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TechnoVision 2012

Bringing Business Technology to Life

Contents

1 Introduction

To offer services of value in consulting, technology and outsourcing, Capgemini needs a good grasp of information technology. Technology today—to master its complexities and translate it into competitive advantages today. Technology tomorrow—to anticipate its evolution and prepare the services of value tomorrow.

With TechnoVision 2012, Capgemini responds to the demands, and the expectations, of our clients: Tell us how you see technology evolving. Where should we invest? What is the best information technology strategy for our business?

These questions are increasingly difficult to answer, for two main reasons. First, information technology is mushrooming, fueled by the imagination of tens of millions of new users every year, the global opportunities and pressures corporations have to cope with, and the growing appetite of public administrations for competitive tools. Second, rates of adoption are even less predictable than in the past: The weight of decades of investments can slow down the spread of new technologies, but Internet users create new standards in a few months, not years.

Capgemini's TechnoVision 2012 pursues two objectives. The first objective is to provide a clear picture of the information technologies that are the most relevant to users—individuals or organizations. TechnoVision proposes a taxonomy that is the result of years of work by the network of Capgemini's chief technology officers, and depicts the impact of the evolution of these information technologies. This is covered in section 2, which examines "The Seven Clusters of TechnoVision 2012."

The second objective is to shed light on how these technologies and their evolution will impact business. TechnoVision proposes its matrix as the tool to explore the increasingly close relationships between business and technology. This is covered in section 3, "From Information Technology to Business Technology."

Section 4 provides examples of "How the TechnoVision 2012 Clusters Apply to Different Industries." Section 5 offers "Key Learnings" from our TechnoVision 2012 and section 6 looks at how companies can go about "Putting TechnoVision 2012 Into Practice."
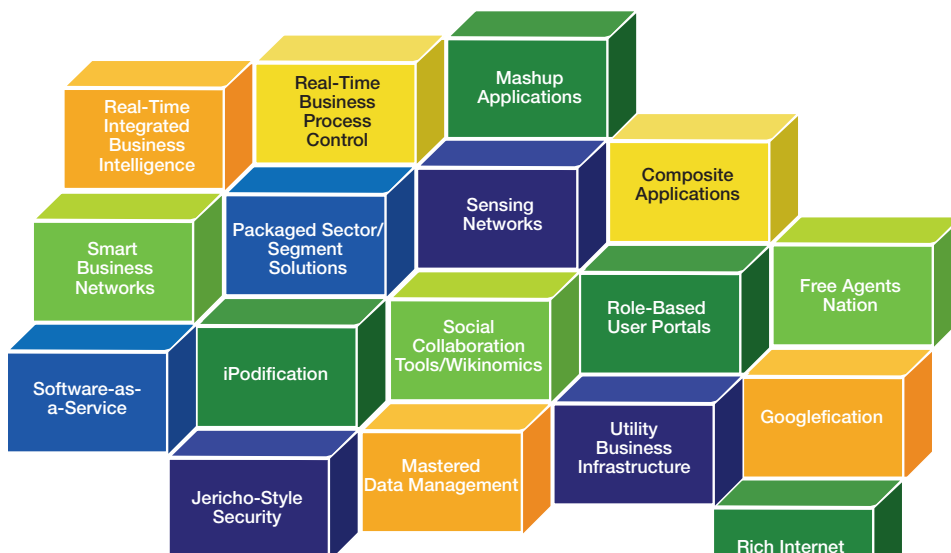
2   The Seven Clusters of TechnoVision 2012

At its heart, Capgemini's TechnoVision asserts that the ongoing evolution of technology creates freedom for businesses in many different ways. More precisely, there are two distinct sides to applying technology to create and enable freedom.

