

Management and Architecture for Product Bundle Life Cycle in Retail Banking

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Abstract:- In this paper, a product bundle life cycle is proposed for retail line of business in banking enterprise. Product bundling involves grouping together different products or services belonging to the same or different lines of business in a bank and offering the bundle to the customer of the bank. The proposed approach helps banks to understand product bundle life cycle and thereby implement a product bundle. Bundle life cycle encompasses the stages of planning, creation, maintenance and reporting of product bundle. The paper also proposes a Service oriented architecture to achieve product bundling in retail enterprise.

Keywords:- product bundle, product bundle life cycle, planning of product bundle, creation of product bundle, maintenance of product bundle, service oriented architecture

I. INTRODUCTION

Banking is an enterprise that consists of various lines of business like retail, business banking and commercial lines of business. Each line of business offers various products or services to bank's customers. The scope of the paper is with respect to retail banking.

The challenges in banking industry are forcing banks to renovate their core systems to survive fierce competition. [1] Traditionally, banks sold one or more products to customers based on the needs of the customers. A recent approach to increase revenue in banks is to bundle different products & sell them as a package to the customer. Banks are always seeking more flexible and efficient ways to package and price their products in order to attract new customers and sell more products to their existing customers. In addition, the economic downturn has brought a greater focus on efficiency and cost reduction. [2]

To successfully achieve customer-centric initiatives, while at the same time reducing costs, banks must invest in enterprise product agility. Product agility is the ability to sense market changes and rapidly react to those changes by bringing the right product combinations to market at the right time.

Product bundling involves grouping together different products/ services belonging to the same/ different lines of business in a bank and offering the bundle to the customer of the bank. It is a Win-Win situation for both Bank and Customer. Bank gains from product bundling by being able to sell/cross-sell more products to a single customer and customer gains by getting discounted rates for the bundle products as compared to their individual product prices. Maturity of Banks worldwide with respect to Product Banking:

UK Banks - Dynamic Packages including Third Party products (most advanced)

Australia Banks - Dynamic Packages

US Banks - Basic static packages

India Banks - Focus more on cross-selling

Packaging of products and services and selling as a bundle shall be the key differentiator in banking in years to come. [3] There are different perspectives of product bundling from stakeholder, consumer, distributor viewpoints. Stakeholder views a product bundle from a provider/ seller perspective to satisfy multiple needs in a single offering. Aim will be to make attractive and innovative basket of bundles and sell in market. A distributor eyes on making more commission from less effort and focuses on making bundle very attractive. A consumer on the other hand, wishes that a single policy satisfies his multiple needs and the bundle provides a cost advantage. The key business drivers for bundling are that it enables cross-selling of products, lesser time to market, easier to convince customer for sales than for single products. [4]

Research indicates that banking customers are having relationship of average 1.9 with banks where they buy different products from different banks. This clearly indicates that average customer dependency on banks today is divided and only way banks can retain customers is to holistically offer several products under one umbrella to the customer.

Product Bundling currently is a niche area in world banking scenario expected to rule the banking industry in years to come. Product Bundling is touted as the next big "revolution" in Indian banking industry. (depicted in figure 1) [5] Hence there is a need to investigate into the life cycle of a product bundle. This paper covers four stages of a product bundle life cycle: planning, creation, maintenance, tracking and reporting stages.

II. STAGES OF A PRODUCT BUNDLE LIFE CYCLE

The different stages of product bundle life cycle are given below: (depicted in figure 2)

A. Planning stage

This is the preliminary stage, where the bank needs to plan on the product bundle combination.

Bank needs to plan regarding three important activities comprising:

- Identification of type of product bundle
 - Bundle strategies based on type of product bundle
 - Identification of delivery channel(s) to release product bundle
- There can be two types of product bundles that can be created:
- Static Product Bundle - The number of products in a bundle and types of products or services in a bundle is fixed and is predetermined by the bank
 - Dynamic Product Bundle - Number of products in a bundle and type of products and services in a bundle are not predetermined and are flexible. Bank needs to take a decision regarding the product bundle combination.

Based on the type of product bundle chosen, the following strategies shall be planned:

- Prospecting strategy – Prospecting refers to the process of attracting prospects to the bank who are potential bundle customers.

