

Predicts 2012: Four Forces Combine to Transform the IT Landscape

Published: 9 December 2011

Analyst(s): Daryl C. Plummer, Peter Middleton

Four IT forces, IT consumerization and new technology styles are forcing IT organizations to see they can't control IT spending. They must actively manage technology investments inside and outside IT. Executives and IT leaders should read these reports before making 2012 IT investment decisions.

Analysis

Predicts 2012 Analysis

This Predicts 2012 special report highlights how the control of technology and technology-driven decisions is shifting out of the hands of IT organizations. New forces that are not easily controlled by IT are pushing themselves to the forefront of IT spending. Specifically, the forces of cloud computing, social media and social networking, mobility and information management are all evolving at a rapid pace. Business unit stakeholders often recognize the value of new technology before IT departments can harness it. In addition, emerging markets are growing rapidly in terms of technology expenditures and influence. Growing technology use and energy consumption around the globe have led to an increased emphasis on green technologies and power conservation within IT industries.

These technological evolutions in the workplace are largely happening despite the controls IT normally places on the use of technologies. The cloud offers new delivery styles and options that are industrialized in a value chain that renders on-premises IT systems and expertise as only part of the overall delivery of IT capabilities to the company. Social computing is allowing collaboration, and a shift of behavioral patterns of users and the communities in which they work. Mobility offers new access channels to applications and data, and at the same time provides end users with a wide variety of device choices. The combination of cloud, social computing and mobility can be used to increase geographic diversity and raise the productivity of virtual teams. Users expect to get access to personal, work, business applications and data from any device, anytime and anywhere.

Finally, the concept of "big data" is beginning to forever alter the relationship of technology to information consumption, as data coming from multiple federated sources and in structured and

unstructured forms must now be analyzed using new methodologies foreign to many IT departments. As in last year's report, to top it all off, IT organizations must respond to all these demands while balancing security against access, and continuing to meet the expectations of individuals who are more technology-savvy than ever before.

This transformation will not desist, and it demands that IT leaders reconsider and (potentially) rebuild IT's capabilities and approach to the consumption of IT. Our top predictions (see "Gartner's Top Predictions for IT Organizations and Users, 2012 and Beyond: Control Slips Away" and "Top Industry Predicts 2012: Industries Face Intensified Consumerization and Technology Disruption") focus on how the shifting role of IT will affect economies, governments, businesses and individuals.

Readers will find the predictions in this special report a good guide and support for the decisions they need to make about technology investments and the broader aspects of business strategy during the years ahead. With more topics, markets and industries covered than ever before, our 2012 predictions affect three macrolevel trends of huge importance to all:

- **Emergence of the nexus of four forces:** The convergence of cloud, social, mobile and information into a unified set of forces shaping almost every IT-related decision. See "Predicts 2012: Cloud Services Brokerage Will Bring New Benefits and Planning Challenges," "Predicts 2012: Cloud Computing Is Becoming a Reality," "Predicts 2012: New Considerations Influencing IT Procurement and Asset Management," "Predicts 2012: Information Infrastructure and Big Data," "Predicts 2012: The Rising Force of Social Networking and Collaboration Services" and "Predicts 2012: Plan for Cloud, Mobility and 'Big Content' in Your ECM Strategy." All this research and more recount the emergence of this nexus and the forces that form it. Additional complexity comes from the need to support users and employees from any screen, as noted in "Predicts 2012: The Success of Consumer Devices Will Rest on Delivering the Ultimate Experience." As IT organizations and business users evolve their strategies, they need to ask themselves how they will handle the nexus — whether in individual pieces, or as a unified phenomenon all of itself.
- **IT spending:** The movement of spending from the IT department to other parts of the business. See "Predicts 2012: The IT Services Journey Toward IT Industrialization Continues to Transform the Way Service Providers and Clients Engage," "Predicts 2012: Marketers Must Adapt, Differentiate and Innovate in Social CRM, SaaS and IMM," "Predicts 2012: Personal Cloud Will Reshape the Consumer Services and Applications Landscape," "Predicts 2012: Data Center Growth and the Impact of Cloud Computing on Energy Efficiency" and "Predicts 2012: Government CIOs on a Tightrope." This research covers a lot of landscape regarding the impact of limited IT budget growth and an increase in interest from the lines of business in evaluating IT-based solutions. Readers will find them helpful in evaluating how to deal with the movement of IT spending out of the control of IT and more into the control of different business units, while retaining IT's involvement in protecting the business from disruptive change.
- **Market transformation:** The transformation of entire markets brought on by new technology-based options. Research like "Predicts 2012: The Business Application and ERP Markets Are Changing Rapidly," "Predicts 2012: The IT Services Journey Toward IT Industrialization Continues to Transform the Way Service Providers and Clients Engage," "Predicts 2012: Mobile and Cloud Computing Set to Transform Enterprise and Consumer Security Markets," "Predicts

