

Business Process Framework Fundamentals

Student Exercises Workbook

Notice

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This part of the workbook presents exercises to be completed by you during the course of the training.

If you are taking this course in person your instructor will answer any questions you have about the requirements stated in the exercises. You may also want to use framework documents on the instructor's laptop.

If you are taking this course on line then you will be provided with some guidance for each exercise by the instructor. You can also use any framework documents that are available to you.

The three exercises should take 45-60 minutes each:

- Overview by instructor – 5 minutes
- Completion by students – 30-45 minutes
- Suggested solution by instructor – 10 minutes

Exercise 1 - The Coffee Shop Process Flows

You decide to invite a friend to a coffee shop for a coffee after work – your treat!

You ask when the friend would like to meet and what coffee shop is preferred. Once when and where is agreed you open your calendar and schedule an appointment including inviting your friend. On the day of the appointment you are reminded of it. You meet your friend at the coffee shop, select one or more items from the menu, enjoy your time together, consume your selections, and pay the bill.

Create a process flow that includes each of the steps (processes) involved as described above. Write a description of at least three or four of the steps.

You may want to ask a colleague or colleagues to do the same thing and compare the flows that each of you developed.

Exercise 2 - Scoping a Project

The challenges faced by a futuristic converged (telecom, content, media, and other digital services) service provider, F-Con, are your challenges for this exercise. F-Con plans to further develop IP access networks that will provide fiber to a customer premise and to expand its current IP access networks.

F-Con will be making available customer premise equipment (CPE) associated with the new fiber to the premise offerings. The CPE will be bundled with these offerings. Product Managers and Network Engineers are part of a project team implementing the strategy set forth by F-Con executives to identify the types of CPE needed to support these offerings. The team also wants to ensure that F-Con's infrastructure will be in place and can support the new offerings and the CPE.

Examples of the types of CPE are shown in the Figures 1, 2, and 3. They include set top boxes, wireless routers, and connection faceplates.

Tornado M10 Digital Media Center

Product Overview

Tornado M10 Digital Media Center is an advanced customer premises equipment (CPE) device for delivering streaming audio, video, and data directly to consumers' TV sets and/or Home Entertainment systems. Tornado M10 supports advanced MPEG4 video and MP3 audio compression algorithms and can deliver content streams with optimal quality over networks with limited bandwidth. Besides audio and video, Tornado M10 also offers advanced Voice-over-IP capabilities, which enable consumers to make inexpensive phone calls over the Internet. Additional services supported by Tornado M10 include video conferencing, chat, email, news, local weather information, program scheduling, video recording, voicemail and many more.

Tornado M10 DMC



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Key Features

- IPTV and Video-on-Demand Support
- Digital Music and Internet Radio Delivery
- VoIP SIP Phone with Peer Auto Discovery
- Video Conference H.263 Support
- Media Extension Center Functionality
- Enhanced Voicemail System with Unified Messaging
- Online Chat and Email Clients
- News and Weather Reports Delivery
- Optional PVR and Program Scheduling

Figure 1 - Set Top Box

Fiber Wireless Router, Optical Wiress Router

www.ExFiber.com

The OWR300 fiber wireless router is a highly integrated optical wireless 11N router designed to deliver IP services at optical speeds for point-to-point FTTH application. It interoperates with major home enduser to meet the worldwide residential market requirements. Alternatively the built-in 802.11b/g/n WLAN brings relief to those troublesome wirings. By offering the flexibility to service provider, the OWR300 delivers the convenience of one model that fits different kind of Internet applications.



Features:

- Complies with the IEEE 802.11b/g and IEEE802.11n
- 1 10/100M Auto-Negotiation RJ45 WAN port, 4 10/100M Auto-Negotiation RJ45 LAN ports, supporting Auto MDI/MDIX.
- High data rate up to 300Mbps network speed.
- WEP 64/128bit and WPA/WPA2
- Support local/Remote Web-based configuration
- Supports web-based configuration

Specifications:

| Item | Description |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard | IEEE802.11n current draft IEEE 802.11g IEEE 802.11b IEEE802.3 IEEE 802.3u IEEE 802.3x |
| Protocol | CSMA/CA, CSMA/CD, TCP/IP, ICMP, NAT, PPPoE, DHCP, PPTP, UDP, NAT, DNS, DDNS, VPN |
| LAN | 4x100BaseTX (Auto MDI/MDIX) |
| WAN | 1x100Base-Fx optical (Auto MDI/MDIX) |
| Cable | Multi-mode Fiber: 50/125, 62.5/125um max distance up to 2km or 5km Single-mode Fiber: 8/125, 9/125, 10/125um max distance up to 20-120km |
| Wireless parameter RF Frequency | 2.4~2.4835GHz |



