BPM & Quality Management (TQM): Will the Twain Meet?

Old-timers from the process profession may look at BPM a trifle suspiciously and maybe derisively as well, thinking, “well, isn’t it more old wine in a brand new bottle?”. They might well have a point. Process Management has been an ongoing evolving area of research and application for most of the last century, and as a structured discipline at least from the early thirties. So, is BPM an avatar of Process Management? We attempt an analysis of this question in this Column by comparing BPM and the body of knowledge under the name of Quality Management or Total Quality Management (TQM) to explore the commonalities and differences.

Why TQM? TQM today represents an umbrella comprising a cumulative body of knowledge, science and techniques which has been popular in organizations for the last three decades. In the last couple of decades, TQM has to some extent, ceded the limelight to complementary approaches, e.g., BPR followed by Six Sigma and subsequently Lean. We propose that the TQM philosophy, to a large extent, encompasses these various approaches at a conceptual level. TQM has been fairly popular as a process and quality management philosophy in several parts of the world, especially in India. We believe that as the BPM bandwagon gathers steam and covers more organizational real-estate, a closer look and alignment with prevailing and complementary approaches will be most beneficial.

TQM: A Blast from the Past

Structured approaches to improve process quality emerged in the 1930’s at Western Electric with legendary figures such as Walter Shewart, Edwards Deming, Joseph Juran, to name a few,. pioneering new techniques on statistical process control. Post World War II, the subject of quality management began developing in a systematic manner. The teachings of quality gurus such as Juran and Deming and others brought the subject to the attention of management for the first time. To a large extent, these teachings found most acceptance in Japan’s industrial circles which built on these foundations and subsequently on the work done by other experts such as Taguchi, Ishikawa and others.. As Japanese quality assumed world recognition in the 70’s, the rest of the world began to emulate their practices. The term TQM probably came into popular usage in the early 1980’s combining several of the best practices in quality management up to that time.

It was around this time that a raft of other complementary methodologies gained prominence from early well-publicized successes. Six Sigma for process improvement was first pioneered at Motorola and was inspired to a large extent by TQM and related approaches. BPR entered the stage as a management practice to redesign processes based on a clean-slate approach. Lean principles for process improvement (also known as the Toyota Production System), initially used for manufacturing, gradually became popular across all industries and functions.

At its core, Total Quality Management (TQM) is a management approach to long-term success through continuous improvements in customer satisfaction and other business objectives relating
to cost reduction, reduced time to market etc. Paul Harmon, in his book, *Business Process Change* [1] defines it as a *movement, an industrial discipline and a set of techniques for improving the quality of processes*. In a TQM effort, all members of an organization participate in improving processes, products, services and the culture in which they work. Typically the emphasis in TQM is on top management leadership for quality, supplier quality management, process design and control, employee training and employee involvement in quality. The typical toolbox used in the TQM kit includes flow charts, cause-effect diagrams, histograms, scatter diagrams, etc. covering process design, improvement and control.

The term “Total Quality Management” may have lost cachet in some parts of the world in recent years. However, it is still popular and used extensively in India, Europe and elsewhere.

As TQM developed, it took the form of holistic frameworks aimed at helping organizations achieve excellent performance, particularly in customer and business results. The Malcolm Baldrige Award was set up in 1987 by the US government as a stimulus to spur US companies towards greater competitiveness (www.nist.gov.in). Similarly, in Europe, the European Foundation for Quality Management (EFQM) instituted the EFQM Excellence Award. Variants of these awards now exist in several countries. India has two, – the IMC-Ramakrishna Bajaj National Quality Award based on the Baldrige and the CII-Exim Bank Award for Business Excellence based on the EFQM.

In one of our previous Columns, we analyzed the growth and adoption of process management practices in Indian companies [2]. To a significant extent, the process and quality philosophies adopted by Indian companies are model / certification based (e.g. ISO 9000, Baldrige) which was initially driven more by branding from an export perspective. Indian companies which are in the export oriented work such as IT, Textiles, manufacturing, etc. have adopted quality models and certificates with the objective of showing their capabilities to their global customers. Over the years, recognizing the benefits provided by adopting TQM in its true sense, the focus is shifting to using quality models for stimulating internal improvement as well. As in several parts of the world, the launch and popularity of the ISO 9000 series stimulated interest in India in the broader area of TQM. A large proportion of Indian companies have aligned themselves with the ISO 9000 certification over the last two decades. In the last decade, adoption of quality awards has also increased significantly. On a similar note, India has the highest number of companies outside of Japan which have won the Deming Prize.