First, technology opens vast opportunities for new value and innovation; it will provide organizations with the freedom to choose where they want to focus their energies, thus helping them achieve their business objectives. However, to accomplish this, organizations must first be liberated from the burden of having to manage assets that do not contribute to differentiating value, yet consume a disproportionate part of budget, time and resources. This is the second way that technology can create and enable freedom: Technology helps us free ourselves from current constraints and obstacles.
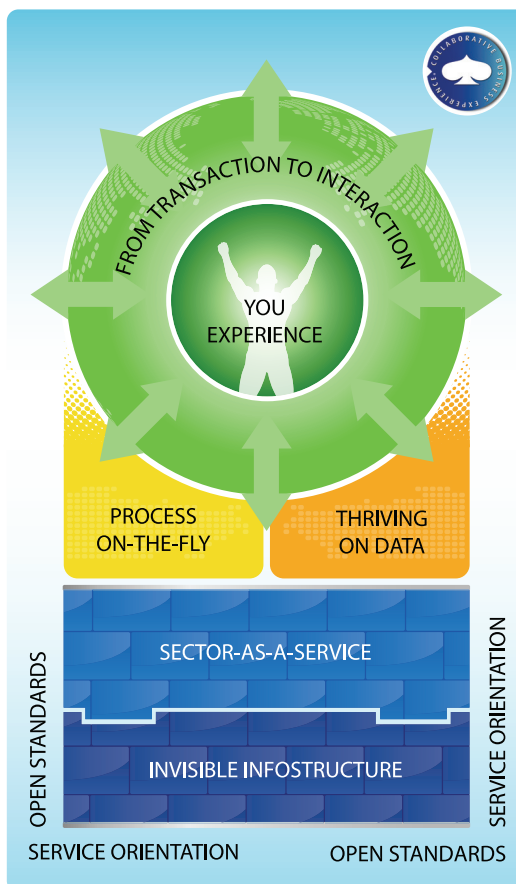
Identifying the Technology Trends That Matter Most

Our analysis of technology developments led us to identify 17 important technology trend areas that are likely to have a profound effect on business, now and in the forthcoming years (see accompanying graphic). We then structured these 17 building blocks into seven technology clusters. These clusters are designed to have the right granularity to be used in the communication between technology and business executives, mapping the business drivers of an organization in a simple way to the technology solutions that may address them. (In TechnoVision, business drivers are significant efforts aimed at exploiting an opportunity or an innovation, correcting an issue, or coping with a disruption or a compliance need.) The clusters can easily be expanded into the original building blocks—and further—to map to actual products and solutions, for example.

17 Key Technology Building Blocks

The Seven Clusters of TechnoVision 2012

FROM TRANSACTION TO INTERACTION

YOU
EXPERIENCE

PROCESS
ON-THE-FLY

THRIVING
ON DATA

OPEN STANDARDS

SECTOR-AS-A-SERVICE

INVISIBLE INFOSTRUCTURE

SERVICE ORIENTATION

SERVICE ORIENTATION

OPEN STANDARDS

Source: Capgemini 2008

Capgemini's TechnoVision depicts the seven clusters in an architectural diagram. With a lot of imagination, one might want to see the contours of an iPod-like device in this diagram. And why not: The "scroll wheel" at the top of the structure contains two clusters ("You Experience" and "From Transaction to Interaction") that consist of fast-moving, highly dynamic technologies that may have a far-reaching impact on systems, solutions and entire business models. They are potentially paradigm-changing technologies, just as the iPod's scroll wheel transformed the market of MP3 players.

Solutions in this top area typically inspire organizations because they contain all the ingredients for real, forward-looking change. They help to envision compelling future scenarios that literally act as a magnet for transformation.

In the middle area, we find two crucial clusters ("Process-on-the-Fly" and "Thriving on Data") that help organizations build new capabilities pertaining to flexible business process management and deep data insight. These are the capabilities companies need in order to flourish in the "network of everything" of today and tomorrow.

In Capgemini's experience, many of today's pressing business drivers are directly dependent on one or both of these clusters. A considerable amount of new change

However, innovation, flexibility and insight require a proper foundation. And this is what the bottom area (with the clusters "Sector-as-a-Service" and "Invisible Infostructure") can provide in terms of technology solutions that help organizations run the non-differentiating part of both IT and business as a utility-style service. To return once more to the iPod metaphor: Even the most advanced, innovative device relies on stable, robust groundwork (storage, network connection, etc.) to function properly. The groundwork is never the essence of the business, but it needs to be dealt with in the most efficient way—quite possibly with the help of innovative solutions—before a business can work on growth and value.

The greatest challenge nowadays for technology in business is transforming existing legacy systems, processes and organizational structures into a stable and simple, yet flexible and easily managed foundation. This requires strategic insight, architectural skills, decisive leadership and, above all, the sheer will to help many IT departments break through the difficulties they face today.

In addition to these six operational clusters, TechnoVision incorporates one technology cluster—"Open Standards and Service Orientation"—that is not operational in itself, but underpins all the others.

Close-up on the Seven Clusters

Following is a more detailed look at the seven clusters. Throughout the discussion we use examples from the retail industry to help make the clusters more tangible.