Figure 2 - Wireless Broadband IP Router


[Larger photo](#)

Fiber-optic Faceplate with One Port, Supports MM or SM Fiber Connection

Model Number: SK-FW001

[INQUIRE NOW](#)
[Add To Basket](#)
[View Contact Details](#)

Chat with supplier using:  

Country of Origin:

- China (mainland)

Brand Name:

- SUNYKING

Key Specifications/Special Features:

- Supports MM or SM fiber connection
- With one port
- Consist of FC, LC, SC, and ST adapters

Payment Details:

Figure 3 - Customer Premise Face Plate

Your challenge

What first level core eTOM processes are being executed by the Product Managers and Network Engineers? These processes represent the scope (boundaries) of this project from a process perspective. You may find that some processes that should be part of the scope may require other members of the project team to be involved in addition to the two types of members mentioned.

Note: Defining the scope of a project is an iterative process. This is the first iteration and the scope is not expected to be the final scope. Part of this challenge is to document your reasons for including the Business Process Framework processes, the assumptions that have been made for including or excluding Business Process Framework processes, and follow-up questions associated with the processes included or not included in the scope of the project.

The table on the next page should be used to record the processes that make up the scope of the project. There is also a column for you to record your reason(s) for including them along with any questions you may have about whether a process should be included or not. You should also include assumptions you have made that caused you to include a process.

The Process Framework in your student materials can help you with this exercise.

| Process | Reason for Inclusion/Questions/Assumptions |
|---------|--------------------------------------------|
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| Process | Reason for Inclusion/Questions/Assumptions |
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| Process | Reason for Inclusion/Questions/Assumptions |
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Exercise 3 – Extending/Confirming the Framework

Here are two core processes and their descriptions that are to be used in this two part exercise.

Advertising

Description:

Draw the market's attention to an enterprise typically for the purpose of inducing individuals and/or organizations to acquire an enterprise's product offerings.

Extended Description:

Advertising draws the market's attention to an enterprise typically for the purpose of inducing individuals and/or organizations to acquire an enterprise's product offerings. This is accomplished by using of various forms of media, such as print, web, and broadcasts. An advertisement may appear on partner sites or other forms of media a partner uses. It includes determining the audience for the advertisement, establishing a budget for the advertisement, planning which media to use, entering into agreements with one or more partners with whom the advertisement will be co-developed/sponsored and jointly used, and choosing a message to be conveyed by the advertisement. In addition drawing attention to a product offering, an advertisement may also be used to enhance the image of the enterprise or announce one or more new offerings.

Brand Management

Description

Create a name, symbol or design that identifies and differentiates an enterprise's product offering and/or offerings from its others product offering(s) and similar offerings available from other enterprises, including competitors.

Extended Description

Brand Management creates a name, symbol or design that identifies and differentiates an enterprise's product offering and/or offerings from its others product offering(s) and similar offerings available from other enterprises, including competitors. The goal is to increase the perceived value of the brand over time. To do so may include co-branding with a partner. It develops a strategic plan to maintain brand equity or gain brand value. This requires a comprehensive understanding of the brand, its target market and an enterprise's overall vision. It includes the analysis and planning on how the brand is perceived in the market, including endorsements by individuals and organizations that are obtained via social media, an enterprise's web site, or publications. Comparisons of an enterprise's brand to competitor's brands are also performed.

Your challenge

Extending the Business Process Framework by decomposing existing processes or new processes is an iterative process. You will see that as you confirm the initial decompositions and descriptions questions arise that should be answered by those involved in these core processes.

Part 1

Extend the Business Process Framework by decomposing two core processes using the Semantic Analysis decomposition technique. Use the extended description to perform the analysis. Categorize each sub-process one that plans for, acquires, uses, or disposes of the core process' key business entity.

Once you have done this create a lifecycle process, such as End Advertisement using suggested lifecycle process names from this module. Then create a decomposition for these lifecycle processes using the categorizations you applied to the processes you found. For example, for the End Advertisement process would be decomposed into the processes categorized as "dispose of".

Lastly, see if you can begin to develop descriptions of the sub-processes using only the description of the core process.

Do not use any Advertising or Brand Management subject matter knowledge you may have to develop the decomposition. Just use the extended description.

Part 2

Confirm your decomposition and the description of the core process. First you may want to identify what technique(s) that will be used. The use of other techniques may be identified once your analysis of the decomposition is in progress.

Student Exercise Suggested Solutions

The solutions provided in this section of the student exercise workbook are suggested solutions. As was noted in some of the exercises, developing a solution to a challenge is an iterative process; the solutions presented here represent the result of the first iteration and may vary from the solutions developed by you.

