

Prolifics BPM Methodology

5 Steps to Improve Your Process and Build Your Evidence-Based Business Case

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Introduction

Business process improvement is a systematic approach that helps organizations become more efficient by optimizing their core business processes to increase productivity and reduce cost; business process improvement initiatives have emerged to become essential drivers for organizations to compete in a rapidly and unpredictably changing market. According to a Gartner EXP Survey, improving business processes has been one of the top 5 business priorities for the past 5 consecutive years.

The business process improvement approach is a series of actions taken by a process owner to improve a business process to meet a new goal defined by the organization. Those actions have to follow a methodology or a framework in order to create successful improvement results.

Any process improvement methodology consists of 3 macro level steps that occur in the following order:



- The Discovery phase involves identifying and mapping business processes that are targeted for process improvement (also known as AS-IS mapping).
- The Analysis phase focuses on analyzing the AS-IS maps using 3 different lenses: processing time, processing quality and processing cost.
- The Design phase is the engineering stage where the process architect identifies the required process changes and/or needed technology solutions to produce future processes that are exceptionally faster, cheaper, and with higher quality outcome. This stage is also known as TO-BE mapping.

Most organizations embarking on process improvement realize that those initiatives are likely to be very challenging and time consuming because of following reasons:

1. The tedious and manual nature of AS-IS discovery and the margin of inaccuracy in the information collected.
2. The increasing complexity of an organization's business processes and the lack of holistic view that spans departmental or even organizational boundaries.
3. The uncertainty of the design results because the analysis was performed on anecdotal and inefficient, and at worst, inaccurate process maps.

In this article, I will present Prolifics methodology for process improvement. The methodology is designed to address those fundamental challenges with traditional process improvement approaches; it also provides a simple road map for process improvement that is powered by innovative technologies that will guide you step by

step in your process improvement journey and expedite the process improvement cycle. This methodology is presented in the context of a real customer initiative to improve a core business process.

Customer Initiative Overview

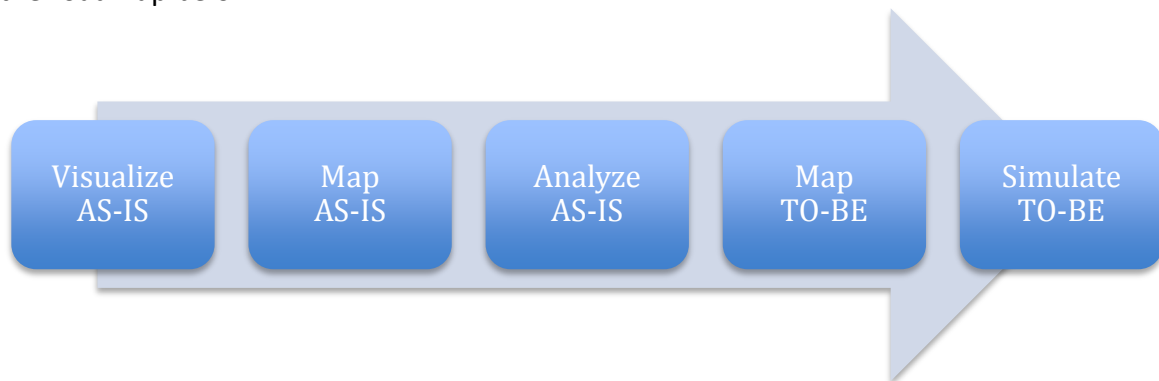
A major financial organization is seeking to improve their customer onboarding experience to address some significant challenges:

1. The lengthy customer on-boarding business process and the associated loss of revenue.
2. The mediocre customer experience due to the high exception rate of the on-boarding business process.
3. The high operational overhead and processing cost.

Customer onboarding refers to the business process of setting up a commercial bank customer with financial services (Cash Management services) such as Lockboxes, Automated Clearing house, etc.

Prolifics Process Improvement Methodology

The Prolifics methodology for process improvement consists of 5 steps highlighted in the roadmap below:



Visualize AS-IS

This step replaces the traditional “Discovery AS-IS” stage that is performed through interviews conducted with process owners and end-users. The visualize AS-IS stage is an innovative technological approach introduced by Fujitsu® through a tool called Automated Process Discovery (APD) that is designed to visualize existing business process variations from the data behind the workflow. Almost every business process interacts with a number of users and/or systems throughout its lifecycle, and in most cases every time the process interacts with an enterprise application or updates an

auditing database or system log, the business process leaves a record of that interaction. The APD technology uses those records of interactions to visualize the process variations represented for all the process instances that follow a common behavior or route.