The **You Experience**: This cluster includes capabilities that drastically improve the way we use information systems and help us to personalize and individualize our user experience. We are all consumers who use the Internet in compelling, useful ways when we are at home. This creates a pent-up demand: We start to expect nothing less than the same experience when using business applications. Examples of capabilities that enable such an experience include: Rich Internet Applications (RIAs), which are highly interactive media-rich applications that are executed through a simple Internet browser; role-based user portals that morph their content to the specific, context-dependent needs of an individual user; "iPodification," the use of simple, yet advanced devices that combine multiple functions; and "mashup applications," solutions that are quickly assembled from multiple services, potentially from many different sources inside and outside the organization.

Through emerging technologies in the You Experience cluster we radically change our vision of what a system is, as we orchestrate its "incarnation" ourselves over and over again, rather than having to comply with the monolithic, prefabricated application design of the past. For example, in the retail industry some companies embrace a new generation of interactive platforms, like social networking and small "widgets" (mini-applications) to provide customers with up-to-date product and event content, with the goal of enhancing and individualizing the customer experience.

Through the You Experience, we shift the focus of solution development away from solutions that are designed and built beforehand. Instead, we quickly orchestrate unique, tailored systems from fine-grained components ("services"), possibly from sources both inside and outside the organization.

Business drivers that are affected by this solution area may include creating compelling user experiences, personalization, differentiation, customization and multi-channel strategies.

The shift **From Transaction to Interaction:** This cluster includes capabilities that help organizations externalize their information, processes and events. By truly connecting to the outside world, fixed, predefined business transactions become ongoing relationships with clients and partners—all engaged in a continual cycle of learning, collaboration and co-creation of concepts, ideas, knowledge and tangible products. This is a "mesh network of everything" in which systems and information are shared by default and new opportunities for collaboration—sometimes ad-hoc or short-lived—arise over and over again.

Examples of capabilities in this cluster include: the social collaboration tools of Web 2.0 that enable new, open economic models ("Wikinomics"), leveraging the power of large groups of collaborating individuals ("crowdsourcing"). This leads, among other things, to new ways for autonomous knowledge workers to work on different activities from any location, possibly for multiple organizations, at the same time. For example, some online retailers use crowdsourcing to actively involve consumers in designing products. This approach provides the retailers with the power of innovative co-creation, but also explores social communities as a new platform to evaluate, market and sell products.

Furthermore, "smart business networks" connect their processes through a continuous, fine-grained flow of information and events, thus creating value in new ways by sensing, analyzing and responding in real-time to this flow, often without human intervention.

Business drivers that relate to this area typically involve innovation, alliance strategies, collaborative development, knowledge management and client/consumer intimacy.

Process-on-the-Fly: A new wave of service-oriented solutions enables business analysts to quickly simulate, describe, model, execute and manage business processes. This provides an unprecedented capability to change and improve processes "on the fly," responding to business-critical events the moment they occur. This flexibility increases even more with the availability of business rules systems that help to isolate the policies of the organization from the supporting information systems. In addition, "composite application" platforms provide additional flexibility through their ability to quickly compose supporting applications from fine-grained, loosely coupled services.

In Capgemini's work with a grocery retailer, the company has improved the availability of products in its stores by enabling "process-on-the-fly" for its store replenishment function. The new system enables the development of store replenishment plans based on the knowledge of present and historic service levels as well as product and store constraints. This flow system allows replenishment plans to be modified in real time as an event occurs.

This entire solution space demands a detailed level of understanding of the enabling technologies, but at the same time puts the analyst at the very heart of the business requirements. Through standardization of solutions, more industry reference models will be made available to speed up the business analysis process. Examples of technologies in this cluster include Business Process Management (BPM) tools, business rules engines and composite application platforms.

Typical business drivers that apply to this space are frequently changing rules and regulations, mergers and acquisitions, continual process and quality improvement (for instance, through Lean Six Sigma), collaborative product development and

Thriving on Data: Intelligence has always been the cornerstone of information systems, supporting many major strategic, tactical and operational drivers of the business. However, through the emergence of open standards and Service-Oriented Architecture, structured and unstructured data can now be extracted from many more sources, often in real time and increasingly from outside the organizational perimeter.

