



















## THE PATH FORWARD: RECOMMENDATIONS TO SIMPLIFY HARDWARE AND SOFTWARE ENVIRONMENTS

### SIMPLIFY EXISTING COMPLEXITY

**Build new applications for easy retirement.** During the requirements gathering phase, identify features and specifications that will make it easier to upgrade or replace applications as business needs evolve. Key elements include alerts and monitoring capabilities that signal low utilization and the ability to set application expiration dates.

**Fast-track retirement for technologies similar to recent retirees.** Once there is a clear view on what makes for a good retirement candidate, create two tracks for retirement. The first track is for technologies that do not adhere to the “ideal” criteria, in which case a full review may be necessary. For technologies that fit the retirement profile, create a more lightweight review process to accelerate removal and minimize bureaucracy without absorbing too much risk.

### INVEST IN FUTURE COMPLEXITY REDUCTION

**Understand organizational tolerance for server multi-tenancy.** Business partners are often wary of multi-tenancy, fearing that outages in one application can have broader impact. Assess where there is acceptable risk for multi-tenancy (e.g. non-mission critical applications) for targeted utilization of the private cloud.

**Enable dynamic management of workloads.** Establish controls to automatically turn off unused capacity to ensure maximum resource efficiency.

**Provide visibility into metered usage.** A key component of cloud computing is providing transparency into resource usage. Establish “showbacks” to provide visibility into the relationship between consumption and costs.

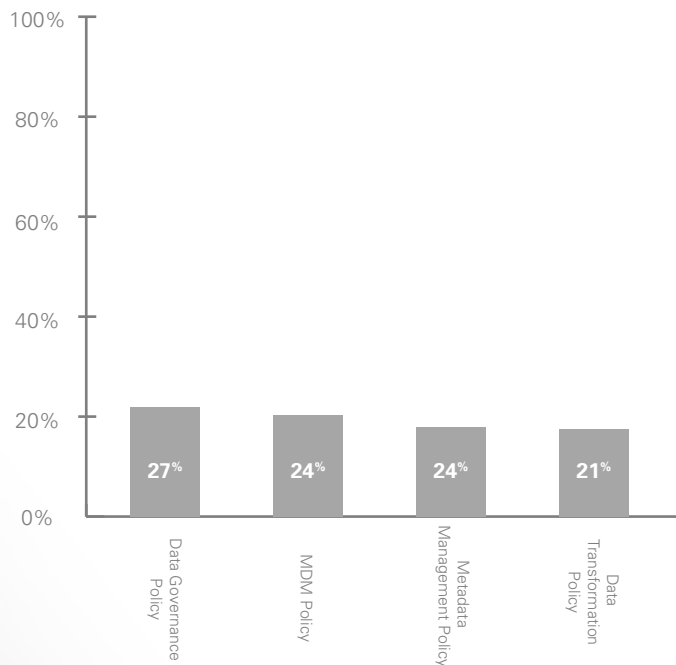
## BIG DATA READINESS

In an era of analytics, poorly managed information can undermine organizations' ability to draw intelligence from big data. Less than one-quarter of IT executives say that their information management policies are mature (i.e. formal, standardized, and adhered to) across four key policy areas:

- Data governance
- Master data management (MDM)
- Metadata management
- Data transformation

This is an urgent challenge for today's data-driven organizations, where lines of business are increasingly demanding faster, easier access to analytics.

### Organizations Reporting Strong Maturity



## THE PATH FORWARD: RECOMMENDATIONS TO SIMPLIFY INFORMATION MANAGEMENT

**Integrate line-of-business partners into policy creation.** Standards can't be imposed on the business by IT. Bring line-of-business partners into standards decisions and discussions to ensure that policies are relevant. Business partners are more likely to adhere to standards if they play a role in determining when data standards make sense and where flexibility is paramount.

**Leverage heavy data users to drive consensus on common enterprise data definitions.** Knowledge workers are the heaviest users of enterprise data. Look to them for guidance to ensure definitions are clear and consistent. To establish data standards create cohorts of knowledge workers that share similar data needs and manage similar processes.

