KPMG
cutting through complexity

Business Excellence and ROI based Process Maturity

Global Insights

Survey report

kpmg.com/in

Table of **Contents**

Preface

From a historical perspective, IT industry was the early adopter of Business Excellence frameworks and quality models. Initially, organizations in the sector adopted ISO-9001 as the standard for process improvement as it was light touch and also an extension of the exisiting methods. With the release of CMMI during early 1990s, IT service started adopting the models for process improvement. Currently, there are over 5000 organizations adopting CMMI models globally, but there is a constant question on ROI from the investment in process improvement and quality in general.

It gives us immense pleasure in releasing this report on 'Business Excellence and ROI based Process maturity - Global insights', covering IT sector and service organizations. The report addresses the aspects around Business excellence frameworks and models and ROI from these investments.

The way business is done today has undergone a significant change; the economic recession has made people rethink their business models. Quality and excellence have become the bywords for survival. Also, it is times like these that Organizations do things more efficiently and with a great sense of focus and purpose. Quality and excellence are now being embedded into the work ethos in many organizations.

In the context of this growing importance for Process Excellence, KPMG conducted a survey based study of senior executives in the IT and service sectors to analyze their perception of Business excellence, and of established Process maturity and Quality practices that help them align with business needs.

With the widespread adoption of numerous process based standards/models/awards, it is important to know how these translate to a significant contribution to both the top-line and bottom-line. This study is intended to understand the perceptions of the practitioners and top executives on the benefits accrued from the use of process models/standards, and thereby look at key characteristics of sustained excellence. The key message is that not just choice of models, but the right application of pertinent process models/standards, provides the key to sustained excellence.

Pradeep Udhas
Chairman of India,
Global Program
KPMG in India

Raman K K
Partner - Business Excellence
KPMG in India

Foreword

This survey being brought out by KPMG in India is an important initiative in capturing inputs from the IT and Services universe. The survey highlights the importance of Business Excellence and ROI based Process Maturity in the IT Sector in organisations that help in better understanding of the processes followed and the various initiatives taken towards process improvement by the reporting entities.

It is important to analyze the process improvement initiatives in any organization based on ROI as it helps in:

- Structured investment of cost and effort in the process improvement journey

- Consideration of the needed Eco-system and process infrastructure

- The realization of benefits from Business Excellence and process improvement initiative.

Quality in business processes can be achieved when processes are defined, carried out and scaled to the highest standards, which constitute a total quality at every deliverable.

In fact, excellence becomes a part of culture when harmonized with every single activity, with focus on internal or external customers. Process models / standards are enablers and compliance is not the destination, but a starting point in Total Quality Organizations.

We would like to thank all the survey participants for their time and overwhelming response. Over 100 leading organizations in India and Abroad partcipated and provided valuable insights for the survey.

Ambarish Dasgupta
Head of Management Consulting
KPMG in India

1. Introduction

The process of service delivery has been a central theme of the corporate world for the past two decades. In the high-technology environment of the twenty-first century, most of the organizations have found themselves building increasingly complex products and services. Today, a single company usually does not develop all the components that compose a product or service. More commonly, some components are built in-house and some are acquired; then all the components are integrated into the final product or service. Organisations today, are expected to be able to manage and control this complex development and maintenance processes. Therefore, companies would have to co-exist with other stakeholders and external entities to create value for the end-users. In any industry, processes allow you to streamline the way you do business. They allow you to:

- address scalability

- provide a way to incorporate knowledge of how to do things better

- leverage resources to enable highest levels of productivity

- create a culture of sustained improvement.

A focus on process provides the infrastructure and stability necessary to deal with an ever-changing world and to enhance the productivity of people and the use of technology to be competitive.

Most highly effective businesses also face challenges to achieve and sustain competitive advantage while complying with regulatory requirements. To meet these challenges, effectively performing organizations apply reference models, standards, and other process improvement initiatives. In this environment—where several improvement initiatives are concurrently implemented at different hierarchical levels and across different organizational functions—different parts of an organization are championing those initiatives that specifically address their problems. This can lead to competition between functions and their associated improvement initiatives—with each vying for the same resources within the organization to meet their respective implementation needs. This competition may cost the organization dearly because of overlapping efforts and subsequent erosion of the benefits from any single effort. Hence, an ROI based approach along with pragmatic method is imperative to implementing one or many process improvement efforts.

Prasanth Shanthakumaran
Director - Business Excellence
KPMG in India

2. Brief overview of our survey

Our survey attempted to understand:

- the relative importance of Quality and Business Excellence in Organizations
- the use of process management tools as a method of enabling business change;
- whether certifications and accreditations actually deliver a tangible return on investment;
- how well companies manage and support the process improvement initiatives
- qualitative and quantitative benefits for organizations that adopted process improvements

The research methodology was primarily a web-based qualitative and quantitative questionnaire supported by face-to-face interviews and hardcopy responses. The survey was sent to respondents across five global regions. The target respondents were Senior and mid level executives and senior management within Organizations, with detailed input from those involved directly in Quality Assurance and process improvement.

We received more than 125 responses from 100 unique organizations across various sectors including IT divisions of banking, automotive, engineering, telecom, defense and aerospace, pharma, retail, media, transport, electronics, power & energy, healthcare, logistics, healthcare and IT/ ITES.

Figure 1: Sector breakup

- IT/ ITES
- IT Divisions of other sectors
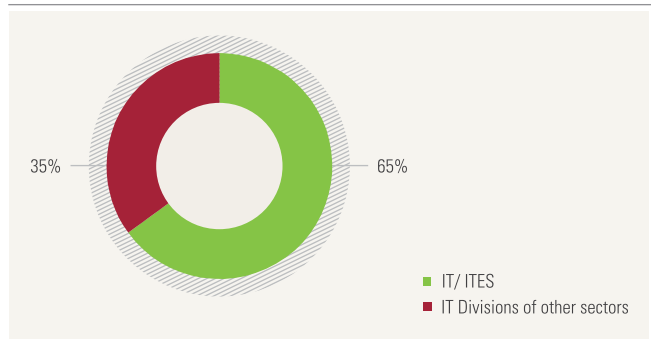
Source: KPMG: Business Excellence global survey 2014

Organizations that participated in the survey ranged from up to 500 IT staff to above 10,000

34 per cent of the organizations can be considered as small sized, 38 per cent in mid size segment whereas 28 per cent are large sized organizations

Figure 2: Classification by organization size

- 1 - 500
- 501 - 1000
- 1001 - 5000
- 5001 - 10000
- Above 10000
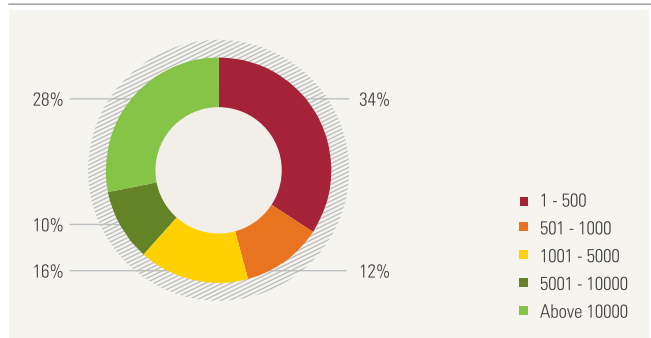
Source: KPMG: Business Excellence global survey 2014

Organizations that responded can also be classified based on their legal entity structure. Listed entity indicates Listed in India

Figure 3: Classification by legal entity status

- Listed entity
- Unlisted entity
- Subsidiary of a foreign firm

Source: KPMG: Business Excellence global survey 2014

Kamlesh Prasad
Manager - Business Excellence
KPMG in India
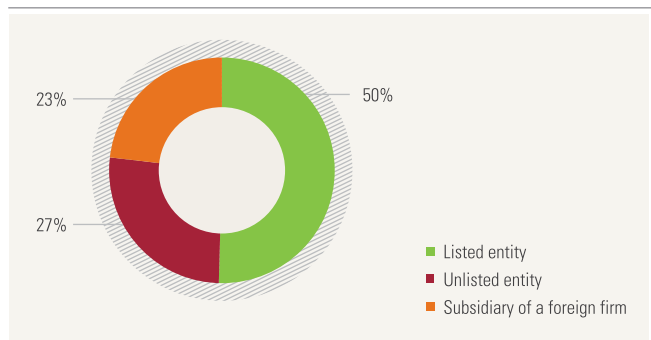
3.Survey Results - Analysis and inferences

The results of the survey give an insight into how and what the process improvement industry thinks about the current scenarios and the future trends in the quality assurance and process improvement practices.

Adoption trends and existing accreditations/ certification status

Many organizations are applying quality improvements to drive organizational performance and process excellence. Although most organizations clearly understand the benefits, it has traditionally been a struggle to successfully implement organizational performance and process improvements, even for top-performing companies. Various models and standards are then adopted by the organizations to achieve business excellence and establish cohesion in their various processes.

Organizations today strive to comply with multiple frameworks and standards to address the standardization and business aligned growth objectives of an organization covering governance, program and project management, service delivery, operations, infrastructure and people growth to name a few areas.

Business excellence frameworks and methods

Out of the various frameworks available in the industry, *20% of our respondents confirm to adopting more than one Business Excellence frameworks* for their organizations. Lean/ Six Sigma is the most adopted framework for business excellence by the participating organizations

The two most favorable combinations seen were Lean/ Six Sigma with Balanced Scorecard and Lean/ Six Sigma with CoBIT[1].

