Every year, an assortment of forecasting models covering the upcoming 12-36 months is published; these models cover a range of subjects from consumer trends to the state of IT in the business. Some sound more like news headlines than practical, actionable guidance for business leaders and technology professionals. IDC’s FutureScape is a departure from these models. It is comprised of a set of “Decision Imperatives” designed to identify a range of pending issues that CIOs and senior technology professionals will confront within the typical 3-year business planning cycle, and for which a decision will be required — even if that decision is not to act.
Decision Imperatives provide guidance on how important areas of technology are trending — based in part on data from IDC surveys — along with focused guidance on the direction that enterprises are taking on a range of challenges from security, service development, and talent management to the pillars of IDC’s 3rd Platform — big data and analytics (BDA), mobility, social business and cloud services.

Decision Imperatives are the consequences of external drivers that include political, economic, social, technological, environmental, legal and business factors that are compelling businesses to react and adapt. These key drivers are the external factors that make it likely that certain Decision Imperatives will take place. Also, each Decision Imperative is linked to specific areas of IT impact, which, in turn, point to strategic and tactical steps CIOs can take to address the technology side of the business changes that the drivers are compelling. IT impact should be considered not just as technology issues, but also the consequences for the enterprise’s people, processes and leadership and their vision of the future.

The IDC FutureScape can be used to evaluate individual areas of IT impact, but it can also be used to frame the direction of IT strategy for 12-36 months. It provides focused recommendations across a time horizon that extends from the near future to the next budgeting cycle and beyond (e.g., 24 months or more). It provides direction on what enterprises can do to address the implications of the Decision Imperatives, but leadership should assess the relevance of the direction their peers and competitors are taking relative to their own plans.

Situation Overview

A Random Walk through the Future?

Some IT forecasts are intended to point to future directions for a range of subjects that have the potential to disrupt business and IT strategies. Without a connection to a practical and sustainable methodology for developing predictive insights, however, valid forecasts might be dismissed by business and technology leaders as relying too much on one expert’s individual knowledge or imagination.
Figure 2 illustrates the CIO or CxO dilemma in interpreting the future direction of IT.

FIGURE 2
A Random Walk through the Future of IT

Without context, all forecasts appear to point forward, but the road forward very quickly breaks off into many paths, depending on how a variety of external attributes in the enterprise ecosystem evolve – including markets, customers, competitors, regulations and so on. The complexity of analyzing future strategic directions while making budget-bound tactical decisions also means correlating near-term risk/return calculations with much longer term potential outcomes.

Unfortunately, many forecasting models don't provide year-over-year consistency in their methodology, resorting instead to a practice of throwing out a set of whatever their authors consider to be that year’s issues du jour. A more useful approach for executives is to have a sense of the direction that businesses are going as a response to external change, based in part on expert analysis but also on industry intelligence derived from surveys and market data.

What is an IDC FutureScape? How is it Different?

The IDC FutureScape is a collection of guidance points on a number of key IT management areas that are formed from IDC research, data and expertise. The IDC FutureScape is a strategic planning tool designed exclusively for technology professionals in enterprises that are making critical investments in IT to further their business strategies. This audience includes CIOs, IT directors, IT managers, and IT architects and IT buyers from within business lines and functions.
The IDC FutureScape methodology is designed to create actionable recommendations that are linked to key ecosystem drivers and to data from IDC customers across many industries. It represents opportunities for future action in terms of emerging external trends that are shaping the business’ response while anchoring its perspective in the collective wisdom of IT executives who are dealing with real-world issues that include security, architecture, organization and the full range of IT management.

FIGURE 3
The FutureScape Process: An Inside-Out, Outside-In Enterprise View

Each IDC FutureScape takes a predefined set of factors into consideration in shaping its recommendations.

- **Key Drivers:** Important external trends (What factors are most significantly driving a particular technology space or market area?)

- **Decision Imperatives:** What will happen, given these trends (With these factors identified, what is likely to happen within this technology space or market area in the foreseeable future?)

- **IT Impact:** What this means for IT (If these things happen, what will be the impact on IT?)

- **Recommendations:** Actions to take (Given the expectation about the future, what should IDC’s clients do?)

Figure 3 illustrates the dynamic tension between Drivers and IT Impact. They are continuously updated as conditions change — that is, by leadership’s ability to sense and respond.

Source: IDC, 2014
Key Drivers

Key Drivers are the external factors that make it likely that certain Decision Imperatives will take place. Key Drivers include political, economic, social, technological, environmental, legal, and business factors that are compelling businesses to react and adapt. As Figure 4 illustrates, drivers are not outcomes. In combination, they are the key elements of a framework of forces that tend to shape, either as enablers or constraints, the strategic and tactical decisions of enterprise leaders.

In an IDC FutureScape, the analysis of Key Drivers is combined with data from a wide range of IDC sources to form the basis for strategic guidelines — Decision Imperatives.