Exercise 1 - The Coffee Shop Process Flows

Here is one possible solution to the exercise. Your process flow may look a little different, but should contain similar steps (processes).

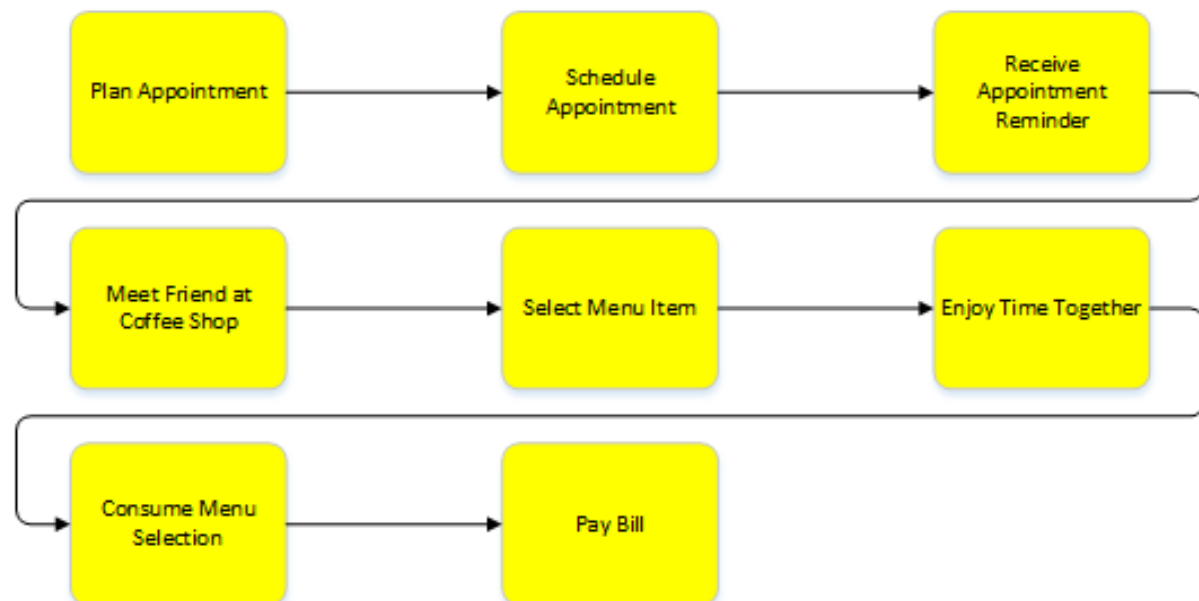
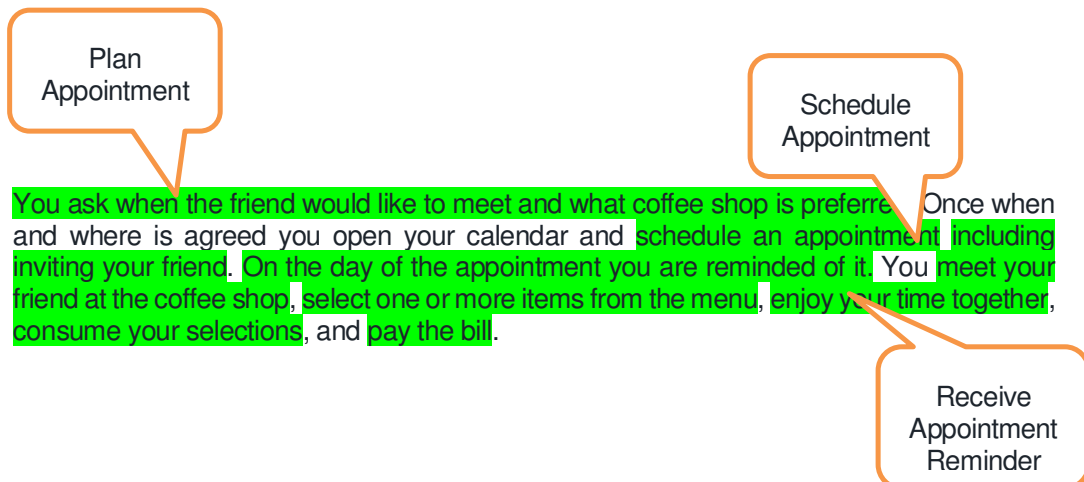


Figure 4 – Coffee Shop Process Flow

Next you can see how these processes were identified by analyzing the exercise's description..



You may have included “Open Calendar” in your flow which is acceptable. However, processes typically result in some change to the state of a business entity, and opening a calendar does not result in any change to the calendar.