### Figure 4: Breakup by Business Excellence frameworks adopted
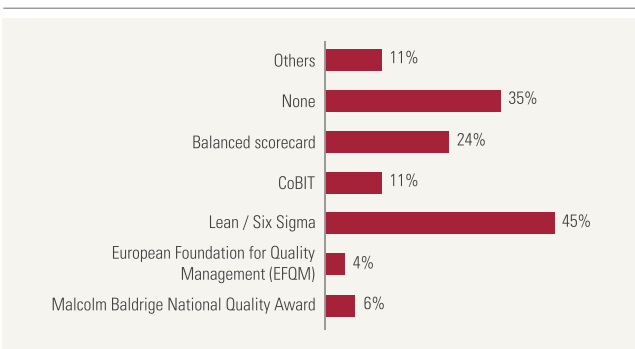
Source: KPMG: Business Excellence global survey 2014

Delivery excellence related frameworks

- Multi-model implementation for delivery excellence is one of the key mechanisms for instilling confidence in the customers for meeting their needs and quality of deliverables. *More than 45 per cent organizations that responded confirmed to adopting [accreditation/ certification] more than 1 delivery excellence framework* while the highest adoption trend is evident for ISO 9001 and CMMI DEV[2].

- 90% organisations confirmed to adopting CMMI as a framework for delivery excellence, out of which 48% have been formally accredited with both CMMI Dev and CMMI SVC

Figure 5: Accreditation status of CMMI Dev and CMMI SVC
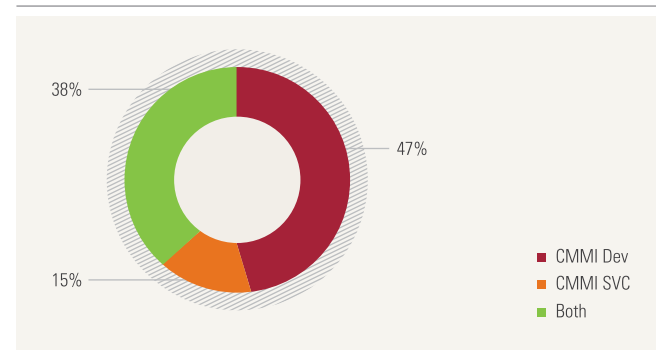
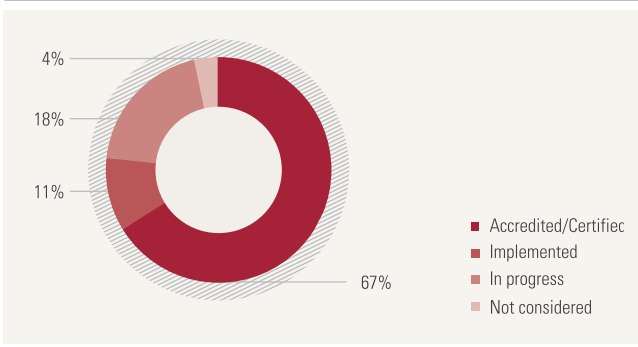**Source:** KPMG: Business Excellence global survey 2014

Figure 6: CMMI Maturity level accreditation breakup
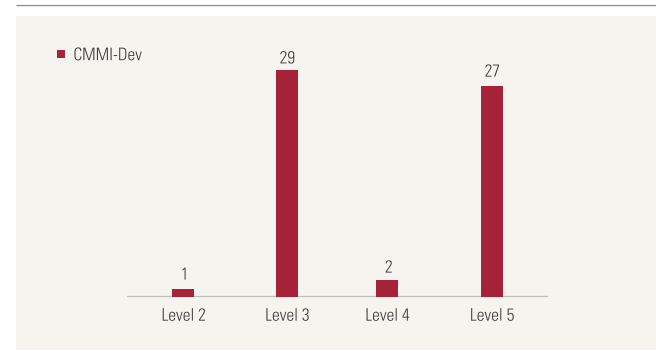
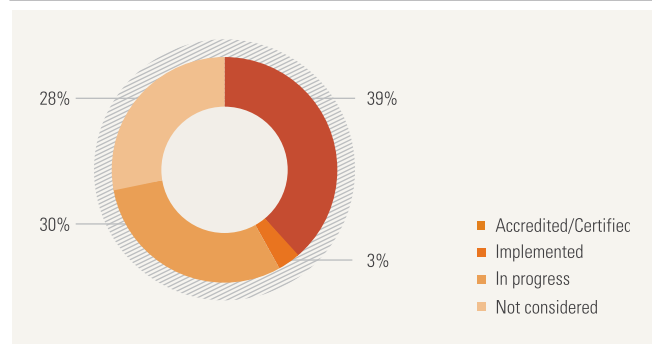**Source:** KPMG: Business Excellence global survey 2014

---

1. Control Objectives for Information and Related Technology
2. Capability Maturity Model Integration for DEVelopment
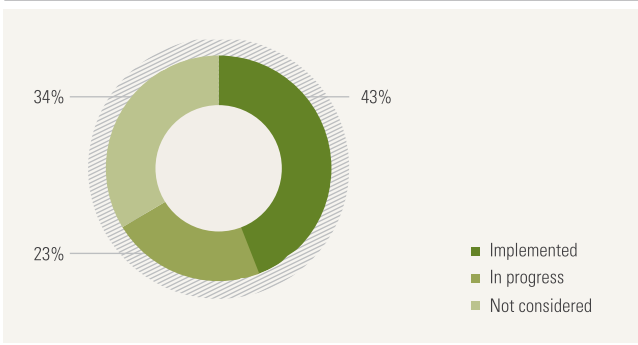
Figure 7: CMMI DEV adoption status

4%
18%
11%
67%

- Accredited/Certified
- Implemented
- In progress
- Not considered

Source: KPMG: Business Excellence global survey 2014

Figure 8: CMMI SVC adoption status

28%
39%
30%
3%

- Accredited/Certified
- Implemented
- In progress
- Not considered

Source: KPMG: Business Excellence global survey 2014

Figure 9: Six sigma adoption status

34%
43%
23%

- Implemented
- In progress
- Not considered

Source: KPMG: Business Excellence global survey 2014

Figure 10: ITIL adoption status

25%
50%
25%

- Implemented
- In progress
- Not considered
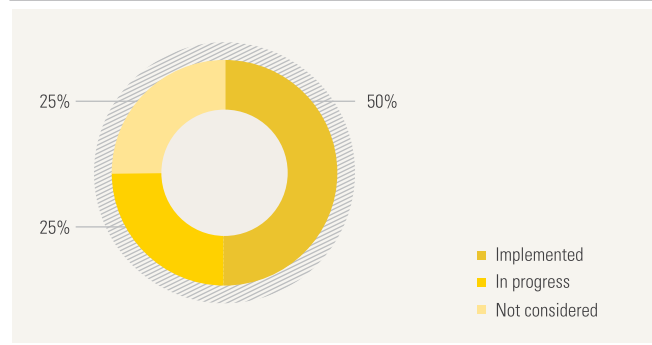
Source: KPMG: Business Excellence global survey 2014

Figure 11: ISO 9001 adoption status

11%
4%
10%
75%

- Certified
- Implemented
- In progress
- Not considered
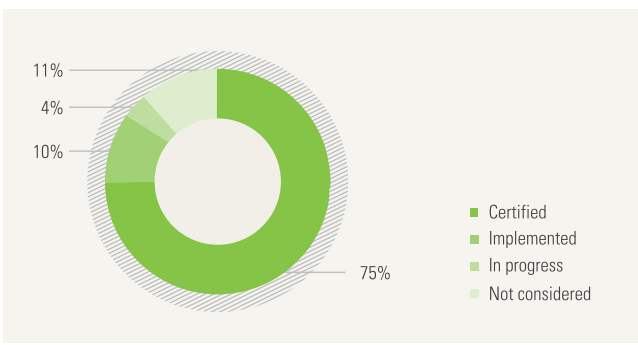
Source: KPMG: Business Excellence global survey 2014

Figure 12: ISO 27001 adoption status

15%
6%
4%
75%

- Certified
- Implemented
- In progress
- Not considered
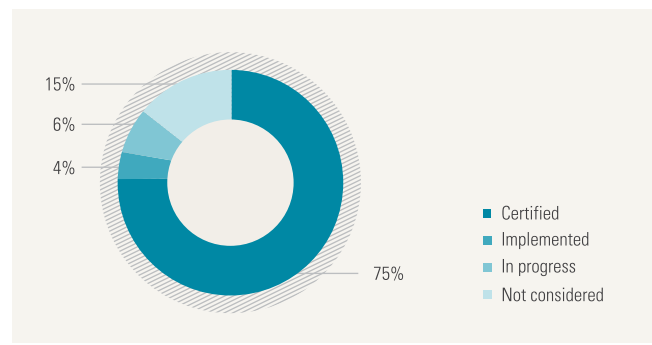
Source: KPMG: Business Excellence global survey 2014

Figure 13: ISO 20000 adoption status

36%
46%
14%
4%

- Certified
- Implemented
- In progress
- Not considered
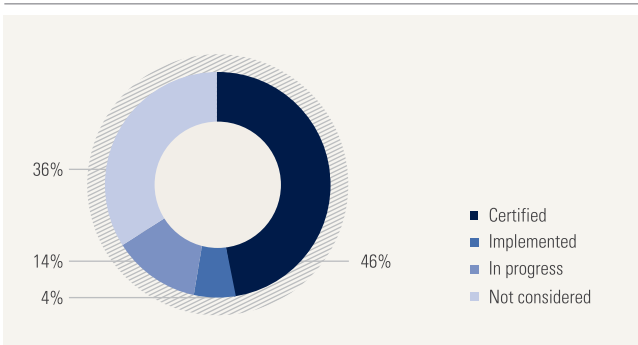
Source: KPMG: Business Excellence global survey 2014

