

A Generational Change in ERP

Exploring How Technology Is Transforming the
Application and How Organizations Work with It

Benchmark Research Program



PROSPECTUS



Table of Contents

Research Overview.....	3
Research Background	4
Research Focus.....	5
Research Objectives	6
Scope and Methodology	7
About Ventana Research	7



Research Overview

The enterprise resource planning (ERP) system is a pillar of nearly every company's record-keeping and management of business processes. It is essential to the smooth functioning of a business's accounting and finance functions. In manufacturing and distribution, ERP also can manage inventory and logistics. Some companies use it to handle human resources functions like tracking employees, payroll and related costs.

Partly because of their centrality, ERP systems have been slow to evolve in the years since they emerged in the 1990s. Indeed, the technologies shaping their design, functions and features were largely stagnant until recently. As a reflection of this stability, our Office of Finance benchmark research found that in 2014 companies on average were keeping their ERP systems one year longer than they had in 2005.

Now, however, ERP systems have begun to change, facilitated by the growing availability of a wave of new technologies such as cloud computing, collaboration, mobility, analytics, planning, in-memory processing and big data, all of which have the potential to address shortcomings in today's systems as well as the most common complaints about this software category.

The users of ERP systems are changing as well. The demographic shift taking place in the ranks of senior executives and managers, from the baby boom generation to those who grew up with computer technology, is resulting in a demand for software that is both more capable and more usable. Increasingly, to be competitive ERP systems will have to deliver four major improvements: expanded capabilities, lower total cost of ownership, a better user experience and greater flexibility and agility.

Despite these growing demands concerning how it works, though, buyers' expectations for what ERP software should do haven't changed much. In our opinion, they should. Companies' selection processes are driven largely by their experience with the last generation of products and the pain points they experienced in using them. They view these systems as notoriously time-consuming and expensive to set up, maintain and modify. Indeed, in our ERP research only 21 percent of larger companies said that implementing new capabilities in ERP systems is easy or very easy while one-third characterized it as difficult.

What is uncertain — and what this research will address — is whether companies will continue to view ERP solely as a system for record-keeping or will come to see it as a strategic tool for enterprise resource planning and more effective management of business processes.



The application of two particular technologies, columnar database technology and in-memory processing, is beginning to revolutionize the performance of ERP and financial management systems in a way that makes possible a new approach to accounting. Organizations are now able to quickly generate a trial balance and monitor the financial condition of the entities recorded in the system in near-real time.

This wave of new technologies will transform the nature of accountants' work, extending automation and thus freeing individuals from having to perform rote tasks. It will lead to more streamlined and standardized processes, support data integrity to eliminate the need for checks and reconciliations and strengthen governance and control. Technology will take the robotic work out of accounting jobs, allowing the finance and accounting organization to play more of a forward-looking advisory role. Technology won't eliminate jobs in accounting so much as it will change the role and skills requirements of accountants.

Research Background

For several years Ventana Research has focused on the accelerating pace of technology change affecting the design of ERP systems. These advances include the cloud, in-memory computing, analytics and planning, mobility, in-context collaboration and user interface design. While ERP vendors now nod toward these innovative technologies, our research and conversations with ERP software users indicate that they are just beginning to make their way into product design and thus far have had little impact on the market.

Then there's the buzz about "consumerized" business applications — fresher designs that reduce screen clutter and streamline work. Support for mobile devices has become common, but gestures and other new user interface conventions that expand and improve the ways in which users can interact with their system are likely future capabilities, especially as touch screens become common on all devices. Conversational computing is still in its infancy. Notifications and approvals increasingly will be accessible from wearable devices and smart watches. Since all business is collaborative, we expect in-context collaboration capabilities to evolve rapidly to improve productivity in every business function, enabling greater responsiveness to customers and speeding the completion of core processes.

But while buzz may be a motivator and a guide, it is not an adequate basis for investment decisions in business system design. And at the moment it's not clear what preferences users or the executives who will be decision-makers in technology purchases have, whether for consumerized ERP, for more productive user interface design or perhaps for a design that emphasizes collaboration.



Our research shows that resistance to cloud-based ERP is ebbing and cloud ERP vendors have been growing faster than on-premises vendors. Nonetheless, the cloud still has a small share of the installed base. This research will gauge the extent of cloud penetration and attitudes toward future investment.