And here are descriptions of some of the processes that were extracted from the highlighted text in the exercise description:

- Plan Appointment – Ask attendee(s) when and where the appointment’s event should take place.

This description is a generalization of the specific text in the description, such as coffee shop, so that the appointment can be planned for any event.

- Schedule Appointment – add the appointment to a calendar including the date, time, and location, attendees, and send the appointment to attendees.

This description has been generalized and expanded based on the steps taken to schedule a typical appointment.

- Receive Appointment Reminder – At a designated point in time a reminder of an upcoming appointment is received.

This description has been generalized since a reminder does not have to be provided on the day of the appointment. For example, it could be provided the day before.

- The first draft of the descriptions for the other processes could include highlighted text, such as “pay the bill” and be expanded later. For example, “Pay Bill’s description may include choosing a payment method and obtaining a receipt.

If a colleague or colleagues also completed the exercise:

- How aligned are your flows with each other?
- Have you identified different steps (processes) or different names for the same steps?

Even if you didn’t do this your process flow may not look like the suggested one shown here.

This is what happens when a standard process framework is not used. Only using flows to represent a process model can result in:

- Little commonality among the recorded flows
- Difficulty in classifying processes into a related group, such as a core process
- Possibility of unknown duplication where the same process has different names
- Process flows recorded in many systems and not in a single model
- Overlapping processes
- Duplicate flows that do not have the same goals.

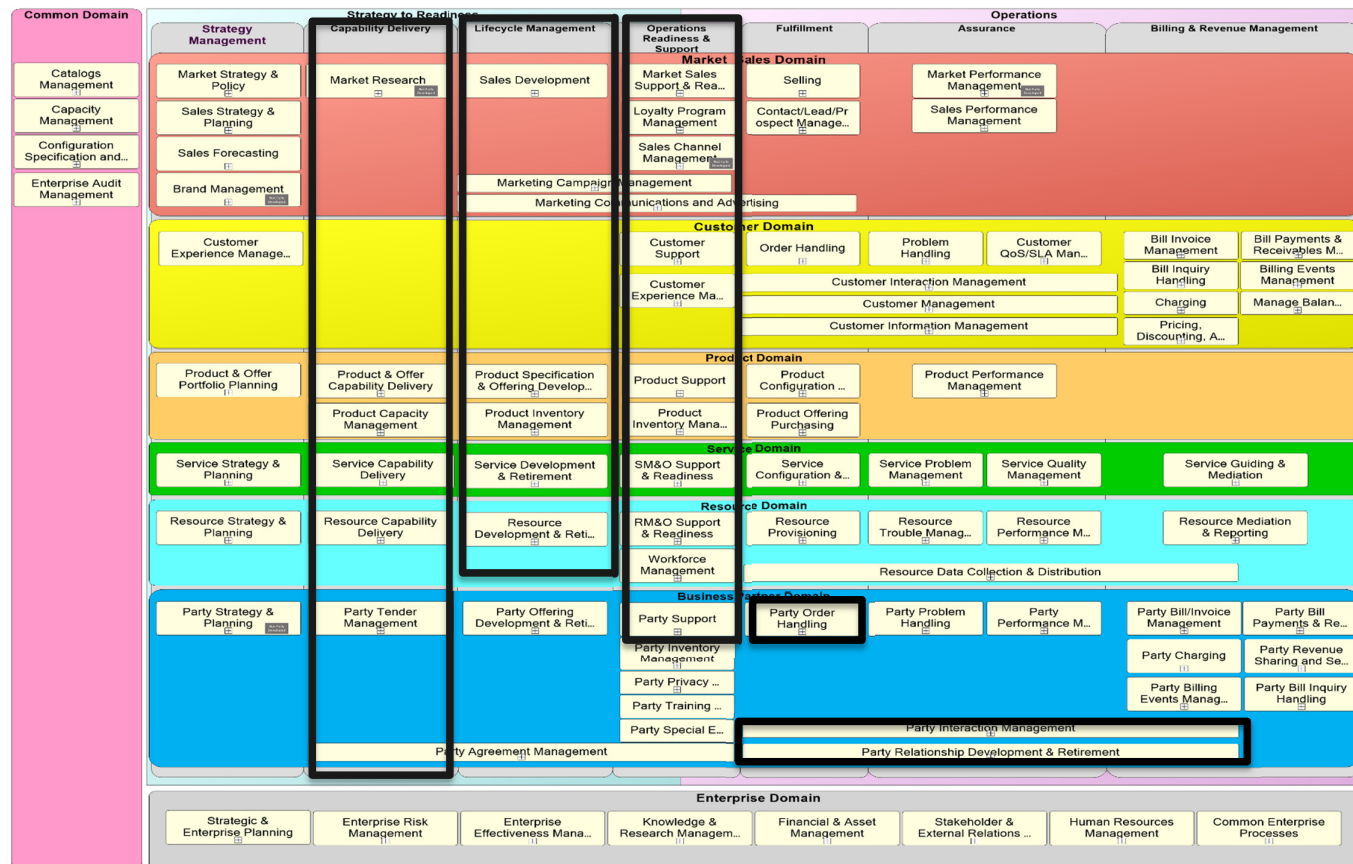
So, it is much more than just the standard structure of the Business Process Framework. It is about the content contained within the structure which provides a starting point for developing industry standard based process flows.

