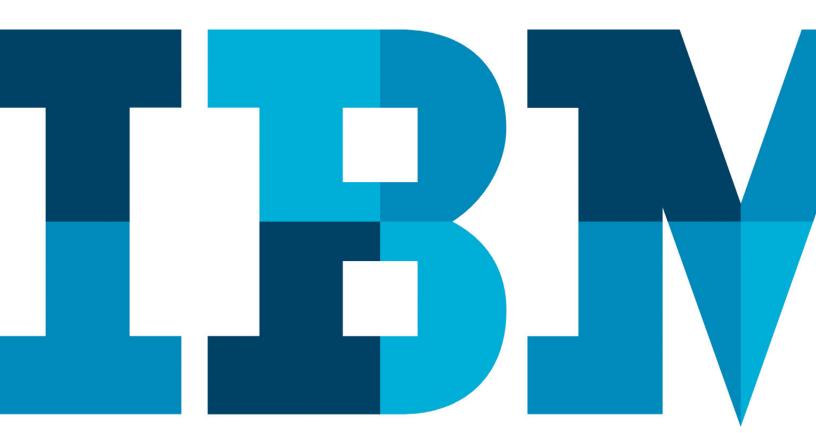
# **Business agility powers innovation, transformation and growth**

Turn change and complexity into your advantage!





Rising change and complexity are the new norms. Uncertainty from marketplace shifts and surprise disruptions is part of our business life. To manage this new reality, successful companies are turning to the power of business agility to drive the transformation and growth they desire by:

- Making better decisions driven by analytics and business rules.
- Taking a smarter approach to process and integration.
- Accelerating application, service and information delivery with service-oriented architecture (SOA) and extending reach to cloud and mobile technologies.

#### **Current market situation**

In this stagnant market, complexity, change and uncertainty are the new norms and have presented opportunities for businesses and entire industries to transform, grow and serve customers in new ways. In addition, in light of increasing pressures to do more with less, organizations are still looking for ways to grow—in spite of their customers' reduced spending. This reality is driven by the following three shifts.

**Shift 1:** Escalating expectations (from customers, prospects, patients and constituents) require businesses to maintain visibility and rapidly respond to an ever-changing environment.

**Shift 2:** Competitors and partners can arise anywhere around the globe. Nascent companies can be as formidable as established companies. Sourcing and partnering possibilities are almost limitless.

**Shift 3:** The velocity of change and emergence of new technologies require organizations to have more flexible processes and systems and to decentralize control, empowering more people to drive change.

The most forward-thinking companies will embrace constant change and escalating complexity, seizing the opportunity to adapt their core business functions to exceed customer expectations and harness new forms of competitive advantage.

## Change, complexity and uncertainty bring new challenges and opportunities

This new reality brings with it new challenges, however. Organizations must tap into information and activity throughout their entire network—including sensors, mobile devices, cloud technologies and social media—to serve customers better, resolve problems faster and operate more efficiently. They must be constantly innovating and optimizing business processes, adding both rigor and flexibility. They must rapidly address new market opportunities and customer expectations—delivering personalized services with speed, flexibility and integrity. Finally, they must break down organizational silos in order to embrace rapid, proactive change.

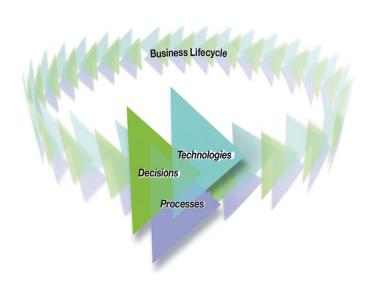
To deal with these challenges effectively, organizational leaders need to focus on bringing together information spanning applications and their extended business network—quickly, flexibly and securely. Organizations must streamline, automate and connect disjointed activities and processes to achieve operational dexterity, integration and control.