Some of the additional frameworks adopted by organizations include:

- ISO 14001
- EN9100
- TS 16949
- ISO 22301
- BS 10012
- TL 9000
- AS9100
- ISAE3402
- ISO20252

Project management related frameworks

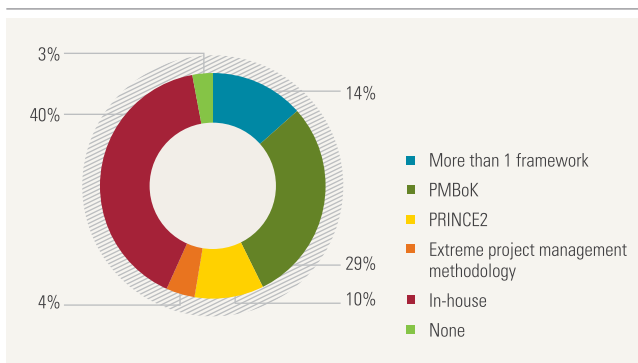- Organizations today still prefer to develop their in-house project management methodology [40 per cent] as compared to adopting a single methodology completely. PMBoK[4] is the next most adopted framework for Project Management with 29 per cent adoption rate.

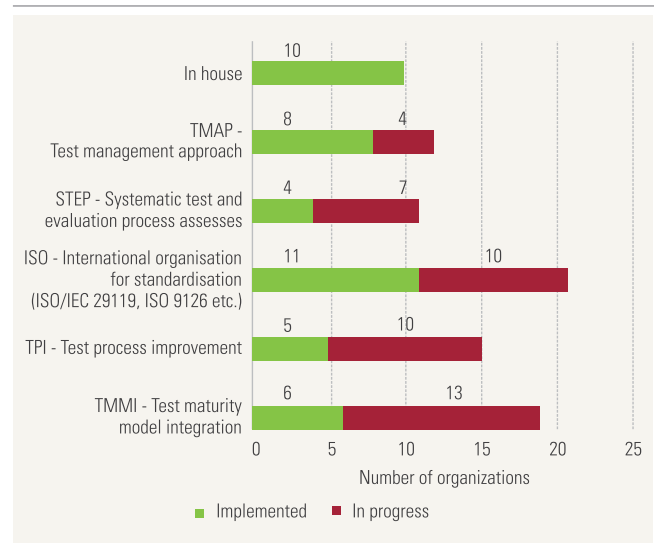### Figure 14: Project Management framework adoption trends

- 3%
- 14%
- 40%
- 29%
- 10%
- 4%

Legend:
- More than 1 framework
- PMBoK
- PRINCE2
- Extreme project management methodology
- In-house
- None

Source: KPMG: Business Excellence global survey 2014

---

4. Project Management Body of Knowledge
5. Test Maturity Model Integration
6. People Capability Maturity Model

Testing related frameworks

- ISO family of testing standards have precedence with adoption in around 23 organization
- 10 organizations use in-house home grown testing frameworks and methodologies

Figure 15: Testing framework adoption trends

Framework	Implemented	In progress
In house	10	
TMAP - Test management approach	8	4
STEP - Systematic test and evaluation process assesses	4	7
ISO - International organisation for standardisation (ISO/IEC 29119, ISO 9126 etc.)	11	10
TPI - Test process improvement	5	10
TMMI - Test maturity model integration	6	13

Source: KPMG: Business Excellence global survey 2014

- TMMI[5] is picking up as model implementation with around 6 organizations accredited at ML 3 and another 13 adopting the framework [4 organizations have not provided the target level]. It is closely followed by TPI with adoption in 17 organizations.

Figure 16: TMMI adoption trends

| TMMI	Accredited/ certified	In progress
ML 5	1	2
ML 4		1
ML 3	3	4
ML 2		4
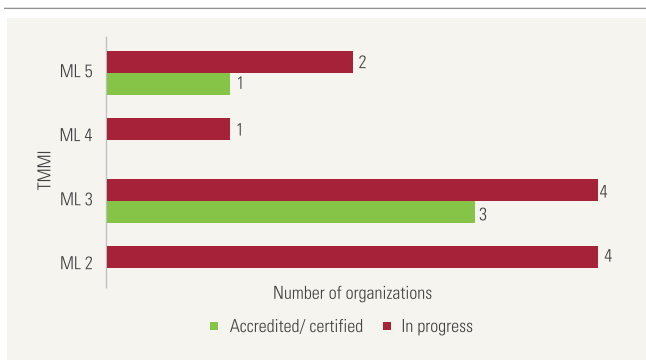
Source: KPMG: Business Excellence global survey 2014

KPMG recently published their Thought Leadership on 'Next Generation testing Survey 2013'. This was based on the World Testing Survey conducted by KPMG in India where approximately 300 people participated. The respondents were a mix of professionals from products to service companies and from test engineers to test managers.

People related frameworks

Organizational focus for people development and competency alignment to business objectives is key to maintaining employee motivation, morale, learning, career growth and development and minimize attrition. This is one area where KPMG feels that organizations need to strategize and invest in the coming times. *Around 39% of the organizations have confirmed to not adopting any people specific frameworks* in their organizations. Competency modeling is adopted by 26% of these organizations, followed by PCMM adoption at 20%.

Figure 17: People framework adoption trends
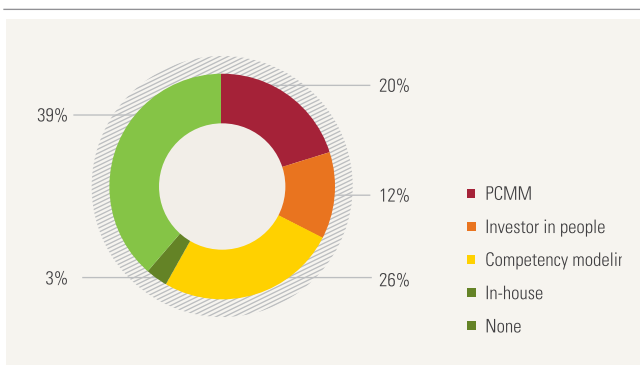
Source: KPMG: Business Excellence global survey 2014

### Figure 18: PCMM adoption status
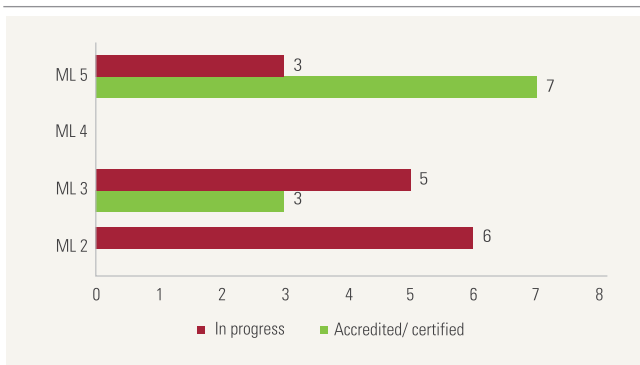
Source: KPMG: Business Excellence global survey 2014

Effectiveness of SCAMPI[7] methodology for CMMI[8] Appraisals

60 per cent of organizations that have responded to the survey are CMMI Appraised (CMMI DEV or SVC). They have all undergone the evaluation through the CMMI appraisal methodology known as SCAMPI. SCAMPI is an intensive activity to methodically review and assess the organizations process maturity and/ or process capability through documents reviews, verbal affirmations and analysis of these findings vis-à-vis the model requirements. Many organizations have gone through multiple such cycles of SCAMPI to get additional business units appraised or reaccreditation for the entire organization.

68 per cent of respondents feel that the SCAMPI methodology utilizes 'Just right' level of intervention to appraise an organization

Figure 19: Effectiveness of SCAMPI methodology
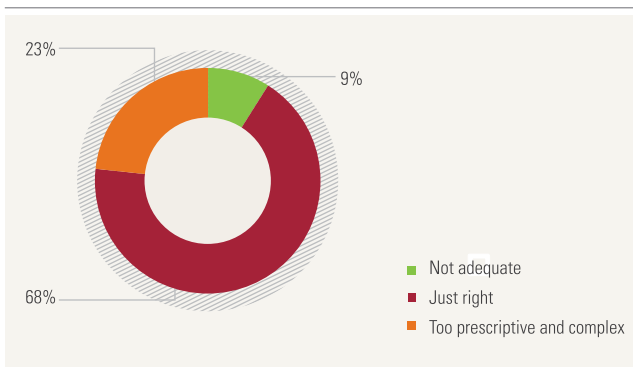
Source: KPMG: Business Excellence global survey 2014

Revolutionizing the process standardization and improvement scene in the industry

During the past 20 years we have seen many standards and models being developed in the industry to address the dynamic growth and change in the IT industry. *61 per cent respondents' feel that CMMI has been the 'game changer'* in this area which best addresses the organization's needs and business objectives.

This is also evident across IT/ ITES and IT divisions of other sectors. CMMI has been adjudged as the most adopted and accepted framework that helped revolutionized the process improvement scene in the industry.

