



## How information technology drives an organisation to its default future

In a recent [article](#) my colleague David Trafford argues that every individual, organisation and even country has a *default future*. This is the place they will end up if no action is taken, other than that currently planned. He also argues that an organisation's default future is ultimately determined by a small number of driving forces.

In this article I'll focus on one of these driving forces: technology – particularly information technology. I'll argue that this driving force has three dimensions, each of which needs to be fully understood if informed choices are to be made on how best to navigate an organisation to an *improved future*. The three dimensions are:

### 1. Legacy of past technology choices

For many organisations it's difficult to think about change without considering the IT implications. In information-intensive businesses, like banking and insurance, the systems have become so complex that the effort and risk of making changes is significant.

Complexity is not the only issue – as many of the systems still in use today were designed to support business operating models of the past. This resulting lack of alignment between the architecture of the installed base and the desire of the business to operate in different ways can significantly constrain future choices.

### 2. Impact of emerging technologies

The reality is that most new technologies like RFID, beyond the iPad, cloud computing, near field communication, flexible screens, TV everywhere, voice control, second screen experiences, 3D printing and HTML5 are already present. The question, therefore, is what impact will they have on an organisation's default future and how can their application lead to an improved future?

### 3. Mindset and competencies

Most IT organisations are successful most of the time. They keep the systems running, fix problems when they arise and manage the risks that come with a complex installed base. Meeting these expectations develops a mindset and a set of competencies that are appropriate to the current context and act as a force driving an organisation to its default future. Should the context change – for example moving to an



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## Legacy systems are preventing one in four UK businesses from achieving agile IT benefits

A recent survey of 500 technology and business executives in the UK showed that legacy systems are causing a number of cost and flexibility issues. Almost half (45 percent) of respondents said that they need to modernise or replace legacy systems that are impediments to rapidly and flexibly meeting changing user and customer needs.

Other highlights of this [research](#) conducted by Accenture shows:

- Over one-third (35 percent) said they were being held back by current infrastructure.
- More than half (66 percent) forecast that up to 30 percent of their IT budget is expected to support legacy systems over the next two years.
- Four-fifths of organisations do not have a fully developed application retirement roadmap.

The report concludes that CIOs face some tough choices about what to do with their legacy infrastructure and applications portfolio.

## By 2015, 80 percent of the world's data will be uncertain

One of the technologies that is fundamentally changing the way we manage businesses and public services is analytics – the use of technology to bring data and sophisticated algorithms together to inform better decision making.

While analytics – or as some prefer to call it Big Data – is not new, the growth of uncertain data presents particular challenges and opportunities. In their [2012 Global Technology Outlook](#), IBM predicts that by 2015 80 percent of the world's data will be uncertain. The sources of uncertain data include ambiguities found in social media, imprecise data from sensors and imperfect object recognition in video streams. IBM argues that in order to

improved future – a new mindset and competencies will be needed.

### **Aligning technology choices to an improved future**

One of the most effective ways of making technology choices so that they are aligned with a target improved future is to get the business to define how it wants to operate through a small number of guiding principles. These principles then create a context within which technology options can be explored, their future legacy implication assessed and choices made.

### **Role of the CIO**

If technology was a commodity, with no downstream legacy implications, then it could be argued that there is no need for a CIO.

As this is clearly not the case the CIO needs to exercise leadership by ensuring that technology choices are not made that will lead the business to an unacceptable future. CIOs need to keep their business and technology colleagues focused on making choices that lead to an improved future.

If you would like to read my full article in which I give examples of how to define future technology choices in business terms, click [here](#).

I welcome your thoughts.

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extract the value from uncertain data they need to develop capabilities that are not found in most organisations.

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### **About Formicio**

We believe that all organisations, groups and individuals have a default future. This is where they will end up if no action is taken, other than that currently planned.

We help leaders understand the default future of their organisation and support them to put in place the necessary conditions that will lead to an improved future.

Using innovative experiential learning techniques, we also develop the organisational competencies needed for the transformed organisation to operate to its full potential.

More details can be found on our [website](#).

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### **Parting thought**

“The imperatives of technology and organisation, not images of ideology, are what determine the shape of economic society.”

John Kenneth Galbraith, 1908 – 2006  
Canadian-American economist