Bundle prospects can be searched in two ways:

- New prospects through global business sources such as Dun and Bradstreet
- Existing retail customers of the bank who can be promoted as bundle customers
- Needs Assessment Strategy – Prepare a Needs Assessment Questionnaire for dynamic product bundle creation. Needs Assessment questionnaire shall include general and specific questions which shall be asked to the bundle prospects to decide on the dynamic bundle to be created [6]
- Pricing strategy - Prices of products/ services in the bundle should be planned to be more competitive than the segregated products. Pricing is the most important market condition in banking to attract new customers and retain existing customers. A competitive pricing strategy enables a bank to strategize lead over its competition [7]
- Statementing strategy - Combined statements for all bundle products and services
- Incentive strategy - Incentives for bank's salespeople for selling product bundles

Plan channels for delivery:

- Delivery channels for a bank comprises of internet banking, telephone banking, bank branch, mobile banking etc. [2,16]
- A detailed plan needs to be made regarding choosing delivery channels to provide product bundling. Product bundling can be made available to customers in a phased out approach where initially product bundle is delivered through bank branch and later made available via internet banking, mobile banking in phases.

B. Creation Stage

This stage involves implementation of product bundle life cycle and activities are:

- Creation of static product bundle or
- Creation of dynamic product bundle based on needs assessment of customers [6]
- Implementation of 'Prospecting strategy'
- Implementation of 'Pricing strategy'
- Implementation of 'Statementing strategy'
- Access of the application via the proposed delivery channels
- Implementation of incentive package for retail salespersons for selling product bundle

C. Maintenance Stage

This stage involves the following activities:

- Customer support for any product bundle queries or issues across the delivery channels
- Maintenance of the product bundle with respect to needs assessment
- Maintenance of product bundle with respect to pricing
- Maintenance of product bundle with respect to statementing
- Maintenance of product bundle with respect to prospecting

D. Tracking and Reporting Stage

This stage involves the following activities:

- Tracking and reporting of the product bundle usage statistics across the delivery channels
- Tracking and reporting regarding retention of customers due to bundling
- Tracking and reporting of sales of new products due to product bundling
- Tracking and reporting of new prospects added to the bank because of product bundling
- Reporting of return of investment to the bank due to product bundle implementation

III. PROPOSED HIGH LEVEL ARCHITECTURE

Product bundle implementation is an enterprise wide activity and hence a Service Oriented Architecture (SOA) is proposed. SOA is an approach to provide shared services infrastructure support for enterprise which improves cost effectiveness and maximises return of investment to the enterprise. [8]

- Tracking Services - Shall be a composite service for tracking the usage of product bundle across different delivery channels.
- Reporting Services - Shall be a composite service used to product bundle reporting purposes.

High level architecture is depicted in figure 3.

The following are the different layers of the architecture:

A. Presentation Layer

This layer contains the user interface components and presentation logic for the application. The user interface components cater to the different delivery channels like Internet banking, Mobile banking, Branch, Bank website which have different software requirements. The Customer shall access this layer.

B. Business Layer

This layer acts as an application facade which redirects the received requests from Presentation layer to appropriate Service layer or Data layer requests.

C. Service Layer

This layer shall consist of various business level services used for product bundling. The important aspect of using business services is reusability [9]. The same services can be reused, if, in the future bundle life cycle needs to be implemented for business banking or commercial lines of businesses.

‘Service Interface’ acts as a facade application which redirects to one of the composite business services of the application.

The following are some of the business level services identified:

- Needs Assessment Services - Shall be a composite service to retrieve questionnaire for needs assessment and for submission of needs assessment answers [6]
- Prospecting Services - Shall be a composite service which is used to retrieve or update prospect profiles into the bundle system
- Pricing Services - Shall be a composite service which contains the logic to perform complex pricing calculations on the bundle products. Pricing services shall use a pricing business rules engine to retrieve and/or update product prices for the bundle
- Statementing Services – Shall be a composite service to implement statementing strategy adopted for the product bundle. It shall contain business logic to combine statement information of multiple products of a bundle belonging to same customer

D. Service Integration Layer

This layer comprises of existing banking services for retail line of business. The Service layer shall interact with this layer to extract existing customer profile information or product information required for product bundle creation or maintenance. [10]

Shared service infrastructure can be achieved through a ‘federated model’. In this model, there shall be a separation between Enterprise level services and Application level services. Enterprise level services shall be identified from each business unit such as retail banking and entered in a registry. Product bundling business services which are part of retail banking shall also be entered into this registry. These services shall be accessible to other applications in retail banking through their service contracts. [8]

E. *Data Layer*

This layer contains the data access capabilities of the product bundle system and interacts with data sources and external systems of retail banking.