Figure 20: Revolutionizing the framework adoption
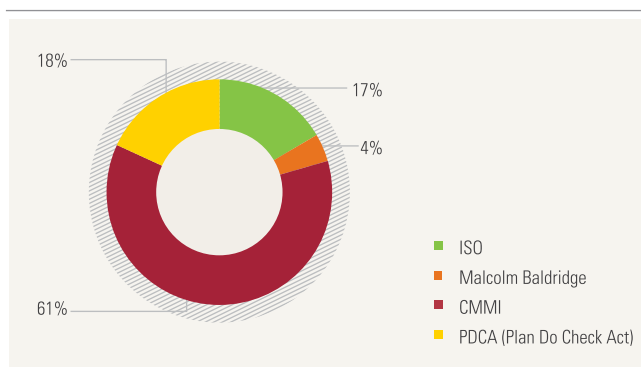
Source: KPMG: Business Excellence global survey 2014

7. Standard CMMI Appraisal Methodology for Process improvement
8. Capability Maturity Model Integration

Figure 21: Framework adoption in organizations

Source: KPMG: Business Excellence global survey 2014

3.1 Business alignment

Very often continuous improvement initiatives are designed to meet short-term tactical requirements and so adhere to a discrete methodology and set of tactical tools. They thus tend not to be aligned with the larger corporate objective of Business excellence, and so do not help the organization in its drive to achieve high performance.

Synergy between business and IT is the key to achieving this balance and provides the required focus to achieve excellence in organizations.

67 organizations provided inputs related to the annual investment in process improvement [people, process, tools] vis-à-vis annual turnover. *37 per cent of organizations have an investment of 0.6 per cent to 1 per cent in process improvement* whereas 27 per cent organizations responded to an annual investment of 1.1 per cent to 1.9 per cent of their annual turnover.

Figure 22: Investment in process improvement

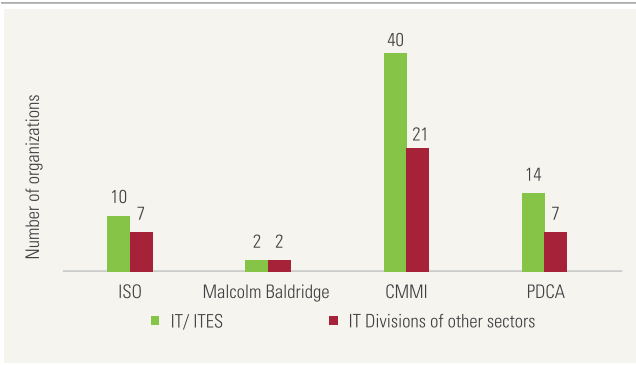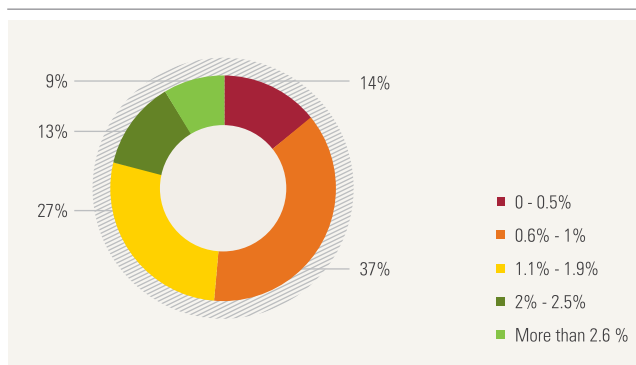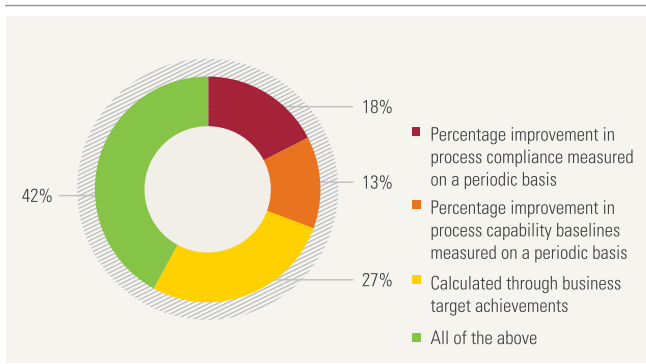**Source:** KPMG: Business Excellence global survey 2014

Measuring the ROI[9] of process improvements

Measuring the improvements achieved in any area is important to understand the effectiveness of the actions taken. While ROI measured in dollar savings is likely to provide the highest indication of ROI of process improvement activities, organization find it challenging to do this. The challenge lies mostly in a clear attribution of improvement to people, process or technological improvement factors. In KPMG's experience, we have seen that most of the organizations measure their ROI using one or a combination of the following methods. We can see from the responses received that *42 per cent organizations have developed an ROI measuring framework using a combination of various parameters such as improvement in process compliance indexes, process capability baselines and achievement of business targets.*

Figure 23: Measuring ROI

Source: KPMG: Business Excellence global survey 2014

Investments leading to maximum benefits in process maturity and innovation – organizational perspective

'Focused senior management involvement' and 'dedicated process team with full time employees' are the top 2 investments considered by organizations that lead to achieving maximum benefits in process maturity and innovation.

Process improvement/ innovations are driven through a Top down approach and this is evidenced through commitment shown by Senior/Top management in terms of providing the required resources and funding for these activities and initiatives. These initiatives are driven to achieve the business objectives as well as reduce through reduction of cost of poor quality or wastages.

9.   Return on Investment

Figure 24: Organizational perspective – Investments leading to maximum benefits
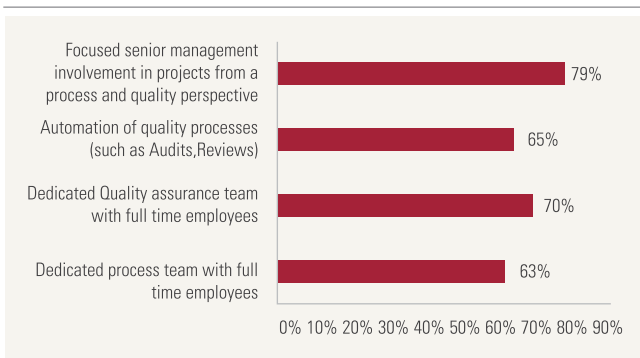
Focused senior management involvement in projects from a process and quality perspective — 79%
Automation of quality processes (such as Audits,Reviews) — 65%
Dedicated Quality assurance team with full time employees — 70%
Dedicated process team with full time employees — 63%

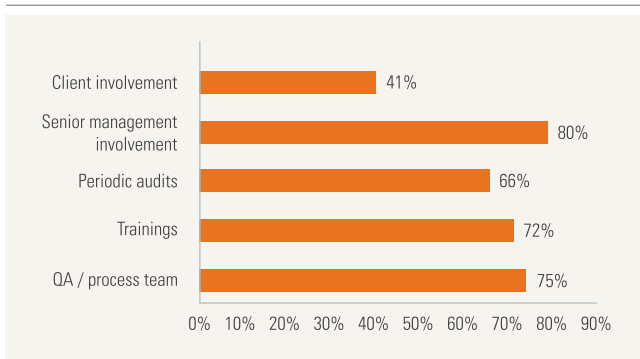0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

Source: KPMG: Business Excellence global survey 2014

Investments leading to maximum benefits in process maturity and innovation – 'projects/ programs' perspective

From a delivery organization perspective [covering programs and projects], *senior management commitment is the top investment leading to maximum benefits*. It is closely followed by dedicated 'QA/ process team' and 'trainings' supporting the implementation of process improvement activities.

Involvement of the QA/ process team for providing facilitation and trainings to the project teams for process awareness and implementation is perceived by project teams as support in achieving their project objectives.

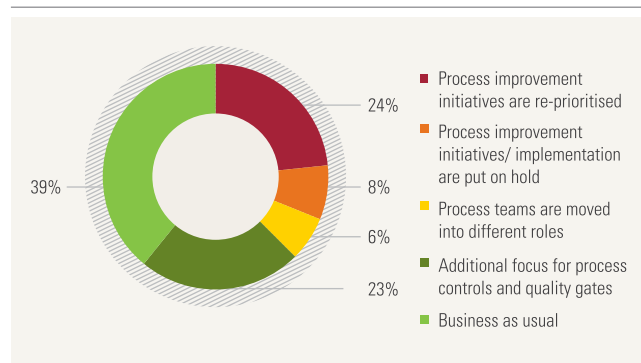## Figure 25: Projects/ Programs perspective – Investments leading to maximum benefits

Client involvement — 41%
Senior management involvement — 80%
Periodic audits — 66%
Trainings — 72%
QA / process team — 75%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

Source: KPMG: Business Excellence global survey 2014

Management reaction in situations of economic slowdown

IT industry has seen varied level of market dynamics in the last 15 – 20 years. Industries have faced periods of high growth and huge slowdowns. 2000 –2001 and 2008 – 2009 have been years of recent economic slowdowns with high impact on IT as well as other industries. Managements today need to be well prepared to handle these situations. Managements react in various ways to manage the impact of economic slowdowns; priorities may need to be reworked to ensure the revenue inflow while still maintaining the high level of service delivery and quality.

39 per cent of the respondents have said that it is 'business as usual' for process improvement initiatives and activities. It is very closely followed by reactions of re-prioritizing improvement initiatives and building additional focus on process controls and quality gates. It is clearly evident that majority of organizations ensure that compliance is not compromised as well as bring-in additional focus to ensure that service delivery is not impacted.