Decision Imperatives

Ten Decision Imperatives are the core of the IDC FutureScape. Each one is composed of four parts:

» Decision Imperative, including expected timeframe for impact
» Key Drivers
» IT Impact
» Guidance

The structure of the statement includes a timeframe and proportional component, usually expressed in terms of percentage (%) or ratio. For example, in the 2013 IDC CIO FutureScape, the guidance on Enterprise Architecture was structured in this way:

By 2015, 3rd Platform requirements will drive 60% of CIOs to use enterprise architecture (EA) as a required IT tool to support continuous change and business innovation, but only 40% will deploy EA effectively.

FIGURE 4
Drivers are Not Outcomes

Traditional:
The Business Goes to the Market

Personal Service
Leverages Relationship
High Cost of Sales
Knowledgeable Salesperson
Company Controls Information
Customer Chooses From Menu

Emerging:
The Market Comes to the Business

Personal Experience
Virtual Relationship
Higher Cost of Marketing
Knowledgeable Customer
Customer Controls Information
Customer Chooses Channel

Source: IDC, 2014
By delimiting statements in this way, the IDC FutureScape reduces vagueness and reinforces the scope of change.

**IT Impact**

The IT Impact of each Decision Imperative is intended to provide more detail and direction on the implications of the change and how IT leaders can adapt to it. IT Impact has four key subject areas: Vision, People, Process, and Technology. Each is further broken down into its component parts, creating the opportunity to develop granular and focused impact statements for each area of guidance. For example, the ‘People’ category is comprised of the following sub-topics.

- Structure/Organization
- Sourcing/Staffing
- Talent/Skills Management
- Communications
- Accountability/Controls
- Measurement
- Rewards/Incentives
- Resource Integration (External/Internal)

In addition, there is an opportunity to identify ‘other’ aspects of People that leadership might need to consider.

**Do Individual Decision Imperatives Stand Alone?**

Yes and no. Each Decision Imperative is applicable to the area that it covers, but the IDC FutureScape set is intended to paint a broader picture of the trends and direction of enterprise IT. Each IDC FutureScape includes a graphic that positions all of the Decision Imperatives on a grid that illustrates how they relate to each in terms of three essential attributes:

- Time (in months) to mainstream (adoption)
  - 0-12
  - 12-24
  - 24+

- Organizational impact
  - Single Department or Business Unit
  - Multiple Departments or Business Units
  - Company/Industry

- Complexity/Cost to Address (represented as the size of the bubble in the graph)
How Far into the Future Do Decision Imperatives Apply?

It’s variable, but they generally provide guidance in the 12-36 month timeframe.

How are the IDC FutureScape Decision Imperatives related to business strategy?

The drivers that shape the IDC FutureScape are broad, macro trends and conditions that are external to the business but which have a direct impact on how business leaders shape their strategies. By reacting to those drivers, including IT and 3rd Platform related challenges, business strategy impels IT leadership to develop innovative responses.

Can the IDC FutureScape be used to set policy and/or strategy?

Yes, indirectly. Typically, a business leader or CIO would need to use more tools to take an IDC FutureScape Decision Imperative all the way to a project level – but the Decision Imperatives suggest outcomes that are indicative of what a broad number of CIOs will experience.

IDC provides a number of other tools (e.g., IDC MaturityScapes) that amplify the level of detail needed to fully formulate IT plans. The IDC FutureScape, by itself, can be used to identify the most critical areas that need to be considered in terms of IT strategy and planning.

This is a critical element of the modern CIO’s role, as the number and complexity of business-related IT issues is growing daily, often as a function of the enterprise’s adoption of technology that directly enables the processes and behaviors that IDC has identified as elements of the 3rd Platform: mobility, BDA, social business and cloud services.

Each of these areas has more granular management concerns attached to it. Figure 5 is an illustration of the challenges facing CIOs today in managing the complexity of these IT elements within the context of a set of new or emerging work roles.

FIGURE 5
The Emerging CIO Role

IT leaders will need to manage multiple strategic initiatives that may seem to be pulling in different directions at the same time.

Clowder (def): A herd of cats
Clowdermeister: Cat Herder

Core CIO Roles
- Personality – Skill Matching
- Social Integration
- Organizational Interfaces
- Service Portfolio Management
- Virtual Organization
- Customer Interfacing
- Security and Privacy

Source: IDC, 2014
Planning for the 3rd Platform and beyond is a challenge that encompasses managing existing 2nd Platform infrastructure (typically 70-80% of the IT budget) while actively developing the skills and management capabilities to embrace innovation in areas that have long been considered outside the domain of IT leadership (see Figure 6).