Here are some other things to consider when developing flows:

- Using a tool that can select process elements that would be imported in a tool for developing a flow
- Using a simulation tool to test the flow
- Using a process automation tool manages the execution of the flow.

Exercise 2 - Scoping a Project

The figure, Figure 5 - Processes Representing Scope provide the first iteration solution to this challenge. Included first level core processes are outlined with dashed borders. The justification for this solution is provided following each figure. As further iterations are undertaken, analysis of the decomposition for each included process will help refine and further develop the scope to include task level processes.



The reasons for including processes shown in the figure:

1. All Infrastructure Lifecycle Management processes were included because it was stated in the exercise description that “The team also wants to ensure that F-Con’s infrastructure will be in place and can support the new offerings and the CPE.” These processes put F-Con’s infrastructure in place and ensure that it is capable of delivering the types of Products, Services, and Resources necessary to achieve goals stated in F-Con’s strategy. Party Tender Management and Party Agreement Management were included in order to put out tenders, such as requests for proposals, to potential parties that will provide the CPE and infrastructure. The figures that show the CPE in the exercise description are from other parties from whom F-Con will acquire the CPE and sell it directly to its customers. It is also assumed that F-Con does not manufacture the resource infrastructure necessary to support its new offerings. This also implies that Procurement Managers should be part of the project team.
2. Most of the Product Lifecycle Management processes were included, because it was stated in the introduction to the student exercises description that “F-Con plans to develop an IP access network that will provide fiber to a customer premise.” and in the description for this exercise that “F-Con will be making available customer premise equipment (CPE) associated with the new fiber to the premise offerings. The CPE will be bundled with these offerings.” These processes deal with identifying the types of Products, Services, and Resources (the Development & Retirement processes) that will be necessary to support these requirements, as well as Marketing Campaigns (Marketing Campaign Management) used to promote them, Marketing Communications and Advertising used to let the market know of their availability, and Sales Channels (Sales Development) that will be used to offer these to the market. This implies that Marketing Managers and Sales Managers may be or should be part of the project team. Party Product Offering Development & Retirement was not included since this process manages the lifecycle of offerings from other parties that will be on-boarded and sold on behalf of other parties.

The reasons for not including processes shown in the figure:

1. Strategy & Commit processes were not included because it was stated in the exercise description that “The CPE will be bundled with these offerings. Product Managers and Network Engineers are part of a project team implementing the strategy set forth by F-Con executives to identify the types of CPE needed to support these offerings.” This implies that the F-Con’s strategy is already in place.

The reasons for including processes shown in the figure:

1. All the Operations Support & Readiness processes were included because these processes ensure that the Operations processes are ready to support F-Con’s infrastructure in the delivery of F-Con’s offerings to the market. For example, RM&O Support & Readiness Enable Resource Provisioning process includes planning and deployment of new and/or modified resource infrastructure to ensure availability of sufficient resource infrastructure to support the Resource Provisioning processes, and monitoring, managing and reporting on the capability of the Resource Provisioning processes. Manage Workforce was included because this process is responsible for managing the activities that put the infrastructure in place.
2. Party Relationship Development & Retirement was included in order to establish relationships with parties that will provide the CPE and infrastructure.

3. Party Order Handling was included because this process is used to acquire CPE as well as resources necessary to construct F-Con's infrastructure.
4. Party Interaction Management was included because this processes manages all interactions with parties from which the CPE and resources needed to construct its infrastructure.

The reasons for not including processes shown in the figure:

1. The other Operations processes deal with fulfilling, assuring, and billing offerings delivered to the market. The exercise description did not mention these aspects of the project. There may be another team working on this aspect of the overall project or it may be the next step for the existing project team.

Exercise 3 - Extending/Confirming the Framework

Advertising

Part 1

Here are Advertising's highlighted sub-processes identified using Semantic Analysis.

