

## Part III – Practical BPTF Application

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In the first two parts of this series, we introduced the Business Process Transformation Framework. In the first, we described what it is, its elements, including Value Chain Segmentation, Building Blocks, and Continuous Improvement Programs. In the second, we described the BPTF Architectural Framework with its Organizational, Process, Application, Data, and Infrastructure Views. So far, so good, but so what? How does BPTF provide a company the ability to incorporate best practices into its business processes and the agility needed to respond quickly to changes in the marketplace and competitive landscape? That's the focus of this third and final part of this series.

Let's consider the hypothetical case of Amalgamated Consumer Corporation (ACC). ACC executives were facing dual challenges: improving customer service and reducing costs and prices to compete with new, offshore competition. In order to respond to these challenges, ACC executives developed a strategy to increase value to customers in specific customer segments. ACC executives were also concerned that historically they had not executed their strategies effectively.

To better understand the gaps between current performance and their newly defined Strategic Objectives, ACC launched a process improvement initiative utilizing the BPTF methodology. They created a business architecture task force and established a Business Process Management (BPM) Program Office. The company's Chief Process Officer was assigned to lead the initiative while ACC's Executive Vice President became the initiative's Executive Sponsor. The Program Manager's primary objective was to deliver the Strategic Objectives through better integration of improved business processes, utilizing ACC's significant investment in information technology. An initial investigation uncovered a lack of key process standardization across ACC's 20 operating divisions. This lack of standardization was identified as the root cause of ACC's inability to respond quickly to shifts in corporate strategy and its underutilization of IT Assets.

Additionally, they discovered that functional units were being rewarded for functional results optimization, often at the expense of other functions, with sub optimization of company results. Lack of business process understanding and process design consensus across functional organizations and across Strategic Business Units was leading to poor communications and competing objectives. Even the definitions of basic terms differed between these groups, making effective communications and problem solving difficult, if not impossible. In an interview, ACC's Executive Vice President stated:

*"When we discuss business issues, we take it for granted that all people in the conversation are on the same page. We've learned that simply isn't true. The clarity of process definition provided through the use of VRM and the BPTF methodology will give us an immediate improvement in our ability to talk intelligently with each other, to standardize our business processes, and to more effectively address business problems. This is the first time we'll have had such an effective business process management foundation. We'll standardize our processes so that we can begin to deliver sustainable improvements in those processes and in our bottom line results."*

The Program Manager and her task force began an exhaustive search for knowledgeable resources to help them with the initiative. They researched the advantages and disadvantages of both publicly available process reference models (such as Value Reference Model, Supply Chain Council Models, and APQC) and private process models offered by large consulting firms. They concluded that the best path forward for ACC would be a hybrid approach incorporating best in class thinking from multiple bodies of knowledge. At the same time, they would maintain compliance with the open standard provided by the Value Chain Group's Business Process Transformation Framework (BPTF) since the open standard environment provides a common language, which also can be used across their customer and supplier networks. This solution also enabled ACC to compare industry benchmarks and best practices with its own operations. As the

Program Manager explained, “BPTF gives us a systems-based methodology for evaluating the effectiveness of ‘As Is’ designs to the ‘To Be’ business process designs, including the related application of technology investments required to deliver our strategic objectives.”

Executive management contracted with external subject matter experts to provide them education regarding best practice processes. The external resources would also prepare them for a Diagnostic assessment to determine the maturity of ACC’s current business processes, the most critical gaps interfering with best practices, and the improvement priorities for driving the greatest benefits to the bottom line quickly.

The Diagnostic findings revealed that the greatest gaps to best practice included an ineffective Integrated Planning process that failed to link strategic planning to execution, and an ineffective master supply planning (master scheduling) process. These findings made sense to the Executive Team in light of ACC’s growing frequency of customer complaints about poor service and rising prices. ACC had put some meetings in place to review short-term demand, but, based on the education they received, they knew these meetings fell far short of a true IBP/S&OP process. Regarding the supply planning functions, they had implemented an ERP system five years earlier to solve those problems. Since that time, however, they had experienced significant turnover in the planning organization and made some programming/configuration changes to the software. The coding modifications were made in response to requests from individual planners and planning managers to make the system more closely emulate what they had built into planning spreadsheets prior to the ERP system’s implementation. But now most of their planning activities were being performed outside the system, using personal spreadsheets, none of which were integrated among planners. Planners would update their spreadsheets weekly at best and then load the results back into the system for visibility of their plans for other functions. This procedure resulted in widespread dissatisfaction with both business results and the system itself.