Figure 26: Management reaction during economic slowdowns

39%
24% — Process improvement initiatives are re-prioritised
8% — Process improvement initiatives/ implementation are put on hold
6% — Process teams are moved into different roles
23% — Additional focus for process controls and quality gates
Business as usual

Source: KPMG: Business Excellence global survey 2014

3.2 People

The employees of an organization are one of the major stakeholders of any process improvement initiative. This section talks about the importance of their involvement and the results due to opposition

Size of quality assurance/ process team within organizations

The Quality Assurance or Process Team provides organized processes and techniques of implementation to ensure the capability of the organization to meet quality requirements. These teams act as 'change agents' for an organization by enabling:

- adoption of process frameworks
- managing resistance to change
- directing and developing the corporate culture

In order to achieve this, most organizations maintain an internal quality assurance/ process team with dedicated members to ensure process optimization, maturity and process compliance. It is clearly evident from the data below that most of the organizations have a QA team size of 6 – 15 members while organizations above 5000 IT staff have a QA team size of above 50 members (benchmark of 1 per cent of the IT staff for quality related activities).

### Figure 27: Organizational size versus QA team size
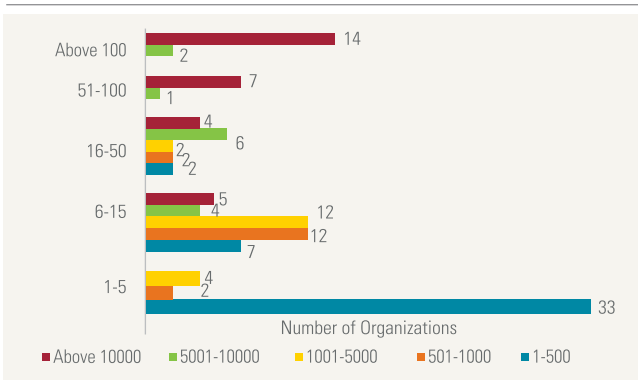
Source: KPMG: Business Excellence global survey 2014

Formation of process improvement teams

People are one of the pillars of any successful organization. Similarly for successful process initiatives, they are required to be driven by a team of focused individuals passionate about deriving business benefits through process innovations. Organizations have achieved this through various means of establishing their process teams *with 63 per cent organizations establishing a dedicated internal quality team. 15 per cent of the respondents also utilize the help of external consultants* to carry out process improvement initiatives for the organization.

### Figure 28: Formation of process improvement teams
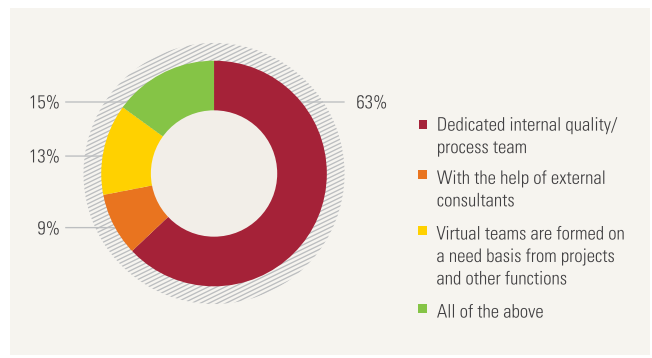
Source: KPMG: Business Excellence global survey 2014

Outsourcing the QA function

Quality Assurance is a key aspect to ensure defect free, high quality and as per requirement and expectations of service delivery to their customers. Process framework embedded with adequate assurance activities and steps helps in identifying defects and non compliance from a process and product perspective early in the service delivery life cycle. Process compliance audits, peer reviews and work product audits of key deliverables, quality gate and release checkpoints, process implementation facilitation, mentoring and handholding are some of the typical QA activities conducted by the QA functions. These aspects as well as other reasons [given below] are highlighted by organizations as the key factors due to which *63 per cent of the organizations prefer the QA function to be internal to their organization.*

Figure 29: Outsourcing the QA function
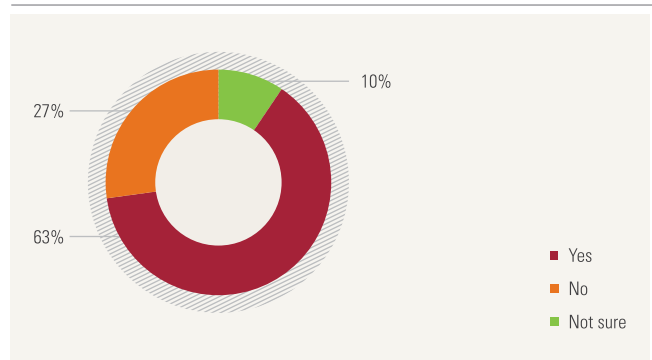
Source: KPMG: Business Excellence global survey 2014

- QA is integral to their brand experience and hence would prefer to keep this priority function internal to the organization
- Independent audits /assessment associated with certification are outsourced/ conducted by external certifying bodies
- QA should be integrated with business philosophy and priorities
- QA team cannot be only the third eye viewer at all times. They need to be involved in the project and project decisions like any other active member
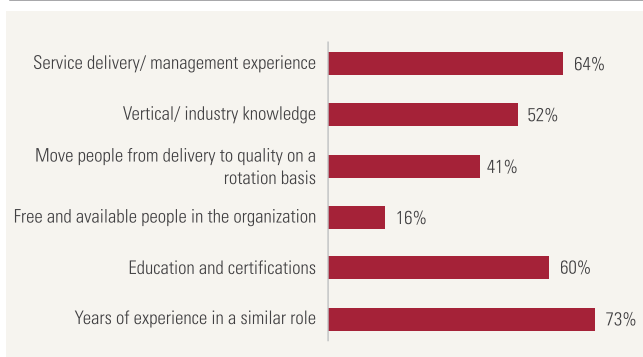
- It is difficult for an outsider to develop complete understanding on processes and process context
- Dedicated in house teams required in regulated industry
- Apart from methodology there is need for process/ domain expertise
- Prefer in house dedicated team as the projects executed need good hand holding with the project teams and QA
- QA resource has to be part of the organizational culture.
- Difficult to find external capabilities for specific industries.

In spite of the above, there is a growing trend for outsourcing of QA related function with 10 per cent willing to consider the same.

Key attributes of process and quality team

Quality teams traditionally have been a mix of process experts understanding the industry standards and frameworks, trained auditors and experienced members in areas of project management, engineering, domains and technologies
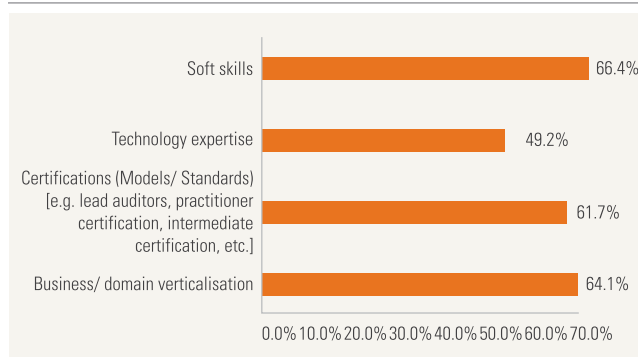
'Years of experience in a similar role' is the top attribute for selection of a member to the QA team, followed by 'service/ delivery/ management experience' as the second most important attribute. These attribute results in acceptance of QA members as part of an integrated team for the success of the projects/ programs.

Skill set for 'NextGen' process and quality team

People are one of the pillars on which success of all organizations depends. Advancement in technology and market demands leads to focused development of its people in terms of soft and hard /technical skills and expertise. As the customer is becoming more aware of their needs, they are also becoming less tolerant of defects and shortcomings. QA is one of the key set of activities that organizations plan and conduct throughout the delivery life cycle to ensure that defects are captured resolves in a timely manner before being released to the customers.

QA team members also need to continuously upgrade their skill set to meet the changing needs of the industry. Effectiveness of QA members will largely increase if they enhance their skill set as per the needs endorsed by our respondents.

Figure 30: Key attributes of quality teams

Attribute	%
Service delivery/ management experience	64%
Vertical/ industry knowledge	52%
Move people from delivery to quality on a rotation basis	41%
Free and available people in the organization	16%
Education and certifications	60%
Years of experience in a similar role	73%

Source: KPMG: Business Excellence global survey 2014

Figure 31: Skill set of 'NextGen' quality teams

Skill	%
Soft skills	66.4%
Technology expertise	49.2%
Certifications (Models/ Standards) [e.g. lead auditors, practitioner certification, intermediate certification, etc.]	61.7%
Business/ domain verticalisation	64.1%

Source: KPMG: Business Excellence global survey 2014

3.3 External consultants

Many organizations take the help of external consultants in identifying, recommending and implementing change. Some use hybrid internal-external teams, with an eye to leveraging deep institutional knowledge as well as external perspective, objectivity and expertise.

Too often, though, internal and external consultants are mixed together haphazardly, as the organization brings in an external consulting firm and then inducts internal consultants to address gaps. As a result of this failure to design teamwork up front, internals and externals may discuss roles and expectations, but fail to work as true partners.

This part of the survey looks at whether there is indeed a case to be made for external consultants to help with the change management programs. If we look at the reasons why organizations rope in external consultants, we find that they do so mainly because they need an independent and objective perspective on what needs to be changed and how it should be achieved.

Engaging an external consulting firm/ consultants

Organizations engage external consultants/ consulting firms to help them in evaluating their existing process maturity and identifying areas of improvements and benchmark against industry models and frameworks and other peer organizations.