Furthermore, the value of data is amplified as it is integrated in solutions that directly address the needs of individuals in the organization. Business intelligence is no longer an isolated phenomenon that is only accessible to a few trained experts through specialized systems. Instead, it is embedded in the activities of every member of the organization, potentially involving many different applications. The renewed emphasis on business intelligence also demands advanced tools and policies to master the governance of data throughout the organization and possibly far outside it. Examples of technologies in this cluster include real-time integrated business intelligence, searching the semantic web ("Googlification") and "mastered" data management.

In the retail industry, shopper analysis and data sharing with key suppliers enable retailers to increase marketing efficiency and plan local assortments. Loyalty card data can be combined with transactional point-of-sale data to support strategic decision-making, brand and marketing strategies, concept design, category management and demand forecasting.

No solution area affects more business drivers than Thriving on Data. These drivers include regulatory compliance, corporate performance management, risk management, customer intimacy, knowledge management, decision-making, portfolio management, control and efficiency.

Sector-as-a-Service: Through explicit simplification and rationalization, organizations can now liberate themselves from having to build and maintain bespoke legacy systems that do not provide differentiating value. Furthermore, automation of standard and non-differentiating business services is increasingly provided by third parties on an outsourced basis, either through the software-as-a-service model or through highly standardized, prepackaged software.

This all helps to recreate an existing landscape of bespoke, highly customized and heterogeneous solutions into a more simple, utility-style set of (sector-related) business services. Service-Oriented Architecture provides the platform to expose these "silo" business services to more dynamic solution areas that do create this value ("higher" in the TechnoVision framework).

To successfully create Sector-as-a-Service solutions, organizations must have a deep understanding of their business foundation and also must apply industrialized, accelerated delivery strategies. The latter can be achieved with templates, industry reference models, reusable patterns, etc.

As an example, a specialty retailer has improved customer service by optimizing its delivery operations through an on-demand visibility and routing solution. Whenever the retailer opens new stores or expands its operations into new locations, it simply plugs into the service and accesses information required to deliver products.

Business drivers that pertain to this area are often related to cost cutting, simplicity, efficiency, economy of scale and industrialization. Complex mergers

Invisible Infostructure: To create headroom for innovation, organizations must minimize efforts to build and manage their own IT infrastructure. This demands smart "virtualization" and "remote management" strategies that present the infrastructure to the business as a nearly invisible utility. This not only pertains to the classical infrastructure elements such as servers, storage and network facilities, but also to the middleware that exchanges and integrates information from inside and outside the organization, sensing networks that capture relevant data and events from any source, and a vast array of mobile, embedded computing devices. Service-Oriented Architecture provides the standards to manage all these "infostructural" elements in a uniform way, thus greatly reducing complexity.

Solutions based on open source typically thrive well in this environment. The increasing focus on corporate responsibility drives a new wave of "green IT" solutions that contain breakthrough innovations to save energy and reduce CO_2 emissions. New security paradigms are needed, as this highly interconnected world does not match well with the established style of hiding between the firewalls of the corporate perimeter and holding on to inflexible procedures.

Examples of technologies in this cluster include utility business infrastructure, de-perimeterized "Jericho-style" security and identity, and sensing networks created by multiple interconnected devices.

In one case, Capgemini worked with a food retailer and distributor using sensor technology to enable the company and its partners to improve shelf quality of fresh fruits and vegetables. The solution has shown that RFID can be a valuable tool in enhancing supply chain transparency, efficiency and accuracy.

Business drivers that are affected by this area typically include cost cutting, fighting complexity, increasing effectiveness and corporate responsibility.

Open Standards and Service Orientation: Although this seventh area is a virtual cluster (it does not directly relate to business drivers), it contains the crucial foundation for technology-driven change in the forthcoming years. Many breakthroughs and new uses of technology are catalyzed by the increased availability of open standards – both as an enabler of boundary-less information flow between organizations but also as a shared vocabulary and a shared way of working that fuels global, distributed-delivery scenarios. As a consequence of open standards, Service-Oriented Architecture contains powerful design principles that greatly simplify building and managing even the biggest systems through its emphasis on standardized, loosely coupled building blocks (or services).

In the retail industry, open standards enable retailers to have increased flexibility, visibility and control of their business operations.

Throughout the elements of the TechnoVision, service orientation is a tool that truly supports an architected style of transformation, bringing together the various needs of the business and the flexible technology components that support them.