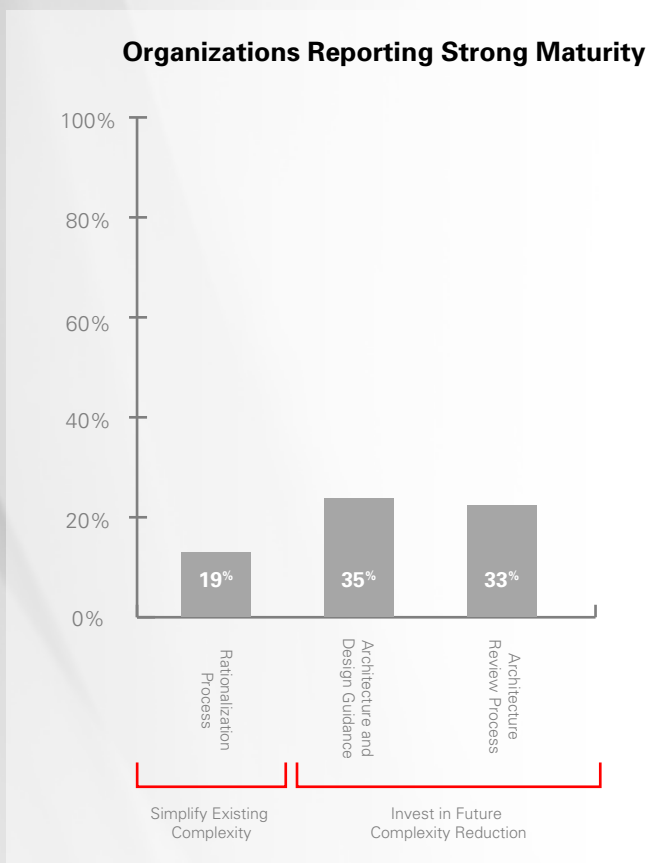
**Establish accountability for data.** Data is a critical business asset and needs to be managed as such. To establish clear accountability for data stewardship, define dedicated roles and responsibilities for monitoring quality and driving adherence to standards. Ensure business partner representation on stewardship boards and roles to ensure that standards and policies evolve with business conditions and priorities.

**Pragmatically approach Master Data Management.** MDM initiatives often fail due to the vast scope of the effort. Instead of pursuing MDM comprehensively, prioritize the most critical master data domains based on their importance to financial performance and staff productivity, and the number of systems the data touches.

**Federate your metadata model.** Create a federated metadata model to maintain consistency of core, enterprise metadata, while letting lines of business customize extended metadata for asset types that are used mainly (or only) by their LOB.

## IT GOVERNANCE HAS ROOM TO IMPROVE

Whereas de-cluttering the hardware and software environment helps rationalize the existing environment, IT governance can be used to minimize future complexity. IT must improve its ability to establish formal, long-term retirement strategies and technology lifecycle roadmaps.



## THE PATH FORWARD: RECOMMENDATIONS TO SIMPLIFY IT GOVERNANCE

**Improve roadmapping quality and usability.** Measure and monitor the two dimensions of roadmaps that have most impact on business executives: completeness and graphics quality. Establish minimum readability thresholds that all roadmaps must meet. Develop a simple checklist against which roadmaps can be objectively scored. Make sure roadmaps that don't meet the threshold receive clear guidance.

**Design a standards framework that is relevant to the business.** Create a standardized taxonomy that will allow for more or less flexibility depending on the need for agility in the related business process.

**Communicate criteria for standards application and exceptions.** Many project teams lack an understanding of how to apply standards to different project circumstances. Create a framework that communicates how standards should be applied and where exceptions can be allowed.

**Synchronize roadmapping with strategic and annual planning processes.** Disjointed enterprise, business unit, and IT planning processes can destroy the clarity of IT investment benefits and timelines. Understand precisely where roadmaps have a role to play in strategic and annual planning, and ensure that roadmaps are kept up-to-date and available to key stakeholders.

**Develop an architecture review board, but keep it focused.** Many architecture review boards attempt to review too many projects and thus end up failing to provide any tangible value. Establish an upfront questionnaire to determine the optimal role of the board for any given project.

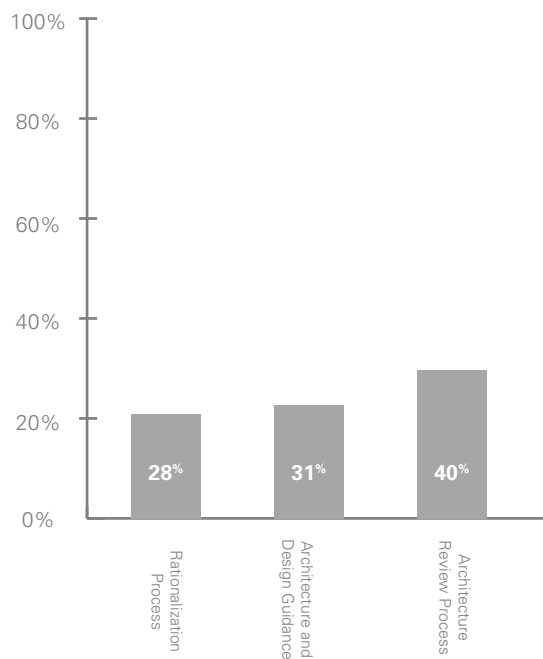
## INTEGRATION COMPLEXITY IN THE CLOUD ERA

Only one-third of respondents indicated they can accurately identify integration requirements during the early phases of a new project. This lack of early insight can often lead to a project taking longer, and costing more, than originally anticipated.

