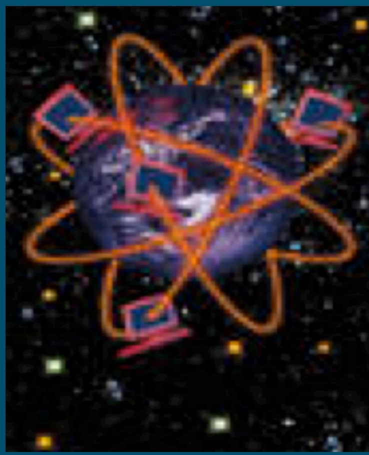
Sirius & Company

Whose business is IT?

Sukhendu Pal

w: Siriusandcompany.com

e: enquiries@siriusandcompany.com



CEOs of large companies routinely face questions about investment trade-offs from analysts, but are rarely quizzed on their information technology (IT) investments. They often delegate IT investment responsibilities down the ladder – either because IT is too complex and boring, or they have better things to do and outsource IT. Are CEOs too important people to take the responsibility for IT? The rules of the IT game have changed. Today, IT plays a role in most aspects of a company's business – without IT most companies will grind to a halt, never mind competing in the global economy. It is high time that CEOs take responsibilities for IT. Find out which IT investment responsibilities should CEOs delegate and to whom? What should they look for when they consider IT investment options? What roles should other executives, such as chief information officers (CIOs), and business unit heads, play in the decision?

Since the early 20th century, the fields of manufacturing, finance, sales and distribution, marketing, and engineering have evolved into a set of commonly understood practices, with well understood vocabularies and investment principles recognised by every member of the senior executive team. By contrast, the field of IT, born only a few decades ago, is rather young. This generation gap means senior executives too often shrugs their shoulders, hand the CIO a generous allowance, and look the other way. Later on, the company finds it has paid an enormous price for the latest technological and outsourcing fads promoted by software suppliers and large scale technology service providers. The result in many large companies is that IT is an expensive mess. Orders are lost. Customers call help desks that are thousands of miles away and are not helpful.

According to our research, we found that the average company waste 20% of its corporate IT budget on purchases that fail to achieve their objectives. Now, consider the IT budget of top FTSE 100 companies, which runs into tens of billions of pounds each year. Such waste is a direct result of the fact that IT has so far operated without the proper involvement of the CEOs and their senior management teams, despite the best endeavours of CIOs. The above symptoms, so common in the industry, tells how CEOs and key members of their organisations *think* about IT, and about their respective roles in ensuring their organisations use IT effectively rather than what the CEOs *know* about the IT. Companies fail to capture value from the IT because their way of doing business is old fashioned [1].

The assumptions on which the organisation has been run no longer fit reality of today's business world. IT is the fourth major resource available to CEOs to shape and operate organisations – they have managed the other three major resources: people, finance, and machines for years. But, today IT often accounts for more than 30% of CAPEX. It is high time to see IT for what it is – a major investment that can radically affect the way companies perform, the way companies serve customers, the way companies communicate both externally and internally, and companies brand. Understanding the importance of the fourth resource and building it into operating imperatives of the business, as well as into strategies and business plans, are essential for the CEO.

The success of IT investments requires common understanding among the CEOs and senior executives' responsible for running their companies. Senior executives know how to talk about finance, because they all understand the language and can agree on a common set of metrics, such as P&L, balance sheets, return of capital employed, combined operating ration (COR), and cost to income ratio, among others. They can do the same with the most elements of operations, marketing, and sales. So, why not with IT?

