

Improved Enterprise Agility With ServiceNow Orchestration



An Agile Enterprise is a fast moving, flexible and robust firm capable of rapid response to unexpected challenges, events, and opportunities.

INTRODUCTION

The advent of technology and rising expectations of customers have meant that the business environment for Enterprises has become very dynamic and complex. Enterprises are under pressure to react quickly to new and previously unplanned for events. These events could be new opportunities or they could be potential threats. Enterprises that possess the agility to react in a timely fashion are better placed than their competitors.

Automation can become key in improving the agility of enterprises. This is especially true of organizations that have to deal with large volumes of transactions that are largely repetitive in nature.

This Whitepaper will briefly seek to establish the case for enterprise agility and introduce some of the challenges they face in becoming more agile. The paper will then introduce ServiceNow and ServiceNow Orchestration as a product that can help the enterprise become more agile and deliver some of its promised benefits.

THE NEED FOR ENTERPRISE AGILITY

Enterprises are large, complex systems with several functions and processes that perform distinct roles but have inbuilt dependencies on each other. The objective is for the entire enterprise to address the full extent of the market opportunities efficiently and profitably. The enterprise is constantly affected by customers in the marketplace, competitors who offer similar or alternative products or services and the overall regulatory and business environment. These elements are all external to the enterprise and hence out of its control. The enterprise is, thus, forced to adapt itself to changes in conditions in any or all of these areas. The advent of newer technologies, better connected and informed customers and disruptive business models has meant that the pace of change in this eco-system external to the enterprise has accelerated significantly. Older organizational models of enterprises are usually too rigid and hierarchical and thus unable to anticipate or react to such rapidly changing business conditions. This is the condition sought to be addressed by making the enterprise more agile. Gartner in its paper, "Achieving Agility: Defining Agility in an IT Context" defines agility

as “The ability of an organization to sense organizational change and respond efficiently and effectively to that change.” They go on further to make the point that responding to environmental change need not be purely reactive but could also be proactive, that is, in some ways being responsible for initiating the change too.⁽¹⁾

To become agile an enterprise will have to address four key areas:

Agile processes: Extremely hierarchical, top-down dictated decision making will usually be too slow to cope with the pace of change the Agile Enterprise demands. This means a redesign of the processes will be needed to allow decentralised decision making while at the same time providing transparent visibility to the top management into the decisions being taken and the motivation behind taking them. In many ways defining unambiguous business processes with clearly laid out criteria for decision making is critical in such an environment to promote consistency, and not individual variance, in performance across the enterprise.

Flexible planning: The process of planning is just as important as the plan itself. Input conditions may change but if the process for creating the plan is clearly specified, the concerned elements within the enterprise will be well equipped to adapt. As Gartner's definition shows, the input conditions could be influenced by the enterprise's actions and the plan the enterprise follows after that should be flexible enough to shift focus based on the market's reaction.

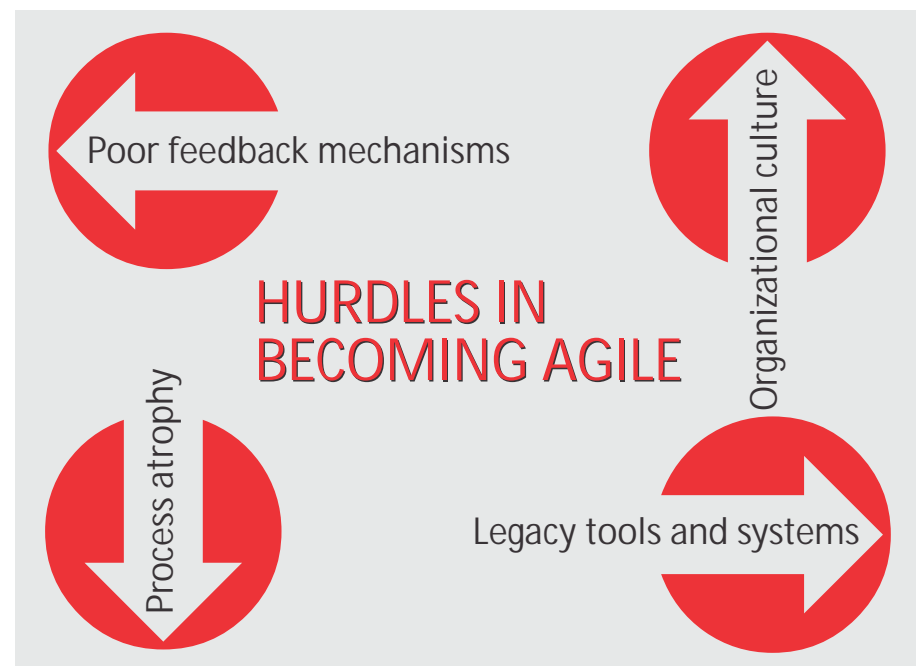
Technology backbone: The IT infrastructure becomes critically important in the Agile Enterprise. There is a need to gather all relevant market intelligence in real-time and make this data available where it is likely to have the most impact. Decisions taken have to be communicated to the various parts of the enterprise that have to take action on them in a timely manner and the IT infrastructure plays a key role here. The IT infrastructure is also key in helping to automate manual, repetitive or low-value add tasks and thus promotes speed of action. In essence, the IT infrastructure is the most critical support system for the Agile Enterprise.

