



KNOWLEDGE SHELVING AND WIRING

Connect business knowledge To systems, processes and users

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Polaris uniquely simplifies complex business functions through the decomposition of products, processes, and unique services, connecting business and technology and by deploying proprietary frameworks such as Knowledge Shelving and Wiring (KSW). Its proprietary framework has over 5,000 business processes, and over 100,000 business cases documented in the areas of Core Banking, Lending and Mortgages, Credit card, Private Banking, Brokerage, Asset Management, Cash Management, Liquidity Management, Trade Finance and Treasury spaces. This article by Ramya Iyer provides an in-depth view into this innovative framework.

Continuously leveraging the growing body of in-house knowledge about projects and domains is the most effective way of simplifying complexity and reducing implementation timelines.

The compelling dynamics of growth in the Banking and Financial services (BFSI) sector faces the challenges of addressing and managing the necessary change management, which is the order of the day. Hence, Global Implementation becomes difficult due to the below reasons:

- Changing and dynamic implementation timelines
- Increasingly complex global roll-outs with multiple simultaneous streams
- Predicting timelines for global roll-outs
- Cost, schedule and effort overruns in multi-location / multi-LOB implementations
- Limited bandwidth impacting time to market

Banks and financial institutions can address this challenge by leveraging their internal knowledge repository. Hence, there is a need for a framework that assists in implementing banking solution initiatives through progressive modernization in a non-disruptive manner and with a high degree of flexibility, scalability, predictability and repeatability.

Are you getting the best out of the current global implementation?

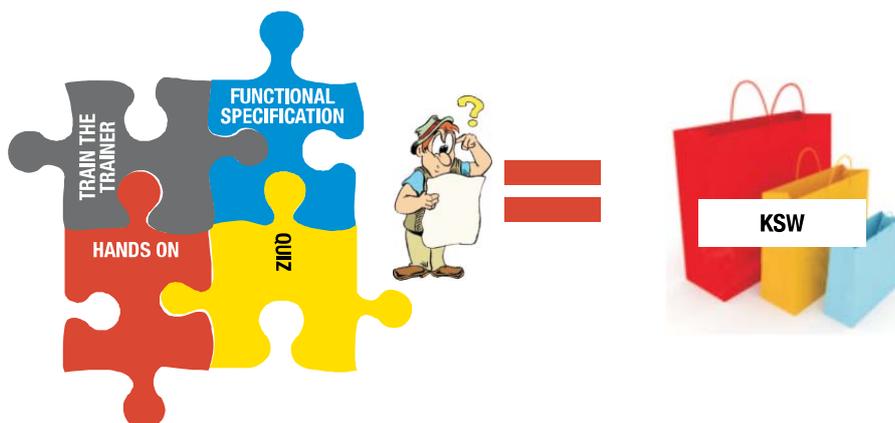
To deliver high business value through implementations, Knowledge Shelving and Wiring (KSW) uses the rapid accelerated methodology for capturing the 'as - is' business process of a banking system at multiple levels of detail.

KSW combined with accelerated methodology offers the following advantages:

- It enables implementation of banking solution with minimal gestation period.
- It offers a non-disruptive approach that has minimal business impact.
- It considers important features for Business Launch, and deferrable features for subsequent launches.

- It encourages bank users to acclimatize during initial Business Launch, gain early buy-ins and further refine business clarity.
- It enables bank users to have a feel of the product and discover additional requirements as they use the system.

KSW can be defined as a framework for classifying, storing, and organizing Process Information constituting an identified business area covering the breadth and depth of the numerous modules in the Banking environment representing Bank in a Box concept.



Business grid, which lists down all the Use Cases for the module, is the first case in the construction of the Business Process Map (BPM)

Parameters setup with screenshots is the part of the BPM

Interface diagram highlighting the interactions with product processors is part of the BPM

Functional Specifications (FS) needs to be referenced only for greater details of specifications, other than functionality and process flows

Storyboard depicting the process flow and the key attributes at each process and sub-process level

All the happy and Exception Business scenarios with end-to-end flow

The Business scenarios constitute process flows screenshots which go hand-in-hand for easy understanding

