citadel of learning to the one that utilizes cutting-edge technology to produce enviable academic outputs. Using mostly old or antiquated IT systems indicate that our university may be gradually killing the optimism or creativity of its employees by not giving them the chance to engage in fruitful competition with the other universities: this entails that they would not be able to withstand modern-day rivalry that is the hallmark of measuring a successful academic institution. For instance, Harvard, Oxford and Yale are known to be operating with the latest technologies in the education industry, and this property allows these great citadels of learning to outperform other competitors [3]. The areas of our IT structures that have been experiencing problems recently are depicted in the following:

- Enterprise Architecture
- Common Automation Suite
- Security and Privacy
- Common Administrative Systems

These four divisions highlighted above reveals that much is needed to be done in our university's IT system. Analyzing how these four sections have been rendered a bit ineffective, one may discover some important facts on why it is non-negotiable to re-engineer our university's IT structures:

- (a) *Enterprise Architecture*: This deals with the issue surrounding what kinds of IT systems are currently in use in our university: are they the new Information Technology models that promise great efficiency or the ones that are outdated and offer less performance? In our university, the regime of IT structures we have are not what currently available in other high-flying universities. Can we ever be able to match their speed and performance with the antiquated IT architecture?
- (b) *Common Automation Suite*: Qassim University has utilized a little common Automation Suite that would make it possible for departments to automatically send down vital knowledge or information to all other departments that are linked together.
- (c) *Security and Privacy*: It is true that our university's system lacks enough security as reports of examination documents leakages, grades hacking and other serious computer crimes have been reported lately. And some faculties have reported that their documents have been illegally accessed, which breached their hope of privacy.

- (d) *Common Administrative System*: Our University requires a central administrative system in order to speedily process information from one department to the other. However, such facility is not currently implemented in our university; and this has been a burning issue that weakened our inter-departmental communication and cooperation.

### III. RECOMMENDATIONS FOR A STRUCTURAL CHANGE AT QASSIM UNIVERSITY

In the light of the various problems or structural shortcomings in our university, which are explained above in detail, it is imperative that some workable solutions should be implemented in order to position our institution for a new re-awakening that would see it competing with big wig in higher education industry. So, these significant recommendations are important for our university to be transformed from its current state of little dormancy to enviable vibrancy by focusing on any activities that could be techno-centric, organizational and ecological, and which would have far-reaching impacts on developing our university toward achieving all its missions/objectives. Table 1 describe the differences in KM between organizations.

Table 1 Differences between organizations (KM)

<i>The traditional company</i>	<i>The knowledge company</i>
Centralized management	Self management
External allocation of work	Allocation of own work
Procedures	Challenges
Resistance to change	Change
Supervision	Self supervision
Hierarchy	Shared work practices
Closed to the outside world	Open to the outside world

#### (i) Organizational Transformation:

The first approach to transforming an organization like our university is to re-organize its existing organizational structure into that that would be receptive to many changes that are necessary to make the institution competitive. Every organization is believed to have got some measure of knowledge that it was established on: this knowledge could be expressed in the organizational mission statements/objectives that are constantly pursued or worked towards achieving [see figure1] [13]. Our university's main objectives/goals include (1) providing high-quality education to the public; (2) creating functional interchange between the university and industries through the application of academic theories and (3) to serve the sole interest of the society in providing community development programs.



Figure 1 KM strategy and its relations with other schemes

A suitable organizational structure that would encourage creativity and smooth transfer of knowledge within our institution would be the De-centralized University Administration System, whereby all departments are perceived as constituents of the central administration, and they could exercise some rights based on autonomy but intra-departmental cooperation [9].

Smaller pockets of administrations tend to be more influential in exerting necessary pressure on individual employee so as to carry out their jobs with utmost interest. Not only that, it would also be possible to monitor the employees' progress of working and quickly map out strategies to improve their motivation. The responses indicated above from employees' survey strongly indicates that a large proportion of workers at our university are losing interest or passion in their respective duties. This explains that the fact more laxities are noticeable in their attitudes towards their jobs. So, in order to encourage creativity and the succeeding knowledge flow, our university should undergo a comprehensive scheme of motivating our workers that are showing signs of inertia [4]. The following motivational processes could be adopted for greater efficiency:

- Offering rewards and financial benefits to those who are due for them.
- Identifying the core knowledge and making it available to the appropriate sections of the university.
- Encouraging and implementing innovation and new creativity, so as to give room for the workers to transform their thinking as far as their jobs are concerned.
- Increasing knowledge flow among all departments and specifically supporting it with a firm laid-down structure.