People: After the systems and processes have been defined and the support system put into place the responsibility for making the enterprise agile actually falls to the people. A flat decision-making structure demands people at every level who have the capability and initiative to take those decisions. There is also a need to equip the people to be able to act speedily and to be flexible in their thinking.

The key measure of whether the enterprise is more agile is whether the financial performance is improving in the face of the changing market conditions. Gartner's definition puts the focus on "efficiency and effectiveness" and the most objective measure of how efficiently the resources of the enterprise are being utilized and how effectively the market opportunity is being addressed.

HURDLES IN BECOMING AGILE

Enterprises that decide to become more Agile are not always successful in achieving that goal. The financial performance of the organization does not improve as previously assumed and this is usually because of an inability to overcome certain challenges.



Poor feedback mechanisms: The crux of becoming more agile is to be able to identify and react appropriately to situations that are changing rapidly in the external eco-system. This assumes a constant and consistent mechanism to collect data from the end-points of the business where the data is collected.

Then there is a need for a mechanism to send this feedback back to those in the enterprise capable of understanding it and defining an appropriate plan of action. Key in the design of this process of collecting and passing feedback is speed. Poor design or implementation of these feedback processes can cause delays in communications that, in turn, constrain the enterprise's ability to respond in an agile enough fashion to be effective.

Process atrophy: The larger and more complex the enterprise the greater is the resistance to change. Processes that have been proven to be effective in helping the enterprise address business needs in the past are particularly difficult to transform. The sheer volume and complexity of these processes with their various linkages and interdependencies makes them particularly difficult to completely map out – a necessary step before re-designing them to become more Agile.

Legacy tools and systems: In large enterprises the IT infrastructure is implemented over time and several evolutionary steps. Re-designing this to make it more agile is often the biggest challenge that enterprises face in their quest for agility. The IT systems have an extremely key role to play in the implementation of the responsive feedback mechanisms. The speedy actioning of business plans is also heavily dependent on the capability of the IT infrastructure – this would include introducing automation of manual or repetitive tasks as well as monitoring and reporting mechanisms. Legacy IT tools and systems in use within the enterprise would usually not be suited to such tasks – an inability to remove them or replace them adequately can curtail the enterprise's ability to become agile.

Organizational culture: The people in the system are also resistant to change since they are trained in and comfortable with the old ways. There are also issues with capability and skill levels to address. In a more Agile Enterprise if decision making is decentralised the frontline employees have to be trained and motivated to become comfortable with taking decisions and then dealing with the consequences. A critical role is played by the ability of the leadership to instil a culture of ownership and accountability among the employees.

Entrepreneur Brad Murphy in his blog “You’re Asking for the Wrong Thing: You Don’t Need Agile Software Teams, You Need an Agile Enterprise” outlined the challenges succinctly, “If you don’t understand your ecosystem and its dynamics, and try to merely scale Agile teams, the results at best will be ineffective. You might end up amplifying existing structural and procedural illnesses. At worst, an Agile implementation can be not only disruptive but catastrophic. Your organization may revolt. In order to successfully transform your organization into an Agile Enterprise, you need to first understand your company’s ecosystem, and then diagnose its health.”⁽²⁾

A STANDARD DEFINITION OF ENTERPRISE AGILITY

Among the variety of definitions out there, Business Dictionary’s is the most comprehensive. It defines an Agile Enterprise as follows, “Fast moving, flexible and robust firm capable of rapid response to unexpected challenges, events, and opportunities. Built on policies and processes that facilitate speed and change, it aims to achieve continuous competitive advantage in serving its customers. Agile enterprises use diffused authority and flat organizational structure to speed up information flows among different departments, and develop close, trust-based relationships with their customers and suppliers.”⁽³⁾

The several different Organizational Characteristics the definition lists are important in themselves.