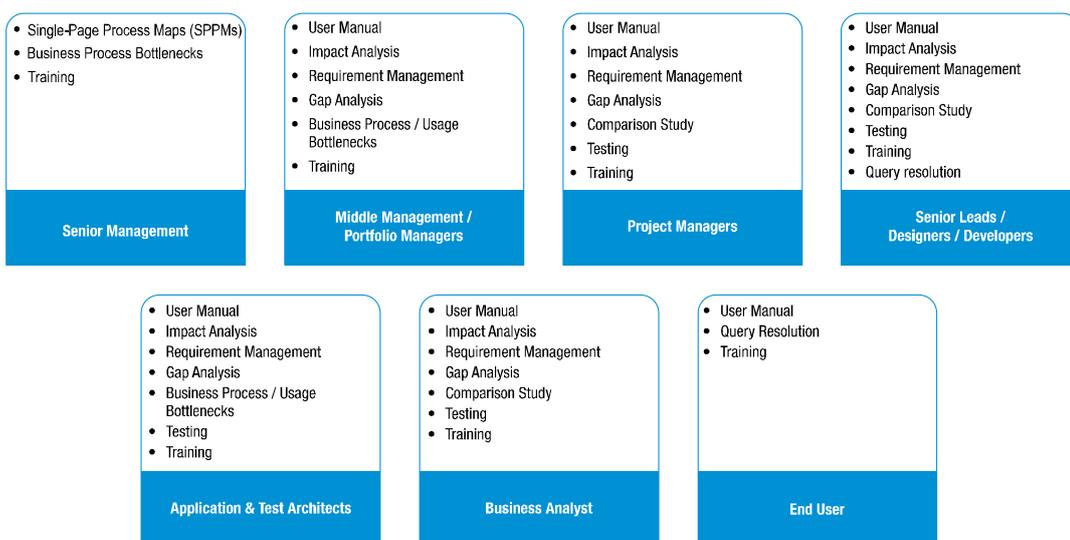
Validations at the eclipse and host level are explained in the BPM

Data requirement is also available in the BPM

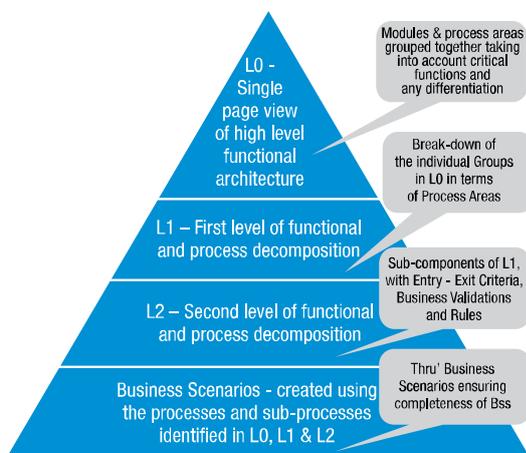
On the whole BPM will be used for the following purposes:

- Impact Analysis
- Requirement Gathering
- User Manual
- Gap Analysis
- Comparison Study
- Testing

KSW Benefits to Roles



Connect Business Knowledge to Systems, Processes and Users



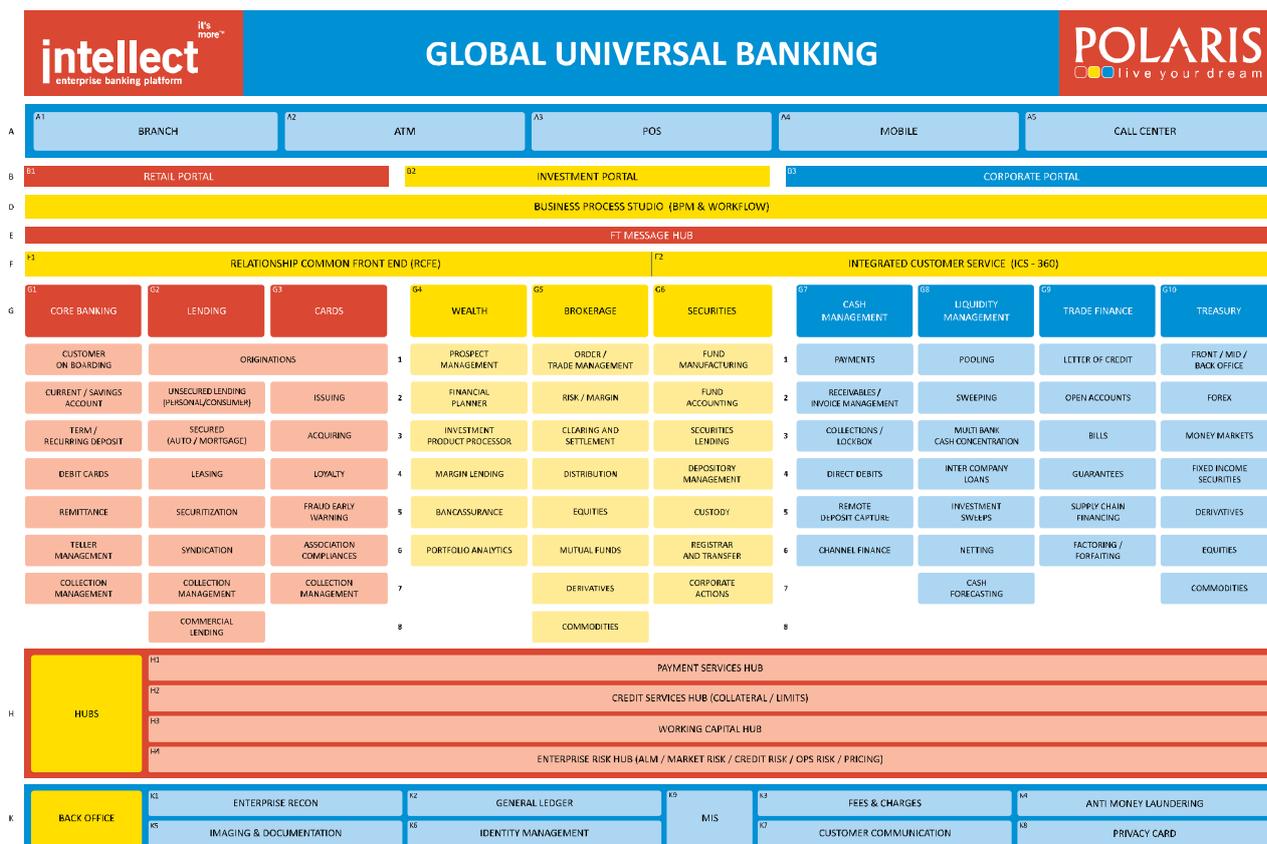
The diagram above provides an overview of KSW

