



Business complexity

Opportunities for enhanced profitability beyond
cost reduction and operational excellence

KPMG INTERNATIONAL

Contents

Foreword	1
Executive summary	3
The impact of complexity	5
Responding to a complex world	11
Developing winning strategies	15
KPMG comment	19
Conclusion	20

About the research

To explore how companies are dealing with the challenges of a complex world, KPMG International commissioned Cardiff Business School, with support from Stanford University, to provide insights into the business models that are currently being developed by executives from 180 of the most prestigious consumer and industrial organizations across Europe, America and the Asia-Pacific regions. In addition, Cardiff Business School's detailed one-to-one interviews with senior executives in 86 business-to-business and business-to-consumer enterprises provided the focus of the research activity across these regions.

We would like to thank the executives for their time and insights offered to the research team. We would like to wish them well for the future.

Our thanks to Nick Rich and the University of Cardiff for their insightful research.

1 Foreword

The search for winning business strategies is continuous. Constant change brings both challenges and opportunities, and demands that strategies be constantly re-evaluated. Many people seem to believe that the business environment is getting more complex, and that this is reflected in increasingly complexity of business structures and operations. But complexity is hard to define. The senior executives interviewed for this report expressed the impact of complexity in terms of a series of driving forces and their effects, which have been categorized into four broad themes:

- governance complexity
- customer complexity
- operations and distribution complexity
- inbound supply complexity

Complexity in these terms can inhibit high performance: it is manifested in lower people and operational performance. As a consequence, the development of profitable business models appears to be getting harder. One instinctive response to complexity is to try and simplify. Organizations are taking established tools and techniques – such as lean operations and six sigma – and applying them to simplifying systems, processes, products and supply chains. But one of the key conclusions of this research is that simplification may be necessary, but is not sufficient to address the challenges of creating successful business strategies in an increasingly complex business world. Indeed, some aspects of complexity provide positive opportunities to those who can identify and manage them.

As a result of this study, I believe that the ‘simplification paradigm’ needs to be broken, and organizations need to embrace complexity and adapt their business models to manage it effectively; this may not result in more simplified organizations. They need to continue to apply their portfolio of improvement initiatives to help ensure the maximum efficiency of the processes and systems that constitute the new business model.

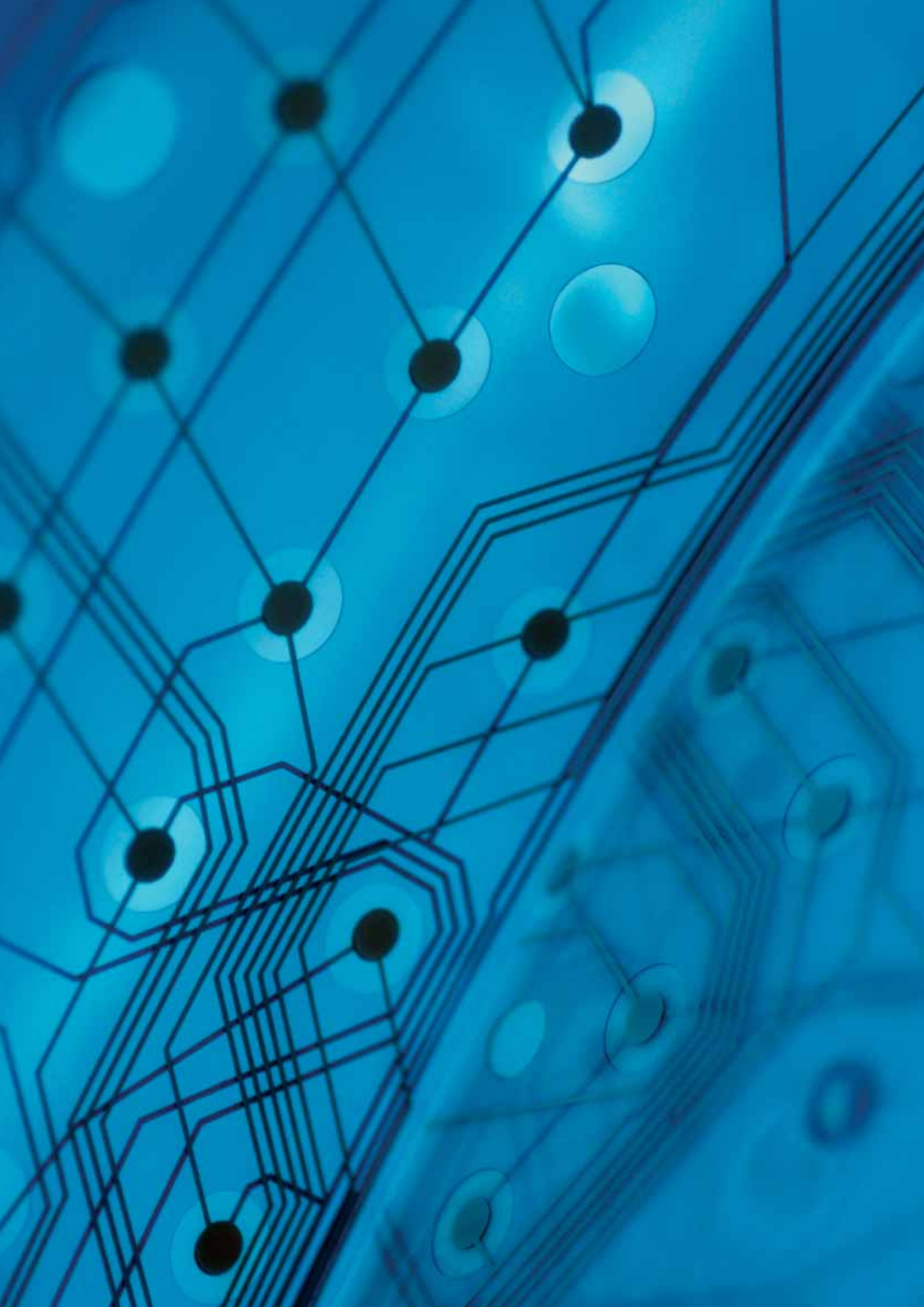
A key conclusion from the research is that the most successful businesses share a number of common characteristics, which can be described under five headings:

- deploying a coherent vision
- managing talent
- accelerating design and innovation
- rapidly executing change
- balancing the supply chain network



There is no single formula for success and each business is unique. But the model we have developed together with Cardiff Business School represents a way an organization can exploit the opportunities presented by complexity.

Julian Thomas,
Head of Supply Chain
KPMG in the U.K.