The IDC FutureScape is a tool to help IT and business leaders understand the dynamics of the 3rd Platform and the consequent changes to business architecture, information management, social workflows and a host of other key considerations. They are distinct from the traditional methods for guessing the future in that they include an assessment (in the form of drivers) on the precursors for it and the practical steps that can be taken to manage the changes that it implies. The IDC FutureScape is a superior way to frame options, prioritize investments, and develop a process for internal strategizing — enabling the enterprise to “see the future” and understand its potential disruptive impact on overarching enterprise goals.

Future Outlook

The writer William Gibson (Neuromancer, Johnny Mnemonic) said, “The future is already here – it’s just not very evenly distributed.” Winston Churchill said, “It is always wise to look ahead, but difficult to look further than you can see.”

![FIGURE 6](image_url)

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated Predictions</td>
<td>Data Driven Decision Imperatives</td>
</tr>
<tr>
<td>IT Strategy Reacts to Business Planning</td>
<td>Business Leadership Drives IT Strategy</td>
</tr>
<tr>
<td>3-5 Year Planning Horizon</td>
<td>Continuous Transitional Strategy</td>
</tr>
<tr>
<td>Tending toward Static Stability</td>
<td>Tending toward Dynamic Instability</td>
</tr>
<tr>
<td>Reliance on Internal Competence/Knowledge</td>
<td>Reliance on Service Delivery and Temporary Skills</td>
</tr>
<tr>
<td>Physical Presence</td>
<td>Virtual Presence</td>
</tr>
<tr>
<td>Hierarchical Organization</td>
<td>Networked Interfaces &amp; Roles</td>
</tr>
<tr>
<td>Process Driven</td>
<td>Interactive – React &amp; Learn</td>
</tr>
<tr>
<td>Discrete Organizational Functions</td>
<td>Integrated Business-IT Teams</td>
</tr>
<tr>
<td>Permanent Infrastructure</td>
<td>“Rented” Infrastructure</td>
</tr>
</tbody>
</table>

Source: IDC, 2014
IT forecasts are sometimes little more than fodder for party conversation, particularly when they’re couched in dramatic “end of the world” terms. While it is always difficult to predict what will happen when global social, political, and economic factors are necessary considerations, IDC believes that it is very possible to create a lens through which IT leaders can see the most credible potential future. In many cases, the trends will inspire questions about how the enterprise must adapt in order to survive, and from there, will point toward business/IT solutions. For example:

» What will be the impact on security budgets as global attacks on enterprise systems and software proliferate and increase in sophistication?

» How might the shifting of power from one geopolitical area to another affect the enterprise’s ability to anticipate the distribution of applications to new or emerging markets?

Recognizing the leading-edge drivers of business change will become as critical to IT leaders as it is for executives. The ability to draw a line between external drivers and their potential impact on IT strategy and policy will be one of the defining attributes of successful CIOs in the next 5-10 years.

**Essential Guidance**

IDC believes that the ability of executives to succeed in and adapt to a continuously changing IT ecosystem will require adopting a range of techniques and tools to frame their strategic insights and plans, including but not limited to scenario planning, program management, enterprise architecture, and IDC MaturityScape documents.

**In the short term (0-6 months)**

» Identify which IT management disciplines can best leverage the IDC FutureScape to greatest advantage

» Establish internal forums for discussing the implications of future changes in key management areas and begin to develop scenarios to anticipate which projects and programs have the best chance to be funded and succeed

**In the medium term (6-12 months)**

» Develop benchmarking programs to identify where the current organization is in relation to industry standards and future business expectations — including organization, process, infrastructure, leadership and risk/reward assessments

» Coordinate business and IT planning to identify the most promising investment opportunities
In the long term (12-24+ months)

» Integrate FutureScape reviews that engage all of the key management stakeholders (e.g., CFO, CMO, LOB) into an annual process of planning that does the following:

» Looks back 12-24 months to assess the accuracy of previous plans and identifies where opportunities for process improvement exist

» Looks forward 12-36 months to assess how key drivers have evolved in their ability to impact business and IT strategies

» Incorporates external and internal data sources (including surveys and benchmarks) into the process of developing future planning scenarios that identify the Decision Imperatives and IT Impact of the most critical key business drivers

Related Research

» IDC MaturityScape: Social Business, IDC #248527, May 2014
» IDC MaturityScape: Enterprise IT Transformation (EIT), IDC #248141, April 2014
» IDC MaturityScape: IT Security, IDC #247584, March 2014
» IDC MaturityScape: IT Strategy and Innovation, IDC #247432, March 2014
» IDC MaturityScape: Enterprise Architecture, IDC #247401, March 2014
» IDC MaturityScape: A Road Map for Optimizing 3rd Platform IT Value, IDC #247360, March 2014
About IDC

International Data Corporation (IDC) is the most experienced and most trusted IT advisory firm in the market. Our global team of 1,100 analysts assist businesses around the world in moving to the 3rd Platform of computing. Our IT advisory services not only advise on the technologies of the 3rd Platform (cloud, mobile, social and analytics), but also on how to effectively lead technology initiatives. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world’s leading technology media, research, and events company.

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