There is no longer any valid reason why senior executives should be IT illiterate. When one looks at some of the talented business leaders of today (such as Arun Sarin – CEO of Vodafone, Lord Brown of BP, Bill Gates of Microsoft, and Alan Jebson – COO of HSBC, among others), it is

Actions tell the story

The degree of CEO's IT responsibility is a function of company's operating mode

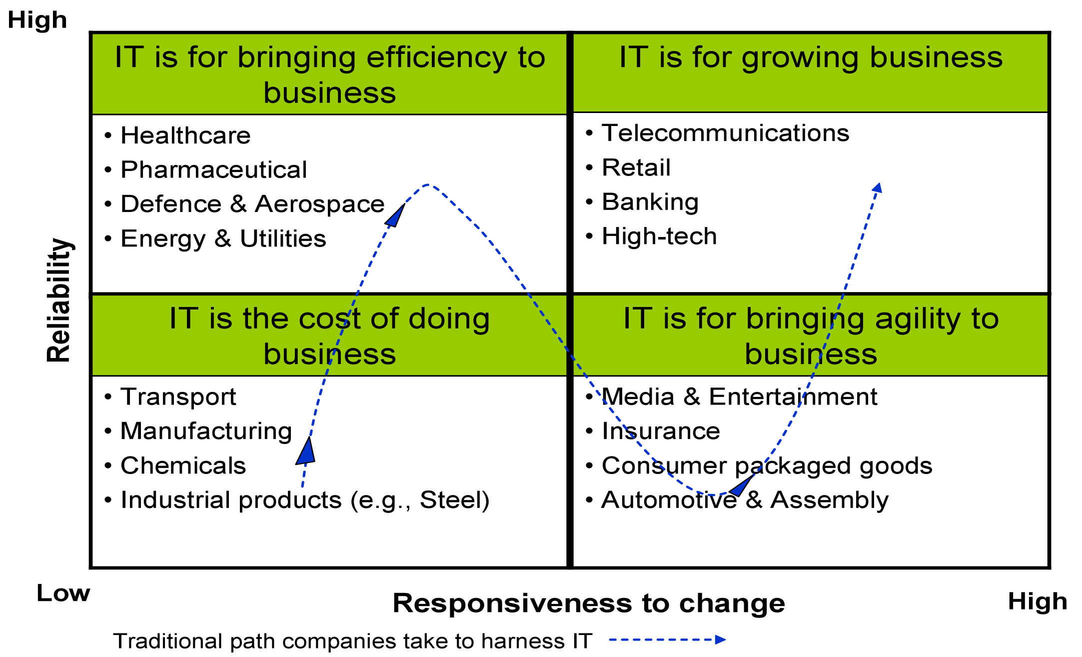


Figure 1: *Operating modes of companies and their use of IT*

not surprising that these men are as capable of running their business as they are with the IT. The traditional view that CEOs are for running business, and they don't have time or interest to take responsibility for IT rarely stands up in today's modern business world. It is no longer a vanity for any CEO to treat IT in a complacent manner. IT risks are increasingly entangled with business risks, and it is the CEO's responsibility to distinguish between them. The CEO's own vision and understanding of IT is the key, which sets the tone. The question is no longer whether the CEO should be directly involved in IT decision. The question is: how?

So how should CEOs go about IT?

The degree of CEO's IT responsibility is dependent on the nature and operating mode of the company. There is no "one-size-fits-all" list of IT responsibilities for CEOs because there are number of factors that determine how IT is already used in a company. These factors include a company's history of using IT, the industry it operates, the company's financial position, the company's competitive landscape, the company's strategic ambitions and priorities, and the company's quality of IT management talent. Having examined many companies over the last 20 years, we have identified four different modes in which IT is used by companies (see Figure 1). We describe these modes as:-

- IT is the cost of doing business;
- IT is for bringing efficiency to business;
- IT is for bringing agility to business; and
- IT is for growing business.

It is common for companies to migrate between the above four modes, but we put companies from different industries under each mode based on how they intend to use IT majority of the time within their business.

IT is the cost of doing business

Many companies operate in this mode, yet they do not fully realise it and understand the implications. This is not to say, this mode of operation is disadvantageous, and some companies' mode of business together with other factors (as mentioned above) naturally lead them to this mode of functioning. Companies that operate in this mode include manufacturing, transport, for example. We found that the IT Director or CIO of these companies is responsible to the Finance Director (FD) or Chief Financial Officer (CFO). Companies in this category balance the cost of IT against an acceptable level of operational reliability.

