

WHITE PAPER

FUJITSU INTERSTAGE BUSINESS OPERATIONS PLATFORM - IMPERATIVE

Fujitsu's Interstage® Business Operations Platform is a next generation business solution and integration platform. Based on the class leading Business Operations Platform from Cordys™, it is designed to truly support the way businesses operate, finally bringing the worlds of business and IT together.

CONTENTS

Introduction.....	2
The Emergence of Business Process Management	3
Unifying Business Operations Architecture, Lifecycle and Teams	5
Making total BPM a Reality	7
Conclusion	8

Interstage Business Operations Platform Imperative

Is your business ready for today? Get ready.

INTRODUCTION

The slow pace of change that IT is able to deliver can be more easily understood if we consider that most IT systems are built using methodologies and architectures that resist rapid changes rather than enable them. Furthermore, because they are often mission-critical, most enterprise-class software systems are built to deliver high levels of stability, scalability and reliability.

This quality-of-service profile is IT's top priority, since it must comply with service-level agreements. As a result, modifications to such systems, which usually require code and configuration changes, are risky, and must be thoroughly tested before they are deployed. Consequently IT is rarely perceived by the business as a partner and change enabler, and much more often is looked at as a roadblock.

TRENDS, OPPORTUNITIES, CHALLENGES

The pace of change in modern business is breathtaking. Globalization has "fattened" the world, leveling the playing field between the once mighty superpowers and the emerging third world economies. Agile competitors seize both global and regional market opportunities that previously could have been taken for granted by the established multinationals.

The Internet has accelerated this shift by making accurate information instantly available to all consumers, thereby placing downward pressure on prices of products and commodities. To survive and thrive in this whirlwind business environment is challenging. Yet smart companies are not only surviving, they are pulling ahead by rigorously focusing on sustainable competitive advantages. They innovate aggressively, and they master operational efficiency. Those businesses that fail to follow this approach will lag behind and get consumed by larger companies for market share.

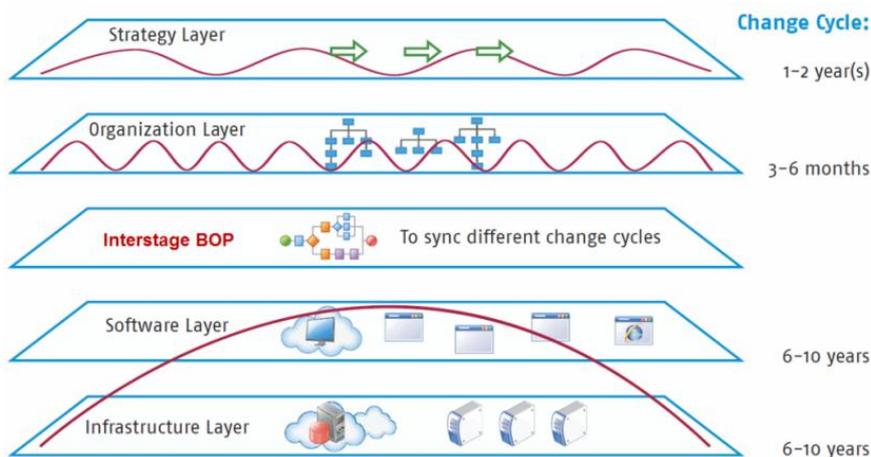
CHANGE CYCLES IN BUSINESS AND IT: A TALE OF MISALIGNMENT

In a business landscape that is constantly changing, enterprises must be ready to embrace change. That means business processes must be both thorough and yet still quickly adaptable. It's no longer just what you do that counts, it's how you do what you do - and how quickly you can modify your methods to take on new opportunities and challenges that's really important. The typical modern business cannot afford lengthy change cycles that span 3-5 years. Enterprises need to be far more agile, able to constantly shift their business and operational strategies for optimum results, with shortened change cycles of a year or less.

Unfortunately, the IT department, which is responsible for facilitating changes demanded by the business, often falls short of being able to do just that. Many studies and surveys show that changes to IT infrastructure and applications are fraught with complexity, costing much more and taking much longer than initially anticipated. It is not uncommon for the IT department to take 5 or more years to make significant enterprise-wide changes; this pace just doesn't support the business initiatives required in a competitive market.