Organizations follow stringent processes to evaluate and select external consultants/ consulting firm. *'Value adds' provided by the external consultants/ firms and their 'credentials' are the top 2 parameters that organizations evaluate. Cost is indicated as the lowest priority while deciding external consultants.*

External consultants have the ability to provide huge value add by sharing their experience of working with similar organizations. This can be in terms of recommending suitable life cycle methodologies, process frameworks, automation, business and IT alignment. Reference able credentials provide the required confidence to the organizations for identifying and selecting the most suitable consultants.

Figure 32: Evaluation parameters for selection of external consultants

Parameter	%
Value add	88%
Credentials	85%
Cost	68%
Continuity of consultants	71%
Market reputation	79%
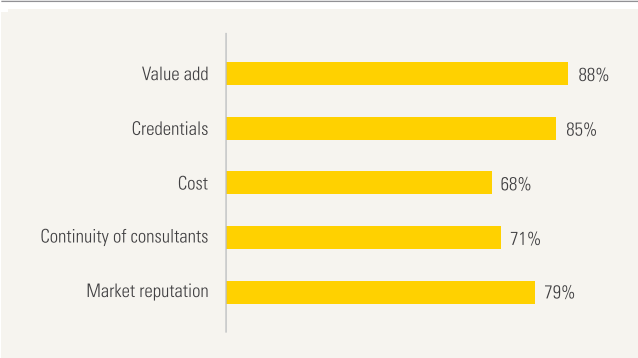
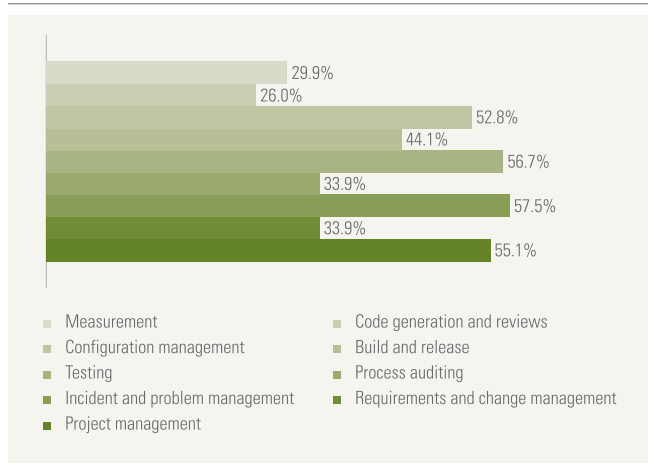**Source:** KPMG: Business Excellence global survey 2014

3.4 Tools and automation

Efforts to improve quality need to be measured to demonstrate "whether improvement efforts (1) lead to change in the primary end point in the desired direction, (2) contribute to unintended results in different parts of the system, and (3) require additional efforts to bring a process back into acceptable ranges". The rationale for measuring quality improvement is the belief that good performance reflects good-quality practice, and that comparing performance among providers and organizations will encourage better performance. In the past few years, there has been a surge in measuring and reporting the performance of the systems and processes in an organization through different life cycle of activities.

Automation in the lifecycle

Automation provides organizations to more accurately and completely gather data related to effective execution and delivery of services. *More than 50 per cent of the organizations prioritize the following areas to automate first are project management, configuration management, incident and problem management and testing*

Figure 33: Automation in service life cycle

Area	%
	29.9%
	26.0%
	52.8%
	44.1%
	56.7%
	33.9%
	57.5%
	33.9%
	55.1%

- Measurement
- Configuration management
- Testing
- Incident and problem management
- Project management
- Code generation and reviews
- Build and release
- Process auditing
- Requirements and change management

Source: KPMG: Business Excellence global survey 2014
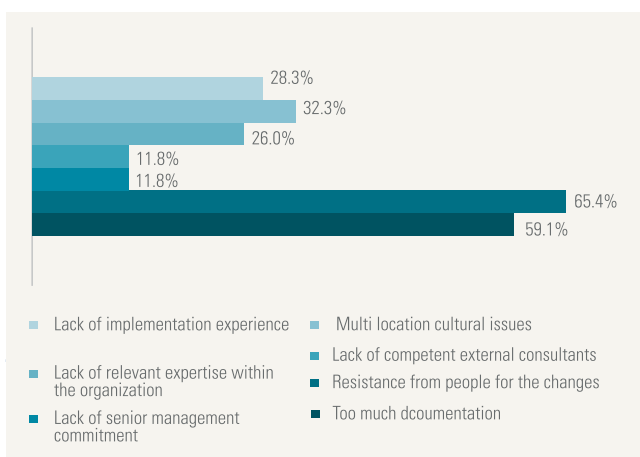
3.5 Success factors and challenges

In some Organizations process improvement programs fail to achieve intended and long lasting benefits. Why something that is basic and fundamental, is increasingly becoming challenging?

Key challenges of implementing models/ standards/ process improvement initiatives

Any process improvement journey is nothing less than a change management initiative. Changes can be in terms of organizational policies and objectives, processes, tools, expectations and results. *65 per cent organizations rate 'Resistance from people for the changes' as the highest closely followed by 'Too much documentation' as still the top 2 challenges faced by organizations for any process improvement initiatives*

This clearly indicates process teams and organizations to look at innovative ways to address these challenges

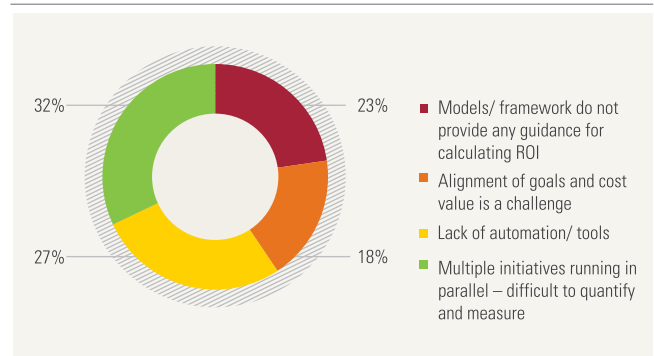Figure 34: Challenges in implementing improvement frameworks

- Lack of implementation experience
- Lack of relevant expertise within the organization
- Lack of senior management commitment
- Multi location cultural issues
- Lack of competent external consultants
- Resistance from people for the changes
- Too much dcoumentation

28.3%
32.3%
26.0%
11.8%
11.8%
65.4%
59.1%

Source: KPMG: Business Excellence global survey 2014

Challenges faced to quantify benefits of process improvement activities

Process improvement activities cover all aspects of process, people and technology. Process standardization, automation, trainings all provide the means of achieving the business objectives but organizations struggle to directly link the benefits to these activities.

Multiple initiatives running in parallel is one of the key challenges faced by organizations in order to quantify the business benefits to process improvement initiatives. It is closely followed by lack of automation/ tools that can help in identifying and categorizing these benefits. In the absence of robust automated measurement system and synergy with business objectives, organizations are likely to continue to face this challenge.

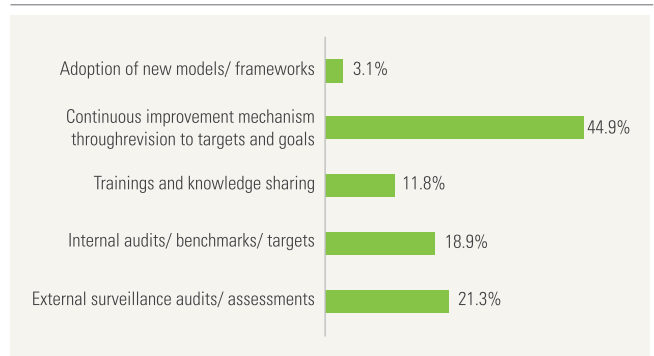Figure 35: Challenges in quantifying process improvement benefits

32%
23%
27%
18%

- Models/ framework do not provide any guidance for calculating ROI
- Alignment of goals and cost value is a challenge
- Lack of automation/ tools
- Multiple initiatives running in parallel – difficult to quantify and measure

Source: KPMG: Business Excellence global survey 2014

Effective mechanism for ensuring quality and process sustenance

Sustenance of process maturity is far more challenging than just demonstrating conformance to a process improvement framework or model. Organizations need to continuously challenge themselves to exceed customer expectations and add value. While changing market trends drive business objectives, it is equally imperative for organizations to identify areas of improvements within and take actions to address them proactively.

44 per cent of the organizations achieve sustenance through continuous revision of their business objective and process improvement targets such as productivity improvement, reduction in waste and defects. 21 per cent organizations additionally rely to identification of areas of improvements through external intervention of audits and appraisals.

Figure 36: Mechanism for ensuring process sustenance

Adoption of new models/ frameworks — 3.1%
Continuous improvement mechanism throughrevision to targets and goals — 44.9%
Trainings and knowledge sharing — 11.8%
Internal audits/ benchmarks/ targets — 18.9%
External surveillance audits/ assessments — 21.3%

Source: KPMG: Business Excellence global survey 2014

3.6 Benefits

Process improvements are widely adoption by organizations to achieve specific benefits in terms of people, technology and financial aspects
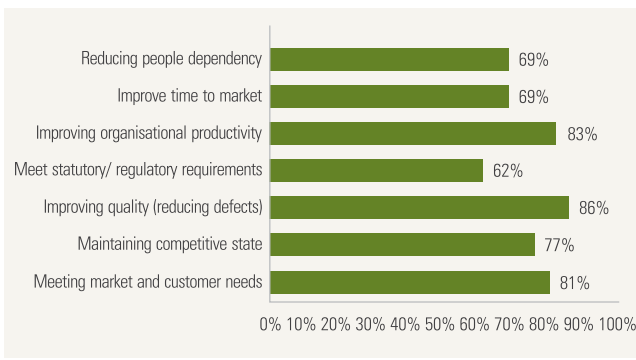
Parameters of improvement for achieving quality certification/ accreditation

Process framework is an integral part of an organization as it depicts an organizations "ways of working" to achieve its business objectives.