IT is for bringing efficiency to business

Almost every company needs to strive for efficiency and improve productivity. But the urgency of doing that using IT is vital for companies who operate in this mode. Organisations that operate in this mode include energy & utilities, pharmaceutical companies, among others. There are many public sector departments, such as healthcare, that try to operate on the same principles in order to bring efficiency and save taxpayers money. We found that private sector companies that operate in this mode grew primarily as a result of many merger and acquisitions. And, size of the mega-merged organisations has created management complexity, and some merged companies are finding the expected savings and improvements elusive. These companies have for years installed one IT system after another, and the interconnections between them have become complex and often inefficient. Modifying these complex systems or adding new ones to the mix has proved costly and time-consuming. Naturally, bringing efficiency by rationalising IT systems in many silos are of major importance to these companies. Many companies that operate in this mode also outsourced and offshored their IT and back-office functions with the hope of reducing IT costs (see *Offshoring: Saviour or Value Destroyer* by Pal). We found that IT directors or CIOs of these companies are primarily technical people, who came through the ranks and report to multiple business unit heads, but not to CEOs.

IT is for bringing agility to business

Companies in this mode use IT to streamline their processes and invest in new IT systems for service improvements, cost reductions, and to gain a competitive edge. In this mode, IT investment often accounts for nearly 50% of CAPEX. Many companies enter this mode with one or more IT projects (such as setting up a shared services organisation) that require substantial re-engineering effort, often accompanied by the decision to move some business functions offshore with the intention of bringing agility to their businesses. We found many companies migrate from this mode to "IT is for bringing efficiency to business" mode, believing that once few functions have been offshored and running adequately, the task of bringing agility to the business to be complete. Most of these companies are multinationals operating in different countries in a siloed manner. We found that IT directors and country-based CIOs of companies in this category report to the business unit heads, and not to the overall CEOs.

IT is for growing business

Companies in this category use existing IT systems and harness new technology to improve the way they approach the market and conduct their daily operations. In this mode, companies aggressively pursue process improvements and new service opportunities, cost reductions, agility, and competitive advantages. IT investments for these companies are over 50% of CAPEX. Many companies operating in this mode do it as a part of their strategic intent to grow their business and dominate their markets. Other companies are forced into operating in this mode by competitive pressure and changing customer preferences. We found that IT directors or CIOs of companies in this category report to CEOs. Majority of CIOs of these companies are rounded people, who have worked in various business units in leadership roles, including IT. These people combine business knowledge and IT expertise, and some of them then go on to become COOs and CEOs.

What should CEOs do?

CEOs cannot do it all, and need farsighted business unit heads and chief information officers (CIOs) who are equally at ease with business as well as with IT. Business unit heads are close to their business to see the most effective ways to harness IT. They all possess the power to embed IT into their strategies and commit the necessary financial resources. With CEO's understanding of IT as a catalyst, the return from IT investments can be multiplied many times by business unit heads, who use IT as an essential strategic resource. The CEO, in turn, must insist on a relevant and robust IT investment in the company's strategies and business plans (see Figure 2).

CEOs agenda for maximising return from IT investments

We identified four practices that distinguish the companies that are most successful from their IT investments. *First,* these successful companies target their IT investments at the productivity levers that are important for their industries and themselves. *Second*, they meticulously worked out the sequence and timing of their IT investments. *Third,* they took a sceptical view of large scale technology and service providers who consistently behaved in ways that reduced companies' financial benefits from IT. *Fourth,* these successful companies did not pursue IT investments in isolation, instead they developed business innovations in parallel with IT innovations (see Figure 3).