# To overcome complexity, IT and LOB leaders must work together

In IBM's most recent survey of CEOs from around the world, technology was identified as the second most important external force (following market factors) that will impact their business over the next three years. Clearly, LOB and IT managers know they need to work together to overcome complexity and thrive in the new norm.

Business and IT leaders must work together to answer pressing questions, such as:

- · How can we better align our IT investments to business priorities?
- How can we make faster, more profitable decisions in near real time?
- How can we enable business-led change by making processes more visible, integrated and flexible?
- How can we quickly develop, connect and deploy new scalable, cost-effective IT capabilities?



## Dynamic business networks require business agility

The new business environment favors companies that can innovate and execute faster within and throughout their dynamic business networks. Agility helps organizations rapidly adapt and respond to changes and to accommodate shifts in partner and supplier relationships, customer preferences and even broader market fluctuations.

IBM can help organizations achieve business agility by providing a prescriptive approach for scoping and implementing projects in the following areas:

- Business process management (BPM)
- Connectivity and integration
- Application infrastructure
- SOA
- Cloud computing
- · Predictive business service management
- Security
- Application lifecycle management
- Collaborative development and operations
- Business planning and alignment
- Application portfolio management (APM)
- Multiplatform development

"With the IBM business rules solution, we're automating wellness guidance, so a single specialist can provide 16 clients at a time with a cost-effective wellness experience.

As a result, we can boast 92 percent member retention."

-Jon Zerden, Chief Technology Officer, Athletes' Performance, Inc.

# Make better decisions driven by analytics and business rules

The dynamic nature of the economic environment presents a significant challenge to organizations seeking to ensure that their customer, partner and internal interactions are aligned with internal objectives and market demands. Add to that the proliferation of data being generated by systems and devices, and the challenge is magnified. But with challenges come clear opportunities—the 2011 IBM Global CIO Study showed that chief executive and chief information officers have a shared objective to turn data into useful information, information into intelligence and intelligence into better decisions. Why are better decisions so important? Making the right decision at the right time, based on the context of a specific situation, results in three important outcomes: increased profitability from each transaction or interaction; improved management of performance and risk; and ensured compliance with external and internal requirements.

How are organizations rising to meet these challenges and achieving improved business outcomes through the delivery of better decisions? Because of the reliance on information technology for employee productivity and operational efficiency, two types of software are being increasingly used to improve the quality of decisions within critical business systems: analytics and business rules. **Analytics** enables organizations to transform data into predictive insight and prescriptive recommendations that can be used for both discrete and repeatable decisions, as well as understanding and managing the complex relationships between business services and the supporting technology infrastructure. **Business rules** automate frequently occurring, repeatable decisions that control the actions of business systems.

IBM is helping organizations harness the explosion of data by using the power of analytics in many different scenarios, all of which, in the end, transform data into information that can be understood and acted upon. From data mining and modeling to reporting and monitoring, IBM has analytics to improve every function within an organization.

IBM software helps your organization make better decisions with analytics and business rules that can:

- Automate, govern and improve operational decision making for better business outcomes.
- Make more profitable decisions with real-time detection of opportunities and risks.
- Make informed decisions around rationalization, optimization and effectively managing the application portfolio.
- Increase decision accuracy by applying predictive analytics to data throughout the enterprise.
- Proactively manage business service, health and performance to reduce costly service degradations and outages.

Specific new or enhanced offerings leveraging analytics and business rules capabilities are:

#### What's new

#### IBM® WebSphere® Operational Decision Management V7.5

- · Combined business rules and business events management platform
- Business experts can author, maintain, validate and govern decision logic in a non-technical, intuitive language
- Enables reuse of decision services among processes and applications
- Event-pattern detection ensures immediate response to opportunity and risk conditions
- · Provides the appropriate business-decision response based on the context of a transaction or process