Another issue between business and IT is the difficulty in finding common ground for the communication between them. Business people often have poor understanding of existing business processes that they wish to improve, and little to no visibility into how effective these processes actually are. They also often lack sufficient technical expertise to specify their requirements in a structured manner that would ensure they are complete, consistent and accurate. As a result, IT implementations often do not deliver exactly what was required by the business, and consequently lengthy and expensive rework is needed.

Rather than supporting business agility, this miscommunication between business and IT stands as a roadblock in the way of progress. This constant friction between the business desire to achieve a rapid pace of change and the ability of IT to deliver it resulted in what is infamously known as the "IT Gap." Instead of being in a position to help the business to become more competitive, IT has to invest most of its budget in maintenance of existing legacy systems and applications.



Companies can change strategy and organization much faster than their ability to change their software and hardware infrastructure.

THE EMERGENCE OF BUSINESS PROCESS MANAGEMENT

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A key solution area that helps organizations to become more efficient and agile is Business Process Management (BPM). BPM is designed to help businesses to discover how their processes work and how to measure, manage and optimize them. Properly implemented, BPM helps organizations to pin-point and resolve process bottlenecks, monitor and anticipate business activity and quickly react to the constantly changing business environment. Many industry analysts recognize BPM as one of the most important enterprise software market segments, and it is not surprising to find many vendors attempting to address the growing demand.

Unfortunately, most current offerings fall short of delivering the full promise of BPM. A good way to put this failure in context is to take a look at how “first generation” BPM offerings have evolved out of two important technology segments: workflow automation and Enterprise Application Integration (EAI).

Workflow solutions have been around for a long time, and are primarily used for the routing of tasks and documents between individuals or groups, based on a prescribed set of process flows, as well as collecting required information from them using structured forms. While adequate as simple routing tools, in the context of BPM, workflow automation products have major shortcomings:

- They do not easily facilitate system-to-system or human-to-system integration and messaging.
- They are bound to prescribed processes that deal with very predictable and well defined activities.
- Conceptually, they are not built around the concepts of constant and rapid change with required support for dynamic self-changing processes.
- They are typically based on client-server architectures rather than modern architectural concepts such as Services Oriented Architecture (SOA), Web services and thin clients.

- Most are implemented using outdated C or C++ and represent processes in proprietary notation rather than industry-standard XML-based notations.
- Because of their older architecture and implementation approach, they typically cannot support cross-company collaboration.

BPM products also grew out of EAI offerings, which provide a set of tools to facilitate and orchestrate the flow of data, operations and transactions across heterogeneous enterprise systems and applications. In the BPM context, these products have major limitations:

- They focus on system-level, short-lived, transaction- oriented processes, and rarely support tasks and operations that are performed by people as part of an overarching business process.
- They are focused on the needs of IT, and are very technical platforms which require significant expertise to deploy.

As a result, they provide very little value to business people, as they offer little, if any, visibility and control at the business level. Most workflow vendors recognized the severe limitations of their offerings, and have attempted to overcome these limitations mostly by developing new functional layers, as well as partnering or incorporating 3rd party products to complement their basic platform.

Similarly, most EAI vendors recognized the inherent deficiencies of their platforms and attempted to combine them with workflow systems to deliver a more holistic process approach, capable of supporting business processes that span both systems and people. Internal development, partnerships or acquisitions have been the most common approaches for augmenting EAI products for the BPM context.

Unfortunately, attempts to create a credible BPM solution by stitching together workflow and EAI technologies often yield very poor results. From the customer's point of view, there are multiple reasons for this:

- Interaction between business and IT professional is still disconnected. Process models are being worked on by business people in a separate environment, and their transition to implementation and deployment by IT is risky and error-prone. This means that the business cannot be assured prior to deployment that what was required actually got implemented. It also means that process documentation and process implementation are often not synchronized.
- There is no single process-centric view that helps the business to monitor and resolve problems in the context of the process as they designed it and therefore fully understand. In short, first generation BPM platforms have separate and disconnected implementation models for "design time" processes and operational "run-time" processes. This separation is artificial and significantly reduces the appeal of the BPM value proposition. It makes it much harder to provide truly "closed loop" BPM, in which processes are iteratively designed, developed, deployed, monitored and improved over time.
- Being still based on client-server models and "monolithic" architectures rather than on Internet-based distribution and modular designs, these systems tend to exhibit strong rigidity and "resist" rapid changes. Worse, they typically have inferior support for processes that go beyond organizational boundaries. This shortcoming is unacceptable in today's globalized business environment.
- Such systems often result in several "specialized" servers and repositories, which are integrated in the context of the overall solution. Such separation of servers frequently results in high total cost of ownership: high software, hardware, deployment and administration expenses for these complex, "integrated" configurations. The inevitable outcome: longer time-to-value.