3 From Information Technology to Business Technology

As part of the development of this TechnoVision, Capgemini involved all of our global industry leaders to share their insights about the relationships between the specific business drivers they see for our clients in their respective industries and the technology clusters as identified in this paper. The drivers range from very specific (such as industry-specific compliance requirements in the public sector) to more general, such as those affecting companies of a sector in a broad fashion. For example, customer centricity, cost removal and supply chain efficiency were identified as key business drivers for retail.

Across sectors, three business drivers appear repeatedly:

- The development of **new customer and client interactions** – for example, building citizen-centric organizations in the government/public industry.
- The evolution of the **supply chain** – for example, the digital supply chain in telco, focusing on high-value content producers and distributors.
- The adoption of **new business models** – for example, in the manufacturing industry new business channels and revenue sources offer services "mashed-up" from partners.

It turned out that most of the current identified business drivers, like the need for more customer centricity, supply chain efficiency, emerging global markets for sales and sourcing, or the need to reduce CO_2 emissions, are vitally dependent on one or more of the technology clusters. In fact, to such an extent that one could argue that most if not all changes in business processes or business models these days are "married" to the changes in technology. This led us to conclude that these days it is more accurate to speak of *business technology*[1] rather than *information technology*.

Making the Link Between Business and Technology

How did we reach this conclusion? We began by using a simple matrix, which on the one axis includes examples of the key business drivers that we see in each of the industry segments, and on the other axis the six operational technology clusters. To identify the relationship between business drivers and the technologies we were interested in two correlations.

First, how do the technologies address a business driver, bring it to a higher plateau of performance or even resolution? To answer this question, we used four indicators:

1. The technology is the *Cause* of the business driver; in other words, it is the trigger for the emergence of the business model itself. An example would be the way in which the advent of the Internet played a causal role in the emergence of business models such as online book retailing.
2. Or the technology is a *Must*; in other words, it is vital but not the very reason for the existence of the business driver. In the government and public sector

for example, one of the key business drivers is public security. The Invisible Infostructure cluster, including the handling of biometric data, is particularly important to meet the increasing challenges of public security. The infostructure closely links government departments, other public organizations and businesses, so they can collaborate to maintain a stable environment for economic prosperity.

3. Or the technology is *Helpful* or a supportive element but is not essential to the business driver. For example, in the case of a manufacturing company where globalization is a key business driver, the Thriving on Data cluster would be a must, but the Invisible Infostructure would be helpful to get the data in the first place.

4. Or, finally, the technology is *not directly relevant* to the business driver.

As it turned out, we found that of all the business drivers originally identified for our major industries, around 85% were vitally dependent on one or more of the technology clusters. On average, they were dependent on three of the clusters. In other words, changes in technology and changes in business processes or business models go hand in hand.

The second thing we were interested in is the timing of the relationship between the drivers and the technology clusters. Is the technology *Available* today, and is it more or less being widely used in the industry segment and ready to be used by all others? Is the technology coming *Next*; is it only being used now by a few early movers and therefore still associated with some risks and uncertainties in terms of benefits? Will it come *Later*; will it be six months to a year before it will likely reach the stage of early adoption? Or, finally, is the timing of the technology beyond a year or unknown?

We found that many of the technologies (60%) identified within the clusters are widely available now or are being applied by early movers and therefore will be available on a wider basis very soon. According to our best estimates, another 30% will become relevant in approximately 12 months. This means that those technologies, which are often familiar to the generation of so-called "digital natives" and have already penetrated our homes, are on the brink of entering the wider business community. We have experienced such a situation before: When the PC was entering the workforce, it was at first adopted outside the realm of IT professionals and only later led to the client-server revolution.

As happened then, significant pent-up demand will drive what companies put on their business priority agendas and will soon drive their IT strategies in the boardrooms.

For a number of the industry sectors, we have conducted or are conducting further research to identify more illustrative examples of early movers, confirming our original findings that these technologies are quickly being applied in the professional workspace.

4 How the TechnoVision 2012 Clusters Apply to Different Industries

Following are examples of how certain business drivers relate to the TechnoVision clusters in various industries.

Manufacturing: Within the manufacturing sector, globalization is a key business driver as companies producing consumer goods on a multinational scale need to manage a global network of production and distribution sites. To do that, they depend on the **Thriving on Data** cluster, using notably "mastered" data management to align and clean their data. In addition, these companies need to respond to short-term changes (such as swings in customer demand) and longer-term change (for example, switching suppliers). To achieve the necessary responsiveness, they have to explore how ERP structures can be broken down into services (the **Open Standards and Service Orientation** cluster), thus providing more flexible processes and an agile architecture.