#### IBM Tivoli® Analytics for Service Performance (preview)

- New analytics-based product that learns the normal operational behavior of IT and network environments and provides predictive alerts on impending issues, leveraging existing infrastructure monitoring investments, both Tivoli and non-Tivoli
- Maximizes early warning of service and application issues, enabling mitigating steps to be taken to halt a service disruption from occurring
- Identifies problems before you know to look for them, catching problems the first time they happen
- · Reduces expensive, time-consuming false alerts and manual threshold settings

#### IBM Tivoli Business Service Manager V6.1

- · Enables business and operations teams to understand and manage the complex relationships between business services and the supporting technology infrastructure
- · New technology enhances role-based dashboards with easy self-service, drag-and-drop capabilities to customize a user's visibility into key service-health indicators, KPIs and business or IT detail required for their role or for tackling a current issue
- Provides service issues with business context and impact to support response prioritization and collaborative decision making

#### IBM Rational® Focal Point V6.5 (enhanced)

- Market- and business-driven portfolio management
- · Collaborative decision making for value optimization and cost reduction
- · Customer and stakeholder collaboration for improved agility and informed decisions
- · Value-based rationalizations to rebalance resource allocation, from keeping the lights on to driving innovation

## IBM Rational System Architect V11.4 (enhanced)

- · Improved business execution and results through realistic, concrete and repeatable ways to connect strategy to execution
- · Visibility, control and understanding of the enterprise to prepare and analyze for future evolution and change
- IT planning and optimization—identifying areas for consolidation and reuse

Decisions being made are also part of and impacted by broader processes. Agile organizations require processes and structures that give them real-time situational awareness into happenings inside and outside the organization and the ability to quickly respond in order to drive better business outcomes. Agile organizations are able to execute efficiently and consistently on the organization's vision.

To successfully translate your organization's vision into tangible results that are repeatable and easily understood, you must take a smarter approach to process and integration. This requires three fundamental capabilities to ensure success—business-led transformation; innovation, enabled through collaboration; and visibility into processes, applications, information and multiplatform systems.

# Enable business-led transformation by directly linking execution to strategy

Effectively executing on a business strategy requires deep engagement from the knowledge workers who hold the business expertise. This simply cannot be done by IT alone. Agile organizations are fostering collaboration between business and IT to ensure the business can quickly and easily make changes as

market conditions and organizational strategy dictate. The first step toward this change is the discovery of existing assets and their linkages to rapidly create an accurate view of the existing business and IT architecture. The next step is for business and IT to jointly evaluate and prioritize change proposals supported by solid financial analysis, driving objective decisions that are aligned with business needs. This provides the foundation for an enterprise execution road map that is monitored and optimized for changing business needs.

Also, because executing a strategy quickly must change how things are done, it is imperative that the supporting processes are addressed. Business process management (BPM) is the best way to ensure your processes supporting your business strategy are flexible and can be changed quickly. BPM enables teams to quickly collaborate on, document and manage their business processes, providing flexibility and agility to quickly and easily make many process changes without IT involvement.

# Accelerate innovation with an agile approach to software and service life-cycle management

As businesses are increasingly defined by the software they deploy internally and externally, business agility depends more and more on their ability to quickly deliver software and services to meet new business opportunities and competitive threats. In order to do this, businesses must overcome the traditional divide between their software development and IT operations organizations and adopt a collaborative approach to development and deployment which focuses on speed of execution without sacrificing quality.

IBM has been working with clients over the past few years to establish business-driven collaborative development and operations capabilities. These integrations cover a wide range of process integrations, including application planning, application performance testing, change management and end-user support. A core capability delivered by these integrations is deployment planning and automation, which allows development teams to work with operations ahead of application changes to plan how new and updated applications will work in production systems. Automating the deployment process lowers the chances of introducing errors, while the collaborative nature of deployment planning reduces the chances of encountering unforeseen problems with new application releases.

#### Gain insight from visibility into interconnected processes, applications, information and systems

You cannot improve what you cannot see. Visibility is a critical component for ensuring successful execution of your business strategy. With a fragmented infrastructure that supports multiple data sources, getting the right information to the right person at the right time is a huge obstacle. BPM provides that visibility into processes, information and systems to deliver the information needed to gain valuable insights. Application portfolio management provides the insight and control that is needed to handle strategic alignment, costs, value, overlaps, performance indicators and other metrics spanning the application flora.