What CEOs need to do

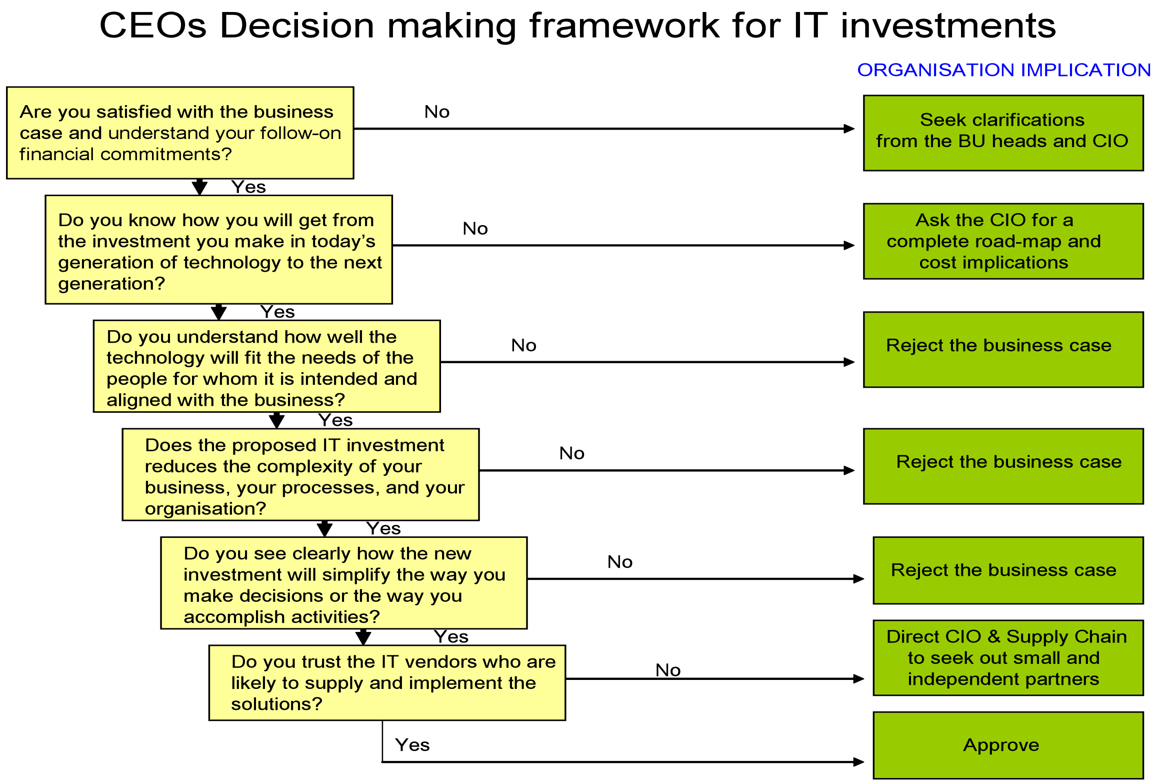


Figure 2: *Good decision making helps to capture value from IT investments*

CEOs need to understand and accept that the success of IT investments relies on the specific characteristics of different industries and the particular business practices or operating modes of different companies. For IT to fulfill its potential and help companies to prosper, business users and IT suppliers must deploy technology thoughtfully (as opposed to flogging IT products and outsourcing services to customers so common among large scale technology and service providers), customising offerings to individual sectors and businesses and merging the offerings with other products and processes. CEOs agenda will be to continue using existing systems effectively whilst making targeted new IT investments that maintain competitive parity, and where possible, strengthen differentiation. This is because when IT investments are aimed correctly, companies improve productivity and competitive advantage.

It's the way CEOs do IT

Prudent investment in IT is just the beginning. Capturing maximum value from IT investment needs smart management practices across the organisation (see *Manufacturing: It's the survival of the best* by Pal). And, the records of good IT management practices to improve productivity in the European companies are not something to be proud of. There are two possible explanations for European companies' failure to keep pace with US productivity growth over the last decade. One is that there are innate advantages for businesses in the US; the other is that they are better managed. A new study has found compelling evidence to back the second explanation - directing the spotlight on to those running Europe's business laggards. So, what role should CEOs play to capture maximum value from IT and, therefore, improve the productivity of their companies? From our experience of working with companies over many years, we identified a number of strategic and executional responsibilities that CEOs must take with the senior executives of their companies (see Figure 4).

