Global Journal of Current Research Vol. 1 No. 3. 2013. Pp. 85-91

Review Paper

A Preliminary Review on Contriving TQM KM and TM for the Best Organizational Performance.

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Abstract
Before few Decades when total quality management (TQM) was first introduced in companies as the way to achieve organizational success, it did not receive an immediate support and universal acceptance then. Gradually the benefits of quality and quality management programs became evident and controversies disappeared. Twenty years later, organizations are facing precisely the same dilemma with Knowledge Management (KM) and Talent Management(TM). The aim of this paper is twofold: Firstly it suggests that there are many commonalities between TQM, KM and TM and discusses how all the three are beneficial to the organization. Secondly, it presents the relationship and differences between TQM, KM and TM. To this end, we address issues such as: if the three terms are independent disciplines? Are they complementary? Do they interfere or do they facilitate and nurture each others' capabilities?

Keywords: Knowledge Management, TQM, Talent Management, Six Sigma, Business Excellence.

Introduction

This paper identifies commonalities between Total Quality Management (TQM), Knowledge Management (KM) and Talent Management(TM) and capitalizing on this common denominator discusses how KM and TM, being a relatively young discipline, can benefit from highly mature and well established TQM practices. For instance, TQM is process-oriented, customer-centric and requires a cultural change (Kolarik, 1999). Precisely the same attributes can be assigned to KM. For more than two decades TQM has been the guiding principle for various organizations, both private and public, to produce high quality products (tangible and intangible) and attain high customer (internal and external) satisfaction (Crosby, 1979; Deming, 1986; Ishikawa, 1985; Juran, 1988; Taguchi, 1986). In the early 1980s the focus of TQM was to continuously improve processes by reducing variation andimproving the mean of a quality characteristic (e.g., performance). Initially, manufacturing quality was the main aim. However, during 1990s, with the advent of global markets and digital economy, TQM priorities also shifted. TQM now focused mostly on services (rather than tangible/physical goods) and was utilized as a competitive weapon for product/service differentiation in the newly borderless markets where, for the most part, fierce competition made price and quality a non-differentiating factor. It is worth mentioning that during this e-Commerce era, the true spirit of TQM and its main slogan— i.e., Customer is King/Queen—was practiced. This was mainly due to fierce global competition among the firms as well as availability of various kinds of product related information to the customers. Even though both the KM and TM are not directly related to the customers they serve them better from behind the screens. The following sections define and describe Knowledge Management and Talent Management and present the technical considerations and managerial factors that contribute to the successful implementation of KM and TM and how TQM practices can assist in this endeavor.

Knowledge Management and Talent Management Definition

Knowledge management:

Knowledge Management has been defined in different ways by different authors. We selected the following definitionwhich we think clearly define the purpose of KM:

"Knowledge management is the process of capturing a company's collective expertise wherever it resides – indatabases, on paper, or in people's heads - and distributing it to wherever it can help produce the biggest payoff"(Hibbard, 1997)

Talent Management

Talent Management (TM) is a term in common currency today, yet it did not appear until the late 1990s, when McKinsey & Company first referred to it in their report The War for Talent (Michaels, Hand field-Jones, & Beth, 2001). TM is said to be critical to organizational success, being able to give a competitive edge through the identification, development and redeployment of talented employees. For example, in a UK Chartered Institute of Personnel and Development (CIPD) study quoted in Clarke and Winkler

(2006), over 90% of the respondents believed that TM activities can positively affect an organization's bottom line, and more than half had already undertaken TM activities. In a U.S. Institute of Management and Administration (IOMA) survey, the term was coined by McKinsey & Company following a 1997 study. The term is defined as An organization's attempts to recruit, keep, and train the most gifted and highest quality staff members that they can find, afford and hire. Talent management gives business managers an especially important role to playin recruiting, developing and retaining desirable staff members.nearly three-quarters of the respondents said TM was at the top of their critical HR issues list (Sandler, 2006). Yet most writing about TM has come from consultants and practitioners, rather than from academic research, and a number of critical questions remain for further empirical research and theoretical development. These include what is meant by TM, how TM differs from earlier approaches to managing people, and what drives organizations to adopt TM.