The diagram below explains how APD works:

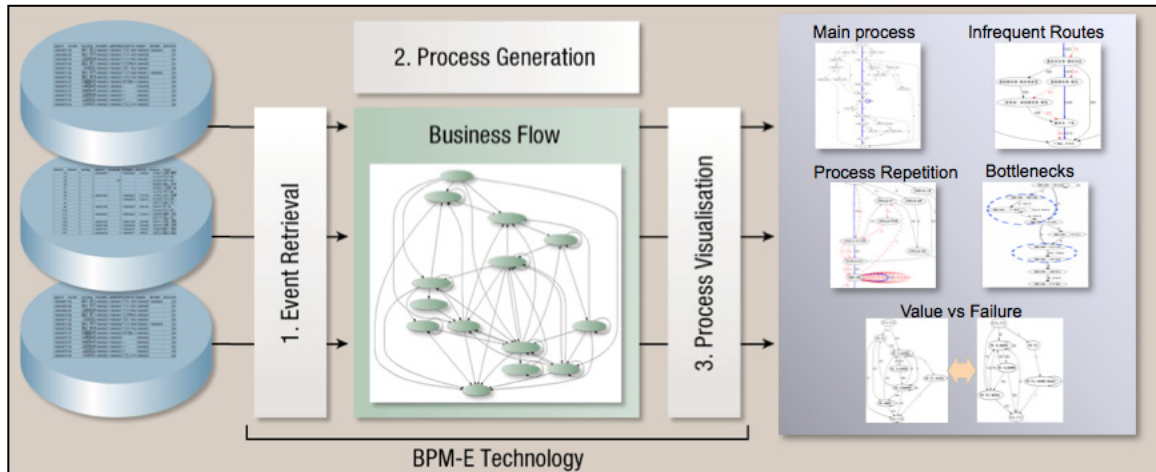


Figure 1

The data records (history records) are brought from all the enterprise systems in a format of “.csv” file; those data records are called events. Then, the data is correlated between these events through an ID. This ID doesn’t need to be same across all events. After defining the correlation, the data is fed to the BPM-E technology to visualize the business process.

The example here shows a process variation visualized through the APD tooling. APD will generate the most frequent to the least frequent (i.e. exception) variation, provide the number of transitions on any specific route, and the avg. time of the each transition. The APD tooling will also provide a list of all the exceptions across all process variations and the ability to drill down on single exception to get more information.

Map AS-IS

This step is performed by a business analyst who consolidates the generated process variations and maps the AS-IS business process. The Map AS-IS step is required to perform the AS-IS analysis. IBM® WebSphere® Business Modeler is a tool of choice for this stage since it provides extensive capabilities to do process simulation and process comparison. During this step, the business analyst will need to validate the mapped AS-IS business process with the process owners. This is required as there may have been additional steps that occurred offline and were not captured by any system. Those steps can only be mapped after talking to the process owners or end users. As an example, the offline logic for customer onboarding was mostly email or phone communications between the bank employee and an operational partner or a customer.