- Removing all obstacles to smooth communication, including rivalry, office conflicts, fear of intimidation or bullying.
- Managing organizational human capital and intellectual assets properly.

If all the suggestions given above are broadly implemented, our university would be on its way to total transformation.

(ii) *Technological Advancement:*

Our University needs to adopt the use of cutting-edge technology in the operations carried out in the different departments. The purpose of this is to re-engineer each department for the new tasks confronting them. Now, the 21<sup>st</sup> Century students are mainly interested in sophisticated services: these include quick processing of their grades; they like virtual assignments and tests; they prefer doing some or all their courses entirely online; they admire receiving quick and straightforward instructions from the school authority; they want their transcripts and other important documents processed at the speed of light [1].

Likewise, all the departments require high-speed technology to communicate with one another; they need better data processing methodology, which only the modern technology can provide and guarantee its successful outcomes. Our university requires the application of the latest educational technology in the areas of teaching and administration [1].

As implemented in other universities, the Information Technology comprises of a combination of information management systems and a set of software: there isn't a single Information Technology Device that could be used at higher education. Hence, with the use of the basic computing techniques with the addition of several software applications, it is possible to carry out knowledge search and retrieval, processing, storage and eventual transferring. Many of the IT systems permit e-learning capability, a great tool that would allow our institution's students to study online. Collaborated with other technologies that provide live chat, wiki, text messages, community networks, online discussion groups, i-channels and Internet radios, these features will surely improve our students' abilities to catch up with the speed of e-learning in this New Millennium. The future of higher education lies in this terrain: most educationists believe that online education would be spreading and eventually take over the traditional learning method in the universities all over the world [1].

Even though our university operated administrative computing, whereby our departments are all computerized to increase the efficiency of our administrative personnel, but undergoing decentralized organizational structure, as suggested above, would require that there is a centralized computing system, which will serve as gateway for exchanging knowledge, data, facts from one department to the other. Nowadays, there are collections of software for planning, managing, processing, cataloguing and transferring of vital information or knowledge from one section of the university to the other. Though, the three major areas which required urgent implementation of the cutting-edge computing systems are (i) the processing of

records related to students' needs, like examination, students' records, transcripts etc; (ii) financial records and accounting procedures; (iii) Institutional planning and management [1].

However, our university needs to train our current IT specialists in the method of utilizing the array of new technologies; because shortage of IT experts may derail our plan to catch up with the competitors by using sophisticated modern computing systems. Since it is one of our university's missions to link with the other relevant institutions.

(iii) Communications:

Our University engages in five-way communication activities: central administration to the other departments; central administration to the students; central administration to the parents/parental associations; central administration to other relevant academic institutions; central administration to the industries. Each of these communication networks requires the application of modern techniques before great outcomes could be recorded. Like in a typical business relationship where customers need good services for constant patronage, in the same way, students and their parents expect productive communication between them and the university's central administration [15]. It is not new that some university has implemented Customer Relationship Management (CRM) which utilizes a combined Information Systems that helps in effectively interacting with all components of the university system as well as the outsiders, including parents, other institutions and industries. Our university can also upgrade its current communication systems to CRM so as to broaden the extent of communication coverage.

Customer Relationship Management can help to transfer knowledge or idea from the central university administration to the de-centralized ones, so that these smaller units of administration could relay these messages to the right quarters that need them. One cannot over-emphasize the importance of having fruitful discussion with the students, their parents or guardians and the industries that put all theories from the university into practical usefulness.

### I. IMPLEMENTATION PLAN FOR THE RECOMMENDATIONS

The expected duration for the implementation of this plan may take up to 6 months. And it is going to follow six categories of implementation as described in Figure 2.