In-memory processing promises a much more interactive experience while big data management will underpin the sophisticated use of analytics to develop actionable insights, alerts and performance measurement. Mobile technologies, ubiquitous among the generation now entering the workforce in the form of smartphones and tablets, will drive demand for the availability of on-the-fly analytics and dynamic planning to enhance forward visibility and deepen situational awareness to guide transaction processes. Similarly, the internet of things (the network of physical objects embedded with electronics, software, sensors and connectivity to enable objects to exchange data with each other) extends the possibilities for expanding the ERP system's capabilities in automating the handling of physical assets and the associated record-keeping, analysis and process management.

Unlike in the shift from mainframe financial and manufacturing management applications to client/server ERP, this time the larger incumbents will be less vulnerable to disruption. One reason is that their large maintenance revenue streams provide greater development firepower compared to upstarts. Nonetheless, all vendors will be challenged in the market if they fail to evolve to meet the expectations of a new generation of executives and users. Smaller ERP vendors, whether primarily on-premises or cloud-based, will need to invest in enhancing their software at a faster pace than has been necessary over the past decade.

Research Focus

This benchmark research will identify, explore and quantify key aspects of the future of enterprise resource planning. These aspects will include the finance department's mandate within the organization; how well or poorly it is performing and why; the challenges it faces; and the role of people, processes, information and software in addressing those challenges. The research will investigate what types of organizations are interested in investing in improvements to ERP, why they are interested and, with respect to software and technology, who in the organization makes the purchase decisions, on what time frame and using what selection criteria. It will explore the value of more effective processes, and it will assess the maturity and performance of the processes, analytics, software and data environments in today's enterprise.

The benchmark research thus will deliver detailed insights into the thinking of executives and Finance to help understand key pain points and priorities for enhancing the



capabilities and performance of Finance. We will assess the partnership gap between Finance and the rest of the business and identify where financial executives must focus their efforts to be able to take a more strategic role in corporate management. We expect this research program to educate both customers and internal staff, to deliver business opportunities and to gauge the receptiveness of research participants to new technologies.

This research program will uncover the best practices innovative companies are using and how they intend to improve their performance in the coming years. It will examine the issues finance organizations face in managing day-to-day responsibilities, taking into account evolving expectations for their role and their visions of the future.

Research Objectives

This benchmark research by Ventana Research will provide a detailed picture of the current state and future direction of ERP. It will answer questions critical to the future of software for the ERP function. It also will provide predictive indicators to facilitate a deeper understanding of the planning for future software in this market. To do so, the research will explore the following issues:

- The proper role of ERP in the participant's organization compared to what it is today, including where changes can and should be made to functions and processes
- Specific initiatives undertaken by the finance organization over the past 18 months to change or enhance its role as a strategic partner to the rest of the business, including such areas as operations, sales, marketing and customer service
- Major challenges finance departments face and the degree to which they believe that technology can address them
- How well finance departments execute core functions, an exploration that will include contrasting the views of members of the finance organization and those who work in other parts of the business, as well as identifying the functions they prioritize for improvement
- Analytics and analytics-led processes at work in the finance organization and those that participants want added to enhance the strategic value of the department
- Responsibility for analytics in the organization
- The prevalence of a dedicated Finance IT function in organizations
- Plans for adopting advanced analytic techniques and impediments to their adoption
- Software currently used by the Office of Finance to support core functions and planned investments in new systems



- Availability, accuracy, adequacy and timeliness of the data used by Finance in core processes
- The use and misuse of desktop spreadsheets in finance departments
- Key considerations for software purchases, including preference for best in class vs. suites
- The current state of software evaluation and purchasing.

Scope and Methodology

This primary benchmark research will be led by Robert D. Kugel, SVP & Research Director of CFO and business research for Ventana Research. Our objective is to have qualified research input from at least 200 companies with more than 100 employees or annual revenues of more than US\$100 million at the levels of responsibility that are pertinent to this topic across IT and related business domains. The survey will be conducted in English. The sample will be qualified through the Ventana Research community and research panel and the specific groups that best represent the focus on product information across the levels of individuals in an organization. All qualified participants will receive a report of research findings in return for their participation (US\$12,000 value). Respondents also will have the opportunity to win additional incentives ranging from US\$10 to US\$100 in value.

About Ventana Research

Ventana Research is the most authoritative and respected benchmark business technology research and advisory services firm. We provide insight and expert guidance on mainstream and disruptive technologies through a unique set of research-based offerings including benchmark research and technology evaluation assessments, education workshops and our research and advisory services, Ventana On-Demand. Our unparalleled understanding of the role of technology in optimizing business processes and performance and our best practices guidance are rooted in our rigorous research-based benchmarking of people, processes, information and technology across business and IT functions in every industry. This benchmark research plus our market coverage and in-depth knowledge of hundreds of technology providers means we can deliver education and expertise to our clients to increase the value they derive from technology investments while reducing time, cost and risk.