Executive Management agreed that Integrated Business Planning (IBP) and Integrated Planning and Control (IPC, which includes master supply planning functions) were key improvement areas. They also identified the importance of improving the Order to Cash (O2C) process at the request of their CFO. These became the three key processes needed to deliver ACC’s strategic objectives and to meet the ever increasing customer demands.

Corporate	Product	Supply	Customer
<b>1</b> IBP - Integrated Business Planning	I2C - Idea to Concept	<b>2</b> IPC - Integrated Planning & Control	C2B - Concept to Brand
FIN - Financial Management	C2P - Concept to Product	CP - Collaborative Planning	MC - Marketing Campaign
HR - Human Resources	P2L - Product to Launch	P2P - Procure to Pay	<b>3</b> O2C - Order to Cash
AM - Asset Management	PTI - Product Technical Info	AM - Asset Management	CS - Customer Support
MDM - Master Data Management		SRM - Supplier Relationship Mgmt	

**Table 4. Top Process Improvement Priorities**

The executive team estimated potential rough-cut saving, using average results from other companies blended with their new knowledge of the magnitude of their gaps to best practice. They discovered that their potential savings were *too large* to be ignored. They were motivated to a point of commitment for funding a comprehensive project to develop best practice process designs and solution roadmaps for IBP and IPC. To avoid losing focus and spreading their resources too thin, they decided to address the “Order to Cash” process after the completion of the IBP and IPC initiatives.

Key Measurement	Performance	ACC Current Value	Improvement Potential	Estimated Benefit
Increased Forecast Accuracy		66%	18-25%	\$500k
Increased Sales Revenue		\$200M	10-15%	\$20M
Increased On Tim Delivery		87%	10-50%	\$3M
Inventory Reduction		\$75M	18-64%	\$20M
Safety Stock Reduction		\$8M	11-45%	\$2M
Increased Productivity		\$45M	30-45%	\$15M

**Table 5. Benchmark Results Comparison (Courtesy of Oliver Wight)**

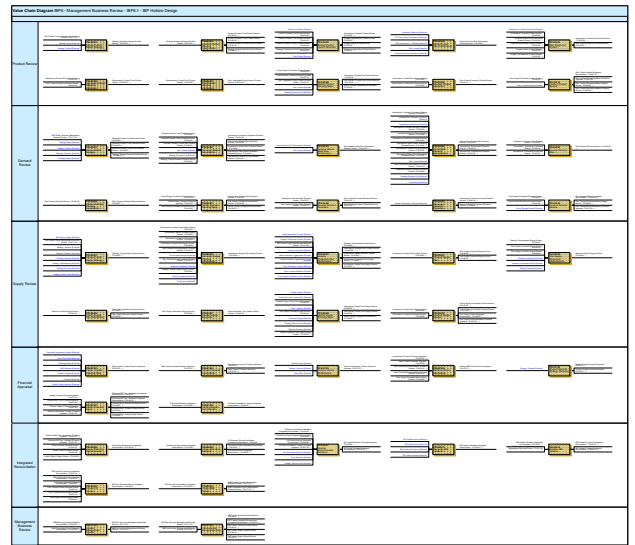
ACC conducted a planning session during which formal BPTF program goals and objectives were established as a baseline to assess their progress. The project team reviewed existing process documentation and process knowledge across a sample of the 20 SBUs. The findings were translated into the framework to contextualize ACC's BPTF baseline. Core team members were then provided rigorous, detailed process education from the outside process experts, and were trained on the framework structure and integrated methodology. They determined and documented value chain segmentation, established improvement priorities, and created a project charter for executive approval.