These and other problems have significant adverse impact on the ROI and success probability of deploying first-generation BPM solutions. Customers can and should expect much more.

UNIFYING BUSINESS OPERATIONS ARCHITECTURE, LIFECYCLE AND TEAMS

As the problematic nature of existing offerings became clear, a new breed BPM solution to managing business processes and the delivery of shared services has emerged. Fujitsu uses the term Business Operations Platform (BOP) to describe this next generation BPM offering, finally allowing the business world and the technology worlds to align.

The business process is where these two worlds meet and is, therefore, where the two worlds can achieve the most in terms of collaborative development and common understanding.

Fujitsu's Interstage Business Operations Platform (Interstage BOP) helps in:

- Placing existing and new application software under the direct control of business managers.
- Facilitating communication between business and IT.
- Improving existing processes and creating new ones.
- Enabling the automation of processes across the entire organization, and beyond it.
- Giving managers real-time information on the performance of processes.
- Allowing organizations to take full advantage of new computing services.

PLACE EXISTING AND NEW APPLICATION SOFTWARE UNDER THE DIRECT CONTROL OF BUSINESS MANAGERS

The term "lost in translation" could well describe what often happens between when a business recognizes the need for a new process and how the process is initially implemented. For a business manager to be accountable, he or she must have greater control of the processes that are key to the execution of their business. A Business Operations Platform provides exactly such control. It eliminates the artificial gulf between the design of business processes and their implementation.

Instead, the two are inextricably linked such that the process definition by the business guarantees the process implementation in the software. If the process needs to change, you can specify the changes exactly. If the implementation changes, you can immediately spot what's happened and determine whether it's appropriate

FACILITATE COLLABORATION AND COORDINATION

A Business Operations Platform facilitates much better collaboration and coordination across business and IT teams. It provides a single "extended" view of processes that is used in all related activities, such as design, development, monitoring and problem resolution. Business and IT both benefit from easy-to-use and business-friendly tools that ensure that what the business process definition specifies is exactly what is developed. In other words, "what you model is what you get".

Collaboration is improved because both business and IT instantly see the results of each other's work and the impact on process definition and implementation.

MAKE IT EASIER FOR THE BUSINESS TO IMPROVE EXISTING PROCESSES AND CREATE NEW ONES

A Business Operations Platform enables business professionals to incrementally refine process models, which in turn drive implementation refinements by IT. Such process refinement iterations introduce a robust and low-risk approach for business process improvement: they allow organizations to realize value in short order while continuously monitoring for problems and fixing them.

Properly implemented, the BOP's shared process model results in true "closed loop" process improvement practice, which enables the extended team of business and IT to collaboratively and incrementally define, design, develop and deploy business processes, and gradually improve them over time

ENABLE AUTOMATION OF PROCESSES ACROSS THE ENTIRE ORGANIZATION, AND BEYOND

A Business Operations Platform eschews proprietary approaches that make integration both within and beyond the enterprise prohibitively difficult. Based on industry standards and modern SOA and Web architectures, a BOP provides the integration flexibility as well as the robust scalability and availability to implement a shared services approach across your extended enterprise.

Because it externalizes process definitions from proprietary applications, the BOP significantly eliminates major integration headaches. Not only does this speed integration, but it also provides greater flexibility in how underlying applications are created and/or integrated, both for packaged as well as composite applications. The Web-architected elements of the BOP ensure that your application can run on one server in one location or on thousands of servers in dozens of locations around the globe, interacting not just with your other enterprise applications but also with key partners and customers as appropriate

GIVE MANAGERS REAL-TIME INFORMATION ON THE PERFORMANCE OF PROCESSES

Speed is the new currency of business, the key to agility and global competitiveness. The BOP provides feedback on process performance as it happens, so that you can instantly respond to problems, identify bottlenecks, and take corrective action. And since it works across all of your enterprise, the real-time information it provides is complete and therefore truly actionable.

ALLOW ORGANIZATIONS TO TAKE FULL ADVANTAGE OF NEW COMPUTING SERVICES

One of the great things about Services Oriented Architectures is that they allow you to make virtually anything into a shared service-and to integrate with virtually any shared service to which you have access, internally or externally.