2 Executive summary

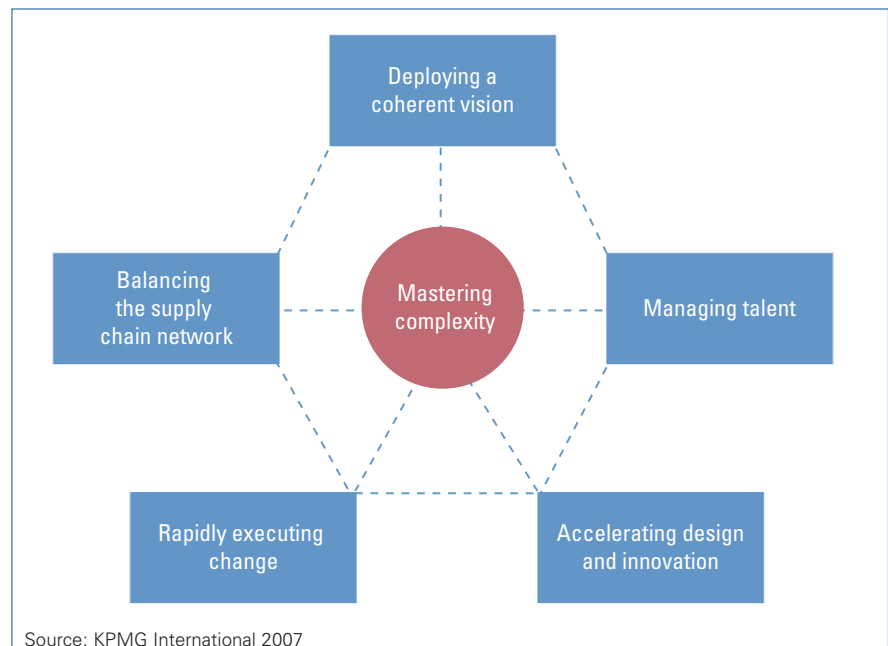
“The age of simplification is almost over – we have gone as far as we can. This was a defensive measure – now we are looking to use complexity as a competitive weapon to shape our sector, to create and retire more products and to redefine our business model”

COO, US FMCG business

Simplification and operational excellence were considered sufficient but not enough by 63 percent of global executives.

The primary goal of the majority of the companies interviewed was to recognize the importance of reducing cost and enhancing value at the same time. Of those companies remaining, there seemed to be a small bias among U.S. and European companies towards enhancing value while companies in ASPAC appear to favor cost reduction.

The findings indicate that leading organizations have five common themes that are enabling them to create competitive advantage. While the successful organizations exhibited one or more of the themes, no one organisation demonstrated all five. Based on the research it is KPMG International’s belief that the masters of success in a complex world will be those organizations who integrate all five themes as depicted in the model below.



Deploying a coherent vision

The executives surveyed confirmed that, in a turbulent world, setting a business vision is critically important. The vision needs to determine what the required adjustments to the business model need to be. Never before has an effective vision been more important for creating the necessary sense of urgency.

“We knew about all the best practices in every area of the business, what we needed was a means of aligning and executing our change processes and that meant rethinking the business model itself...”

CEO, European industrial business

35 percent of executives believed the decision-making processes within their businesses were too slow and 60 percent believed the decision-making processes at suppliers slowed the ability of the business to change effectively.

Managing talent

Market change rarely slows down; the new business model is one that is capable and time-conscious. The findings suggest that a key foundation of a successful business model will continue to be the effective management of the organizational talent pool (people within and beyond the business). Developing the talent pool is likely to lead to knowledge creation and sharing, and create the fluidity needed to adapt to change.

Accelerating design and innovation

The research highlighted that while making a product or service efficiently is a goal of all businesses, making the right product rapidly is the hallmark of a business that truly understands the importance of design and innovation and its pivotal impact upon margins. As product lifecycles decrease and consumers increasingly defy traditional segmentation, rapid product innovation is key and a capability that must be mastered.

Rapidly executing change

Executives surveyed reiterated that effectively executing change relies upon vision, skills, knowing what to change, taking decisions and making the right changes in the right sequence to unlock competitive advantage. Knowing what to change without the ability to accelerate the execution of that change is likely to result in business failure.

Balancing the supply chain network

The study underlined the fact that value for today’s organizations is created through their supply chain network and it is recognized that insufficient time and effort has been allocated to its design. The major debates concerning complexity involve questions about how many operations the business needs to own, how many distributors are needed to service markets, how many suppliers are required to supply products and services that are cheaper made outside than owned, whether the supply chain should be local for just in time flexibility and responsiveness or global for best price, what capabilities the suppliers/distributors can offer and how relationships can be developed to allow access to these capabilities. Leading organizations have learned where the balancing points are for these often contradictory requirements.

Conclusion

In addition to the need to simplify continuously, the research suggests that new emerging and successful business models adapt and thrive through integrating all five key themes and through the development of a ‘system’ that becomes self-sustaining.

3 The impact of complexity

73 percent of executives highlighted dissatisfaction with the ability of the business and its structures to accommodate change.

In pursuit of new revenue and lower-costs, organizations around the world have created ever-more complex networks of marketing, sales, service, operations, research and development, and sourcing activities. However, those that have let their global footprint grow without continuously determining how the pieces can be rationalized and optimized have unwittingly built in complexity and costs.

Despite launching many improvement initiatives across their global operations, many businesses are overwhelmed by increasing complexity.