- ▶ Speed
- ▶ Flexibility
- ▶ Being responsive to unexpected situations
- ▶ Seeking to achieve competitive advantage or to serve customers better
- ▶ Building processes and organizational structures that allow faster decision making and action

As has been indicated earlier in the paper – today business situations are fluid. Conditions change very rapidly and are likely to keep changing over the lifecycle of the business. The customers also expect the enterprises they deal with to acknowledge their needs and act on them instantly. In such situations the enterprise that has the capacity to respond the fastest is best placed to stand apart from the competition and reap the benefits.

The enterprise's need for speedy decision making and action puts a lot of onus on the design of the organizational structure. This is to ensure that decision making is possible at the frontlines where the action is required. There is also a need to define processes that provide all the relevant information to the individuals tasked with taking such decisions when they need it. This will ensure that the right decisions can be made whenever required, their impact measured and, where necessary, corrective measures put into place to improve outcomes in the future.

SERVICENOW INTRODUCTION

IT Service Management is defined as a combination of people, processes, and tools that are deployed to support the production environment or for delivering other IT services to the organization's internal & external customers. ServiceNow is a cloud-based ITSM tool focused on the enterprise.

ServiceNow focuses on the workflows within the enterprise and helps enterprises define, codify and automate these workflows to ensure predictability and scalability on a day to day basis. Enterprises deploying ServiceNow leverage the capabilities of the product in:

1. Incident Management: Address issues that could cause service disruption and fix them in a timely manner.
2. Issue Management: Identify the factors behind "incidents" that cause, or could potentially cause, service disruption, and find ways to fix them so incidents don't recur.
3. Request Management: Managing, routing and directing communications between groups within the enterprise including "requests" for services.
4. Knowledge Management: Collecting information on issues related to service delivery and making to available to users when required.
5. Tracking and Reporting: Robust monitoring and reporting of all the elements involved in the process of service delivery on an ongoing basis.

ServiceNow itself identifies the following capabilities⁽⁵⁾ for its product offering:

1. Service Management: Improved workflow efficiency across IT, HR, Facilities, Field Services and other service area.

2. IT Operations Management: Simplify service delivery, mapping and assurance, automated provisioning and monitoring.
3. Business Management: Tracking, monitoring and reporting tools.

ServiceNow focuses on a variety of business domains including Financial, Healthcare, Higher Education, Managed Services and various Government sectors.

OVERVIEW OF SERVICENOW ORCHESTRATION

As mentioned earlier, ServiceNow focuses on the workflows, Orchestration is required to extend the workflows into outside systems and applications. ServiceNow Orchestration Core is part of the ServiceWatch Suite, focused on IT Operations Management.

The product attempts to address the automation of tasks that are traditionally addressed manually. Such tasks, when addressed manually are more effort intensive, take more time and also carry the potential for errors. These tasks have, traditionally, had to be addressed manually due to a lack of integration between various systems and tools in the IT environment of the enterprise and this restricts the possibility of automating them. ServiceNow identifies these tasks as including “simple or complex tasks across remote applications, services and infrastructure for IT service management, IT operations management and business process automation scenarios.”⁽⁶⁾

ServiceNow lists the following as examples of the systems and applications outside ServiceNow with which interaction may be required:

- ▶ VMWare
- ▶ Amazon Web Services
- ▶ Microsoft Azure
- ▶ OpenStack
- ▶ Puppet Labs
- ▶ OpsWare

Examples of the kind of processes that could benefit widely from such automation include:

- ▶ Password resetting, Account Resetting, and unlocking
- ▶ Specific database query automation
- ▶ Starting or restarting services
- ▶ Automation of file delivery or transfer
- ▶ Automation of service delivery
- ▶ Onboarding of employees
- ▶ Monitoring of service or event logs

The advantage of the ServiceNow Orchestration product is that it provides an easy way for enterprises to create automation without having to do any software coding. The ease of creating the automation allows enterprises to build up a variety of Orchestration components over time. The different Orchestration components are:

- ▶ Orchestration Core
- ▶ Orchestration activity packs
- ▶ Custom Orchestration Activities
- ▶ Cloud Provisioning
- ▶ Cloud Provisioning Catalog Items

HOW SERVICENOW ORCHESTRATION HELPS ENTERPRISES BECOME AGILE

We have identified IT infrastructure as a key support system to enable Enterprise Agility. Setting up an appropriate IT backbone and communications infrastructure is an important part of becoming more Agile. Orchestration plays a role in enabling the IT systems to automate manual and repetitive tasks that would otherwise take up time and reduce the enterprise's ability to react quickly to situations.