Top 2 reasons considered by organizations for adopting models and standards of process frameworks 'Improving Quality' and 'Improving organizational productivity'

These are closely followed by 'Meeting customer and market needs' as the 3rd top reason for adoption of models and standards for process frameworks.

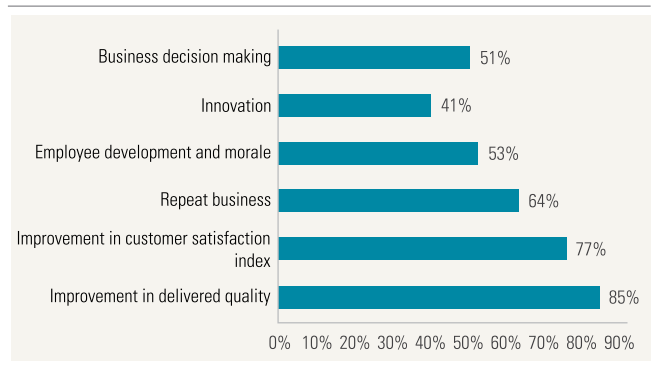### Figure 37: Parameters targeted for process improvement

Parameter	Value
Reducing people dependency	69%
Improve time to market	69%
Improving organisational productivity	83%
Meet statutory/ regulatory requirements	62%
Improving quality (reducing defects)	86%
Maintaining competitive state	77%
Meeting market and customer needs	81%

Source: KPMG: Business Excellence global survey 2014

Maximum benefits of process excellence

Organizations investing in process improvements and optimization have observed a series of benefits strengthening their business, customers' confidence in the service delivery capability and employee morale.

Top 2 benefits of process excellence initiatives observed by organizations are 'Improvement in delivered quality' and 'Improvement in customer satisfaction index'

Figure 38: Maximum benefits of process excellence observed by organizations

Benefit	Value
Business decision making	51%
Innovation	41%
Employee development and morale	53%
Repeat business	64%
Improvement in customer satisfaction index	77%
Improvement in delivered quality	85%

Source: KPMG: Business Excellence global survey 2014

This report has highlighted some new aspects as well reinforced some of the existing attributes of business excellence and ROI within the industry. Improving organizations productivity, maintaining competitive state and reducing people dependency have emerged as the top 3 reasons for organizations to adopt the Business Excellence framework in their endeavor towards achieving their business goals.

- Based on this survey research, most of the Organizations believe in the adaption of conglomeration of variety of models / frameworks that can potentially create business value to clients instead of stove-piped adaption. Identification of key business challenges can be one of the key ingredients to select and suitably adapt collections of models / frameworks that provide long-term business benefits by addressing the business challenges. Key is to realize "One size does not fit all"

- 45 per cent of the organisations are adopting multiple frameworks for Business Excellence. The most common combination was adoption of, Six Sigma and Balanced Scorecard

- With people being the most important asset of an organization, around 35 per cent of organizations are adopting formal models and frameworks such as P-CMM to invest in workforce practices to enhance Organizational capabilities to attract, develop, motivate, organize and retain talent. Organizations those adapted PCMM framework were able to utilize structured processes for Talent acquisition, development and alignment with overall Business Objectives

- The ISO family of testing standards such as ISO/IEC 29119, ISO 9126 etc leads the testing related frameworks by being the most adopted standard in organizations followed closely by a growing number of organizations undertaking TMMi accreditation for their testing and quality assurance departments. Adaption of models such as TMMI instills Organizational edge with ardent focus on Product Quality.

- 85 per cent of the respondents have observed significant improvement in delivered quality followed by improvement in customer satisfaction index (77 per cent) as the top benefits from any process improvement initiative.

- Establishing a QA team requires qualified team members and 73 per cent of the respondents consider the years of experience in a similar role to be the foremost requirement to select a candidate along with good soft skills and business domain knowledge

- Change Management in any organization is always faced with hurdles from both internal and external factors. 65 per cent of the organizations observe that the biggest challenge for implementing process improvement initiatives in their organization still comes in the form of resistance to change by their people / staff

- ROI based measurement are being adopted by leading edge organization to measure results from Business excellence frameworks. Around 42 per cent of organizations have developed formal methods to using a combination of various parameters such as improvement in process compliance index, process capability baselines and achievement of business targets

- Around 39 per cent of the organizations maintain "Business as usual" during economic recessions. Around 23 per cent includes additional checks and balances during recessionary times to ensure that customer demands are met. Overall organizations continue or enhance the efforts for process improvement during recessionary or tough economic periods

- There is significant investment in tools and automation within organizations. Testing, Project management, Configuration management and Incident/problem management are top four candidates for automation.

Sankaran Venkataramani
Technical Director - Business Excellence
KPMG in India

5. Glossary

IT	Information Technology is an industry consisting of two major components: IT Services and business process outsourcing (BPO)
ITES	Information Technology Enabled Services include the wide variety of operations which exploit information technology for improving efficiency of an organization. The IT Enabled services (ITES) may include :- Knowledge Process Outsourcing (KPO), Business Process Outsourcing (BPO), Back Office Operations, Legal Process Outsourcing (LPO), Logistics Management, Game Process Outsourcing (GPO),Call Centers
Lean	Lean dynamics is a business management practice that emphasizes the same primary outcome as lean manufacturing or lean production of eliminating wasteful expenditure of resources. However, it is distinguished by its different focus of creating a structure for accommodating the dynamic business conditions that cause these wastes to accumulate in the first place
Six Sigma	Powerful, flexible and proven cost and waste elimination method. It is an approach to organizational improvement that focuses on process speed and efficiency. It does this by a relentless search for all kinds of waste in the functions the organization performs
Balanced Scorecard	The balanced scorecard is a strategy performance management tool - a semi-standard structured report, supported by design methods and automation tools, that can be used by managers to keep track of the execution of activities by the staff within their control and to monitor the consequences arising from these actions. It is perhaps the best known of several such frameworks
COBIT	Control Objectives for Information and Related Technology is an IT governance framework and supporting toolset that allows managers to bridge the gap between control requirements, technical issues and business risks. COBIT enables clear policy development and good practice for IT control throughout organizations. COBIT emphasizes regulatory compliance, helps organizations to increase the value attained from IT, enables alignment and simplifies implementation of the enterprises' IT governance and control framework
Malcolm Bridge National Quality Award	The Malcolm Baldrige National Quality Award recognizes U.S. organizations in the business, health care, education, and nonprofit sectors for performance excellence. The Baldrige Award is the only formal recognition of the performance excellence of both public and private U.S. organizations given by the President of the United States. It is administered by the Baldrige Performance Excellence Program, which is based at and managed by the National Institute of Standards and Technology, an agency of the U.S. Department of Commerce. Up to 18 awards may be given annually across six eligibility categories—manufacturing, service, small business, education, health care, and nonprofit
European Foundation for Quality Management	EFQM (the European Foundation for Quality Management) is a not-for-profit membership foundation in Brussels, established in 1989 to increase the competitiveness of the European economy. Regardless of sector, size, structure or maturity, organizations need to establish appropriate management systems in order to be successful. The EFQM Excellence Model is a practical tool to help organizations do this by measuring where they are on the path to excellence; helping them understand the gaps; and then stimulating solutions
CMMI	Capability Maturity Model Integration (CMMI®) is a process improvement model that provides organizations with the essential elements for an effective process. It can be used to guide process improvement across a project, a division, or an entire organization. Under the CMMI methodology, processes are rated according to their maturity levels, which are defined as: Initial, Repeatable, Defined, Quantitatively managed, and Optimizing
CMMI-DEV	CMMI for Development is a CMMI framework used for Product and Service development. This is a widely used model for process improvement globally for both IT services and IT divisions. Over 5000 organizations globally have adopted the model for improvement and assessment
CMMI-SVC	CMMI for Services is a CMMI framework used for Service Establishment and Service Management. CMMI SVC has one of the fastest adoption rates in the industry with use by both IT and Services industry. It's used by many organizations in conjunction with CMMI DEV and also as a standalone model for process improvement.

