

ROLE OF INFORMATION TECHNOLOGY IN BUSINESS ENVIRONMENT

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The business environment is changing at a dizzying pace, driven by globalization, business virtualization, outsourcing, and other factors. To compete, and indeed to survive, enterprises must increase their agility. They must be able to swiftly adapt business processes to accommodate changing business conditions. To drive business agility, they must also have information technology (IT) resources, including hardware, software, networks, processes and people.

Supporting changing business processes is not easy. Enterprises are becoming more virtualized as business processes are increasingly distributed across organizations. At the same time, the technology environment is shifting dramatically. The evolution of on-demand computing is accelerating the virtualization of IT resources.

Keywords: Business, IT resources, Globalization and Software.

INTRODUCTION

In today's do-more-with-less business environment, with increasing demands from customers, shareholders, and regulators, the IT organization is not only asked to work harder and smarter, but is being asked to take on the role of assuring the business. Businesses don't succeed if they can't measure their success against objectives, which must be prioritized and supported by an effective information infrastructure. Business governance demands that financial reporting is accurate and secure, that assets are effectively managed, and that employees, the most valuable but the most expensive asset the organization has, are enabled and productive. Yet there is a constant struggle to free up time to think and work more strategically, in the midst of today's challenges and fire-fighting mode. Technology is an enabler for more effectively managing the business, but does not solve the problem unless it is tied directly to business and governance objectives. Utilizing technology more effectively enables businesses to address many of the challenges they face everyday, such as how to improve commercial performance, increase business up-time, raise output per employee, improve customer service and satisfaction, reduce business and security risks, cut operational costs, comply with multiple regulations, and keep staff happy and motivated.

IT professionals need to transform their orientation from "managing boxes" to managing IT resources from a business perspective. They should understand the enterprise's business processes and how the components of the IT infrastructure support these processes.

These new solutions must provide a view of the business process topology — that is, the interrelationships of business processes. They must also identify which IT resources support which processes. Three key technologies have emerged in the evolution of IT systems management to permit management from a business perspective: configuration management database (CMDB), automatic discovery and service impact modeling.

KEY PERFORMANCE IN IT

Measurement of Growth and Value

Revenue growth against IT investment and utilization

Linkage between IT investment and business strategy

Cost Management

- Cost avoidance and cost reduction, budget management
- Re-use and sharing of services, infrastructure, architecture such as networks, customer databases, hardware, service desks, servers, middleware and security
- Adoption of standard IT principles
- Asset utilization, asset status and tracking

Risk

- Continuity and availability
- Access management
- Security Management
- Integrity and accuracy of information
- People risks, Staff turnover and retention

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- Disaster recovery processes

Communication

- Customer satisfaction and feedback
- Awareness and knowledge
- Service levels and availability

CONFIGURATION MANAGEMENT DATABASE

Implementing a CMDB is an important step in IT systems management. It can provide a company with a single source of truth about its IT assets. It acts as a central repository for the wealth of data gathered and maintained by system management solutions. Moreover, it ensures that all systems management solutions interoperating with the CMDB use consistent information. With a centralized and robust CMDB, IT Service Management (ITSM) processes can be driven across system management solutions with the necessary process integration, which is key to implementing IT Infrastructure Library (ITIL) best practices.

A CMDB should ensure the accuracy of data by automatically reconciling it across disparate data sources. A CMDB with reconciled data will be the cornerstone of delivery capability.

AUTOMATIC DISCOVERY

Automatic discovery is another key technology. The tools, which continually gather information to populate and update the CMDB, have become essential since it is no longer practical, because of the extreme complexity and dynamic nature of today's IT infrastructures, to manually gather and maintain configuration information to support ITSM best practices.

These automatic discovery solutions should be integrated with a CMDB. The advanced solutions discover physical and logical interrelationships in the IT infrastructure, such as the logical topology of SAP, J2EE, and PeopleSoft enterprise resource planning (ERP) applications. Also, a variety of standards, such as XML and business process execution language (BPEL), will enable the extension of these capabilities.

SERVICE IMPACT MODELING

Service impact modeling technology is another important piece of the puzzle. It permits modeling of the relationships among IT resources and business services. The technology can increase the automation of model creation, slashing the time and effort required to generate models. It will also permit automatic updates, dynamically changing models to reflect changes in the environments, resulting in faster time-to-IT-value creation and a greater ability to adapt to business needs.

THE NEXT STEP – KEEPING BUSINESS PROCESSES UP AND RUNNING

So what's the next step? As large-scale business processes are disassembled into smaller components, these process components are then distributed both inside and outside the enterprise. For example, Automobile manufacturers are disassembling their manufacturing processes and parceling out component processes to suppliers.

Enabled primarily by advances in technology, this evolution allows enterprises to focus on the areas in which they can add the most value, and rely on suppliers and partners to deliver the other components.

At the same time, IT systems are transforming into virtualized environments, enabled by the convergence of the Internet, wireless networking, on-demand computing architectures, and service-oriented software architectures. Virtualization offers far more efficient use of IT resources for lower cost, higher resource utilization, and greater ability to adapt to changing conditions.

EMPLOYEE PRODUCTIVITY

Employee productivity requires an infrastructure that allows them to access the appropriate information when and where they need it, and the ability to quickly resolve simple issues themselves. This increases satisfaction and reduces the pressure on the IT department, allowing service desk analysts to spend more time solving complex issues, and less time logging tickets and managing common problems. Systems designed to provide easy access to user information, sophisticated knowledge bases, and remote access, as well as seamless Incident, Problem and Change Management are helping to revolutionize the analyst's role. Role-based functionality provides customers, employees and IT service management personnel with access to the information they need at the time they need it. User-friendly, "smart" interfaces can be accessible through multiple formats

CONCLUSION

Instead of focusing on basic service provision and problem resolution, organizations need to start thinking of IT as an enabler of business objectives. Organizations must not only anticipate and address problems before they arise, they must identify and prioritize their business objectives and develop business processes and supporting information infrastructures that optimize performance of the business.

The evolving service-oriented software architecture is expanding the distribution of IT services across sources both inside and outside the enterprise. These rapid shifts are making it ever more difficult to manage business processes without IT resources. "Discovery and automation, diagnosis and resolution, and knowledge and learning are the fundamental principles that define the changing role of IT in assuring the future success of the business."

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