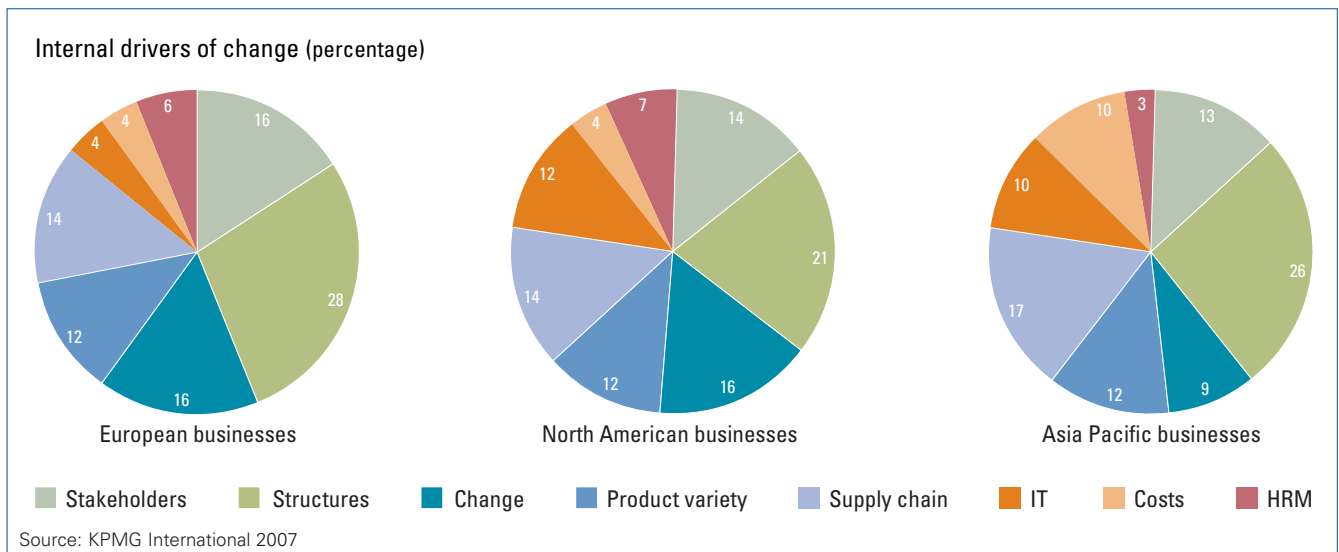
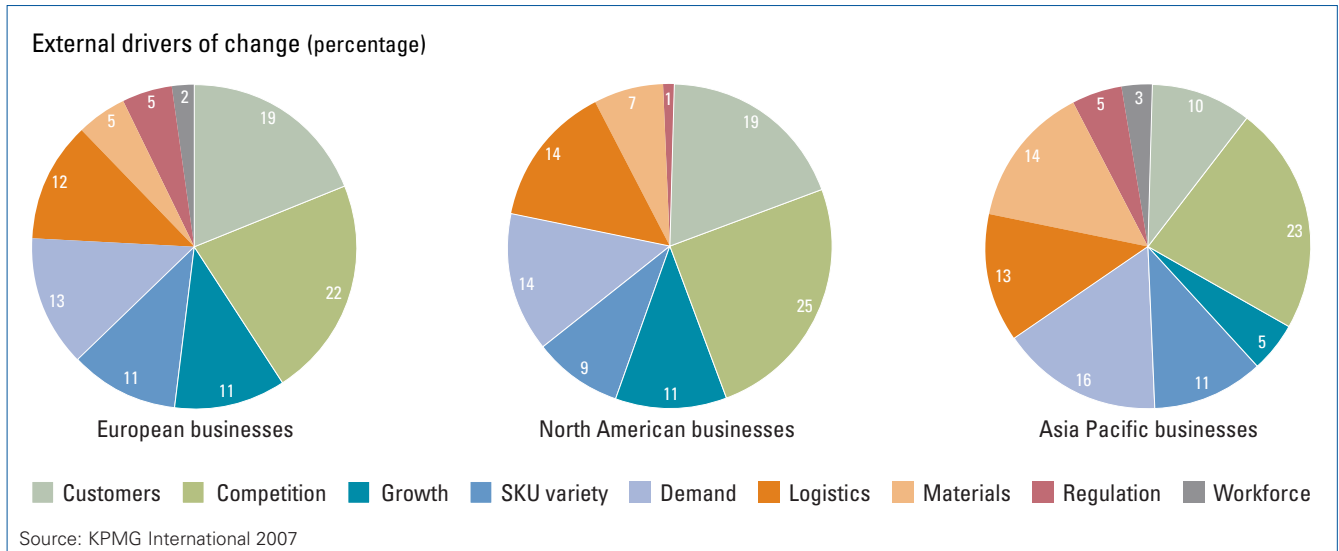
Executives expect coordinating product development, supply chain, sales and marketing activities that are oceans and time zones apart to become even more difficult in the years ahead due to continued globalization and fragmentation of most companies' operations.

Entering new markets with new or existing products is fraught with challenges. Organizations that underestimate the challenges have limited insight into the true cost of products and can jeopardise their investments and growth plans. Some companies are pursuing opportunities in low-cost countries, such as China, without realising that the gains from lower unit costs of products can be overshadowed by huge logistics costs, delays and regulatory and tax issues. For one company surveyed, the result of a program of switching supply to low cost labour regions added almost 7 percent to the total cost of acquisition when compared with local supply.

More complex economic and political environments — changes in regulations, environmental protection, international trade and investments, and taxation — compound the problem. Increased border controls and security concerns, the continued evolution of World Trade Organisation (WTO) rules, the expansion of the European Union, new regulations on environmental safety and health, fluctuating currencies, and the emergence of new global players such as Brazil, China and India, can all add to the complexity cocktail.

The Survey findings show that complexity is driven both externally and internally. From an external perspective organizations from all three regions believe that complexity is created as a combination of meeting increasing customer expectations, the growing intensity of competition, the logistics of meeting customer demands and the need to continually find new growth opportunities.

Similarly, organizations share common beliefs regarding the drivers of internal complexity. The prominent features are increasing stakeholder expectations combined with the need to manage and control increasingly complex organizational and supply chain structures.

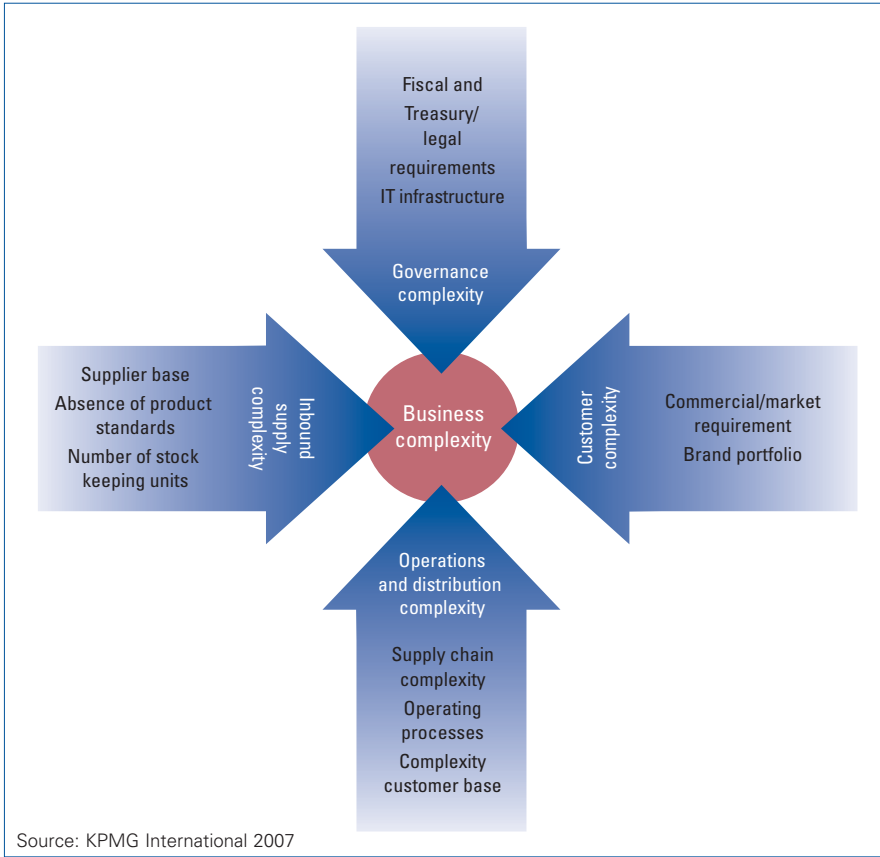


“Our ERP system cost a fortune to buy and we are still suffering the aftermath of a poor implementation process”

CFO, European FMCG business

Across the organizations in the study, complexity takes many shapes and forms. Even the highest performing businesses shared the belief that there was no single source of complexity and that customer expectations, operations and distribution, inbound supply, and governance were all contributing factors.