This visibility must also carry forward into the software and services delivery life cycle where real-time information on progress, the discovery and reuse of available assets and the mapping of development efforts to business needs should be transparent.

#### Interconnect business processes throughout the enterprise

End-to-end business processes do not execute in silos. Many processes will execute spanning applications, organizations and enterprises in a broader value chain. Seamless process execution must integrate information and events from all of these sources, as well as the growing world of instrumented devices.

Connectivity and integration solutions from IBM help accelerate process improvement by bringing together information, applications and processes to speed innovation, increase collaboration and get clients closer to their customers. Organizations can reduce the time and complexity of integrating their enterprise, the cloud environment and their broader trading community. Connectivity and integration solutions from IBM make it easy to share services and extend business processes throughout the extended enterprise, regardless of platform, network and device, or data format.

IBM's smarter solutions for BPM provide your organization with the simplicity, power, visibility and governance needed to manage your highly dynamic and networked business environment. IBM Business Process Manager features a simple ready-to-use and easy-to-customize user experience, enabling all players in the process to participate easily. With built-in process monitoring and analytics and easy access to process metrics, business users can easily optimize processes through simulations and comparisons. IBM Business Process Manager is available on a wide range of platforms, including z/OS. IBM's solutions for deployment planning and automation enable development and operations to work in a new model for marrying your organization's application life-cycle management and IT service management processes to improve business responsiveness. Rational Automation Framework helps bridge this gap by enabling operations teams to accelerate the provisioning and deployment of applications, using repeatable processes to help reduce the risks and costs of agile delivery.

#### What's new?

#### IBM WebSphere Message Broker V8 (enhanced)

- · Integrate virtually anything: New support for .NET; Invoke .NET programs directly within WMB flows
- · Accelerated time to value: Faster installation, pre-built connectivity patterns, new industry-specific nodes
- · Improved management and error tracing: Audit and record capabilities to view, edit and replay data flowing through the broker
- · Bridge messaging and file networks (IBM Sterling Connect: Direct® and WebSphere MQ) with common routing and transformation

#### IBM Rational Automation Framework V3 (new)

- Powerful configuration management and deployment automation for middleware
- Forty-six percent increase in software deployment frequency and 40 percent decrease in errors in build and deploy1
- Rich UI experience and capabilities allow configuration capture and reporting, preventing configuration drift
- · Simplified pricing and packaging for improved value and low cost of entry for businesses of all sizes

#### **IBM Case Manager V5.1**

· Unify information, process and people to provide a 360-degree view of cases

#### IBM Business Process Manager Advanced for z/OS, V7.5

· Optimize business processes by providing visibility to all process participants, fostering greater collaboration and enabling continuous process improvement among distributed platforms and z/OS

## Accelerate application, service and information delivery and extend reach

The delivery of IT services is shifting rapidly. By 2015, USD534,000,000,000 of transactions will take place on mobile phones,2 65 percent of new enterprise workloads will be in the cloud, and 80 percent of the applications that have a transformative impact on the business will be compositions. These shifts present organizations with both an opportunity and a challenge. Agile organizations can take advantage of these shifts to get closer to their customers, respond more quickly to market demands and deliver innovative solutions. At the same time, these changes are dramatically affecting the characteristics of traditional IT workloads. To embrace the promise of mobile, cloud and end-to-end integration throughout the value chain, organizations must use an SOA and fundamentally reevaluate how they develop, provision and integrate IT services.

#### Get closer to clients by extending IT services to all platforms and mobile devices

In all industries clients and internal business users of technology are demanding greater access to core IT services. Existing systems, competing technologies and a new generation of applications have made it difficult to meet this challenge. Most IT organizations now have multiple tools, technologies and standards that they must support. At the same time, organizations must ensure consistent security to all access points and adequately address the spikes in request and data volumes that can originate from new mobile-application channels.