Sector-as-a-Service is also applicable to the manufacturing industry. Notably the smaller plants of a large multinational corporation in emerging countries will benefit significantly from sector-specific (or even client-specific) functionality, available as a service and not to be maintained onsite. Often this may be with a somewhat reduced functional scope, but available as a service and able to be scaled later during expansion.

Retail: Within the retail sector customer centricity is a critical business driver that depends on the **You Experience** technology cluster to provide new ways to service modern consumers. As an example, mobile phones equipped with Near-Field Communication (NFC) capabilities can be used to revolutionize the shopping processes. The NFC phone can read information from a billboard or price label and then merge that information with an online shopping list or personal profile to provide immediate advice and feedback. The same device can also be used for automated checkout and payments. Moreover, more products increasingly are tailored to our individual needs (mass customization) by using the **Transaction to Interaction** capabilities to work jointly on new product features. We have already seen this model in action in the car and fashion industries.

Supply chain cost removal is an ongoing driver for the retail industry. Competing with big-box retailers like Wal-Mart requires continual reduction in operating costs—without losing performance or quality. The **Sector-as-a-Service** cluster is key to enabling seamless integration of commodity services with the rest of the operation. These services can either be run through a software-as-a-service model or the whole process can be outsourced.

Financial Services: The **Process-on-the-Fly** philosophy is about to become real in the financial services business. New offerings are often the result of bundling different financial products, and speed to market becomes an important factor. The ability to easily design a combination of, for example, a banking and an insurance product/service (such as short-term credit as a bridge before the insurance pays out) brings a competitive advantage.

The stronger role of so-called "white label" products (products and services such as credit cards, retail banking, mortgage services and insurance that are being introduced by non-financial companies) is also increasing the need for flexible processes in financial institutions. This is the best way for a financial institution to provide an integrated set of services, based on products manufactured by another. An example might be a life or disability insurance, where the insurance company is the underwriter and application provider, behind the bank acting as the client interface.

Utilities: The utilities sector is undergoing significant transformation, driven by high commodity prices, increasing oil and gas demand, regulatory constraints, climate change issues, globalization, sector consolidation and operational efficiency programs. Technology is playing an important role to make these changes possible. An example is the use of smart meters, two-way communication equipment on an electrical or gas network that automatically collects data from energy meters. These smart meters show how the **Invisible Infostructure** of this industry supports the needs of the business to help quantify and modify energy demand so utilities can better predict and manage their base and peak loads, maintain their grid, retain their customers, and contribute to energy and CO_2 emissions reduction. Smart meters also enable automated meter reading, energy prepayment, sophisticated pricing and grid outage detection, prevention and restoration.