Two design teams, one for IBP and one for IPC, then moved into a series of design workshops to establish critical design parameters, such as planning horizon, planning product families, time fences, performance measures and tolerances, lot sizes, and lead times. They then turned to a BPTF XRM containing Oliver Wight process design templates. They utilized Class A enabling Integrated Business Planning and Integrated Planning and Control process flow diagrams and supporting documentation as the starting points for their designs.

Rather than starting with a blank sheet of paper, the design teams were able to begin with an archived flow chart completely integrated with the Oliver Wight Class A concepts and principles, learned during design team education, and with completely integrated inputs and outputs at the various levels of detail. Their focus moved immediately to simple modifications of the archived designs to better represent their specific businesses and business challenges. The resulting redesign for each business process was, as a result, completed in a matter of a few days and readied for end-to-end testing.

The capabilities and functionality of the BPTF enabled rapid completion of the design. Of course, the design teams and operating management had additional work to do after process flow design approval. All people involved in operating the new processes required education in the new design and in the business case that led to the design. Behaviors were monitored to ensure that everyone followed the new policies and procedures. Associated measures required monitoring and continuous improvement until design objectives were achieved. But the use of BPTF saved months of design work and, as a result, drove business benefits to the bottom line months earlier than had the improvement approach been document-based. Further, ACC was now positioned for easy maintenance and modification of their newly designed processes when operating or marketplace changes call for process modification. This efficient design process was enabled by several key elements of the BPTF.

Dictionaries (discussed at length in Parts I and II of this article series) provided ACC predesigned and reusable process building blocks that could be literally dragged and dropped into the design space within BPTF. Since the design team included operational representatives from all regions, there was buy in to use of the new design across the globe and further agreement that modification of that design to meet unique regional requirements would be monitored and approved by ACC's owner of each process. The dictionaries also ensured rapid alignment on terms being used as well as on the linking inputs and outputs (and input-output dependencies) between process building blocks and between all levels of detail within the design.



The process view in Figure 7 (captured as dependencies network, a.k.a., “crow’s foot” diagram) was used to normalize semantics and validate all input/output dependencies in the scope of the process flow. Each organizational unit (swim lane in Figure 7) was assigned a set of activities (blocks in Figure 7) and for each activity all inputs and outputs (arrowed lines in Figure 7) were listed to gain full understanding of where inputs come from and where outputs go for each activity in the scope. Even though the process model contained 45 individual activities with over 250 dependencies, thus, sorting through the map was very easy and convenient because each individual’s concern was explicitly expressed and connected throughout the process flow.

Similarly, significant time was saved through the use of pre-loaded template policies, procedures, practices, and metrics related to the various process blocks in the dictionaries.

Process team members did not begin with blank sheets of paper to write policies, but began with the Class A Templates and simply modified them to reflect exactly how they wanted ACC to operate. Additional capabilities and content of the Oliver Wight XRM were also drawn on by the design team. Pre-loaded template roles and responsibility documents were linked to the appropriate process designs as were other ACC documents essential to the operation of the business. Taken in total, the design teams, utilizing all the pre-loaded templates, were able to rapidly develop and deploy business processes with a best practice foundation completely aligned across all divisions and regions of the company.

As they completed their designs, they could automatically produce from BPTF a description of the new process, complete with process diagrams, swim lanes of accountabilities by function, and cross-functional process dependencies, policies, and metrics. The resulting design archived within BPTF then provided ACC a basis for training new personnel and for reviewing the process for continuous improvement. Finally, BPTF also allowed ACC design teams a precise description of exactly how they wanted their system integrators to reconfigure their ERP system, a significant change from its initial configuration. An expanded process view with all details about the activities flow, information flow, practices, metrics and documented requirements was compiled (Figure 8) to aid in the next step – process blueprinting.