2012: Cloud Computing, Social Media and Mobile Technologies Will Disrupt Insurers," "Predicts 2012: Technology Innovation Starts a New Automotive Era" and "Predicts 2012: Emerging Markets are Changing the World of IT." This research indicates clear trends toward the transformation of industries and technology markets in ways that do not happen very often. Readers will benefit from reading a wide selection of research that makes transformation a practical reality.

As the relationship between "technology means" and "technology outcomes" becomes ever clearer, stakeholders of all kinds are gaining a sharper understanding of how technology decisions will impact the business, and are raising the bar in terms of expectations for success.

Because clients use Gartner's predictions to make better decisions, accuracy is critical. Our "hit rate" with predictions continues to be very high, but we also recognize that some will fail to pan out as we expect. In the same spirit of transparency and accountability that has been applied to our earlier Predicts special reports, we continue to provide a look back at our previous predictions — highlighting those that were accurate and those that were not. For each report with historical precedent, we review one "on target" and one "missed" prediction to expose why our assumptions were accurate or inaccurate.

Our 2012 predictions span 73 market, topic and industry areas, with more than 300 predictions in total. The complete list of reports is at the end of this overview.

How to Use These Reports

Our predictions are both broad and deep across the most significant areas of IT and the IT industry. As 2012 unfolds, track these predictions, and use them to frame the planning assumptions that will drive your business into the next decade. However, the way in which you use these predictions depends on your role:

- IT managers, a critical demographic for these predictions, must use them to prepare for the coming onslaught of risks and user demands. The response to these risks and demands are listed as recommendations throughout the reports.
- C-level executives should exploit these predictions to test new strategies and directions for their businesses as they contemplate the future use of technology to drive revenue growth.
- Strategists will take a broad view of all these predictions as a means of defining a strategic platform for the growth of the business. Whether they focus on internal issues such as security, or external issues such as social media, the landscape is shifting for individuals, businesses and IT organizations — all at the same time. Strategists will earn their salaries in the next few years by thinking strategically and acting with purpose.
- End users will find these predictions useful in examining the implications of certain predicted trends on their business activities. While the end user is not often the target of our predictions, all the predictions herald changes that will affect end users and their roles in companies and organizations.

- Vendors should use these predictions to guide their strategic investments in R&D, marketing and demand generation.

Gartner clients have come to rely on our annual predictions for input into their strategic plans and as a signal of potentially disruptive change. For most organizations, investment and business decisions throughout the next few years will likely be made against a backdrop of continued economic uncertainty and major technological disruptions. Getting ahead of these changes will be even more important than it has ever been in the past.