The Inside-Out view

KSW is conceived and constructed keeping in mind the needs of the business user community in terms of how information is acquired, evaluated and applied when business knowledge is translated to technology and thus influence the way a business user interacts with technology.

Ability to conceptualize the breadth and depth of a complex application landscape in an easy-to-understand, functional block model
Brings out the functionalities of the process / sub-process in each module through business scenarios

KSW uses Polaris' Global Universal Banking LO Framework

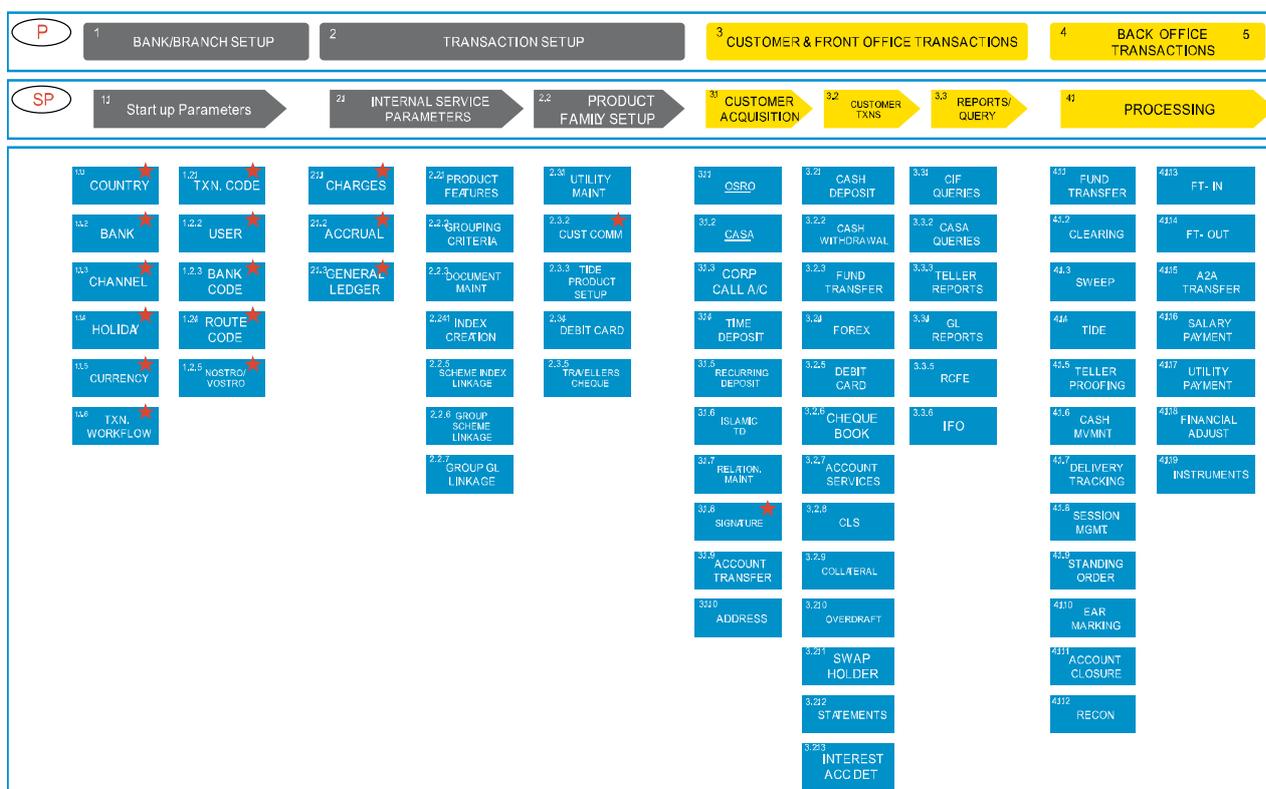




Inside-Out and Outside-In views provide a 360° Understanding of Banking functionalities

Polaris' Level One (L1) architecture includes and represents all modules that go towards performing banking activities, extending from parameter set up to back office functionalities such as Currency and Holiday set up in Parameter set up area to