**BPM – The Flow so Far**

BPM, in the early years of its development, became associated with automation enabling business process improvement through agility, flexibility, cycle time, etc. This naturally followed since in its infancy, BPM was fuelled by some innovative automation technology which promised process transformation. Over the years, it has acquired much broader dimensions and today has evolved into a process-centric, IT-enabled approach for managing the complete life cycle of business processes. The current understanding of BPM is a more encompassing world view. Quoting Jeston & Nelis [3], - “BPM is the achievement of an organization’s objectives through the improvement, management and control of business processes”. The current BPTrends survey [4] also reveals that the meaning of BPM to most people is either about managing and improving business processes or a top-down organization-wide approach rather than just about software technology. BPM has evolved through developments in technology and also leveraging and improving existing process management methods. Innovative technologies like web based technologies, service oriented architecture, workflow systems, application integration products and ERPs on one hand and new process management methodologies and techniques like BPR, Lean, Six Sigma, process architectures, etc. on the other, together helped to create the current broader outlook in the understanding and implementation of BPM. There are many other aspects which need to be understood and practiced to make BPM a true enterprise wide program for managing business processes. Can we adopt some practices from TQM to achieve this goal?
BPM technologies are also evolving to support the complete life cycle of business processes. In addition to technologies that help organizations build agile applications & infrastructure that can be modified easily, quickly and with minimal impact on existing operations when there are changes to the business process, BPM products are including capabilities which help business users monitor, measure, analyze, simulate and redesign the business processes.

BPM Technology adoption in India has not yet gained momentum. In most large Indian organizations the focus is still on automation of functional processes through ERPs and other enterprise systems, while in the small and medium organizations use of IT systems is limited to a few functional products. Workflow systems and BPMS products are popular with banks and other financial services companies.

BPM vs TQM: Similarities & Differences

Analyzing the definitions of TQM and BPM, one is struck by the similarities in scope of both areas. Both have at their heart the management of business processes. TQM explicitly looks at ensuring ongoing customer satisfaction (along with other internal business drivers) through better planning, improvement and control of business processes. BPM focus, in the initial years was on dynamic processes, e.g. agility and flexibility enabled by technology. Today the scope of BPM has expanded to focus on organizational objectives through better management of business processes. However, if we were to include the quality awards (Baldrige, etc. in our definition of TQM, we find significant differences. In addition to basic process management, the quality awards also focus on the processes and work systems in other key areas of leadership, strategy management, customer and markets, information and knowledge and people management with corresponding emphasis being given to the results achieved by the company in these areas. BPM however, still remains largely in the domain of the IT community. TQM and allied techniques reside in the quality domain, and in several organizations (especially Indian companies), these initiatives are often anchored by independent process / quality groups reporting at the executive level.

BPM recommends process modeling as an approach to process documentation with sufficient rigor in process modeling and analysis through the use of structured tools and methods. Moreover the use of appropriate BPM technology helps in quicker and more scientific analyses of processes which is particularly advantageous in analyzing large and complex processes. On the other hand, in the TQM model, processes are mapped and documented using simple methods like flow charts with 4-5 symbols, which are less structured. Process analysis is usually done manually, although several tools are used for process data analysis, such as Six Sigma. Process mapping in this mode is more easily understood and usable for a larger audience, especially for non-technical business users.

Process improvement in the TQM space depends on some or all of these elements: improvement based on data (ranging from qualitative to highly quantitative as in Six Sigma approaches) analysis, root-cause approaches, BPR, aided and supported by appropriated technology. The BPM paradigm espouses process redesign and improvement from a holistic angle using appropriate methods, tools and technology. However, on the ground, process flexibility and improvement through the use of BPM technology is still the main focus for BPM champions.

In TQM parlance, process control involves use of statistical tools, planning and building appropriate controls in the processes (manually or technology enabled). In BPM, process monitoring and control receives considerably more emphasis, since BPM technology features a strong capability for process control and monitoring.
So What?? 😊

What does all of this mean for BPM professionals, researchers, and practitioners as they attempt to move organizations toward process centricity?

Most Indian organizations have some flavor – strong / moderate or weak – of quality management in their organizational ecosystem. BPM in organizations have tended to be driven more by IT departments, maybe largely because of the technology antecedents of BPM. Where there is no strong organizational driver and ownership for quality management, we find, in some rare cases, IT taking ownership for process management. In a significant number of Indian companies, quality management is owned by a central independent group reporting at the executive level. It follows logically that BPM should explore strong and synergistic partnerships with the quality management programs within the organization. It is not often we find a partnering approach between IT-BPM groups and quality management people. There is often a mutual misunderstanding on both sides.

For those in charge of implementing BPM in an organization where TQM has a moderate to strong ownership, it makes sense to align with the TQM / quality groups in the organization. For instance, process modeling initiatives under the BPM umbrella should align with the process documentation repositories / process architectures maintained as part of the quality management system. Similarly, those responsible for process improvement initiatives would do well to explore BPM process monitoring capabilities.

As Quality management has the buy-in and commitment from the senior management in most Indian companies, it seems logical that BPM programs should be linked to the same drivers as TQM. BPM methods and tools should be aligned to the quality models or awards that the organization pursues. This will ensure that the implementation is tracked as part of the same TQM program. For example, if a Six sigma program is running in the organization, it is advisable to ensure that the BPM tools and techniques are adapted to support the Six Sigma program

We suggest that a primary objective for researchers and analysts working in this space is to recognize the complementary possibilities of the Quality management and BPM approaches. For example BPM tools can be of great assistance in facilitating Six Sigma projects. Hopefully, one day the twain will meet!!

References