US productivity growth began outstripping Europe's 10 years ago, after decades in which the gap had narrowed. US output per hour grew at an annual rate of 2.5% between 1995 and 2004, compared with 1.5% in the 15 members of the European Union before the recent enlargement. Research had already shown that the difference lay in sectors of the economy that use technology intensively, especially in retail, wholesale and financial services businesses. Some attributed the growing gap to

CEOs Agenda for maximising Investments

CEOs IT Investment challenges	How IT suppliers should respond	How large IT suppliers actually respond
Target productivity levers that produce maximum results	• IT suppliers learn more about how their products and services can enhance each customer's business. Whether they are helping to improve supply chains, reduce insurance claim processing time, or helping to offshore applications in the most secure manner, IT suppliers master the details necessary to raise their customers' productivity.	• Large IT suppliers use shotgun approach – that is supply all kinds of products that instantly (or "on demand solutions" in their marketing jargon) solve all kinds of customers' problems. • All most all the large IT suppliers have panoply of offerings (i.e., "solutions" merchants) which increases the complexity of the clients' business and at best result in mediocre performance.
Get the sequence and timing right for IT investments	• IT suppliers help companies find value from previously lost IT investments. • IT suppliers develop solutions to help their customers turn around unsuccessful IT deployments and deliver a clear value proposition for future investments.	• Large IT suppliers are always on the look out for selling the next upgrade with promise of superficial ROI improvements. Whether it is flogging the RFID to replace the bar code for retailers, or forced upgrade of software, IT suppliers conjure up every trick to improve their revenue growth regardless of their customers' priorities.
Institute rigorous assessments of large scale IT service providers	• IT suppliers recognise that size doesn't matter. Instead, they develop particular skills that focus on solving customers' specific problems.	• Large IT suppliers use their size and panoply of offerings to convince their customers' IT people that "bigger is the better".
Pursue business and IT innovations in parallel	• IT suppliers innovate selectively, from learning partnerships with customers and other third parties, to provide best for their customers recognising that many customers made large IT infrastructure investments over the last three to five years, and IT suppliers want new products and services that leverage the assets customers already have .	• Large IT suppliers continue to flog their technology to customers IT departments, and to isolated business units without much consideration to customers' cross-unit savings. • Large IT suppliers' main interest is to sell their technology or outsourcing and/or offshore capability first regardless of its economic value to their customers.

Figure 3: *CEOs IT investment challenge*

characteristics of the US business environment, such as greater space for large operations, less regulation, or tougher competition. Others believed it was caused by different operating and management practices in US companies.

A definitive answer is given by new research from the Centre for Economic Performance at the London School of Economics (LSE) [2]. It was given unique access by the Office of National Statistics (ONS) to UK government data on more than 7,000 private sector establishments in the UK. The researchers found that output per hour in US-owned organisations in the UK was almost 40% higher than in UK-owned organisations. Some of the differences could be attributed to the greater use of IT by the US subsidiaries. But most of the gap was explained by the superior IT investment strategies, and use those companies made of their IT - they were able to derive a higher return from their investment. Nor was this just because foreign-owned organisations were intrinsically more productive. UK subsidiaries of non-US multinationals appeared no better able to get the most out of IT investments than the UK companies. The LSE researchers found two important differences in the way US companies were managed. One was that they were more focused in their people management. In other words, they were quicker to promote top performers and get rid of under-performers. The other was that they devolved responsibility for managing IT to local organisations and business unit heads.

This brings hope to European companies struggling to catch up with the superior investment in IT and better productivity of their US competitors. The gap is not caused by any innate advantages of being US-based, but by investment decisions in IT, and much more important, by management practices. If CEOs can learn the lessons from studies such as these, they should be able to raise the returns from IT investments and narrow the gap.