Top Predictions

"Gartner's Top Predictions for IT Organizations and Users, 2012 and Beyond: Control Slips Away"

"Top Industry Predicts 2012: Industries Face Intensified Consumerization and Technology Disruption"

Topic Predictions

"Predicts 2012: Client Computing"

"Predicts 2012: Cloud Services Brokerage Will Bring New Benefits and Planning Challenges"

"Predicts 2012: Application Development"

"Predicts 2012: Cloud and In-Memory Drive Innovation in Application Platforms"

"Predicts 2012: Cloud Computing Is Becoming a Reality"

"Predicts 2012: Opportunities for EA to Lead Business Transformation in Turbulent Times"

"Predicts 2012: IT Services Sourcing Strategies and Execution Demand Proactive Diligence"

"Predicts 2012: New Considerations Influencing IT Procurement and Asset Management"

"Predicts 2012: Business Intelligence Still Subject to Nontechnical Challenges"

"Predicts 2012: Skills Gap Biggest Challenge in Leveraging New Opportunities in Analytics and Performance Management"

"Predicts 2012: Data Management at a Tipping Point"

"Predicts 2012: A Maturing Competitive Landscape Brings New IAM Opportunities"

"Predicts 2012: Sophisticated Attacks, Complex IT Environments and Increased Risks Demand New Approaches to Infrastructure Protection"

"Predicts 2012: Sophisticated Attacks, Complex IT Environments and Increased Risks Demand New Approaches to Infrastructure Protection"

"Predicts 2012: Ramifications of the Transition to HTML5"

- "Predicts 2012: The Business Application and ERP Markets Are Changing Rapidly"
- "Predicts 2012: Organizational Politics Hampers, Gamification Motivates BPM Adoption"
- "Predicts 2012: Emerging Suites and SaaS Are Driving New Capabilities in Administrative ERP"
- "Predicts 2012: Business Continuity Management Maturity Takes Two Steps Forward and One Step Back Due to Technology and Cultural Changes"
- "Predicts 2012: Global Logistics"
- "Predicts 2012: IT and OT Alignment Has Risks and Opportunities"
- "Predicts 2012: Information Infrastructure and Big Data"
- "Predicts 2012: The Rising Force of Social Networking and Collaboration Services"
- "Predicts 2012: Application Integration Will Increase in Scope and Complexity"
- "Predicts 2012: CRM Customer Service and Support Stagers into the Posthuman Age"
- "Predicts 2012: Achieving a Business Focus on Sustainability, Energy, Performance and Technology"
- "Predicts 2012: More PaaS Vendors and More PaaS Confusion"
- "Predicts 2012: Cloud Computing and Event Processing Will Be the Key Advances in Application Architecture"
- "Predicts 2012: PPM Leaders Must Embrace 'The Next Normal' by Embracing Changes and Adapting"
- "Predicts 2012: Midsize Businesses Seek Technologies to Simplify Their IT Environments"
- "Predicts 2012: Supply Chain for Healthcare and Life Sciences"
- "Predicts 2012: Software as a Service Prompts Return to On-Premises"
- "Predicts 2012: Sales Cloud Applications Expand, but Costs Are Greater Than Expected"
- "Predicts 2012: Marketers Must Adapt, Differentiate and Innovate in Social CRM, SaaS and IMM"
- "Predicts 2012: Social CRM Remains an Immature Area"
- "Predicts 2012: Information Governance Programs Gain Traction"
- "Predicts 2012: Industrial and High-Tech Value Chains Look to Cultivate the Complexity That Provides Resilient Operations"
- "Predicts 2012: Mobile And Wireless Technologies Rise"

"Predicts 2012: Supply Chain Predictions: Talent, Risk and Analytics Dominate"

"Predicts 2012: IT Investments in the Retail Value Chain Grow to Manage Demand and Consumer Unpredictability"

"Predicts 2012: New Privacy Laws Bring Change, Not Certainty"

"Predicts 2012: Successful UC Deployments Depend on Defining Organizational Objectives and Understanding the Challenges"

"Predicts 2012: Plan for Cloud, Mobility and 'Big Content' in Your ECM Strategy"