IBM can help clients extend applications to new channels by streamlining the development and deployment of multiplatform applications. Developers can improve productivity by as much as 40 percent by leveraging a modern collaborative and integrated

development environment to rapidly design, develop, test and deploy enterprise applications spanning multiple platforms, languages and technologies, including mobile devices. Extending applications to new channels outside of the firewall can also present security risks. IBM helps organizations to securely expose and transform application functions for mobile consumption. The mobile channel is also a significant driver of spikes in application traffic. With elastic scaling capabilities, IBM provides an in-memory grid for delivering a unique approach to high availability and self-healing, enabling organizations to ensure that services remain accessible during high-traffic periods. Moreover, IBM's elastic caching for connectivity and SOA provides improved system response times and enhanced throughput as redundant calls are stored for rapid access.

IBM Rational Developer solutions<sup>3</sup> make multiplatform application development faster, more efficient and less costly. They accelerate the development of your IBM System z®, IBM zEnterprise<sup>™</sup> and IBM Power Systems<sup>™</sup> applications, including traditional COBOL, RPG, PL/I, C/C++, Java and Assembler applications, web services and XML-based interfaces linking to the web. New productivity enhancements extend existing and attract new skills for building applications that span platforms, languages and technologies (yielding a 22 - 37 percent improvement in developer productivity). Flexible license management, enabling cloud provisioning of enhanced-unit-test environment (IBM x86 blade server support), reduces administration cost and application development MIPS (yielding a 50 - 80 percent reduction in host CPU usage). In addition, new middleware support (IBM DB2® V10) and enhanced debugging for z/OS, IBM AIX® and Linux environments have been added to the solutions.

"We have seen a full return on investment for the whole Lean Six Sigma transformation initiative in little more than 12 months. Better still, this new process represents a savings of more than 23 percent per year on the original approach."

-Pat O'Mahony, CEO, Irish Medicines Board

#### Accelerate application and service delivery in the cloud

Organizations, regardless of size or geography, are forced to deliver higher-value products and services at an ever accelerating pace. This is forcing organizations to rethink how to serve their customers and consume technology services. The promise of cloud computing enables companies to reinvent how they create new services and deliver them to their customers. Cloud computing removes the barriers that once constrained IT's potential, enabling organizations to deliver a set of services throughout their entire value chain without the constraints of time and place. Realizing this opportunity requires that organizations cultivate the ability to provision IT services in the cloud—rapidly and securely.

IBM helps you maximize the promise of the cloud by automating key elements of provisioning development, test, preproduction and production environments to accelerate application development and delivery—and reduce costs. At the same time, your organization needs to be consistently and rapidly deploy applications. IBM provides a secure appliance with intelligent management capabilities that make it easy for you to quickly dispense new application images into the cloud.

IBM Workload Deployer V3.1 enables you to easily deploy and dynamically manage middleware environments by delivering preconfigured, integrated patterns within private clouds. New enhancements make it even easier to create application images and extend support for Red Hat and AIX images.



## Drive innovation, increase customer satisfaction—integrate the value chain

Building and deploying new applications is not sufficient to deliver transformative results to the business. Business function now resides in multiple applications, in the cloud and throughout the broader trading network of partners and suppliers. Improving the customer experience and delivering innovative solutions requires seamless end-to-end integration of all of these entities and channels.

IBM helps you leverage a service-oriented approach to break free from the constraints of packaged applications, so that your organization can reliably share and deliver information broadly to provide fully integrated capabilities to your clients.

IBM WebSphere MQ V7.1 offers unmatched integration with guaranteed delivery of messages and files, regardless of platform, language or device. New enhancements provide a more flexible security model, extend publish-and-subscribe capabilities and simplify the process of implementing new versions of MQ.