For the purposes of this study, complexity can be broadly defined across the four areas depicted in the model below:



Erratic customer demand patterns and a logistics lead time of 42 days on the water from Asia to Europe wiped out profits as airfreight was used to cover for potential shortages and poor availability.

Executive, European Industrial Business

A number of common symptoms arise in organizations due to complexity:

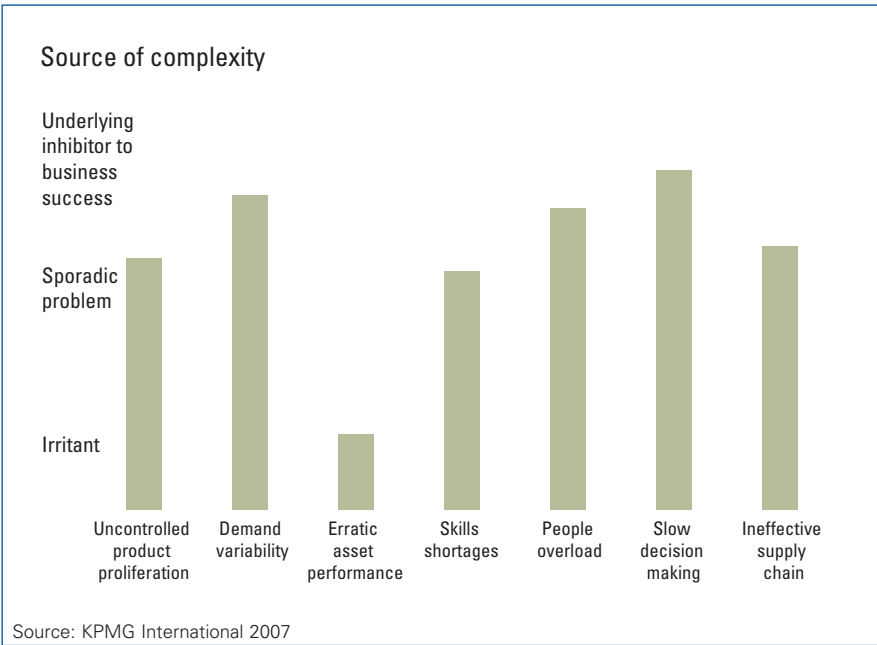
Origin	Characteristics
Uncontrolled product proliferation/ demand variability	High variability of supply chain inventories due to erratic demand swings, promotions to stimulate sales and slow moving stock simultaneously
Erratic assets performance	Sub-optimal utilization of the current assets
Skill shortages	Lack of commercial skills across key departments or lack of technical skills for the design of products or services
People overload	Employee overload, too many key performance indicators and a clash of improvement programs
Slow decision making and IT	Slow decision making and poorly integrated computer systems resulting in delays to changes and the introduction of countermeasures to business and supply chain abnormalities
Ineffective supply chain design	An ineffective supply chain in terms of costs and service provision

Source: KPMG International 2007

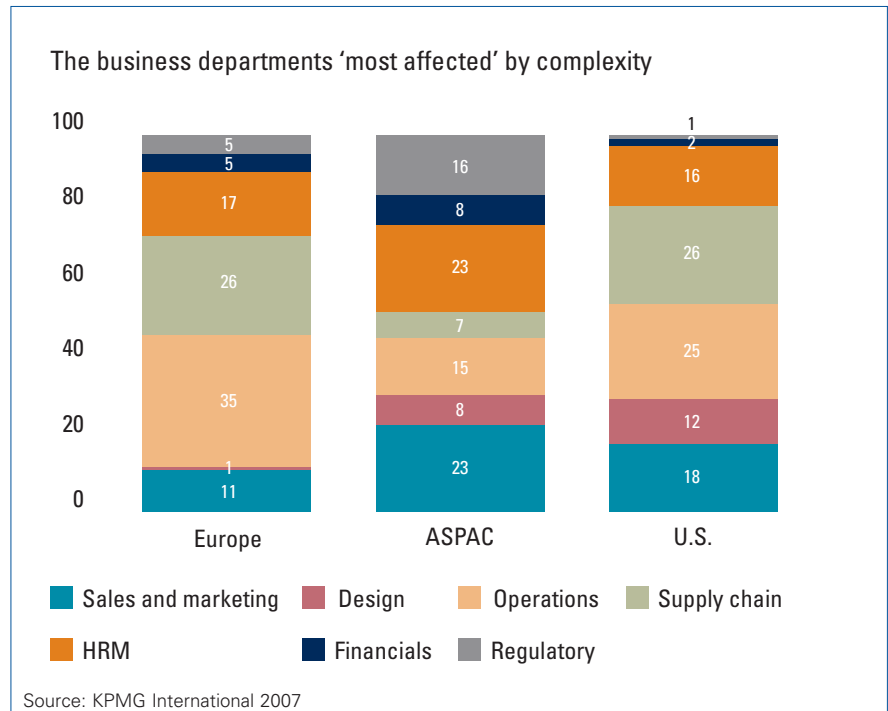
“I am never totally satisfied that our new products don’t simply cannibalise the sales of the existing product line-up”
CEO, U.S. FMCG business

Executives indicated that certain symptoms of complexity were more serious than others. They distinguished between: short-term irritants, sporadic or underlying inhibitors to business success.

The three key factors to emerge as potentially threatening to future success were demand variability, people overload and slow decision-making.



Aside from the financial implications, organizations were asked if any particular department was more affected by complexity.



Executives agreed that no single business department was significantly more affected by complexity than average, although it was acknowledged that there was a growing impact on sales and marketing.

96 percent of the executives surveyed regarded their role in response to complexity as to simplify business processes and the design of the organization to unblock innovation and increase the rate of adaptation needed. They also believe that new Information Technology (IT) systems required more executive time than is necessary in formatting data into meaningful information.