Establish responsibility framework

It is essential for CEOs to make everyone accountable to get the most out of IT investments. For example, when a large supply-chain-management installation goes awry, fingers point in all directions. To avoid such recriminations, CEOs make their IT suppliers, IT organisations, and business heads jointly accountable while linking improved supply chain processes closely to their budget cycles and compensation packages. CEOs direct CIOs to ensure IT suppliers are rewarded or penalised according to how well the software or their solution does its job, not just how quickly

CEOs "To Do" List

	IT Decision	Role of CEO	Implication of Delegation
Strategy	How much should the company spend on IT?	Define the strategic role that IT will play and then determine the level of investment needed to achieve that objective.	The company fails to develop an IT platform that is secure and furthers its strategy, despite high IT investments.
Strategy	Which business areas should receive the company's IT budget?	Make clear decisions about which IT initiatives will be funded and the ones that will not receive IT investments.	A lack of focus with the IT unit, which tries to deliver many projects simultaneously that have little value across the company
Strategy	Which IT capabilities need to be companywide?	Decide which IT capabilities should be provided centrally in the form of shared services and which should be developed within business units.	Excessive standardisation (often the result of business process outsourcing) limits the flexibility or frequent exceptions increase costs and limit business synergies.
Execution	How excellent the company's IT services really need to be?	Decide on service levels and reliability that are needed on the basis of economic value assessment and cost to serve basis - use external benchmarks.	The company may pay for services that cannot be cost justified, especially if the services are provide by an offshore/outsource service provider.
Execution	What security risks will the company accept?	Decide on the trade-offs between security and acceptability on the basis of cost and loss of business and reputational damage.	An overemphasis on security inconvenience all stakeholders, and an underemphasis exposes the company to unwanted risks
Execution	Who is accountable if an IT initiative fails?	Assign a business unit head to be accountable for every IT initiative and monitor business metrics.	Wasted investment and the business value is not captured

Figure 4: *Role of CEOs in IT related decision making processes*

it is installed. The CIO ensures that IT managers and supply chain executives are jointly responsible for delivering the solution on time and for performance improvements, such as meeting inventory or service-level goals. All participants are judged by the CIOs and business unit heads on whether they bring in the project on time and within budget.

In this operating environment, senior executives establish shared metrics, and tie the IT suppliers' compensation to the achievement of certain business goals, not merely to technology delivery. Competitive pressure increasingly compels companies to make large IT investments. But the challenges of creating and capturing value from these investments are immense. Taking a rigorous approach to getting it right can make the difference between productivity improvements at every level by prudent investment in IT in the organisation and taking a multimillion-pound write-off.

Make business unit heads responsible for setting IT road-map

It is common for CIOs of large companies to spend time developing the IT road-map and priorities independently. This is because most CIOs have come up through the technical leadership roles which allowed them to be more comfortable with the IT than the business. It is rare to find organisations, where CEOs, business unit heads, and the CIOs set out the IT road-map together. This means, the IT road-map and the business agenda are developed separately and often in a divergent way. Implications of functioning this way produces poor results from IT investments and creates two camps with different cultures within an organisation – a camp of technologists and a camp of business unit heads, who are not entirely satisfied with regular requests from the technology camp to increase funding for their IT usage. But, it doesn't need to be this way – and there is a better way. That is, CEOs need to make business unit heads responsible for setting the IT road-map for their companies working with their CIOs. In this way, CEOs set the tone right from the beginning and making both business unit heads and CIOs responsible for IT.

Not align business and IT but integrate business with IT – manage the complexity

Complexity is driven by misalignment between business needs and IT objectives (e.g., IT objectives are aligned with an ill-defined business model). For example, in an insurance company, a poorly planned product architecture drives fragmentation, complexity, and high cost in the IT systems required to support the business model. Management (not just the IT management) must understand that complexity is the result of both business drivers and IT drivers. The most crucial task for CEOs is to establish a business and IT partnership to bring the IT organisation more closely in line with the rest of their organisations. From our research, we found that companies with better IT governance integrated with corporate governance have more than 25% higher profits than companies with poor governance given the same strategic objectives. These top performing companies have custom designed IT governance for their strategies (see Figure 5). Just as corporate governance aims to ensure quality decisions about all corporate assets, IT governance links IT decisions with company objectives and monitors performance and accountability. If IT projects are to be completed on time and within budget, and to have a real impact, the organisational structure and reporting relationships of the IT function will have to change. Instead of the IT organisation operating in a silo and reporting only to the CIO, key individuals within IT will need to report to both the CIO and business unit heads.