Teller, Single Account Opening, Standing Instruction and Anti Money Laundering functional areas. Though the L1 architecture might see changes from bank to bank, these will be marginal re-arrangement of the blocks given that banking functions are basically standard. Through color coding, the blocks of varying colors represent 'One-Time Set Up', 'On-going transactions', 'Process Area', and 'Sub-Process Area'. All these areas are linked together through numbering.

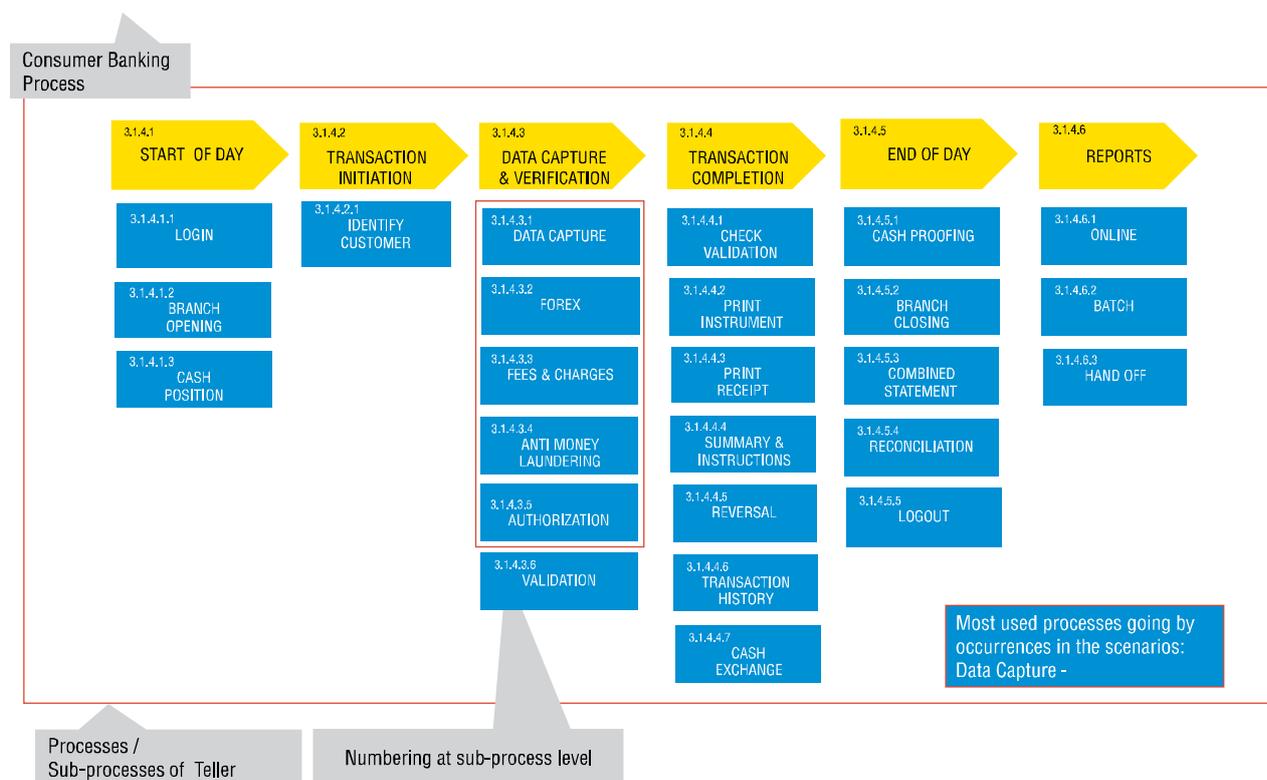
L1 Architecture - Retail Banking



- ★ - Indicative components which can be shared across product lines.
- P - Process
- SP - Sub Process
- Grey Blocks - Onetime setup
- Yellow Blocks - Ongoing transactions

Each block falling below the yellow bands is further drilled down to Level two (L2). L2 is the pictorial representation of the Business Process Map containing the processes and sub-processes going into each of the blocks represented in the L1 architecture.