Another clear driver for change is the unbundling of the utilities network. Generation, distribution and sales of energy can be split into different entities and the network is opening up to allow more competition. This means that services that represent these functions need to become interoperable. The applications, originally supporting the integrated companies, have to be unbundled as well and later repackaged into services that support each of the new process layers. This trend depends on the **Sector-as-a-Service** cluster.
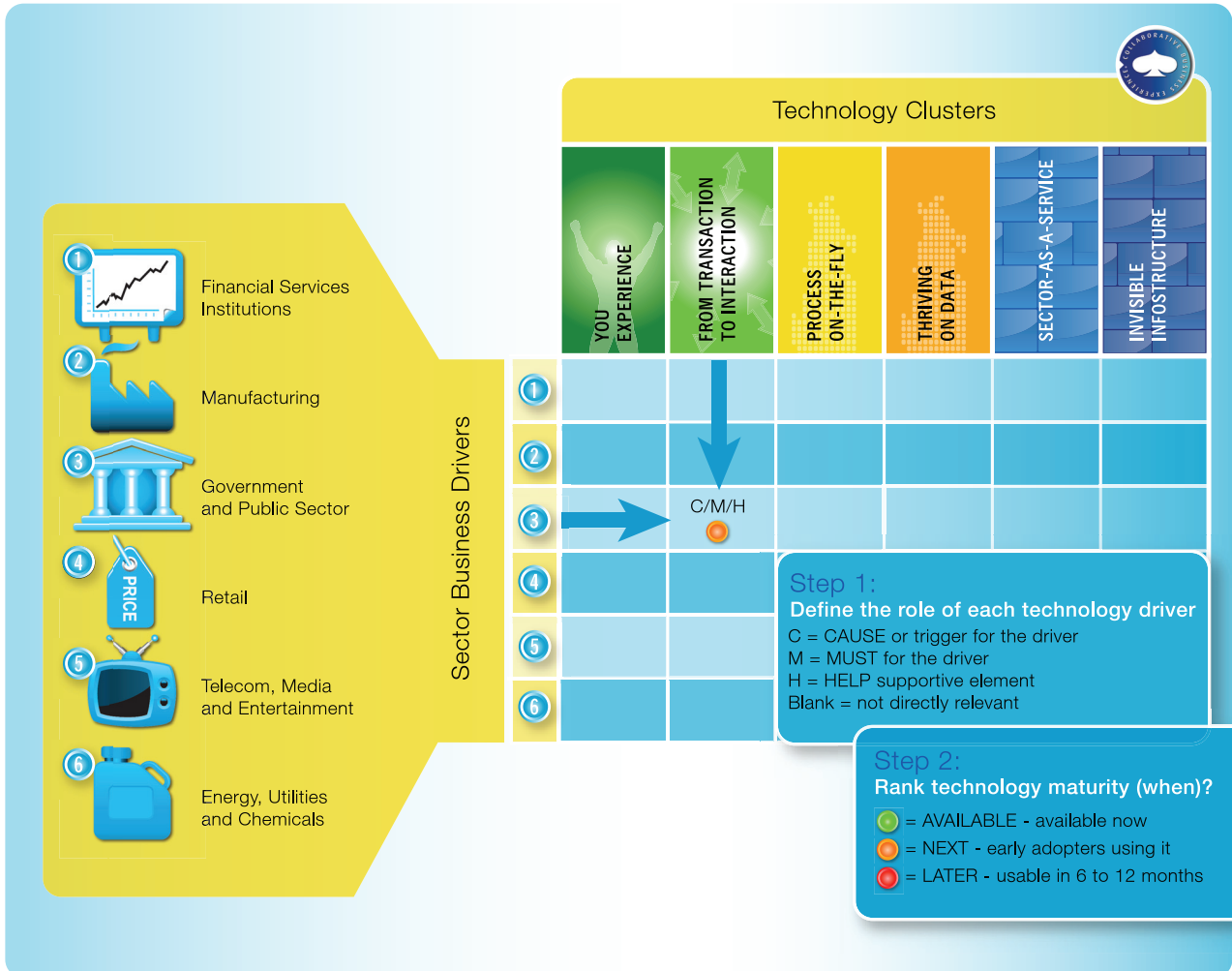
How the TechnoVision 2012 Matrix Works

To illustrate how the TechnoVision matrix works in practice, we have applied it to the retail industry. In retailing, an example of a key business driver is customer centricity. Technology-savvy shoppers today are playing an increasing role in the development of store formats and products. Web 2.0 capabilities, for example, are being used for product configurations in areas such as toys, T-shirts and running shoes. This business driver relies heavily on the You Experience cluster plus the transaction capabilities of the Web, which are in fact a *Must*, if not the *Cause* for the driver. Mass customization, or mass individualization, is brought to the next level in areas like car manufacturing, fashion or some blended consumables like tea or muesli.

Another retail business driver is the need for more efficient and transparent supply chains, enabling companies to know where goods are and having the option to redirect goods in transit. In this example, the emerging RFID-enabled sensor networks are a Must or essential, as well as the ability to handle, manage and create new insights and decisions out of the vast amount of data they produce with the Thriving on Data capabilities.

The TechnoVision Matrix 2012

Technology Clusters

YOU EXPERIENCE | FROM TRANSACTION TO INTERACTION | PROCESS ON-THE-FLY | THRIVING ON DATA | SECTOR-AS-A-SERVICE | INVISIBLE INFOSTRUCTURE

Sector Business Drivers

Financial Services Institutions
Manufacturing
Government and Public Sector
Retail
Telecom, Media and Entertainment
Energy, Utilities and Chemicals

C/M/H

Step 1:
Define the role of each technology driver
C = CAUSE or trigger for the driver
M = MUST for the driver
H = HELP supportive element
Blank = not directly relevant

Step 2:
Rank technology maturity (when)?
= AVAILABLE - available now
= NEXT - early adopters using it
= LATER - usable in 6 to 12 months

Source: Capgemini 2008

5   Key Learnings

Beyond specific business and technology insights, TechnoVision 2012 allows us to draw three conclusions of a general nature.