Advertising

Extended Description:

Advertising draws the market's attention to a product or service typically for the purpose of inducing individuals and/or organizations to acquire an enterprise's product offerings. This is accomplished by using of various forms of media, such as print, web, and broadcasts. An advertisement may appear on partner site or other forms of media a partner uses. It includes **determining the audience for the advertisement, establishing a budget for the advertisement, planning which media to use, entering into agreements with one or more partners with whom the advertisement will be co-developed, sponsored and jointly used, and choosing a message to be conveyed by the advertisement.** In addition drawing attention to a product offering, an advertisement may also be used to enhance the image of the enterprise or announce one or more new offerings.

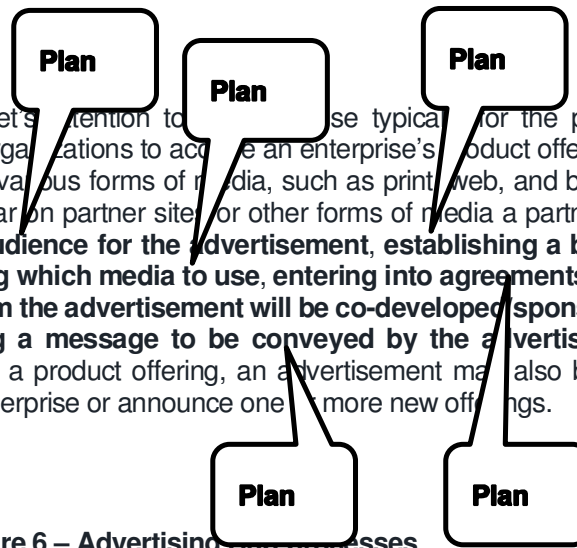


Figure 6 – Advertising sub-processes

Note that the first and last sentences state the goals of the process.

Your solution may have categorized some or all of the processes as “acquire”. But typically the results of these processes are used to develop and track the development of an advertisement. Categorization differences such as can often be decided based on having a discussion with individuals who are involved in the Advertising process.

Here is the decomposition.

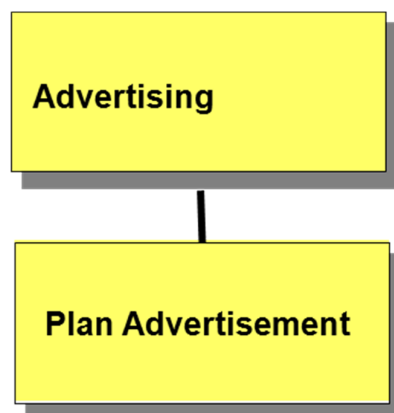


Figure 7 – Advertising Decomposition

And here are the names of Plan Advertisement's sub-processes and their initial brief descriptions:

- **Determine Advertisement Audience**
Determine the audience for the advertisement.
- **Establish Advertisement Budget**
Establish a budget for the advertisement.
- **Plan Advertisement Media**
Plan which media to use. This is accomplished by using of various forms of media, such as print, web, and broadcasts. An advertisement may appear on partner sites or other forms of media a partner uses.
- **Enter Into Advertisement Agreement**
Entering into agreements with one or more partners with whom the advertisement will be co-developed/sponsored and jointly used.
- **Choose Advertisement Message**
Choose a message to be conveyed by the advertisement.

Note that Plan Advertisement Media's description included text in the core process' description that referenced media. And that the entire description of the core process has been used other than its goals. You may have come up with different names but the verb should imply the overall meaning of the implied processes.

Part 2

Since this is a core process lifecycle decomposition might have come to mind as a technique to use.

You may have thought of another confirmation guideline if you only identified the single process as shown in the suggested decomposition— that a process does not decompose into a single sub-process as shown here. This points out that the decomposition is not complete.

Using the lifecycle decomposition technique points out that first level task processes that acquire, use, and dispose of an Advertisement are missing. For example, Develop Advertisement, Place Advertisement, Cancel Advertisement, End Advertisement, and Evaluate Advertisement. Place and Evaluate are two use processes. These should be added to Advertising's description and become part of its decomposition in consultation with those that are involved in the processes. You may have come up with different verbs in the names but they should imply acquiring, using, and disposing of an Advertisement.

One other technique could be applied, consistency of goals, inputs, and outputs. It appears that the goals of the core process and its sub-processes are not aligned. There is no mention of association of the advertisement to an offering or the enterprise's image. Perhaps these are part of the description of Choose Advertisement Message.