1. ***Some of the most popular KM practices include:***

- Communities- of- Practice/Purpose
- Asynchronous Communications (e-mail, message board/broadcasting, subscriptions and alerting, discussion threats)
- Synchronous Communications (instant messaging/white boarding, application and screen sharing, video and audio conferencing)
- Collaborative Services (calendar and scheduling, task management, survey voting and polling, workflow)
- Document and Content Management
- Knowledge Engineering, Taxonomies, Mapping
- Knowledge discovery (Data warehousing, Data mining, Expert systems)
- Lessons Learned and Best Practices Repositories
- E-learning, training, mentoring
- Expertise Locator/Organizational Yellow Pages
- Change management, Change Agent, BPR
- Culture change, Incentives, Leadership,
- Intellectual Capital/ Property

KM practices are numerous and can be categorized in different ways. However, a certain agreement on a typology defining two main KM approaches exists: codification versus personalization (Hansen, Nohria, & Tierney, 1999). The *"codification approach"* or *"people-to-documents approach"* is intended to collect, codify and disseminate information. It relies heavily on Information Technology (IT). One of the benefits of the codification approach is the reuse of knowledge. "The aim of codification is to put organizational knowledge into a form that makes it accessible to those who need it. It literally turns knowledge into a code (though not necessarily a computer code) to make it as organized, explicit, portable, and easy to understand as possible" (Davenport &Prusak, 1998). In contrast, the personalization approach or *"people to people approach"* focuses on developing networks for linking people so that tacit knowledge can be shared. It focuses on dialogue between individuals,not knowledge in a database. *"Knowledge that has not been codified - and probably couldn't be - is transferred in brainstorming sessions and one-on-one conversations"* (Hansen *et al.*, 1999). An investment is made on building networks of people, where knowledge is shared not only face-to-face but also over the telephone, by email, using instant messaging applications and via videoconference. If we contrast these two KM approaches with quality approaches, most quality approaches mainly focus on "codification" (Data collection, Measurements, Quality certifications, Quality procedures). However, most of the employees' know-how, expertise, experience and *"savoir faire"* are currently not captured and not codified due to their tacit nature (people can know more than they can tell (Polanyi, 1966)). The question then becomes: Could we increase the effectiveness and efficiency of current quality practices by better managing employees' knowledge? The emphasis on the "personalization" approach – which permits tacit knowledge sharing to occur - remains limited in quality practices. An example of personalization approach was the concept of "Quality circles". We believe that in this manner KM can play an important role in improving quality and customer satisfaction. Another drawback of over emphasizing on codification practices is that they have a tendency to kill innovation and creativity.

Problems and Issues in KM Implementation and Practice

We can categorize KM related issues into the following: Organizational/Managerial, Cultural, Technical, and People related. As we review these problems, one can notice the parallelism between KM and TQM problems/issues and challenges. Technology is the easiest part of KM. Perhaps the most significant technical consideration for KM systems is information quality. Poor information quality has been and still is the major concern of decision makers and business managers and it has a direct impact on the bottom line of any business. In addition, processes must be established for information quality to ensure integrity and consistency of knowledge and knowledge presentation. This applies to both the information/knowledge that enters into KM system from various sources and the knowledge produced by applying knowledge discovery techniques (data mining, expert systems, intelligent agents, data warehouse) on knowledge repositories. Another important ingredient to assure information quality is users. The users of a KM system should be

involved in determining what goes into the KM system, what output is expected from it and what will be a context based format for presenting the (input) information and the (output) knowledge. Cultural issues are quite significant in KM and they directly impact KM success or failure. In fact they are the first barrier to success (Barth, 2000; Knowledge Management Review, 2001; KPMG, 2000). As in TQM, in KM initiatives people tend to avoid or fight change and they prefer "the old way of doing things" in the company. With KM, there will be a new way of decision making in the organization and people have to share knowledge and "know-how". Knowledge being often associated with "power", promoting knowledge sharing is not an easy task particularly if employees don't see how they can directly benefit from it. Knowledge transfer can also take place among various organizations (Lam, Chen, &Ubroeck, 2002). Leadership then becomes critical and managing through a knowledge lens should become a priority (Ribière& Sitar, 2003). Organizational and managerial issues in KM include devising managerial processes for capturing and distributing knowledge. In addition, these processes need to be improved continuously to become more effective and efficient. KM systems must be included in an organization's structure. However, such a structure (as in TQM) must be flexible and adaptive. "It is important that organizational structures are designed for flexibility (as opposed to rigidity) so that they encourage sharing and collaboration across boundaries within the organization and across the supply chain" (Gold, Malhotra, &Segars, 2001).

