Chapter XIV
Case Study: Enterprise Integration and Process Improvement

Randall E. Duran
Catena Technologies Pte Ltd, Singapore

ABSTRACT

Enterprise integration (EI) can be a major enabler for business process improvement, but it presents its own challenges. Based on the process improvement experiences of banks in several different countries, this chapter examines common EI challenges and outlines approaches for combining EI and process improvement to achieve maximum benefit. Common EI-related process improvement challenges are poor usability within the user desktop environment, a lack of network-based services, and data collection and management limitations. How EI affects each of these areas is addressed, highlighting specific examples of how these issues present themselves in system environments. The latter part of this chapter outlines best practices for combining EI with process improvement in relation to the challenges identified. Guidelines are provided on how to apply these practices in different organizational contexts.

INTRODUCTION

Business process improvement and highway traffic flow optimization have several similarities. For example, both try to improve the total volume supported, increase rates of flow, and decrease completion and journey time. Business processes benefit from reducing the number of exceptions, and traffic flow from reducing the number of accidents. Likewise, both are affected by less tangible factors. Drivers may be distracted by too many road signs or a rough road surface, whereas processes may be hindered by high levels of complexity or user-unfriendly systems.

Traffic planners and process improvement specialists have a wide range of techniques available to achieve improvement. Where a highway planner might designate a car-pool lane or change the speed limits, the process improvement specialist can eliminate handoffs or reallocate staff to reduce bottlenecks. Using these techniques, improvements can often be made without significant changes to the existing environment.
These minimal-impact approaches will improve performance, but their overall effect will be limited. Some advantage may be gained by using these techniques, but it may be the case that as much as 70% or 80% of the potential improvement still remains. Realizing these more significant gains requires changes to how the outside world interacts with these flows. In the case of optimizing highway traffic, it may require building new connecting roads, bridges, and on-ramps. For process improvement, it often requires the development of connectivity to the applications and systems that are used within the process. Enterprise integration (EI) can provide this connectivity and is critical to the overall success of many process improvement initiatives.

This chapter examines how EI can best support process improvement. The examples presented are primarily based on the experiences of three financial service institutions based in the United States, Japan, and Singapore. Each company had a different focus—call center, retail banking, and enterprise-wide processes—and is at a different stage of implementation: between 6 months and 3 years after starting to use EI for process improvement. However, the conclusions and lessons learned are not unique to the financial services industry; they are applicable to process improvement in many different industries. The objective of this chapter is to help those planning EI to better understand the context, perspectives, and challenges of process improvement initiatives, and to help those planning process improvement initiatives to understand how to best apply EI to help business processes achieve the significant productivity gains.

The structure of this chapter is as follows. The first part discusses process improvement approaches and considerations, and how they relate to EI. The second part reviews common process improvement problems and explains how EI can help. The third part outlines best practices for applying EI to support process improvement.

**PROCESS IMPROVEMENT**

To appreciate the benefits that EI can provide, it is first necessary to understand the environment within which process improvement is achieved. The examples discussed are representative of situations that banking business units encounter across different functional areas in both the front office and the back office. Although the examples are drawn from the financial services industry, similar activities and processes are found in many other industries. Thus, the discussion of the process improvement environment will focus on common considerations rather than specific details that might only be relevant to a single industry or business area.

**The Process Improvement Environment**

Processes that manage information usually make use of paper, software, or a combination of both paper and software. At one extreme, entirely paper-based processes may involve receiving handwritten or typed information and combining it with other printed information from paper-based files or printouts from software systems. These process inputs can result in stacks of paper that are physically moved between people who then check and verify information in the documents, make calculations, and eventually approve or deny the requests. While this type of processing may sound terribly inefficient and anachronistic to IT professionals, it is an environment that still exists in many business areas, such as loan application processing.

Given that it is now the 21st century, it is more often the case that at least some of the process information will be stored in and manipulated through software applications. Unfortunately, though, it is uncommon to find totally paperless business operations; both paper and software-based systems continue to drive business processes. For example, a call center operation...
Related Content

People-Oriented Business Processes
[www.igi-global.com/chapter/people-oriented-business-processes/54381?camid=4v1a](www.igi-global.com/chapter/people-oriented-business-processes/54381?camid=4v1a)

Optimal Privacy Preserving Scheme Based on Modified ANN and PSO in Cloud
[www.igi-global.com/article/optimal-privacy-preserving-scheme-based-on-modified-ann-and-pso-in-cloud/220402?camid=4v1a](www.igi-global.com/article/optimal-privacy-preserving-scheme-based-on-modified-ann-and-pso-in-cloud/220402?camid=4v1a)

Enhancing Traditional ATP Functionality in Open Source ERP Systems: A Case Study from the Food & Beverages Industry
[www.igi-global.com/article/enhancing-traditional-atp-functionality-open/2133?camid=4v1a](www.igi-global.com/article/enhancing-traditional-atp-functionality-open/2133?camid=4v1a)

The Integrated Enterprise Life Cycle: Enterprise Architecture, Investment Management, and System Development
[www.igi-global.com/chapter/integrated-enterprise-life-cycle/19428?camid=4v1a](www.igi-global.com/chapter/integrated-enterprise-life-cycle/19428?camid=4v1a)