Wayne Cullen in Cisco's blog, "Service Agility from Customer, Business, and Orchestration Perspectives" makes the point that to become more Agile the Enterprise IT Infrastructure would deploy elements like "Programmable networking, virtualization, open source software and standard APIs." Once these have been deployed, though, Orchestration can help to further enhance the speed of response by automating "multiple processes to enable the infrastructure to adapt in real-time to increasing or decreasing service demands."⁽⁷⁾

ServiceNow Orchestration offers enterprises a fast, single window of truth for such repetitive operations. This increases the agility. Since the system is automating the task it is also much easier to use for employees. Orchestration works well in large enterprises where the volume of such transactions is extremely high. Banking, Retail, and Financial Services are examples of sectors where Orchestration can be successfully employed to improve Enterprise Agility.

A typical use case within a retail organization could be related to user authentication. Such organizations would usually have several thousand users. In response to news of a possible security breach, every single user id and password may have to be reset. Doing so manually would be too slow to be effective and would be virtually impossible to address. In such a situation User ID and Password resets can be completely automated with ServiceNow Orchestration.

The automation can also help address situations with resetting user ID's which users forget and seek information on from the back end. Essentially the automation creates a simple, reusable approval process. Similar examples would also exist in effort-intensive tasks like managing storage, software and application installation and managing Vms.

Orchestration is most effective when the objective is to launch the right automated process consistently. The automation ensures that the best practices and accumulated wisdom are codified into the process and the need for subjective decision making is reduced. In such situations, Orchestration saves time as well as money.

ALCOR'S CAPABILITIES IN SERVICENOW ORCHESTRATION

Alcor is a global cloud advisory and implementation services company serving Government establishments, Fortune 500 and other leading organizations in multiple industry verticals. Alcor advises leading businesses on cloud platforms, architecture, enterprise service management and integrating IT service delivery. Alcor provides focused and specialized skills to address the technology needs of their clients in the GRC, ITOM, ITSM, IT Asset Management, systems integration, web development and mobility space. Alcor has several years of deep expertise in providing solutions to their client organizations.

Alcor takes a strategic ITSM implementation approach and focuses on solving the business problems of their clients by leveraging an integrated business process design and technology implementation capability. Alcor's ITSM solutions with ServiceNow leverage a business view of IT services. The objective is to enable the IT support organization to:

- ▶ Quickly resolve or escalate issues and problems
- ▶ Improve root cause isolation
- ▶ Provide higher levels of business user satisfaction

Alcor brings substantial process expertise, ServiceNow experience and depth of organizational governance modeling to build solutions that are effective and provide a complete life cycle support for:

- ▶ Incident Management
- ▶ Problem Management
- ▶ Change Management
- ▶ Configuration Management

Alcor also has a specific focus on ServiceNow Express – ServiceNow's SME targeted offering. Alcor has experience in Automating ServiceNow with external applications like emails, active directories, Adobe, assets, and Amazon Cloud Provision (LABS). This includes real-world experience of having worked with enterprises in the banking and financial services and retail sector where we have helped orchestrate transaction volumes running into the 100's of thousands.

Alcor achieves this by leveraging their integrated business process design and technology implementation capability. Their professionals are the top talents in the business with deep personal understanding of the business verticals they service. This allows them to deliver flexible solutions that work in the real world. Their strength lies in delivering solutions that are customized to the specific requirements of their customers including complex integrations with the other systems in the eco-system like Financial and Procurement Management systems.

For more information about Alcor's capabilities please write to information@alcortech.com

CONCLUSION

Enterprises that are seeking to become more Agile have to focus on creating an IT infrastructure that supports the transformation. ServiceNow Orchestration is an effective way to automate manual processes and thus further improve the speed of the response of the enterprise.



Alcor is a technology implementation company focusing on Enterprise and Government technology needs in ITSM, systems integration, web development and mobility space. We provide a strategic ITSM implementation approach to our clients and focus on solving business problems by leveraging an integrated business process design and technology implementation capability.

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