F. *Cross Cutting Concerns Layer*

This layer contains the common utilities that are required for the entire application.

The common utilities are:

- Authentication and Authorization – based on the delivery channel requirements
- Security – based on the delivery channel requirements
- Logging – includes application and exception logging

Business Rules

Business rule defines or constraints one aspect of business i.e., intended to assert business, structure or influence the behaviour of business. [11]

A business rules engine shall be designed to contain:

- Business rules for defining needs assessment requirement
- Business rules to maintain product bundle combinations
- Business rules to maintain pricing and statementing information

IV. FIGURES

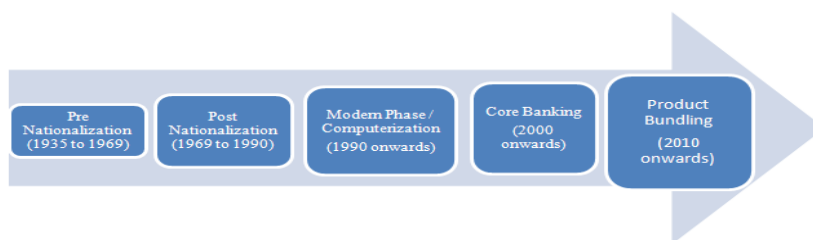


Figure 1: Depicts the different milestones in Indian Banking Industry

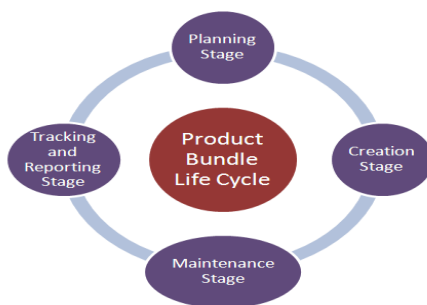


Figure 2: Depicts the different stages of Product Bundle Life Cycle

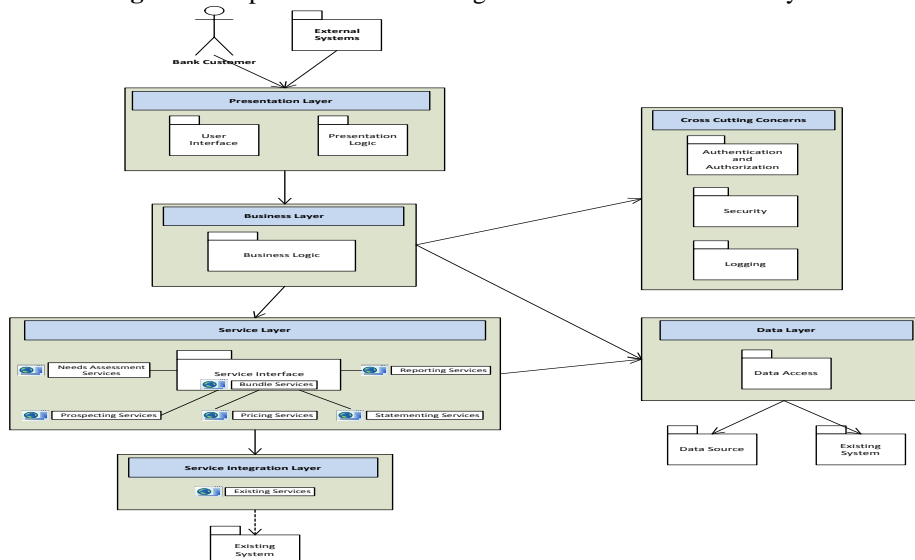


Figure 3: Depicts the High level Architecture of Product Bundle Life Cycle

V. ASSUMPTIONS/ DEPENDENCIES

- The Product bundle life cycle is limited to “Retail” Line of Business in banking.
- Customer’s profile and product information is maintained in enterprise database/ datawarehouse within the retail banking.
- The term “Existing Products” refers to the set of retail products already owned by the customer.
- Retail Line of Business has services which already have been built and interact with existing systems to retrieve customer and product related information.

VI. CONCLUSION

This paper explains product bundle life cycle with reference to retail banking. It includes the different stages such as planning, creation, maintenance, tracking and reporting. The paper proposes a high level service oriented architecture to realise the product bundle life cycle requirement.

Future work to this paper can include:

- Extending the requirements to include other Lines of Businesses like Business Banking and Commercial.
- Implementation of product bundle life cycle for retail banking.

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