Brand Management

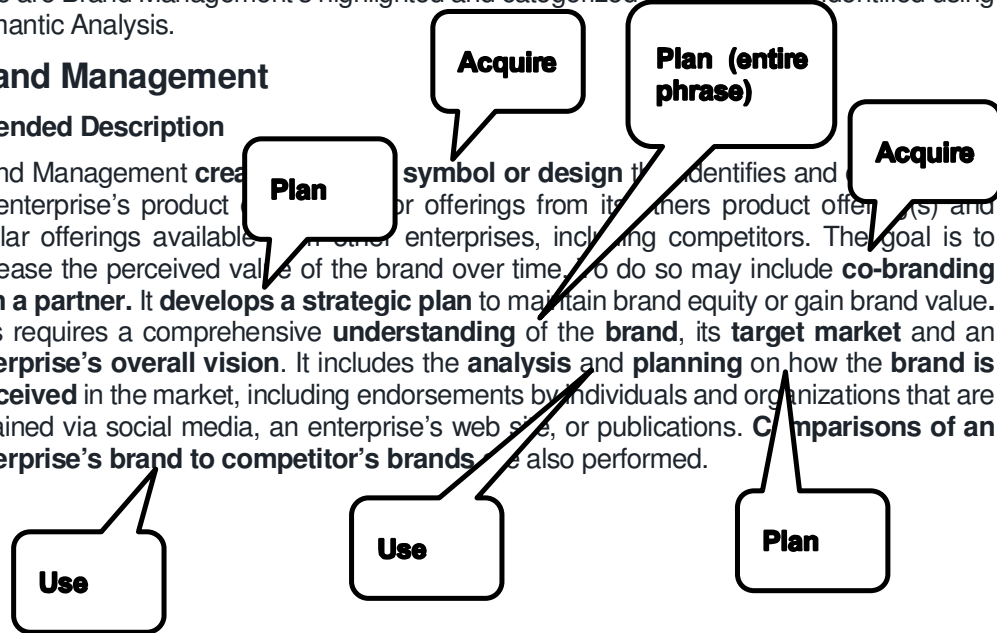
Part 1

Here are Brand Management's highlighted and categorized sub-processes identified using Semantic Analysis.

Brand Management

Extended Description

Brand Management **creates a name, symbol or design** that identifies and differentiates an enterprise's product offering and/or offerings from its others product offering(s) and similar offerings available from other enterprises, including competitors. The goal is to increase the perceived value of the brand over time. To do so may include **co-branding with a partner**. It **develops a strategic plan** to maintain brand equity or gain brand value. This requires a comprehensive **understanding** of the **brand**, its **target market** and an **enterprise's overall vision**. It includes the **analysis** and **planning** on how the **brand is perceived** in the market, including endorsements by individuals and organizations that are obtained via social media, an enterprise's web site, or publications. **Comparisons of an enterprise's brand to competitor's brands** are also performed.



Although not part of the exercise here is the description with goals in green, bold italics since they were useful in the confirmation of the Advertising process' description and decomposition. The first highlighted is the overall goal of Brand Management.

Brand Management **creates a name, symbol or design** that identifies and differentiates an enterprise's product offering and/or offerings from its others product offering(s) and similar offerings available from other enterprises, including competitors. ***The goal is to increase the perceived value of the brand over time.*** To do so may include **co-branding with a partner**. It **develops a strategic plan** to ***maintain brand equity or gain brand value.*** This requires a comprehensive **understanding** of the **brand**, its **target market** and an **enterprise's overall vision**. It includes the **analysis** and **planning** on how the **brand is perceived in the market**, including endorsements by individuals and organizations that are obtained via social media, an enterprise's web site, or publications. **Comparisons of an enterprise's brand to competitor's brands** are also performed.

Figure 8 – Brand Management Decomposition and Goals

Here is the first level sub-process decomposition.

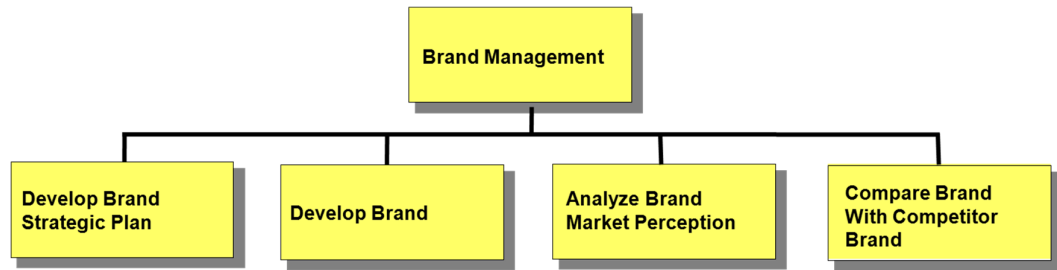


Figure 9 – Brand Management Decomposition

And the decompositions of the two sub-processes that could be further decomposed.