For example, the first move could be to decentralise the applications programme development function so that senior applications development people report both to the business unit head and to the CIO. The second move could be the introduction of a shared services group within IT, with responsibility for architecture and infrastructure – this group remains centralised to take advantage of economies of scale and to reinforce best practices from mature industries, such as manufacturing. For example, an automotive manufacturer gains significant efficiencies and economies of scale today by building several product lines on top of a single shared platform and by reusing 80% of common assets across these product lines. Similarly, by developing a shared technology infrastructure platform CIOs can effectively address the challenges they face whilst maximising the return from previously lost IT investments and improving the productivity.

In order to lead their industries, companies need to take action in three areas:-

- **Competency:** The senior leadership needs to become competent in technology. IT isn't somebody else's job, it's ultimately theirs. Boards should require that CEO candidates demonstrate not just knowledge of finance and marketing but also a advanced level of technology aptitude.
- **Accountability:** Boards must make CEOs accountable for technology failures and security breaches. The compensation committee should push for clearer links between pay and performance for IT-related activity. These links should be described clearly in the annual report so that analysts can scrutinise them.
- **Frequency:** The senior leadership team mustn't just pay lip service to the CIO and his or her team. The CIO's group is at the core of the business; it runs the company's nervous system and immune system and connects all internal and external entities. Technology updates should be provided to the senior management team with the same frequency and rigor as financial statements and signed off on by the leadership team as part of the pay-for-performance framework.

CEOs must know to go from pain to gain

With a tsunami of new digital technologies (e.g., social media, mobile, cloud and analytics) all converging simultaneously, there has been, once again, a cry for corporate IT to radically change to enable the digital transformation of businesses. Technology innovation is not slowing down or levelling off, but ramping up — and businesses will soon face a barrage of new digital possibilities. There is no time for complacency.

IT is already being asked both to industrialise traditional infrastructures and systems fast to save costs, and to innovate customer experiences and operations with new digital technologies. Cloud-based services are also now being bought directly by business units' executives resulting in IT losing its control over technology purchase within the company. Are all these changes just part of the natural evolution of the IT function? Or, in preparation for the coming wave, is a more fundamental re-invention needed? Our work with industry leaders point to the latter.

Those companies that are doing their digital reinventions successfully show common characteristics in the way they have shaped their IT to work differently with the business. They have changed their IT functions utilising three related management interventions which, taken together, represent a fundamental re-invention of IT.

- **IT becomes the core of transforming the business:** It is no longer sufficient for IT just to be 'aligned' with the business objectives; a fusion is needed. IT must become a core management competency to continually scan the technology landscape for fresh perspectives on how new digital technologies can differentiate