This, however, is also one of the most frightening things about SOAs to the experienced IT professional who can well imagine the potential for chaos that this creates. Only by integrating comprehensive BPM into a shared services environment is it truly safe to fully exploit the potential that SOAs have to offer. Thus the BOP facilitates the freedom and innovation and keeps out the chaos.

USING BUSINESS OPERATIONS PLATFORM TO CREATE A PROCESS LAYER

In order to enable businesses to be more responsive to change, leading organizations have realized the benefits of creating a process layer, which provides a level of process abstraction that decouples the processes from the control of applications. In the same way middleware provided a data abstraction layer, a BOP provides a "process abstraction" layer that delivers business services when and where they are needed.

Before BOP, enterprise applications typically would be in charge of their localized sets of processes, and they try to subjugate adjacent applications to these processes. With every application handling this differently, it's no wonder integration is the single biggest expense associated with software budgets.

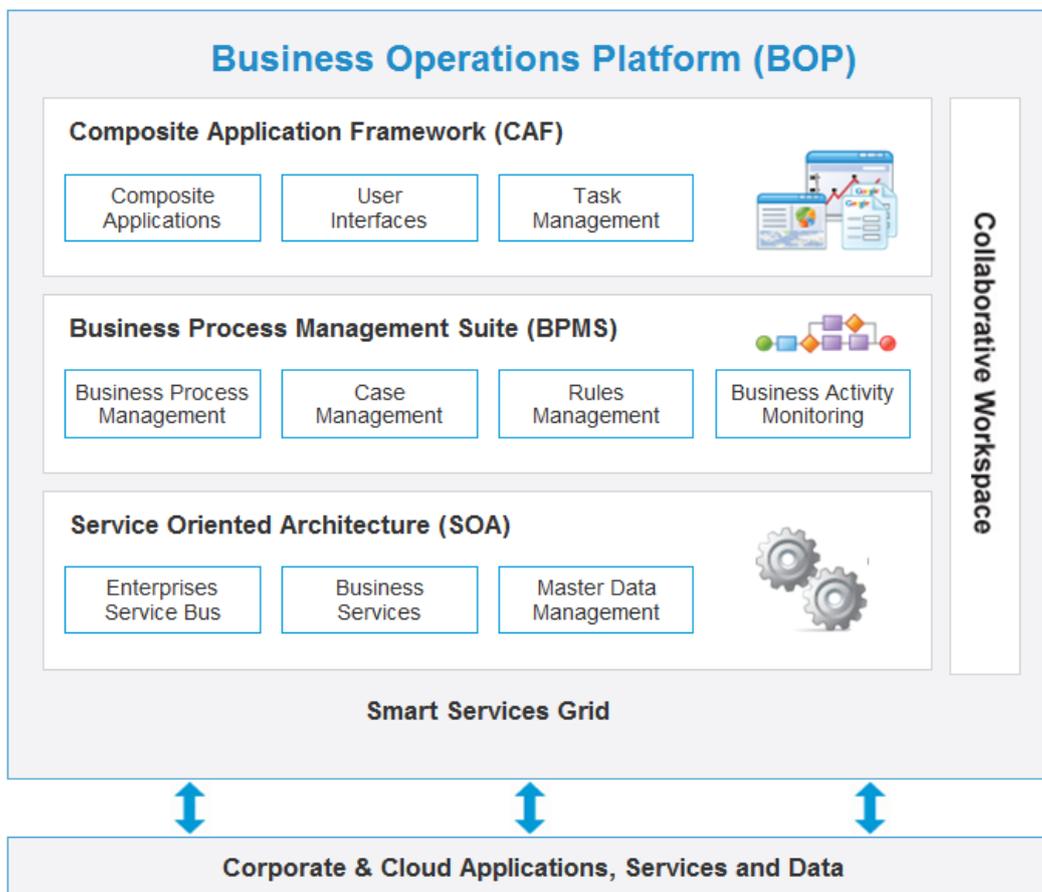
Now, BOP externalizes the control of processes away from individual applications. It makes them equal peers, subjugated to the BOP layer that controls the execution of the processes, the provision of services and the delegation of tasks or activities to the individual applications according to their specific uses and needs.

In order to do this well, BOP must be able to do the following:

- Manage applications in parallel as well as in series
- Manage people-intensive applications
- Decouple the process from the application
- Work both inside and outside the organization
- Be both continuous and discrete, and allow processes to change over time
- Put the process into the hands of the business user

The BOP delivers against these needs like nothing that's gone before, providing a new way of delivering the agility and flexibility needed to support today's rapidly changing business environment and the challenges posed by globalization.