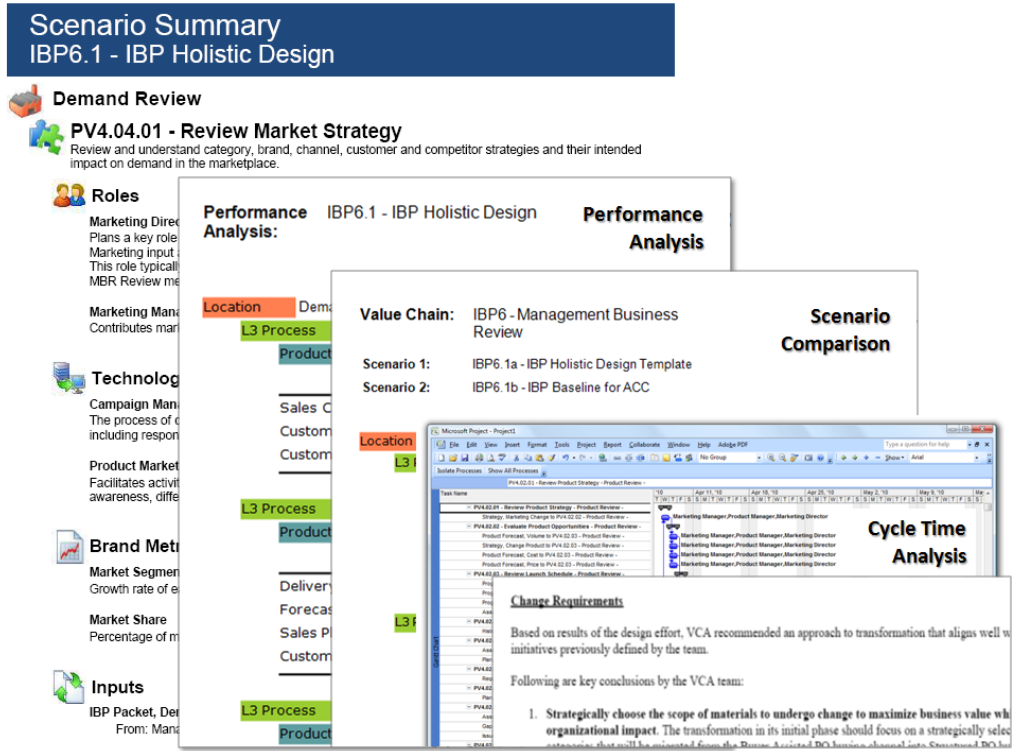


Figure 8. Expanded process view

Using BPTF top-down approach, business analysts worked alongside application architects to model the blueprints within the ERP and MES systems. Breaking down the process steps using the SFD described exactly how the systems should be configured and interfaced to provide desired information flow and timing of all critical transactions and decisions as detailed in the process design. To validate the blueprints, ERP and MES application architects and business analysts performed step-by-step simulation of the process using live tools and a sample of data representing the most challenging process flow synchronization requirements. In the simulation, they discovered that not only were the systems able to support all required scenarios, they were also able to aggregate accurate data for much needed reports and balanced scorecards. Synchronizing process and information flows supported a weekly planning cycle with a complete set of planning steps, from assessing new demand through current supply balancing. They were also able to support assessment of an entire planned order stack for accurate analysis of customer delivery date possibilities from a new master plan. All steps were synchronized into a weekly cycle with complete accurate performance metrics, because there was no longer a need to use spreadsheets or information capture tools outside the integrated systems.