Problems and Issues in TM Implementation and Practice

Talent management: practical issues in implementation

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The term 'talent management' is clearly a big hit with HR people, but will the recent talent craze yield real business value? If talent management does help, it will do so by shifting our thinking and/or by helping us to act more effectively. The term 'talent management' can act a useful reminder that all businesses need to: think about 'potential' – a positive, strengths-based way of approaching people focus on the future – talent management is, to a large extent, a re-named combination of workforce planning, succession, and career development. It emphasizes investing in people over the medium term and for future roles. The language of talent 'pools' and 'pipelines' can help us think about which groups of people and jobs we need to plan for attend to both individual and organizational desires in a balanced way, linked with ideas of the psychological contract and the employer brand. Integrate resourcing activities (recruitment, deployment and career movement) with development activities (leadership development, learning, coaching etc.) These are all positive shifts in thinking, but the term 'talent management' is also problematic. There are at least three big 'buts' to the impact of talent management on our thinking:

But 1: the term 'talent management' has often been defined as a list of '~ings': attracting, retaining, developing. This has grown to include motivating, rewarding, measuring etc. If we are not careful we are simply renam'ing' the whole of people management, which is irritat'ing'. Sensible employees and managers might rightly ask 'isn't talent management just a new name for all the things HR has to help us do?'

But 2: the 'management' word in the phrase may be a delusion. We do not so much 'manage' talented people as get to know them, support them and negotiate with them to meet both business needs and their own preferences. *'The employee is less a malleable resource for the company and more a mobile investor of his or her own human capital.'* Gratton and Ghoshal (2003)

But 3: the most serious 'but' is that if we call some people 'talent' then a lot of others are 'not talent.' The recent CIPD research shows that employees and line managers are deeply concerned about being in, or managing, the 'not talent' pool. It is foolish in any event to speak as though 'talent' is a single commodity – the question 'who is talent?' is simply not a sensible one without defining the broad kind of work and the development timeframe one is talking about. So although the term 'talent management' can bring useful thoughts to mind, it can also arouse confusion and anxiety.

Weak spots in implementation

- **Talent management interventions should be clearly focused** on groups of jobs or people which, without pro-active attention, will put the business at risk. So the keyfirst question is not 'who is talent?' but rather 'where does the business need tofocus its talent management effort?' This may need to be on people with executivepotential in early career, mid-career or near the top. It can also be on particulargroups of jobs or people, defined by their level or function or geography.Sometimes individual critical posts may need attention. An organization will often need several target areas for talent management activity. Such focused interventions must complement active development of the whole workforce, notsubstitute for it.
- **Individuals need dialogue about their careers and development**. Theconversation needs to be two-way and about future direction, not just a potentialrating. Talent and succession processes need to be woven in with the normalprocesses for managing individual performance and development.
- **Managers need to act collectively in identifying and developing talent**. To do this they need a clear and regular choreography for their collective information sharing,decision-making and action. Discussions between managers need to linkup down through the organization, reaching down into talent pipelines, andfacilitating action across divisional and geographical boundaries.

- **People are developed through both career and skill development activities.**
  Active career development is essential to developing and deploying talent. 'Talent programmes' are too often just short bursts of skill training or coaching. Gettingaccess to the right range of work experiences is the key to generating crediblesuccessors at any level.
- **HR needs to give sustained attention to supporting talent management**,
  including managing information, facilitating and training the line. Central teamsneed to help local business partners work with the business to identify and developpotential at lower levels and in early career.

Critical Success Factors

There are numerous critical success factors in developing and implementing anTM. Having access to good data, and the critical appraisal and analysis of that data, is essential in developing strategies to address the needs of the organization. Effective and continuous workforce planning is also essential. Moreover, it is the quality of the workplace that is integral to the attraction and retention of top talent. In addition to these factors, the following organizational elements must be present if an ITMP is to be effective:

• Active participation by senior executives
• Alignment of the program with the strategic directions of the organization
• Accountability for the program at the director and supervisory level
• Effective departmental HR management and supports
• Employee input, engagement, and participation
• Continuous evaluation, monitoring, and improvement efforts
• Effective organizational communication of the program