Managing IT from the business perspective

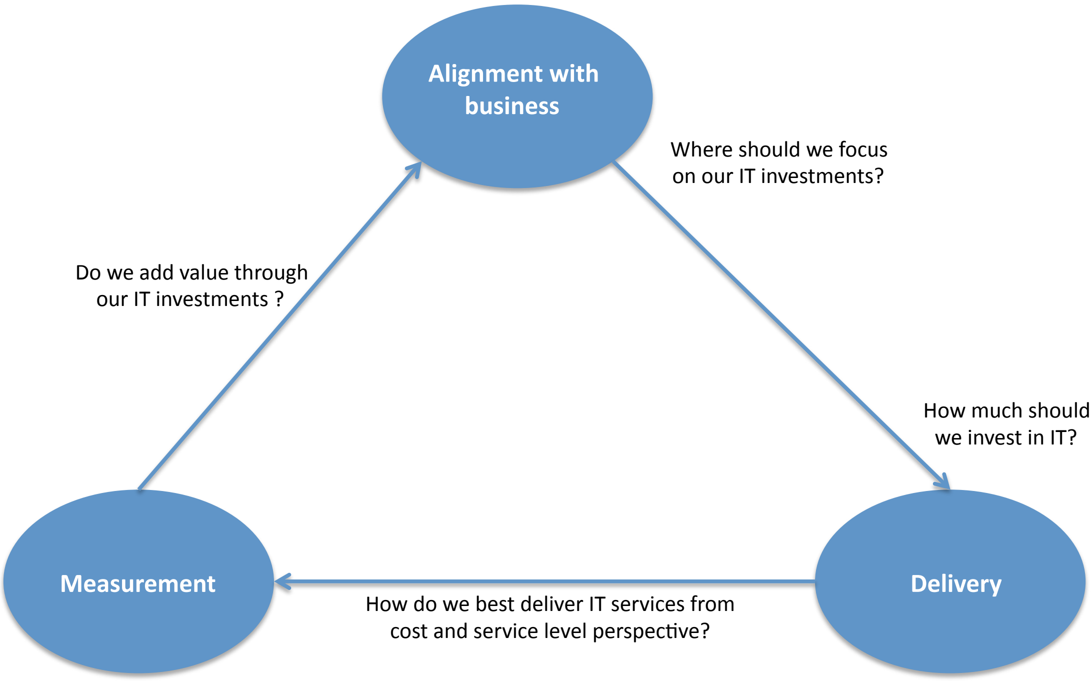


Figure 5: *Integrate the IT and business organisations to create a true partnership*

a company's offerings and improve business performance. In other words, IT becomes at the core of the business.

- **Upgrade digital capabilities quickly:** Digital capabilities are not about supporting the best practices, but implementing the next practices and a truly digital IT organisation is very different from traditional IT organisation. It requires new modes of operation. Different standards of project and portfolio management are also required with more flexibility in demand management and budgeting methods. And, there is a need to leverage partners within the company's ecosystem to ensure continuous innovations.
- **It isn't just people, process and technology:** In the digital business, assets are not the people, processes and technology, but the capabilities of the people in the business, faster innovation and swift implantation of next practices. But, how do companies build these capabilities? In our experience, what works is adopting a three-pronged action of hiring new talent, building new capabilities in existing employees and filling skills gaps. And crucially, it'll require a new breed of leaders both in business and in technology functions. Companies that are successfully leading digital transformation use these three pillars to reinvent their companies.

What does all this mean for CEOs?

CEOs need to take a more sophisticated approach to managing risks in their IT operations. Traditionally, most large companies have procured their technology and related services from large IT vendors, believing them the safest bet – but in today's business environment, that isn't necessarily true: just look at what happened to once mighty Enron, WorldCom, MCI, Digital Equipment, Compaq, and Parmalat. Moreover, many large vendors have become outsourcers and cloud-based IT suppliers, whose primary aim is to carve out technology and back-office functions from companies, lock them into long-term contracts, and subsequently make them pay over the odds when their business changes. Many companies have failed to recognise this new risk. Prudent CEOs need to steer their CIOs and supply chain organisations toward small and independent technology service providers, who are more likely to act in the true interests of their clients by helping them to deliver efficiency and operational excellence.

The rules of the IT game have changed. Given the speed of change in the business environment and impact of globalisation on almost every sector of the economy, together with the rapid changes in technology, there is no room for CEOs to abdicate responsibility for IT. Today, IT plays a role in most aspects of a company's business – without IT most companies will simply grind to a halt, never mind competing in the global economy. Companies' strategies will remain ineffective until leaders acknowledge that without IT they're ineffective too. Instead of delegating down the ladder, it is high time that CEOs take responsibilities for IT and make IT their business.

NOTES

1. Peter F. Drucker, "The Theory of the business", Harvard Business Review, September-October 1994.
2. Nick Bloom, Stephen Dorgan, John Dowdy, Tom Rippin, and John Van Reenen, "Management Practices: the impact on company performance", CentrePiece Summer 2005, London School of Economics.

About the author

Sukhendu Pal is the CEO and Managing Partner of Sirius & Company.