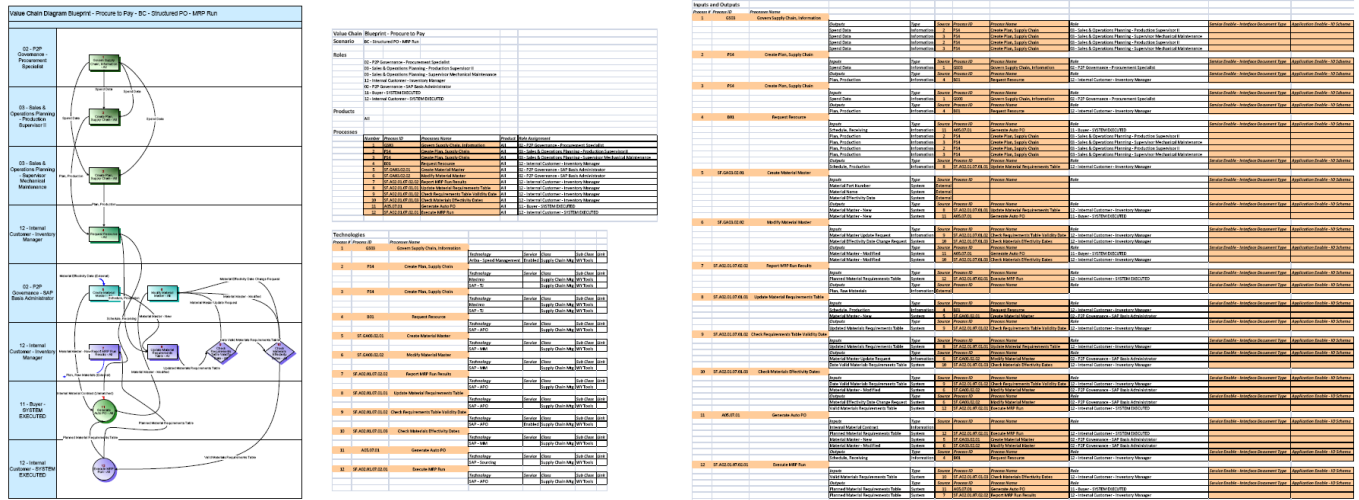


Figure 9. System configuration blueprint using bill of transactions

The finalized blueprint for system configuration was derived and mapped into an application view using the bill of transactions format (Figure 9). Each system transaction, their sequences, exact system function call (from SFD), and application specification (version, release, and build) was specified in this simplified format, enabling systems and interfaces configuration to be precise and fast.

In summary, use of the BPTF gave Amalgamated Consumer Corporation:

- Best practice Integrated IBP and IPC business process designs created by cross-functional and cross-regional design teams
- A cost-effective design process documented with the detail required to ensure precise delivery of process design requirements for system configuration
- A greater ROI, as a result, from a properly configured ERP system and shortened time to results
- A solid foundation and starting point for a journey to business excellence
- Reduction of cross-functional and cross-regional communication barriers and misaligned objectives
- Formal documentation and automatically produced design documents to support deployment and facilitate sustainability of the redesigned processes and associated improved business benefits

**Conclusion**

It has been reported that approximately 70% of ERP implementations fail to deliver expected results. The road to a higher success ratio lies in rigorous process education and improved process design prior to system configuration. The BPTF methodology addresses many of the root causes identified in those failings. Decreasing the risk of system implementation failure lies in best practice process education supported by a model-based framework to facilitate and accelerate process design, redesign, implementation, reimplementation, and maintenance. The model-based approach also enables design standardization and scalability across large, complex organizations.

Further, the model-based approach improves communication between business stakeholders and the IT support organization through the use of standard terminology and appropriate design detail. With BPTF, everyone involved or affected by the work can articulate their needs and capabilities with precision, which in turn increases design productivity and efficiency.

To create a strong bond between BPTF theory and practice, Value Chain Group (VCG) provides training for selected business process owners. For more information contact the Value Chain Group – [info@value-chain.org](mailto:info@value-chain.org).

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## Authors

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Dennis Groves, a principal since 2000, is Chairman of Oliver Wight Americas as well as President of Oliver Wight International, the governing board for all worldwide divisions of Oliver Wight. He has more than 40 years of experience as a consultant and a practitioner. He has worked with process and discrete manufacturers in consumer goods, foods, pharmaceuticals, and many other industries. Among his client companies are Solutia, Schick & Wilkinson Sword, Watson Pharmaceuticals, Schering-Plough, Qualitest Pharmaceuticals, and Zebra Technologies. He has taught numerous classes in sales and operations planning, supplier planning and control, integrated planning and scheduling, data structures and bills of material, and inventory record accuracy. He is co-author of *Achieving Class A Business Excellence: An Executive's Perspective*.

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