ITIL	Information Technology Infrastructure Library (ITIL) is a set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business. ITIL describes processes, procedures, tasks and checklists that are not organization-specific, used by an organization for establishing integration with the organization's strategy, delivering value and maintaining a minimum level of competency. It allows the organization to establish a baseline from which it can plan, implement, and measure. It is used to demonstrate compliance and to measure improvement
ISO	The International Organization for Standardization is an international standard-setting body composed of representatives from various national standards organizations. Founded on 23 February 1947, the organization promotes worldwide proprietary, industrial and commercial standards
ISO 20000	This is the first international standard for IT service management. includes "the design, transition, delivery and improvement of services that fulfill service requirements and provide value for both the customer and the service provider. This part of ISO 20000 requires an integrated process approach when the service provider plans, establishes, implements, operates, monitors, reviews, maintains and improves a service management system
ISO 9001	ISO 9001 specifies requirements for a quality management system where an organization needs to demonstrate its ability to consistently provide product that meets customer and applicable statutory and regulatory requirements, and aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements. All requirements of ISO 9001 are generic and are intended to be applicable to all organizations, regardless of type, size and product provided
ISO 27001	ISO/IEC 27001 is an information security management system (ISMS) standard. It formally specifies a management system that is intended to bring information security under explicit management control
ISO 14001	ISO 14001 is a family of standards related to environmental management that exists to help organizations (a) minimize how their operations (processes etc.) negatively affect the environment (i.e. cause adverse changes to air, water, or land); (b) comply with applicable laws, regulations, and other environmentally oriented requirements, and (c) continually improve in the above
ISO 22301	The full name of this standard is ISO 22301:2012 Societal security – Business continuity management systems – Requirements. This standard is written by leading business continuity experts and provides the best framework for managing business continuity in an organization. One of the features that differentiates this standard compared to other business continuity frameworks/standards is that an organization can become certified by an accredited certification body, and will therefore be able to prove its compliance to its customers, partners, owners and other stakeholders
ISO20252	ISO 20252 is the standard that is globally recognized for professionals and organizations that conduct market, opinion and social research. The standard sets out requirements for a quality management system. The standard requires senior management to be responsible for quality of client service, and the development, interpretation and continual improvement of the system. It also requires the appointment of a quality manager with sufficient authority to be responsible for and have control over the entire system
TL9000	TL 9000 is a quality management practice designed by the QuEST Forum in 1998. It was created to focus on supply chain directives throughout the international telecommunications industry, including the USA. TL 9000 specializes the generic ISO 9001 to meet the needs of one industrial sector, which for TL 9000 is the information and communications technology (ICT)—extending from service providers through ICT equipment manufacturers through the suppliers and contractors and subcontractors that provide electronic components and software components to those ICT equipment manufacturers
EN9100	The standard EN 9100 is a standard European describing a quality assurance system for the aerospace market. This standard is specific to the sectors of aeronautics and the space and is more comprehensive than the standard ISO 9001. It specifies additional requirements for systems of quality management in the aerospace industry (about 30 per cent of additional requirements to ISO 9001: 2000).It applies to manufacturers, but increasingly also to their suppliers.

AS9100	AS9100 is a widely adopted and standardized quality management system for the aerospace industry. It was released in October, 1999, by the Society of Automotive Engineers and the European Association of Aerospace Industries. AS9100 fully incorporates the entirety of the current version of ISO 9000, while adding additional requirements relating to quality and safety. Major aerospace manufacturers and suppliers worldwide require compliance and/or registration to AS9100 as a condition of doing business with them
TS16949	TS 16949 is the International Quality Management Standard specifically written by the Automotive Industry. TS16949 applies to the design/development, production and, when relevant, installation and servicing of automotive-related products. It harmonizes the country-specific regulations of Quality-Management-Systems
ISAE3402	ISAE (International Standards for Assurance Engagements) 3402 is a global assurance standard for reporting on controls at service organizations. ISAE 3402 is an extension and expansion of SAS 70 (the Statement on Auditing Standards No. 70), which defined the standards an auditor must employ in order to assess the contracted internal controls of a service organization
BS10012	BS 10012 has been developed to help companies establish and maintain a best practice personal information management system that complies with the Data Protection Act 1998. It is the first standard that relates to the management of personal information. By following the framework set out within BS 10012, organizations can improve their data storage protection and manage data processing and data transfers better – so that they comply with legislation
PMBoK	The Project Management Body of Knowledge (PMBOK) is a collection of processes and knowledge areas generally accepted as best practice within the project management discipline. It provides the fundamentals of project management, irrespective of the type of project be it construction, software, engineering, automotive etc. PMBOK recognizes 5 basic process groups and 9 knowledge areas typical of almost all projects. The basic concepts are applicable to projects, programs and operations. The five basic process groups are: Initiating, Planning, Executing, Controlling, Closing
PRINCE2	PRINCE2 (an acronym for Projects in Controlled Environments, version 2) is a project management methodology. It was developed by the UK government agency Office of Government Commerce (OGC) and is used extensively within the UK government as the de facto project management standard for its public projects. The methodology encompasses the management, control and organization of a project. PRINCE2 is also used to refer to the training and accreditation of authorized practitioners of the methodology who must undertake accredited qualifications to obtain certification
TMAP	Test management approach (TMap) is a software testing methodology. TMap is a method which combines insights on how to test and what to manage, as well as techniques for the individual test consultant.
STEP	Systematic Test and Evaluation Process is designed to improve quality by early involvement in the development life cycle instead of having testing as an activity on the critical path at the end of the build phase. This approach ensures early detection of defects, including those introduced in the requirements, specifications and design milestones
TPI	TPI provides an objective insight into the maturity of an organization's entire test processes. It identifies and defines incremental steps for improvements to optimize an organization's testing capabilities. The assessment also provides insight into the broader context within which testing operates, including overall IT governance, business requirements management and quality assurance
TMMI	Test Maturity Model Integration (TMMI) a test maturity model developed by the TMMi Foundation. TMMi is being applied in various domains and industries world-wide. Using TMMi, organizations can improve their test process and even have their test process or test organization accredited when it complies with the requirements. The most important differences between TMMi and other test improvement models are independence, compliance with international testing standards, the business-driven (objective-driven) orientation and the complementary relationship with the CMMI framework
PCMM	The People Capability Maturity Model (P-CMM) is a maturity framework that focuses on continuously improving the management and development of the human assets of an organization. The People CMM helps organizations characterize the maturity of their workforce practices, establish a program of continuous workforce development, set priorities for improvement actions, integrate workforce development with process improvement, and establish a culture of excellence

SCAMPI	The Standard CMMI Appraisal Method for Process Improvement (SCAMPI) is the official CMMI Institute's method to provide benchmark-quality ratings relative to Capability Maturity Model Integration (CMMI) models. SCAMPI appraisals are used to identify strengths and weaknesses of current processes, reveal development/acquisition risks, and determine capability and maturity level ratings. They are mostly used either as part of a process improvement program or for rating prospective suppliers. The method defines the appraisal process as consisting of preparation; on-site activities; preliminary observations, findings, and ratings; final reporting; and follow-on activities
LA	Lead Appraiser
ATM	Appraisal Team Member
PDCA	PDCA (plan–do–check–act or plan–do–check–adjust) is an iterative four-step management method used in business for the control and continuous improvement of processes and products
Process Automation	Is an integrated 'Process-Tool- Mentor 'Infrastructure designed to deliver end-to-end process improvement to automation solutions. Process Automation services – Advisory service helps gain visibility and control across the process and technology resulting in increased productivity and significant cost savings

6. List of Figures

7. Acknowledgements

We would like to thank all the organizations and respondents that participated in the survey and provided valuable inputs that helped us in putting this report together. We are very thankful to the entire team of Business Excellence who worked wonderfully in reaching out to their contacts within the industry to respond to the survey. We would also like to thank the senior leadership team of Business Excellence for providing their guidance and expert feedback on the thought leadership into shaping it into its current form.

This report would not have been possible without the commitment and contributions of the following individuals:

Survey - Concept and Design: Prasanth Shanthakumaran and Kamlesh Prasad

Survey and Report - Review and Approval: K K Raman, Prasanth Shanthakumaran, Sankaran Venkataramani

Report analysis and preparation: Kamlesh Prasad

Supported by: Supriya Uchil and Abhishek Natarajan

Report Design and publication: KPMG in India'a Brand & Design team

Contributors: Ajay Chugh, Ajay Aggarwal, Sayantan Debnath, Abhijeet Dey, Manish Dhonde, Kewyn George, Sajit Jacob, Radhakrishna Kalla, Rajesh Kannan, Mangesh Katalkar, Kaushik Narasimhan, Supraja Natarajan, Venkatesh P R, Pradeep Poluru, Thirtha Uthappa, Karthik V, Neeraj Nangia, Ganesh Arunachala, Rajesh Balakrishnan, Nitesh Jain, Pazhani K R, Amir Khan, Ramesh Krishnamurthy, Sivakumar M S, Teenu Puri, Anandkumar Shelat, Hansraj Takemal and Meenakshi Sundaresan.

Contributing Partners: SPIN London and UNICOM

KPMG in India contacts:

Richard Rekhy
CEO
KPMG in India
T: +91 124 307 4303
E: rrekhy@kpmg.com

Dinesh Kanabar
Deputy CEO
Chairman, Sales & Markets
T: +91 22 3090 1661
E: dkanabar@kpmg.com

Pradeep Udhas
Chairman of India
Global Program
T: +91 22 3090 2040
E: pudhas@kpmg.com

Ambarish Dasgupta
Partner and Head
Management Consulting
T: +91 33 4403 4095
E: ambarish@kpmg.com

Raman K K
Partner
Business Excellence
T: +91 80 3065 4700
E: kkothandaraman@kpmg.com

Prasanth Shanthakumaran
Director
Business Excellence
T: +91 80 3980 6000
E: prasanths@kpmg.com

Sankaran Venkataramani
Technical Director
Business Excellence
T: +91 44 3914 5251
E: vsankaran@kpmg.com

Kamlesh Prasad
Manager
Business Excellence
T: +91 40 3046 5044
E: kamlesh@kpmg.com

kpmg.com/in

Latest insights and updates are now available on the KPMG India app.
Scan the QR code below to download the app on your smart device.

Google Play | **App Store**