Individuals vs. Corporations

Individual users benefit greatly from new technologies. In the last five years, millions of people have gained access to huge stores of data and information, search them blindingly fast, perform increasingly complex transactions online, connect with hundreds of colleagues and friends, belong to worldwide communities, and work and play anywhere, anytime. Information and communication technologies bring these people what companies seek, but seldom achieve: a better mastery of data and information, real-time business intelligence, processes adapting to circumstances, tighter and broader connection with their clients and partners, and the gift of market ubiquity. Enjoying the privileges of modern technology, individuals wonder why their employers and suppliers, and the corporate world in general, appear to be lagging. Their expectation is that companies draw the same benefits from technology as the ones individuals enjoy.

Early Adopters of Technology Pave the Way

When is a technology cluster ready for business use? This might well be the most difficult question in any technology assessment. It can take years for a new technology to reach maturity and serve the needs of the business community. Sadly, information technology is better known for its longstanding promises than for reliable fulfillment. But TechnoVision highlights a way to do better.

While few technology clusters are ready now to support business drivers on a broad base, many—close to half of the vitally important technology clusters—are in the phase of early adoption. Someone somewhere has made use of the cluster to implement a specific business driver. As the early adopters have provided the proof of concept, the next adopters do not need invention, but the proper application of what has been discovered and learned already. For Capgemini, the challenge is to bring to its clients the know-how created somewhere else.

The Marriage of Business and Technology

Eighty-five percent of the business drivers identified in TechnoVision are vitally dependent on information technology: They cannot become reality without one or more technology clusters—on average they depend vitally on three of the six operational clusters. After decades of work, analysis and speculation on the convergence between business and technology, now is the time to celebrate their marriage—giving birth to business technology.

This marriage places new demands on key executives, notably on chief executives and chief information officers. The progress of the organization depends on their close understanding and collaboration. TechnoVision 2012, understood in the context of their company's situation, can help these executives interact more effectively—by speaking the same TechnoVision language. For example, decisions on outsourcing and offshoring are improved with a common understanding of the technology clusters—the upper areas of the clusters usually calling for proximity

6 Putting TechnoVision 2012 Into Practice

The predominant objective of TechnoVision is to better serve Capgemini's clients. We want to support them in better understanding how technologies are linked to the drivers that matter for their business. With this intelligence, businesses and organizations can prioritize and focus their efforts to develop the right capabilities. They can then appropriately time the adoption of new technologies to drive and support the business. What's more, TechnoVision's focus on business drivers and technology clusters makes it easier to recognize relevant applications of technology from a wide range of industries that may be applicable to a company's business.

TechnoVision's learnings can be tailored to a particular client in many ways. Two have proved to be particularly effective.

The first one is the TechnoVision workshop. Its principle is simple: The general business drivers of TechnoVision are replaced by the client's business drivers, and the resulting matrix is filled to reflect the client's situation. Not only is the correlation between cluster and driver specifically defined; in addition, the availability of technology for a given business use reflects not only the state of the technology itself, but also the ability of the client to specifically apply it. As a result of this workshop, the client-specific matrix accurately reflects business and IT strategy – it provides the executive team with the common understanding that leads to the right decisions.

The second major way to use TechnoVision is to systematically explore, in Capgemini's Accelerated Solutions Environment (ASE)[2], the possibilities opened up by new technologies. In a couple of days, our clients can define the major steps required to become an "Enterprise 2.0."; updated or new business drivers result from this technology exploration.

TechnoVision 2012 and Business Transformation

In past business transformations, information technology usually took a back seat to business. At best it was seen as an enabler of transformation; at worst a major obstacle to transformation.

With the marriage of business and technology, the role of technology in transformation changes radically. Transforming the business or the organization without technology would be mostly impossible. Transforming the IT organization without the strictest alignment with business would make no sense.

Capgemini proposes a new approach to business transformation that takes this change, and many others, into account. This approach equips executives with a new set of tools to better manage transformation – a daily task. It also focuses on choosing the right transformation strategy from among the many paths open to the enterprise. And it increases the pace and flexibility of transformation programs.

For many of Capgemini's clients, the true benefits of TechnoVision will be achieved through an improved, combined approach of transformation and technology.
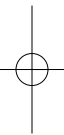
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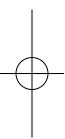
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