As adoption of Software as a Service (SaaS) grows, the need to identify these requirements early on becomes even more acute—particularly since vendor pricing typically does not include money spent on integration efforts.

When deciding whether to implement SaaS, organizations must identify integration requirements early in the process, in order to estimate the true, total cost of ownership.

### Organizations Reporting Strong Maturity



## THE PATH FORWARD: RECOMMENDATIONS TO SIMPLIFY INTEGRATION

### **Begin inventory of common integration needs.**

Critical to reducing integration time is having a library of services. Identify the most common services and establish standards for reuse. Start with identifying where there has been the highest volume of point-to-point integration, as this signals the greatest opportunity to remove complexity.

**Define criteria for integration service creation.** Ensuring reuse of integration services can significantly reduce duplicated efforts. However, clarity into which services have the greatest potential for reuse can be low. To identify the best candidates, look for integration services that map to foundational functions within the enterprise—such as finance—since they are likely targets for integration.

### **Organize and publicize your integration services library.**

A library of integration services is only valuable if it's widely used. Publicize the volume of reuse and document the amount of time saved in order to create incentives for adoption.

**Consolidate similar integration services to improve reusability and ROI.** Once a library of services has been created, look for similar services. Consolidate similar services based on volume of usage, possibly pulling the most valuable component parts of each service to build a more refined option.

## CONCLUSION

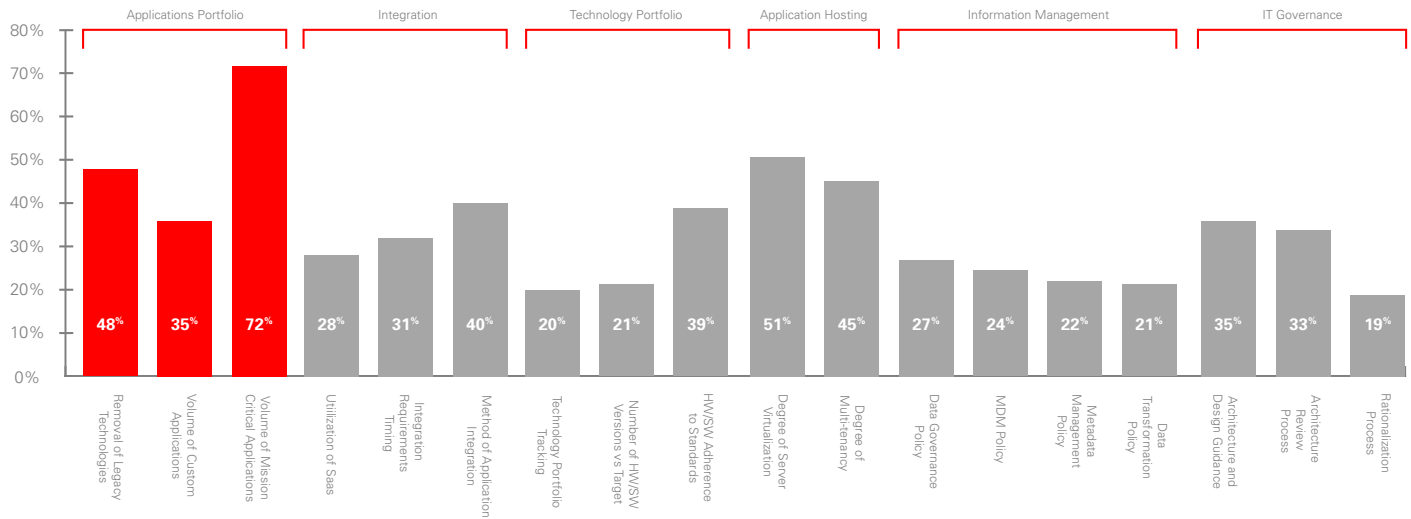
In the era of big data and cloud services, new approaches are needed to simplify the IT environment and reduce complexity. Integrated cloud offerings that include software, platform and infrastructure as a service are one approach to reducing complexity, as well as improving ease-of-use and deployment. A complete big data architecture to manage both structured and unstructured data can help companies reduce the high levels of complexity related to information management. Finally, an IT stack designed and built to work together offers a way to reduce the time spent on routine maintenance, integration and testing. Simplifying the IT environment can help organizations shift time, money and resources away from “keeping the lights on” and towards more strategic, growth-oriented projects.