All the executives agreed that, over the past three years, more of the working day was spent with stakeholders and this was an element of the role that was expected to increase further. In the past, communication between businesses was limited and often electronic. The new model calls for much greater relationship management and a human side to the supply system based upon the premise that no stakeholder can ever know enough about a customer or consumer if that supplier partner is to contribute to the competitiveness of the product and ecosystem that supports it.

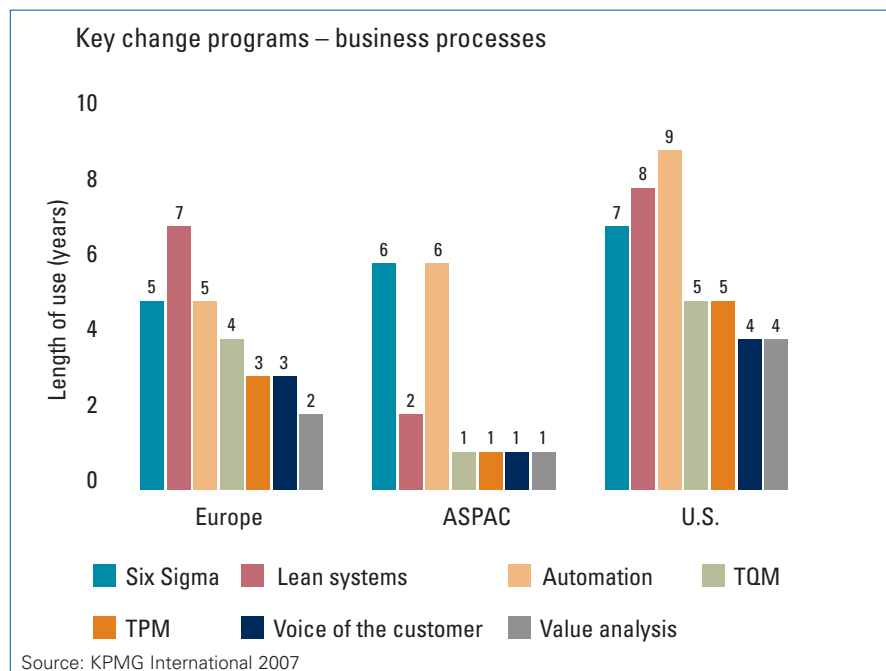
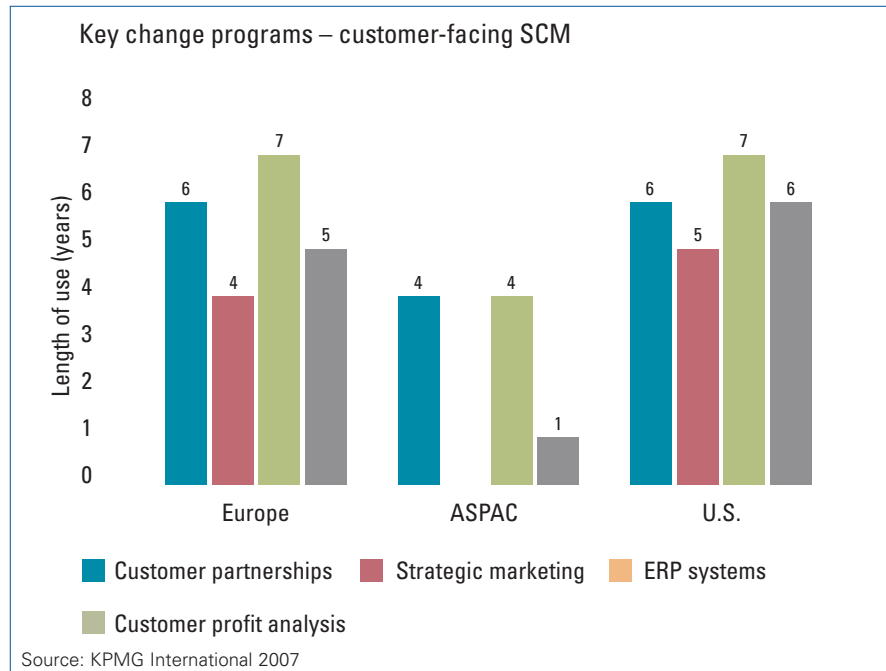
4 Responding to a complex world

“Unless you understand the customer in the ecosystem, how can you and any of us be sure we are not supplying the wrong product using the right supply chain or the right product using the wrong supply chain?”

CEO, European consumer goods business

“Eliminating waste and reducing buffers within our business and beyond has exposed a weakness in our business model – that of years of asset neglect. Buying inflexible machinery or suffering erratic performance puts at risk customer service agreements and the going ‘off stock’”

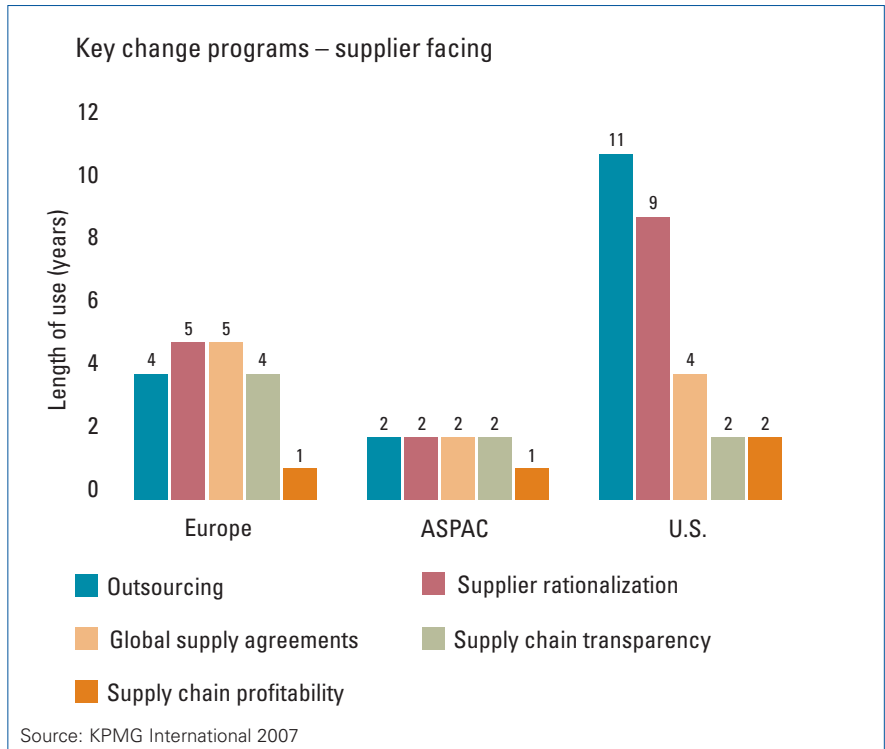
Executive, European industrial business



The research shows that organizations are attempting to ‘simplify’ by addressing customer-facing issues (through the supply chain), business processes and supplier-facing issues.