KM and TM Implementation and Practices: Lessons Learned from TQM

Launching a KM and TM initiative is an evolutionary and on-going effort. This paper suggests that there are many similarities between implementing KM and implementing total quality management (TQM). In addition, there are also similarities in KM,TMand TQM practices. Therefore, we recommend that best practices, the lessons learned, and common pitfalls in TQM implementationand TQM practices should be utilized for KM and TM implementation and practices. Commonalities of TQM, KM and TM are listed below:

a). TQM, KM and TM both involve cultural change. TQM introduces a new managementstyle into the organization andKM introduces a new way of information sharing and decision making.TMfrom an 'exclusive' perspective presents adifferentiated/segmented view of the workforce

b). Success of all the three are heavily dependent on the top management support.

c) They may require organizational changes/restructuring.

d) TQM and KM are customer-centric (both internal and external customers). In TQM customer is king and KM providesthe foundation for customer relationship management (CRM). TM also supports the both by providing quality and talented employees to serve both organization and customers.

e) The ROI on TQM,KM and TM is difficult to measure the benefits are realized in a distant future; thus,the top management may be reluctant to support the project (a short-term return may be preferred bysome managers). The methods used in TQM for top management support (e.g., creating success stories by startingwith a small scale TQM project) can also be used in KM and TM(e.g., start with a small application area).

f) They need a champion to ensure success.

g) They require a sound training program. That's particularly relevant when a company wants tobecome a learning organization.

h) They should both support the organizational mission and its long term strategies and objectives.

i) Both have broad implementation guidelines (abstract and general) that may end up into failure

j) They are now considered as everyone's job even if it was not the case when they started (e.g., Quality control Dept)

k) Some organizations were doing it (QM,KM and TM) before it became a discipline and got so much attention

l) Both had some Japanese Gurus (Quality: Kaoru Ishikawa, GenichiTaguchi, KM: IkujiroNonaka, Hirotaka Takeuchi)

m). But TM has none. In order to develop, implement and maintain all the three you need: Leadership, Processes, Culture, technology as a keyenabler and Measurement systems

n) Deming's 14 points (presented in Table 1) which have been successfully applied to TQM can be applied, to a largeextent, to KM systems.

Table 1: Compares and summarizes the objective and focus of the three disciplines.

Terms	***TQM***	***KM***	***TM***
Objectives	Make continuous improvement in all the areas of the organization	Achieve knowledge superiority and competitive advantage over competitors Become a learning organization Foster innovation and collaboration	Acquiring, Developing and Retaining Competent Work force
Focus	It focuses primarily on total satisfaction of the internal and external customers within a management environ which seeks continuous improvement of all systems and processes	Focus on processes needed to collect, store, retrieve, share and leverage knowledge assets.	Focuses on Identifying and segregating the talented employees for better organization performance and increasing the talent pool.
Personnel Development	Empowerment, Training and Development	Empowerment, Competence Development and Learning	Training, Development, Progressive Strategies for Talent Management
Leadership	Top level and middle level management	Chief knowledge officer, Knowledge champions, Communities of Practices	High performing leaders, Head hunters, Middle Level Management

Quality standards and initiatives

During the first part of this paper we used the term TQM in a broad sense. If we want to obtain a better understandingon how KM relates and integrates with Quality we need to define and analyze the different types of quality initiatives thatare currently implemented in organizations. We decided to focus our analysis on four well known and well accepted qualitypractices/tools.

Quality Management Systems: ISO 9000:2000 standard family Total Quality Management Initiatives Six Sigma National Quality Awards (MBNQA & EQA Excellence Models)

These quality practices/tools explained below address the main “generic” concepts shared by the majority of worldwidequality initiatives that organizations may implement.

Total Quality Management Initiatives *(Praxiom Research Group Limited, 2003)*

Total quality management is defined as a management approach that tries to achieve and sustain long-term organizationalsuccess by encouraging employee feedback and participation, satisfying customer needs and expectations, respecting societalvalues and beliefs, and obeying governmental statutes and regulations.

Six Sigma (6ó) (i Six Sigma, 2003)

Six Sigma is a rigorous and disciplined methodology that uses data and statistical analysis to measure and improve acompany’s operational performance by identifying and eliminating “defects” in manufacturing and service-related processes.Commonly defined as 3.4 defects per million opportunities, Six Sigma can be defined and understood at three distinct levels: metric, methodology and philosophy...Six sigma was developed by Motorola during the 1980s. It was subsequently adopted by leading corporations such as GE, Sun Microsystems, AlliedSignal and Bank of America.