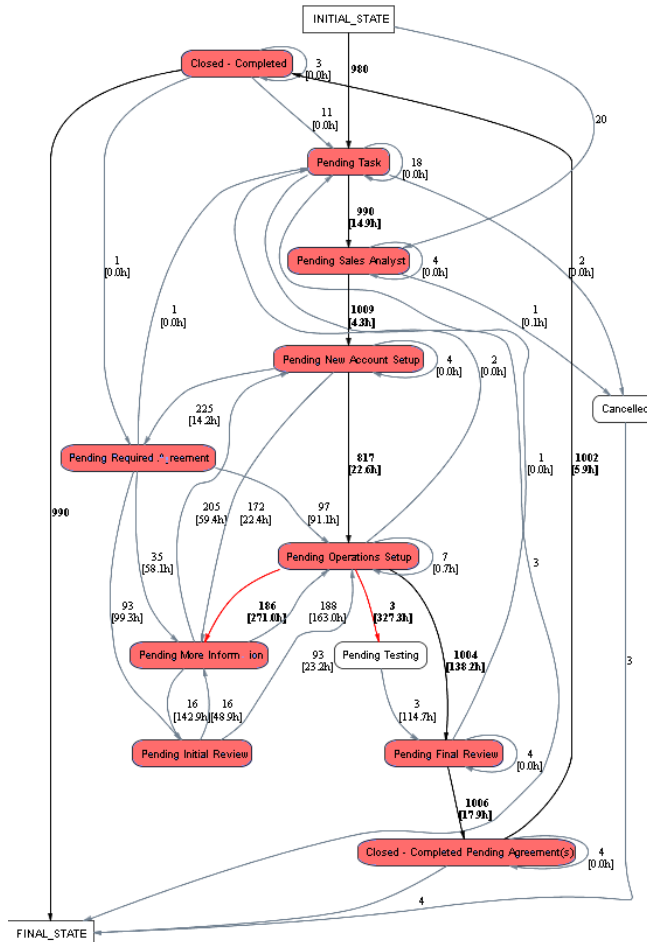


Figure 2 (Generated by Fujitsu APD)

Analyze AS-IS

The Analyze AS-IS comprises the 3 core activities:

1. Perform root-cause analysis and prioritize results. This analysis can be easily performed through the APD tooling by leveraging the drill down capability available on a specific flow. Example:

The red-dotted line around an activity called “Pending More Information” indicates an exception. This task is invoked 12 times as part of one transaction. After presenting the results to the process owners, we realized that majority of their exceptions (80%) are due to the incomplete or incorrect agreement which must be completed and signed.

Order	Event	Occurrence time
1	Pending Task	Jun 26, 2009 11:46:55 AM
2	Pending Sales Analyst	Jun 30, 2009 4:10:14 PM
3	Pending New Account Setup	Jun 30, 2009 4:10:28 PM
4	Pending More Information	Jul 1, 2009 9:35:25 AM
5	Pending New Account Setup	Jul 1, 2009 10:02:23 AM
6	Pending More Information	Jul 1, 2009 1:23:05 PM
7	Pending New Account Setup	Jul 1, 2009 1:25:16 PM
8	Pending Required Agreement	Jul 1, 2009 3:02:22 PM
9	Pending More Information	Jul 14, 2009 4:51:38 PM
10	Pending New Account Setup	Jul 24, 2009 10:45:45 AM
11	Pending More Information	Jul 24, 2009 1:30:14 PM
12	Pending New Account Setup	Jul 24, 2009 2:07:22 PM
13	Pending More Information	Jul 24, 2009 3:19:55 PM

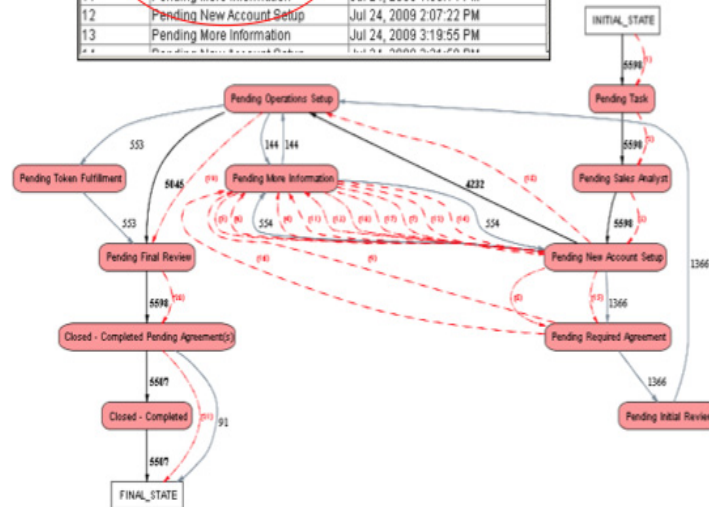


Figure 3 (Generated by Fujitsu APD)

- Gather information required for cost analysis from the process owners. Examples for the customer onboarding include the number of employee involved, the average employee salary, the number of daily working hours and paper and mail costs.
- Plugin the data collected through the APD tooling (time and exception rate) and the data gathered for the process costs to the AS-IS process maps. Run simulation to measure process performance against the 3 metrics.