“Few of our products are truly seasonal but the way we run our business creates peaks and troughs in what customers believe they want and what we then ask our suppliers to do”

Executive, European industrial Company

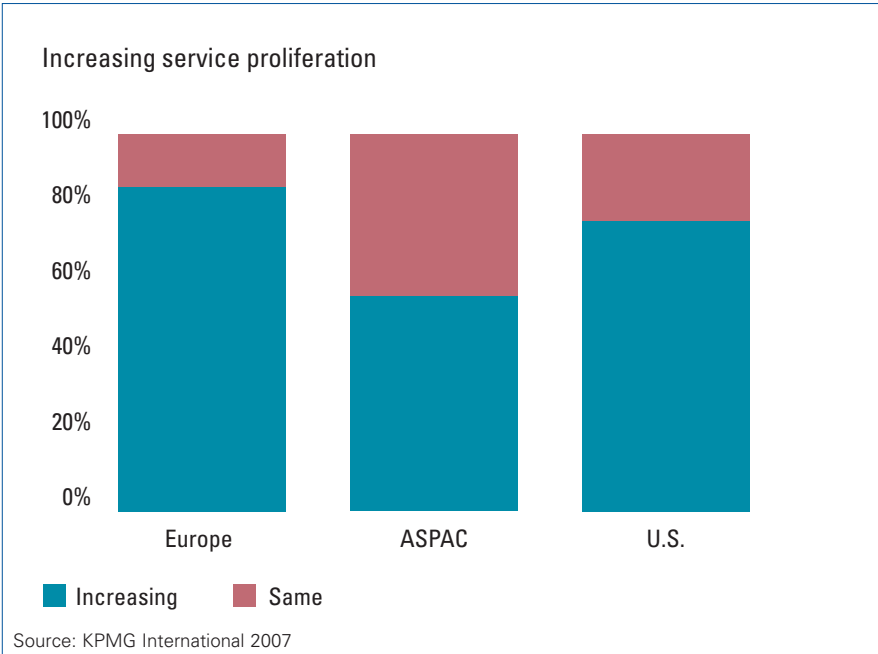


In addition to these actions there was acknowledgement of the need for improved visibility of information. However, this issue was highly contentious and drew emotive responses. In the majority of cases, executives felt cheated by poor system implementation, inability to identify projected savings and the amount of organizational energy and resources committed to fixing operational problems many years after systems had ‘gone live’. 70 percent of the executives felt obliged to continue with the development of these ERP investments as a means of recovering a payback from an investment that should logically have simplified the business but in fact had aggravated complexity.

Despite the variety of impacts of complexity in each region, the research revealed a consensus that over 70 percent of complexity resulted from customer and product issues. Executives in all regions suggested that a number of their products were less profitable than they would wish, and a quarter of executives suspected certain products barely contributed to the overall profitability of the firm at all. There was agreement on the need for deep changes in the business model to address these failures and reduce the constraints to greater profitability. Executives needed to concentrate on determining what product and service offerings should be created and how this could enhance their margins. 86 percent of American, 82 percent of European, and 85 percent of ASPAC executives expected major changes within their organization and its product line-up in the coming years.

Over 79 percent of executives in this study saw complexity management as a means of enhancing margins.

Only 30 percent of the executives involved with this study had developed the business processes needed to plan and accommodate external change.

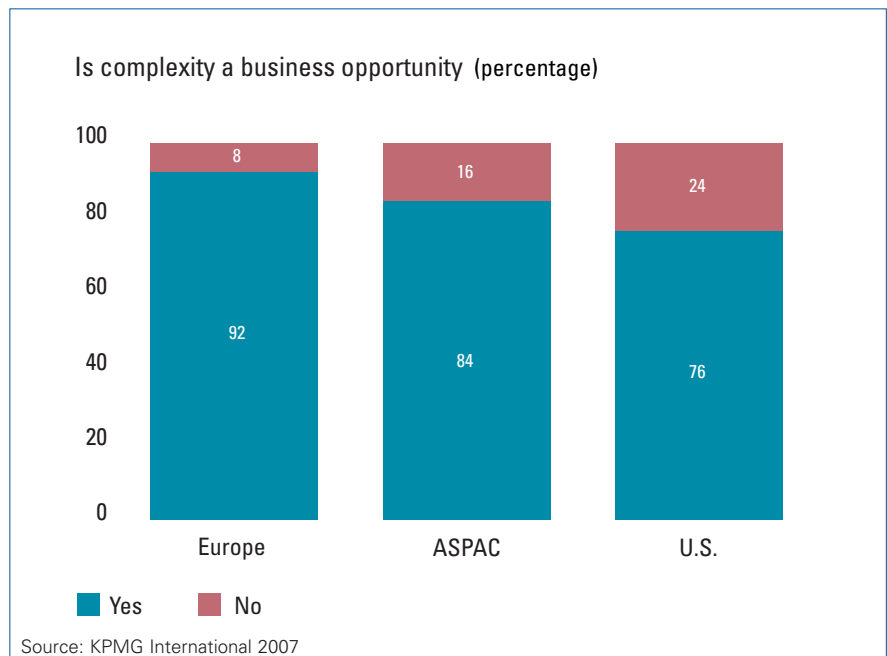


As well as product proliferation, the study shows a significant increase of service proliferation with an associated impact on profitability.

“If you lower complexity and you lower costs you create a commodity product which inevitably leads to a price war and that sets a bad precedent for future generations of product. Creating better products for consumers is a better strategic option for growth than continuously looking within to trim out costs and not watch where markets are headed”

Chinese CEO,
consumer products company

Despite the penalties of increasing business complexity, a majority of organizations across all three regions also see it as a business opportunity. In growing Eastern economies and the mature Western manufacturers particularly, complexity was regarded a driver of innovation, a source of exploitable revenue streams and hence an opportunity for profit. But it was universally acknowledged that ‘simplification’ alone is an inadequate strategy for exploiting the opportunities created by complexity.