The analytic thinking

Theconcepts of TQM have been accepted and recognized as critical criteria for organizations to remain competitivebut their application has always been problematic. Only strong and visionary leaders were able to fully implementthem in order to fully take advantages of TQM. Some organizations likeMotorola took their own approach to TQM and created a new discipline directly inspired from TQM. One such an approach is Six Sigma which is currently the most popular and the most successful one. The main difference between TQM and SixSigma resides in the word management. Six Sigma is a methodology which is well defined compared to TQM philosophicalguidelines. Six Sigma is more short term results oriented and it is not the territory of the quality department (Pyzdek,

2001).Nevertheless, Six Sigma does share common themes with TQM, as seen by the overlap in our framework. We believethat a Six Sigma initiative is more likely to succeed if it is implemented in an open and quality friendly culture. Organizations will have to implement only one of the two disciplines. (TQM or Six Sigma).

The commonalities between TQM, Six Sigma, KM and TM are mentioned in the fig 1. The figure 1 shows the commonality among TQM, Six Sigma, KM and TM. TQM or KM or TM or Six Sigma cannot be implemented without a serious reconsideration of the business processes of an organization. One of the goals ofall the above terms are to create new processes that will satisfy customer needs or to modify existing ones. So in both cases BPR is critical.The intersection between Six Sigma, Knowledge Management and Talent management directly relates to Communities of Practice (CoP). CoP can be defined as a group of individuals with a common working practice who do not, however, constitute a formal work team.Communities of practice generally cut across traditional organizational boundaries and enable individuals to acquire newknowledge otherwise unavailable or at a faster rate. Six Sigma teams can be considered as CoP due to the fact that theyregroup employees from different divisions and very often from different locations around similar activities and interests.Already some Six Sigma teams are starting to use knowledge portals and online Communities of Practice to collaborate andshare knowledge across divisions. So BPR is the common element for TQM, KM, TM, Six Sigma and CoP. An example of successful initiative in this area is the case of Caterpillars with their currentuse of more than eighteen hundred CoP. We strongly believe that organizations cannot achieve worldwide performance excellence focusing only on quality disciplines.The missing piece of the quality puzzle is in our opinion Knowledge Management and Talent Management.Enabling and facilitating knowledge sharing and Identifying and Segregating the prospective employees are the key to Quality.We strongly believe that Knowledge Management and Talent Management are the keystone of the door to Business Excellence. Withoutit, organizations will not fully benefit from their Quality initiative, whichever it is, and may not obtain the competitive advantageexpected. The enabler to successfully “pass this door” being Strong Leadership, Organizational Culture, Measurementsand Information Technology (the pillars of our door).

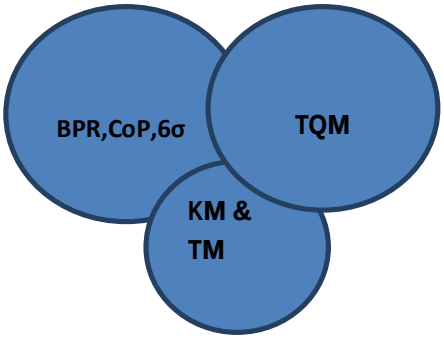

Figure 1: Integrating TQM,KM,TM and Other Quality and Process Disciplines.

***TQM**: Total Quality Management, BPR: Business Process Reengineering, **CoP**: Communities of Practice, **KM**: Knowledge Management, **TM**: Talent Management,**6σ**: Six Sigma*

Conclusion

This paper provided a brief discussion of TQM, KM and TM and identified the commonalities between them and how theyintegrate. Since TQM is mature and has established a reliable set of best practices and common pitfalls, it was suggested thatKM and TM can benefit greatly from TQM experiences due to their significant commonalities. KM was subsequently added to this framework toemphasize the significance of KM and the role it plays in enabling an organization to achieve “Business Excellence” both inits quality endeavor and in its KM practices.the phrase "**talent management**" is being used to refer the activities to attract, develop and retain employees and it’s a specialist, Some people and organizations use the phrase to refer especially to talented and/or high-potential employees. The phrase often is used interchangeably with HR -- although as the field of talent management matures, it's very likely there will be an increasing number of people who will strongly disagree about the interchange of these fields. Because HR is a Broad system or practice which looks after the process such as compensation, labour welfare, Finally, the conclusion was that KM-TQM-KM are a three-way path and theyCan be benefited from each other.

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