The BOP process layer enables the automation of processes across the entire organization, and beyond, by externalizing the control of processes away from individual applications.



The Business Operations Platform process layer enables the automation of processes across the entire organization, and beyond, by externalizing the control

MAKING TOTAL BPM A REALITY

Unlike other offerings that were stitched together from fragments of technologies past, Interstage BOP is built on a standards-based and modern architecture, designed from the beginning to be the cornerstone of a robust Business Operations Platform. Interstage BOP is based on the class leading Business Operations Platform from Cordys™.

With a SOA grid and full BPM capabilities, combined with the shared services already existing or built anew with Interstage BOP, customers can create a complete Business Operations environment that will drive innovation, efficiency and agility for their enterprise.

The Interstage BOP is a comprehensive offering, which includes business process design, execution, monitoring and improvement. It is designed to help business managers to directly align business process implementations with business goals, while facilitating process improvement via unparalleled control and visibility into process metrics and real-time business activity. At the same time, Interstage BOP helps IT managers and developers to rapidly model and integrate their entire enterprise business process landscape, while ensuring that existing IT assets are fully leveraged. From a functional standpoint, Interstage BOP uniquely provides a shared process context to improve collaboration between business and IT.

The Interstage BOP user interface is completely Web based, which makes collaboration much easier, especially if business and IT professionals reside in multiple geographical locations.

The Interstage BOP shared process model makes it possible to maximize alignment between business and IT, and defines the "contract" for process implementation, which is fulfilled by connecting top-down business process design components to bottom-up technical services.

This unique approach puts the business firmly in charge, by empowering business professionals to directly influence and control IT implementations.

Furthermore, the Interstage BOP approach gives business managers and business analysts complete confidence that their models are up to date and reflect actual deployed processes.

On top of these robust capabilities, Interstage BOP also provides Composite Application Framework (CAF) and enterprise Master Data Management (MDM) to establish a single view of the business, which can then be continuously and effectively monitored via the platform's integrated Business Activity Monitoring (BAM). This level of visibility makes iterative business process improvement a reality. It helps the organization to reach operational excellence via analysis of non-performing processes and reduction of process-related friction across the extended supply chain.

Finally, Interstage BOP enables comprehensive process auditing, which helps decision makers to achieve better process governance. This is necessary to better comply with external and internal regulations and quality initiatives, such as SOX, Six Sigma, HIPAA, or Basel II.

Last but not least, Interstage BOP provides these highly unique capabilities on an industry-proven, highly-scalable and fault-tolerant application platform.

With Interstage BOP, mission critical business processes and applications are guaranteed to run without disruptions, offer end users superior levels of performance, and scale up effectively and economically with increased demand

CONCLUSION

To gain the maximum return on investment, a Business Operations Platform should be based on the principles of Services Oriented Architecture (SOA), which, from IT's perspective, enables high degrees of adaptability, changeability, modularity and reuse. These are absolutely essential in order to embrace change rather than resist it. SOA provides BOP the proper architectural basis to enable agility and competitiveness.

The BOP provides a "unified" SOA-based server that serves as the repository and management facility for all artifacts generated throughout the process lifecycle. The BOP repository hosts and associates process models, development assets (such as integration code), and configuration files and data transformation definitions. Therefore, the BOP repository is capable of presenting a unified "project" context to the end-user, which spans all dimensions of the process lifecycle and advances the usability and intuitiveness significantly. Furthermore, the unified BOP repository eliminates the need to deploy multiple servers and thereby reduces total cost of ownership and deployment complexity. Another architectural aspect of BOP, that is required to facilitate cross-organization BPM, is support for thin browser-based clients and a usage model that is heavily geared towards Internet-based distribution. It is the most efficient way to facilitate today's highly-distributed, seldom co-located business environments.

STAYING AHEAD OF THE GAME

Interstage BOP is the only fully integrated platform that combines the worlds of SOA-based integration, Business Process Management and application development. Interstage BOP is designed to model, execute and monitor all types of workflows, including human-to-human workflows, system-to-system integration-type interactions and hybrid processes that involve both humans and systems.

Interstage BOP SOA layers enable IT to become more flexible and agile, and to meet business demands more effectively. Interstage BOP enables business professionals to gain better visibility over business processes, and to transition their requirements to IT with greater confidence

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