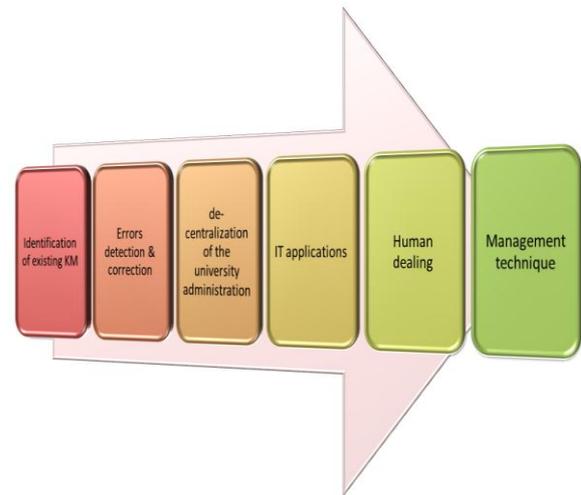


Figure 2: Timeline of Implementation.

Category 1: Identification of the kinds of knowledge existing in our university: Naturally, two forms of knowledge exist in all organizations: Implicit and explicit knowledge. Implicit knowledge includes those the employees have but which they do not know they possess, since it has become intrinsic part of their lives. The second part is explicit knowledge, which includes the one already existing in the university, and which every concerned employee demonstrates. A system engineer, for example, understands that he/she needs to do some programming as well as taking care of our university's system. But an example of implicit knowledge is the one possessed by a quiet employee who does not realize that he/she could talk well in the public, but shy away since his/her job was not a Public Relations Officer.

Category 2: Determination of the competency level of each component of our university system: that is, identifying how each section and individual performs in the transfer of knowledge from one department to the other, or to the students and their parents. This step would help to locate the areas where mistakes have been made and need instant corrections.

Category 3: This is stage for de-centralization of the university administration into smaller units comprising of the faculty or unitary college administration. The purpose of this is to create small groups from the central administration which would be able to closely monitor the progress of the employees, chide them when necessary or reward them when they merit it. In short, smaller administrations could increase the amount of motivation on the employees under their control.

Category 4: Application of Information Technology to handle all data or knowledge mining, retrieval, processing, storing and transferring. It has been identified that this stage of implementation is very sensitive. First, there must be enough trained professionals on ground at our university who are ready to jumpstart the applications of the new technologies. Two, improper installations and localization could reduce the efficiency of the IT system if not properly handled.

Category 5: Dealing with the human part of our university systems: the administrators, managers, faculties, students, parents and business leaders. However, emphasis would be laid on the employees here; because they are the ones that require enough motivation before they could discharge their duties to satisfy the rest human faces of our university operations. Motivation could come in the form of salary increase, rewards, benefits, re-training, introduction into a better working condition, elimination of internal rivalry and so. One the best approaches is to create a comfortable workplace full of new methods of operation, for example, using the latest technology to carry out assignments that were previously difficult and hard.

Category 6: This is the last and continuous stage in the implementation of new Knowledge Management technique at our university. It entails carrying out inspection of the units, and measuring performance against a standard so as to ensure quality performance. In short, this is when quality control comes in. Both the new set of technologies and the human employees need to be periodically checked in order to make sure that they are working in conformity to the expected functionalities. Sometimes, it may be helpful to use external quality agency as a confirmation of all the facts got from the in-house quality control department. What makes a transformation succeed is the ability to constantly check its conformity with the expected outcomes; in this case, making sure that processes in our university are producing good results in the areas of students' data processing, viable communication with parents and external industrial leaders and functional in-house transfer of knowledge, skill and human intelligence.

#### IV. CONCLUSION

Knowledge management has become a modern-day approach to solving the problems of redundancy and non-performance that often negatively influence the products or services of a particular organization. Our university's educational services would receive a dramatic boost if the recommendations given are strictly followed.

We need to utilize our human capital and motivate them to work harder and more success-oriented. It is as a result of this that we would be able to meet educational challenges of the 21<sup>st</sup> century, while satisfying the needs of our students and their parents. It is important to keep to the barest minimum the power of our competitors. This indicates that our university must rise up to the new-day challenges while sticking to it traditional values of providing great education to the students and extending goodwill to our society. Knowledge Management is gaining ground in many fields of human endeavors because of its singular purpose to help organization harness all their potentials (both human and material resources) for a better performance that could be sustained for a long time. While Knowledge Management is still a discipline or idea in development, our university must be ready to upgrade its technologies to be abreast of latest development in the field of knowledge management. Training our employees to identify changes in the system and contributing meaningfully to its

perpetual usefulness, an idea that is going to benefit both our university and its components.

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