5 Developing winning strategies

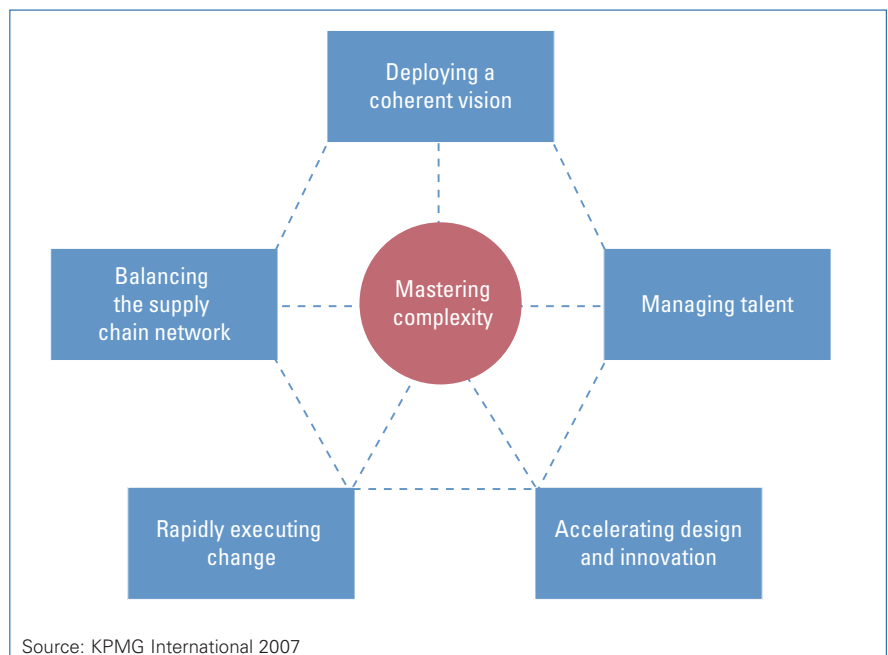
“It was only when we used policy deployment we could see what change programs were needed to eliminate the weaknesses with our business model”.

CEO, U.S. FMCG business

What are the secrets behind the successes of those organizations who are successfully dealing with an increasingly complex business world, and even turning complexity into competitive advantage?

Leading organizations display five common characteristics. None exhibited all of these characteristics, but compared to many other companies, the most successful have developed superior capabilities within and across:

- Deploying a coherent vision
- Managing talent
- Accelerating design and innovation
- Rapidly executing change
- Balancing the supply chain network



“As directors we now spend about 80 percent of their time on strategy development and deployment as a group whereas two years ago we would have been micro managing business units and moaning that our staff never acted as if they were empowered to decide things for themselves”

CEO, European industrial company

50 percent of executives believed the business needed to change the way it grooms the next generation of management.

“We had no option the universities do not teach the practical knowledge needed to manage material product and information systems. So we started our own. And we also train our people in what they need to know and not every chapter of the text book because some is just not relevant to our business”

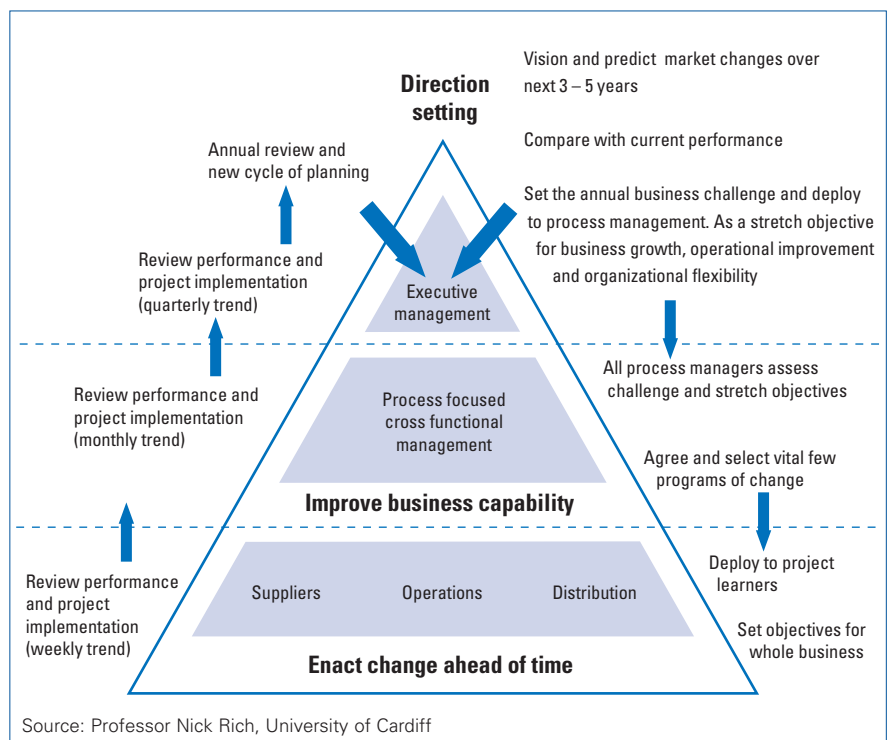
CEO, European logistics business

Deploying a coherent vision

At the heart of the successful business is a coherent vision of the future. Success is achieved once this has been effectively translated and deployed throughout the organization.

During the interview stage of the research, there were detailed discussions concerning the development of a business vision, the role of business strategy, contingency planning, and core competence. Without exception, all business executives believed in the concept of core competence and the value statements that they had developed for their businesses. However, the effective deployment of the strategy divided executives.

There was a very noticeable concentration of businesses that had adopted a process called ‘policy deployment’ where stretch objectives were established by the senior executives. The prediction of where competitive standards will be in the future when compared with the current performance allowed the identification of weaknesses in the business now that need to be addressed by cross functional management and breakthrough projects. Expressing the challenge in these terms appeals to the diagnostic capabilities of the organization and serves to spread knowledge, avoid projects with no real benefits, and smooth cooperation between management during change activities.



“One of my biggest problems is ‘legacy personnel’ who just don’t want to change despite our attempts to re-skill them. These people love large job titles, they love lots of subordinates, and are difficult to convince that we all need to change”

CEO, Indian industrial conglomerate

Managing talent

Traditionally, technical skills have been guarded and protected and management skills seen as secondary, resulting in an over-reliance upon key individuals. This in turn has slowed key decision making processes and re-enforced the ‘silo’ mentality. With global shortages of key engineering and supply chain skills, and perceived gaps in University education in terms of instilling ‘commercial sensibility’, over 60 percent of the sample of business executives had invested in their own ‘Academies’. These aimed to develop employees in the skills, values and models of the company, and were actively engaged in bringing outside experts to the business to train employees. 86 percent of all business executives identified a need for greater investment in supply chain training and advanced design skills for employees.

Accelerating design and innovation

Making the right product is critical to the winning business. Higher performing businesses ensured that the design capability of the company and its network was reinforced by data availability about customers and consumers. Traditional design and market segmentation practices appear to be increasingly questioned by world-leading businesses and replaced with a greater integration of the customer with the design process itself.

One North American fast moving consumer goods business realized that no matter how many lean and six sigma improvement activities were under-taken to enhance the way in which products were manufactured, these improvements rarely yielded real benefits, but recovered losses. With 80 percent + of operational costs determined at the design stage, the business invested heavily in understanding the consumer and what they really wanted and how they used the product. After several months of development, new products now have greater success rates, arrive to market a third quicker than before the program of change was started, and have extended the product lifecycle through an ability to customize variants with higher margins rather than resort to traditional promoting and discounting practices.