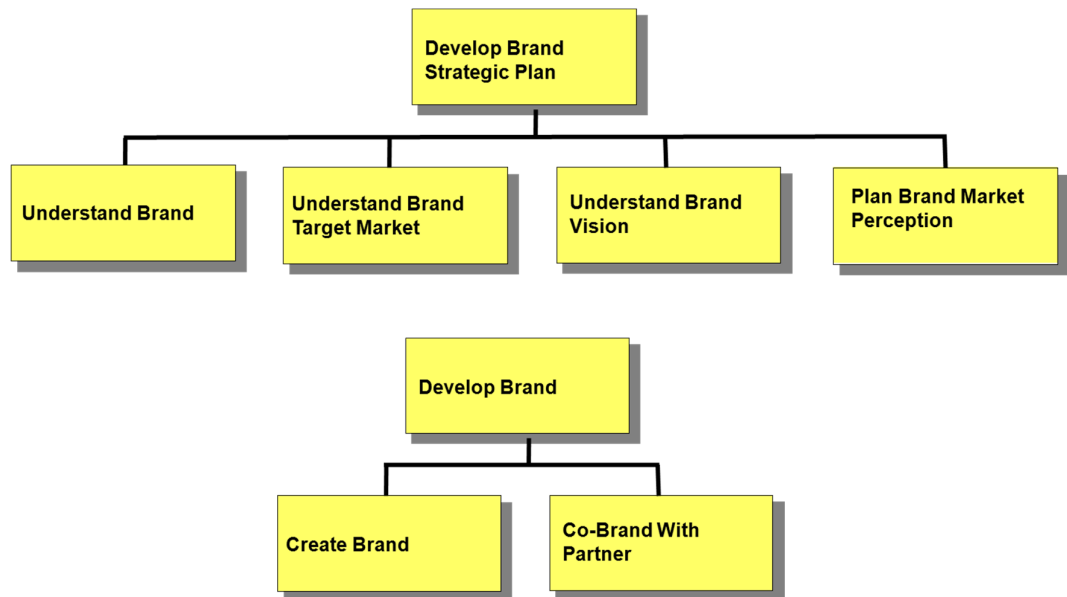


Figure 10 – Brand Management Sub-process Decompositions

And here are the names of all Brand Management sub-processes and their initial brief descriptions. You may have come up with different verbs in the names but they should imply planning, acquiring, and using a Brand.

Brand Management's lifecycle sub-processes:

- Develop Brand Strategic Plan

Gain an understanding of the brand, of the brand's target market, and an understanding of an enterprise's overall brand vision. Plan on how the brand is to be perceived in the market. The goal is to maintain brand equity or gain brand value.

Note: The description of a higher level process can often be developed using the descriptions of its sub-processes. This was done for this process and the next one. The goal was added from the description of the core process. Doing this ensures the consistency of goals, inputs, outputs of a higher level process and its sub-processes.

- Develop Brand

Create a name, symbol, or design that identifies and differentiates an enterprise's product offering and/or offerings from its others product offering(s) and similar offerings available from other enterprises, including competitors. Co-brand With Partner if desired. The goal is to increase the perceived value of the brand over time.

- Analyze Brand Market Perception

Analyze how the brand is perceived in the market, including endorsements by individuals and organizations that are obtained via social media, an enterprise's web site, or publications.

- Compare Brand With Competitor Brand

Perform comparisons of an enterprise's brand to competitor's brands.

Develop Brand Strategic Plan's sub-processes:

- Understand Brand

Gain an understanding of the brand.

- Understand Brand Target Market

Gain an understanding of the brand's target market.

- Understand Brand Vision

Gain an understanding of an enterprise's overall brand vision.

- Plan Brand Market Perception

Plan on how the brand is to be perceived in the market.

Develop Brand's sub-processes:

- Create Brand

Create a name, symbol, or design that identifies and differentiates an enterprise's product offering and/or offerings from its others product offering(s) and similar offerings available from other enterprises, including competitors. The goal is to increase the perceived value of the brand over time.

- Co-brand With Partner

Co-brand with a partner if desired.

Part 2

Since this is also a core process lifecycle decomposition might have come to mind as a technique to use. There are plan, acquire, and use processes, but a dispose process is missing. At some point a Brand may be retired, so there may be a need to add Retire Brand to Brand Management's sub-processes.

This is another use of lifecycle decomposition. It can be used to ask those who are involved in a process a question about missing lifecycle processes, such a Retire Brand. And to assist in further describing the higher level process.

One other technique could be applied, consistency of goals, inputs, and outputs. It appears that the goals of the core process and its sub-processes are aligned. The two goals of the core process were include in the descriptions of the sub-process to which they pertain, Develop Brand Strategic Plan and Develop Brand. And it appears that the other two sub-processes, although they do not have a stated goal support these two goals. If a goal or goals are to be stated for these two sub-processes those that are involved in them could provide them. They could then also be added to the description of Brand Management.