#### What's new

#### IBM WebSphere MQ V7.1 (enhanced)

- Flexible configurations supporting high availability, load balancing and time-independent integration
- Enhanced publish-and-subscribe patterns for flexible integration
- Simplified upgrade path for MQ implementations

#### IBM Workload Deployer V3.1 (enhanced)

- Support images created by ICON, HV Image support for AIX/Power, mission-critical readiness, centralized logging, analysis tooling
- Dynamically manage elastic, scalable workloads, leveraging your existing virtualization environment
- Optimize for production application workloads, featuring policy-driven management of application qualities of service

#### What's new

#### IBM Rational Developer family V8 (enhanced)

- New productivity enhancements extend existing and attract new skills for building applications spanning platforms, languages and technologies (22 - 37 percent improvement in developer productivity)
- Flexible license management enabling cloud provisioning of enhanced-unit-test environment (x-86 blade support), lowers administration cost and reduces application development MIPS (50 - 80 percent reduction in host CPU usage)
- New middleware support (DB2 V10)

## Experience the difference

IBM understands that business leaders are not primarily looking for products and services but rather are looking for business outcomes, including increased output, higher quality, lower costs, increased revenue and increased market share. These business leaders recognize the dynamically changing nature of business ecosystems and the need to respond to significant events or proactively anticipate changes. To effectively address these challenges, IBM Software Services offers a broad spectrum of consulting services designed to help organizations drive growth and transformation as the business environment becomes more complex.

IBM's proven, repeatable, prescriptive approach helps you establish tangible, valuable outcomes for your business. IBM's experts can help with the critical first step toward increased agility,

profitability, and sustained competitive differentiation. IBM is a global team of highly skilled, deeply technical experts ready to help you become more agile by implementing IBM software solutions, including business process management, application integration, application development, service-oriented architecture, rules-based business decision management, cloud integration and more.

IBM Software Services can help you think big, start small and scale fast. IBM offers comprehensive delivery options and comprehensive training, and can help you ramp up through training, discovery workshops and QuickStarts. Or, IBM can accelerate your project's success through QuickWin Pilots and software solution assets. IBM can also provide complete business transformation through solution implementations and Centers of Excellence. And throughout your project's life cycle, IBM can continue to provide expertise through IBM on Demand Consulting and health checks.

And, as a lab-based organization, IBM consultants work with IBM software development from the very beginning of an emerging technology—and have the expertise to get you started the moment the technology is available. IBM's ties to the lab ensure the smartest and most advanced solutions available—allowing you to more easily manage change and uncertainty. ibm.com/websphere/serviceszone/

### The right partner makes all the difference

The way to get started embracing the dynamic network and to thrive in this new norm is to gain advantage by using the right partner in your approach. The market leader in strategy and change consulting, business process management, software development platforms and SOA, IBM has the deep process and industry expertise to help drive your dynamic network. Using best practices based on thousands of client engagements, extensive industry experience and market-leading products, IBM can deliver a road map to help you achieve profitable growth and enable business agility.

#### For more information

To learn more about how IBM can help you achieve new levels of business agility, please contact your IBM marketing representative or IBM Business Partner, or visit:

- ibm.com/business-agility
- ibm.com/websphere
- ibm.com/tivoli/
- ibm.com/rational/

Additionally, IBM Global Financing can help you acquire the IT solutions that your business needs in the most cost-effective and strategic way possible. We'll partner with credit qualified clients to customize an IT financing solution to suit your business goals, enable effective cash management, and improve your total cost of ownership. IBM Global Financing is your smartest choice to fund critical IT investments and propel your business forward. For more information, visit: ibm.com/financing



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- <sup>1</sup> Customer Case Study, Demonstrated Benefits of Software Delivery Automation, Hurwitz 2011
- Mobile Payment Advanced Technologies (NFC), Strategies And Future Of Remote & Proximity Payment In U.S—MarketResearch.com, 2010
- The Rational Developer family includes:
  Rational Developer for zEnterprise V8.0.3
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