"Predicts 2012: Competitive Advantage in IT"

Market Predictions

"Predicts 2012: Doing More With Less in Storage Has Never Been More Imperative"

"Predicts 2012: The IT Services Journey Toward IT Industrialization Continues to Transform the Way Service Providers and Clients Engage"

"Predicts 2012: Marketers Must Adapt to a World That Rewards Speed"

"Predicts 2012: Photovoltaic Solar Energy Faces Slower Growth and Intensifying Competition"

"Predicts 2012: Personal Cloud Will Reshape the Consumer Services and Applications Landscape"

"Predicts 2012: Managing Consumer Diversity"

"Predicts 2012: Data Center Growth and the Impact of Cloud Computing on Energy Efficiency"

"Predicts 2012: Embryonic Smart City Processes Point to Opportunities"

"Predicts 2012: The Success of Consumer Devices Will Rest on Delivering the Ultimate Experience"

"Predicts 2012: The Evolution From Print to Multimedia Publishing Accelerates"

"Predicts 2012: Mobile and Cloud Computing Set to Transform Enterprise and Consumer Security Markets"

"Predicts 2012: Emerging Markets are Changing the World of IT"

Industry Predictions

"Predicts 2012: Life Sciences"

"Predicts 2012: Technology Fuels Education on the Move"

"Predicts 2012: Government CIOs on a Tightrope"

"Predicts 2012: Cloud Computing, Social Media and Mobile Technologies Will Disrupt Insurers"

"Predicts 2012: Demand Sensing Will Be Key to Success and Growth in Consumer Goods Manufacturing"

"Predicts 2012: Financial Services Firms Must Shift to New Model for IT Development to Respond to Change"

"Predicts 2012: Changing Customer Needs Demand More Fluid Banking IT Systems and Processes"

"Predicts 2012: Finding Business Value at the Intersection of Social, Mobile and Interactive"

"Predicts 2012: Personalized Offers Through Mobile and Social but Will Struggle With Multichannel Execution"

"Predicts 2012: Embryonic Smart City Processes Point To Opportunities"

"Predicts 2012: Successful Governance, Risk Management and Compliance Require Clear Business Benefits and Business Skills"

"Predicts 2012: Product Design and Life Cycle Management"

"Predicts 2012: Healthcare Delivery Organization CIOs Must Navigate an Ocean of Changes"

"Predicts 2012: U.S. Healthcare Payers Must Focus on Business Models, Consumer Outreach and Analytics"

"Predicts 2012: Technology Innovation Starts a New Automotive Era"

"Predicts 2012: Product Support Market Will Weather the Cloud Based Storm and Emerge Driving Value-Management Review"

[More on This Topic](#)

This is part of two in-depth collections of research. See the collections:

- [The Nexus of Forces: Foundational Research for the Technical Professional](#)
- [The Nexus of Forces: Social, Mobile, Cloud and Information](#)

GARTNER HEADQUARTERS**Corporate Headquarters**

56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters

AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations,
visit <http://www.gartner.com/technology/about.jsp>

© 2011 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. or its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. If you are authorized to access this publication, your use of it is subject to the [Usage Guidelines for Gartner Services](#) posted on gartner.com. The information contained in this publication has been obtained from sources believed to be reliable. Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information and shall have no liability for errors, omissions or inadequacies in such information. This publication consists of the opinions of Gartner's research organization and should not be construed as statements of fact. The opinions expressed herein are subject to change without notice. Although Gartner research may include a discussion of related legal issues, Gartner does not provide legal advice or services and its research should not be construed or used as such. Gartner is a public company, and its shareholders may include firms and funds that have financial interests in entities covered in Gartner research. Gartner's Board of Directors may include senior managers of these firms or funds. Gartner research is produced independently by its research organization without input or influence from these firms, funds or their managers. For further information on the independence and integrity of Gartner research, see "[Guiding Principles on Independence and Objectivity](#)."