**To rate your own level of IT complexity, take the survey:**

[oracle.com/goto/rate-my-IT-complexity](https://oracle.com/goto/rate-my-IT-complexity)

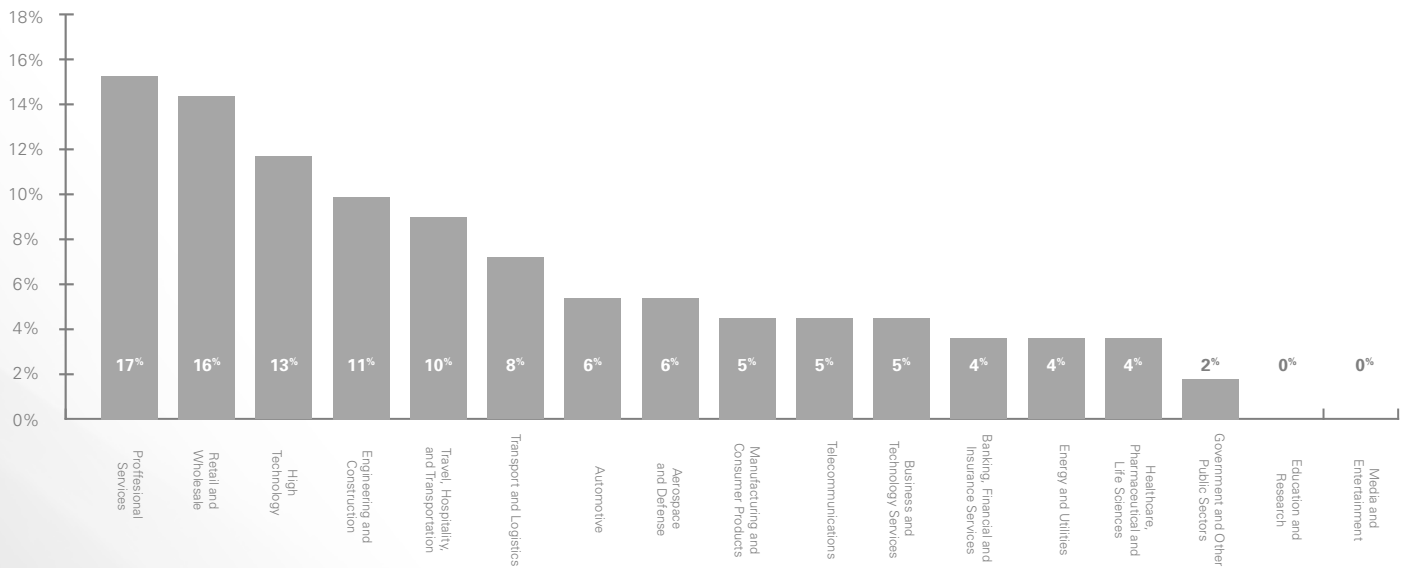
## APPENDIX

### Percentage of Organizations Reporting Strong Maturity



## HOW COMPLEXITY VARIES ACROSS INDUSTRIES

### Organizations Reporting High Levels of IT Simplicity, by Industry





## METHODOLOGY

Oracle conducted an online survey with 544 IT executives in January and February of 2014.

### Sample Demographics:

#### Function/Title:

CIO/CTO/IT Manager, 32%  
 Infrastructure, 19%  
 Enterprise Architecture, 13%  
 Applications, 7%  
 Other, 29%

#### Location:

North America, 40%  
 EMEA, 34%  
 APAC, 18%  
 Latin America, 8%

### Industries Surveyed:

Business and Technology Services  
 Banking, Financial and Insurance Services  
 Healthcare, Pharmaceutical and Life Sciences  
 High Technology  
 ISV (Independent Software Vendor)  
 Telecommunications  
 IT Hardware Vendor  
 Aerospace and Defense  
 VAR / System Integrator  
 Energy and Utilities  
 Engineering and Construction

Automotive  
 Transport and Logistics  
 Manufacturing and Consumer Products  
 Retail and Wholesale  
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 Media and Entertainment  
 Travel, Hospitality and Transportation  
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