Winning businesses have tamed the product proliferation process.

"A company's real core capability – the inner core, if you will – lies in the ability to design and manage the supply chain in order to gain maximum advantage, albeit temporary, in a market where competitive forces may change at lightning speed"

Charles Fine
Author of *Clockspeed*

"Benchmarking was futile – we knew what needed to be changed – even our customers told us – so we returned to executing change effectively rather than talking about it forever"

CEO, U.S. FMCG business

Rapidly executing change

Aligning execution with the needs of the consumer ahead of time rather than reacting to current pressures differentiates the highest performing businesses.

The successful business emphasises planning and action aligned to customer and market trends. This requires collaboration and sharing throughout the organization. This 'sharing' includes new roles which emphasise the diagnostic abilities of middle management, new responsibilities which cross traditional departmental and business boundaries, and a shared allegiance to the performance of the business to grow and generate the profits needed to satisfy the entire network.

For a Singaporean business, knowing what to change involved management sessions to learn about key business processes and the innovations of other non-related but high performance organizations, and then the development of 'action plans' to enact change in nine month blocks of effort with weekly reporting of progress in terms of what had been enacted and how key indicators had improved. As such all employees could see the direct cause and effect relationship between a solution and better performance.

Balancing the supply chain network

Supply chains must be designed with the right type of partner in mind. This helps to ensure that the business and is linked with partners that share the same features.

'Thinking global but acting local' holds true within the new business model yet the actual design of the network is unique to each business. What is important is the alignment and balance of the network with the needs of the end customer coupled with the transparency of information.

At an Australian FMCG business, over 70 percent of the final product came from suppliers and was managed by fewer than 1 percent of employees, whereas every major customer account was serviced by a dedicated team. In parallel, many services (including design, product claim substantiation and legal services) were outsourced. Recognizing that customers and suppliers were dependent upon each other was the first step in redesigning the business and engaging these partners as a network.

The strength of integration

One of the most important and critical aspects of the new business model is the coherence of the design and how each of the five critical features enhances the strength of the overall system, its ability to adapt towards the future competitive battlegrounds and well as 'sense' where new and profitable growth opportunities exist.

KPMG final thoughts

This research shows that in response to increasing complexity, organisations are attempting to simplify their business processes and systems, using established tools and techniques to focus on reducing cost and improving quality and delivery.

An unspoken assumption is that the two objectives of reducing cost and enhancing value are linked: that simplifying an organization in response to increasing business complexity can help to reduce costs and generate higher customer value. However, it is becoming increasingly apparent that in a complex world simplification is not enough.

Some under-performing businesses remain focused on simplification and increasing the efficiency of areas such as their supply chains. But merely following industry best practice does not guarantee increased margins. As the business environment changes, new strategies are necessary. Indeed the increasing complexity of the market may itself open up opportunities: increasing globalization may open up new sources of demand; greater consumer demand for customization may allow development of more niche products. Instead of focusing on efficiency and simplification, winning businesses adapt their business models and use them as a source of new competitive advantage.

Conclusion

“It is often said that manufacturing is now ‘old economy’ — that is simply not true. It is much more vibrant and challenging now and calls for new skills, new models and a vision for growth that breaks traditional thinking”

CFO, industrial business ASPAC

“I admire Toyota and how that business seems to sustain change and invent new divisions. Making cars is just one element of what Toyota does now. Moving the Toyota Way to new products and services shows the profit power of an effective business model”

CFO, FMCG
business Europe.

This study highlights a new optimism in some of the world’s leading businesses. As the new approach to profiting from complexity gathers pace, those organizations that are content to focus on internal ‘cost reduction’ and simplification will fall behind.

Business complexity offers opportunities for enhanced profitability beyond the ability of any program of cost reduction and operational excellence.

Rethinking the business model, developing the competencies to master complexity and a senior management team that are focused on exposing the competitive weaknesses in the current business model will be the hallmarks of ‘excellent’ businesses.

Making the right product with the right supply chain requires vision, direction and talent pools within and beyond the business. It is intuitively obvious, but a challenge to adhere to at both strategic and operational levels amidst the increasingly fast-paced and complex environments in which companies operate. One of the most important factors in how a business responds to complexity is whether it focuses on simplifying internal complexity, to eliminate apparent barriers to implementing its strategy; or whether it develops a level of business competence and mastery that helps to ensure the long term growth and viability of the business and its partnerships and allows it to profit from the opportunities which a complex world presents. Those executives who take the time to redefine their business models and deploy resources accordingly will have designed their businesses to win.

For more information please contact:

Julian Thomas

KPMG (UK)
8 Salisbury Square
London
EC4Y 8BB
United Kingdom
+44 20 7 694 3401

Edge Zarrella

KPMG (Australia)
10 Shelley Street
Sydney
NSW 2000
Australia
Tel + 61 2 9335 7590
Egidio.zarrella@kpmg.com.au

Dan Doherty

KPMG (US)
303 East Wacker Drive
Chicago - IL
60601-5212
United States of America
Tel +1 312 665 2372
Danieldoherty@kpmg.com

Tan Wah Yeow

KPMG (Singapore)
16 Raffles Quay # 22-00
Hong Leong Building
Singapore 048581
+65 6411 8338
wahyeowtan@kpmg.com.sg

Lim Yen Suan

KPMG (Singapore)
16 Raffles Quay # 22-00
Hong Leong Building
Singapore 048581
+65 6411 8333
yensuanlim@kpmg.com.sg

KPMG International is a Swiss cooperative that serves as a coordinating entity for a network of independent firms operating under the KPMG name. KPMG International provides no audit or other client services. Such services are provided solely by member firms of KPMG International (including sublicensees and subsidiaries) in their respective geographic areas. KPMG International and its member firms are legally distinct and separate entities. They are not and nothing contained herein shall be construed to place these entities in the relationship of parents, subsidiaries, agents, partners, or joint venturers. No member firm has any authority (actual, apparent, implied or otherwise) to obligate or bind KPMG International or any other member firm, nor does KPMG International have any such authority to obligate or bind any member firm, in any manner whatsoever.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2006 KPMG International. KPMG International is a Swiss cooperative that serves as a coordinating entity for a network of independent firms operating under the KPMG name. KPMG International provides no services to clients. Each member firm of KPMG International is a legally distinct and separate entity and each describes itself as such. All rights reserved. Printed in the U.K.

KPMG and the KPMG logo are registered trademarks of KPMG International, a Swiss cooperative.

Designed by Natural

Publication name: Business complexity

Publication number: 306-359

Publication date: April 2007