Teller - Level two (L2) Architecture Business Process



The top line of yellow blocks names the processes that go into the functionality of 'Teller'. The blue blocks represents the sub-processes into which the process may be split to form the L2 architecture.

The most effective way of aggregating internal knowledge is by storing process information in a framework covering all the modules of the target domain.

- Captures domain knowledge in terms of process groups taking into consideration critical functions and any differentiators
- Captures all processes and sub-processes in an identified process group
- Documents the processes (in its entirety) including process touch-points, handoffs and interfaces

KSW also captures the sub-processes going into the Product Family Set Up and Interface diagram bringing into context the other systems with which the selected system is interfaced. The blocks falling within the Product Family Set Up are further enhanced by screenshots that are attached to each block.

Once the L2 architecture of an identified module is captured, it is further explained and enhanced by business scenarios.

A business scenario is constructed using processes and sub-processes that constitute the L2 architecture of a module. It may be a Happy or an Exception Scenario. At the business scenario level the sub-processes are also elucidated by screenshots.

Business scenarios are also captured in a Business Scenario Grid. The Business Scenario Grid identifies all functionalities that go into each of the sub-process thus ensuring full coverage.

Sample Business Scenario - Teller

1. Identify banking functions in the business process

Iteration # 1 - Teller Functions		BS1	BS2	BS3	BS4	BS5	BS6	BS7	BS8	BS9	BS10
Functions	Withdrawal										
	Cash	x	x	x	x	x	x	x			x
	Forex (Different Currency)										
	Purchases										
	Manager's check										
	Demand Draft										
	Encashments										
	House check	x	x	x	x						
	Travelers check					x	x	x			
	Manager's check										

2. Identify other entities like instrument, customer type, etc.

3. Plan unique scenarios by using various combination of identified entities.

Business Scenarios		
Cash Withdrawal	Account holder walks into the bank to withdraw cash from his/her account, reversal happening on the same day	Happy
	Account holder walks into bank for cash withdrawal from his/her account but fails to withdraw due to 'Staff Self transaction'/'Closed Account Status'/'Invalid Account Number'/'Insufficient funds for SA'	Exception
	Account holder walks into Bank for cash withdrawal from his/her account but fails to withdraw due to 'Blocked Account Status'/'Dormant'/'PND'/'Whereabouts unknown'/'Insufficient funds for CA'	Exception
	Account holder Walks into to the bank for cash withdrawal, Amount exceeds Teller's limit	Exception
	Account holder walks into Bank for cash withdrawal, validation for Anti Money Laundering limit	Happy
	Account holder walks into the bank to withdraw cash from his/her account with a different currency and Teller encounters account status pending closure	Happy
	Account holder Walks into the bank for cash withdrawal with the different currency encountering signature verification failure	Exception
Account holder Walks into the bank for cash withdrawal with the different currency encountering ATM PIN failure	Exception	

4. Describe the Business Scenario in words.

KSW uses an integrated grid of Use-Cases and Process Storyboards to generate a Business Process Map for each module.

Conclusion

In today's competitive market, KSW is a champion methodology for global rollouts and implementations. It serves to:

- Capture and document the processes (in its entirety), process touch-points, interfaces, handoffs, break-points and business rules
- Connect business knowledge to systems, processes and users
- Communicate the knowledge in an understandable form to educate the user and thus influence the intended outcome
- Facilitate development and improvements of business functionality and processes



About The Author

Ramya S Iyer is a Senior Program Manager in consulting services division, Knowledge Shelving and Wiring (KSW) services for Polaris Financial Technology Limited. She has 9 years of experience in the banking sector specializing in application business for banking operations, consulting, management and development.

Ramya has been instrumental in developing KSW services based on Polaris' framework. Her paper on KSW services was presented at the Polaris Financial Technology Conference (PFTC 2010), held in Chennai, India. She has a Graduate degree in Computer Science and holds a Masters degree in Business Administration from the Madras University. She can be contacted at ramya.iyer@polarisFT.com.

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