The results of executing the Analyze AS-IS step on the customer onboarding business process are depicted in the table below.

Lens	Time	Quality	Cost
Baseline	8 business days	Exception Rate 25%	\$55/Request
Root-Cause-1	Agreement Delivery Mechanism via snail-mail	Lack of data entry validation & system intelligence	Lack of system automation requires high number of FTE & the need to add additional FTE to accommodate business growth.
Root-Cause-2	Lack of process	Lack of system	Cost of paper & mail

	automation & system integration	integration that leads to multiple data re-entry points (8 times for E2E)	due to the paper nature of exchanging customer agreements
Root-Cause-3		Lack of standardization & process governance	

Map TO-BE

This step is performed by a process architect/engineer and involves identifying the improvement options, those options could be technology solutions or process changes that will better streamline the work and eliminate duplicate work or any unnecessary layer of approval. As the result of that, the process architect maps the TO-BE process.

The following changes have been proposed to the customer onboarding business process:

- **Cut Cycle Time**
 - Eliminate mail time from the process by implementing digital signature (Online Agreements).
 - Streamline workflow to eliminate non-value add steps and provide better work allocation.
 - Eliminate data re-entry points through system integration.
- **Cut Exception Rate**
 - Provide user interface validation logic to eliminate errors at the source.
 - Eliminate data re-entry points by integrating workflow with front and back end systems.
 - Implement process governance to define roles and responsibilities and control entitlement.
- **Cut Processing Cost**
 - Process automation that will reduce the full time employee number required to complete the job.
 - Eliminate mail and paper cost through the Online Agreements solution.

Simulate TO-BE

The simulation is performed on the TO-BE maps through the WebSphere Business Modeler. The results of running the simulation on the TO-BE business process for customer onboarding are depicted in the table below.

Process Metric	AS-IS	TO-BE
Time	8 Biz Days	1 Biz Day
Quality	25% Exception Rate	5% Exception Rate
Cost	\$55 / REQ	\$31 / REQ

It's important to note that there could be multiple iterations of the Map TO-Be & Simulate TO-BE cycles until you have reached the snapshot that achieves the ultimate improvement for your TO-BE business process.

Evidence-Based Business Case

Normally the final stage of any process improvement initiative is creating the business case to secure funding for the implementation. The Prolifics methodology will provide you with all the data inputs based on facts and results extracted from the process itself. These data inputs are essential for performing the cost-benefits analysis and calculate the cost reduction & revenue gain for the business case.

For the customer onboarding initiative:

1. The revenue gain is accomplished through 2 streams:
 - a. Cutting the cycle time of the business process that will allow services to be delivered faster to the customer, hence, service fees are to be gained earlier. In other words; every day cut from the overall cycle time will translate into additional day worth of service revenue.
 - b. Increasing the quality of the customer onboarding business process (reducing the exception rate) that will significantly enhance the customer experience, thus driving up cross-sell and up-sell rate.
2. The cost reduction is accomplished through two streams:
 - a. Process automation and system integration that will allow for employee utilization to be dramatically less; thus, the process will require less number of FTE to complete the job.
 - b. Leveraging digital media to handle customer agreements (using online agreements instead of paper-based agreements) will eliminate the cost of paper and mail.

The tables below show the revenue gain and the cost reduction per year achieved by implementing the new improvement business process.

Metric	Improvement	Revenue Lift
Cycle Time	-7 Biz Days	\$1,300,000
Up-Sell/Cross-Sell	+3% Referral	\$490,000

Metric	Improvement	Cost Saving
Number Of FTE	-60%	\$500,000
Paper & Mail	-\$100,000	\$100,000

Summary

To summarize, the Prolifics process improvement methodology is a unique and proven approach for process improvement that leverages the latest technologies and tools in the market. The approach allows you to:

- Get a jump-start for your process improvement initiative by automating your process discovery.
- Discover real AS-IS processes vs. white-boarded AS-IS.
- Eliminate the guesswork from your process improvement initiative by focusing the improvement on real problems outlined by the process itself.
- Simulate your improvement results and compare different TO-BE workflows to achieve the most optimization.
- Create a fact-based and NOT an opinion-based business case.

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