Ventana Research provides the most comprehensive analyst and research coverage in the industry; business and IT professionals worldwide are members of our community and benefit from Ventana Research's insights, as do highly regarded media and



association partners around the globe. Our views and analyses are distributed daily through blogs and social media channels including [Twitter](#), [Facebook](#), and [LinkedIn](#).

To learn how Ventana Research advances the maturity of organizations' use of information and technology through benchmark research, education and advisory services, visit www.ventanaresearch.com.

The leadership team behind this benchmark research includes:

Robert D. Kugel, SVP, Research Director of CFO and Business Research

Rob heads up the CFO and business research focusing on the intersection of information technology with the finance organization and business. His research agenda includes the application of IT to finance and business process optimization — particularly continuous accounting and continuous planning; control systems and analytics; and price and revenue optimization. Prior to joining Ventana Research he was an equity research analyst at several firms including First Albany Corporation, Morgan Stanley, and Drexel Burnham, and a consultant with McKinsey and Company. Rob was an Institutional Investor All-American Team member and on the Wall Street Journal All-Star list. Rob has experience in aerospace and defense, banking, manufacturing and retail and consumer services. Rob earned his BA in Economics/Finance at Hampshire College, an MBA in Finance/Accounting at Columbia University and is a CFA charter holder. Rob can be found on [Twitter](#) at @rdkugelVR and on [LinkedIn](#) and can be reached via email at Robert.Kugel@ventanaresearch.com. Read his insights at <http://robertkugel.ventanaresearch.com>.

Mark Smith, CEO & Chief Research Officer

Mark is responsible for the overall business and research direction of Ventana Research and drives the global research agenda covering both business and technology areas. He defined the blueprint and methodology for improving business by using benchmark research to provide guidance across people, processes, information and technology. Mark is an expert in enterprise software and business technology innovations including: business analytics, big data, cloud computing, business collaboration, mobile technology and social media. Mark has held CMO, research and product development roles at research and software companies. Mark started Ventana Research more than a decade ago; he has worked in the software industry for 25 years leading innovations in research and technology. Mark was rated the 2011 software industry analyst of the year by The Institute of Industry Analyst Relations (IIAR). Mark is also ranked as one of the top ten technology influencers in 2012 by Human Resources Executive magazine. Mark can be found on [Twitter](#) at @marksmithvr, on [LinkedIn](#) and can be reached via email at mark.smith@ventanaresearch.com. Read his blog at <http://marksmith.ventanaresearch.com>.



Alan S. Kay, Senior Vice President, Research Management

Alan manages the development, publication and syndication of the company's research projects and other analytic and advisory materials. Alan is a veteran business journalist, newspaper and magazine editor and publication consultant who has written in and directed coverage of many of the areas addressed in Ventana's research agendas. He served as executive editor of Corporate Computing and editor of Knowledge Management, and his writing has appeared in BusinessWeek, CIO, CRM, Datamation, Field Force Automation, Forbes, Fortune, InformationWeek, Mobile Computing & Communications, Small Business Computing & Communications, the Washington Post and Wired. Alan has been a judge for the Industry Solution Awards, has spoken widely on knowledge management issues including delivering an American Productivity and Quality Center conference keynote address, and has chaired sessions at the Seybold Seminars, the Bay Area Knowledge Management Cluster and the Cyber Summit. Alan attended Brooklyn College of the City University of New York and Princeton and Yale Universities. Alan can be found on [Twitter](#) at @alankayvr and on [LinkedIn](#) and can be reached via email at alan.kay@ventanaresearch.com.

Katie Prince, Senior Research Program Manager

Katie manages research programs for Ventana Research. Before joining the company in March 2017, she taught composition and creative writing at Coastal Carolina University and North Carolina State University. Katie has worked as a journalist for newspapers including the Williamsport Sun-Gazette and Scranton Times-Tribune, covering courts, local politics, business and education. She also worked as an associate producer on a television production about unsolved crimes for which she won two Regional Emmy Awards, one for journalistic enterprise and another for best new nonfiction program. Katie received her BA from St. John's College in Annapolis and an MFA with a concentration in poetry from North Carolina State University. Katie can be found on [Twitter](#) and [LinkedIn](#) and can be reached via email at katie.prince@ventanaresearch.com.