INFO-420

Software Project Management

Assignment #2

Group 6

Project Charter, Scope, and Organization

For

BHYR Furniture Retail

Proposed by Yashfa Azizi, Harsh Sharma, Brandon Stream, and Russell Zheng

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Part One: Project outline

Group Name: BHYR Project Committee (Group 6)

Project Name: FurnitureHub Mobile Application

Members: Yashfa Azizi, Russell Zheng, Brandon Stream, Harsh Sharma

Prior to the introduction of the COVID-19 pandemic, BHYR Furniture Retail was able to operate normally within the outlet setting, where interested customers would visit the premises and purchase furniture that best suits their needs. However, with the COVID-19 outbreak taking place, BHYR has started to notice a decrease in the number of in-house sales and the visiting customers. The firm understands that this is because the customers are not willing to visit the premise due to virus transmission risks in public spaces. In terms of BHYR's supply chain management, there is a surplus of furniture supply which is taking up space and storage costs due to the lack of demand. As a result, BHYR is looking for a way to revamp their operations by partnering with ReVamp and sponsoring FurnitureHub, a mobile application which will provide a creative, safe, and interactive user experience.

Given the financial hardships that BHYR is facing, the introduction of FurnitureHub will assist BHYR in reaching out to customers and provide a method of closing a given sale. Customers will be able to utilize the augmented reality feature to virtually design their furniture spaces in real-time through the mobile app. ReVamp believes that this integration will allow for a seamless and creative form of user experience on top of what BHYR has to offer. The FurnitureHub project will be deemed successful if BHYR manages to account for a 30% increase in profit margins within the first year of the product release.

In order to better understand how the development of this project aids BHYR's overarching organizational strategies, one needs to consider the solutions that BHYR's

competitors have put in place during the pandemic. IKEA, a ready-to-assemble furniture company, has been dependent on their e-commerce business to reach their expected sales levels during the pandemic. Based on customer feedback, IKEA's online customer support has been criticized for improper communication, lack of commitment on delivery of the goods, and poor supply management (Wilson, 2020, paras 6-7). One major problem with IKEA's solution is that their inventory is disintegrated with the system. Hence, an order might be placed for an item which is out of stock. It can clearly be seen that IKEA's website system fails to deliver to the expectation and leaves customers unsatisfied. On the other hand, FurnitureHub offers a central platform with active customer support instead of automated bots and an integrated inventory management that realistically reflects the items in stock.

In response to the pandemic, Raymour and Flanigan, a furniture retail company, is also looking to reform their short-term strategies with the motive of achieving consumer attention through sales. Alexandra Steigrad from the NYPost highlights how the firm used a festive "Friends & Family" sale to gather public's attention. An employee of the company described the sale as "a potential breeding ground for problems" (Steigrad, 2020, paras 1-2). Furthermore, the article suggests that although the company was trying to promote a safer shopping environment, the sale went out of control. Overall, FurnitureHub, the app designed by ReVamp, will ensure that BHYR meets its financial goals by providing an augmented reality experience, active customer support (during and after purchase), and a rating system which would allow the customers to assess and represent product quality in a virtual environment. All in all, this will be a valuable investment for BHYR as they can continue using the app in tandem with the in-store purchase for the long-term. Financially, BHYR will be served well as they will be able to reach out to more customers for the future as well.

Part Two: Project charter

Project Name	FurnitureHub Mobile Application
Project Stakeholders	**BHYR Furniture Retail:** A furniture company creating FurnitureHub Mobile Application in order to increase sales. **ReVamp:** Contractor working for BHYR Furniture Retail who will provide services to assist with the development of FurnitureHub Mobile Application.
Project Description	FurnitureHub will be a mobile application that allows customers to purchase furniture from BHYR Furniture Retail.
MOV	This project will be successful if BHYR can increase profit margins by 30% within a year of this project's completion.
Project Scope	**In Scope:** The creation of a mobile application that would be available for all consumers of BHYR Furniture Retail with smart devices which would offer the viewing of the BHYR's catalog to purchase from. The app would also include a social media feature which allows the consumer to see what is trending between other users from BHYR services. Additionally, it would include an augmented reality experience which allows the consumer to see the furniture through the camera of a mobile device in real-time. **Out of scope:** An additional feature to publish combinations of furniture designs, along with an additional website for those consumers with smart devices that wish to view and purchase furniture through a web browser.
Project Schedule	FurnitureHub is expected to have a duration of 3 years. **Major Phases:** TBD
Project Budget	FurnitureHub has an estimated cost of $300,000.
Quality Issues	FurnitureHub will meet all guidelines required in IEEE Mobile/App Guidelines.

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Resources Required	BHYR Furniture Retail will provide an office space, along with work laptops and office materials to allow for collaboration and support for the project team. BHYR Furniture Retail will additionally receive aid in development work from ReVamp.
Assumptions and risks	1. BHYR Furniture Retail may need to invest in a larger budget than their initial budget to complete FurnitureHub. 2. Either BHYR Furniture Retail or ReVamp may lack adequate resources to implement features in FurnitureHub. 3. Either BHYR Furniture Retail or ReVamp may overstep established critical deadlines, causing a delay in FurnitureHub. 4. There may be less demand for user usage of the application as the pandemic will most likely be over within three years.
Project Administration	**Communication plan:** BHYR Furniture Retail and ReVamp will hold meetings at the beginning and end of sprints to report updates on FurnitureHub. **Scope management plan:** Scope will be submitted, logged, and reviewed by both BHYR Furniture Retail and ReVamp during meetings. **Quality management plan:** BHYR Furniture Retail and ReVamp will assure that guidelines in IEEE Mobile/App Guidelines are being followed in the project life cycle during meetings.
Acceptance and approval	<table><tr><td>**Signature**</td><td>**Date**</td></tr><tr><td>BHYR Furniture Retail Project Manager: <u>Jane Doe</u></td><td>11/01/2020</td></tr></table>
References	IEEE Mobile/App Guidelines. (n.d.). Retrieved November 01, 2020, from https://brand-experience.ieee.org/guidelines/digital/mobileapp-and-responsive-design-guidelines/mobile-apps/

Part Three: Project scope

Scope Statement

1. To develop a mobile application that promotes sales during the pandemic for

   BHYR Furniture Retail while creating a simplified customer experience.

2. To provide the customer with an augmented reality experience altering the

   familiarity of furniture shopping for the safety of the customer.

Deliverable Definition Table

Deliverable	Structure	Approval Needed By
Business Case	Document	BHYR Furniture Retail Project Manager
Project Charter & Project Plan	Document	BHYR Furniture Retail Project Manager
Current System Study	Document	BHYR Furniture Retail Project Manager and ReVamp Project Manager

Use Case Diagram
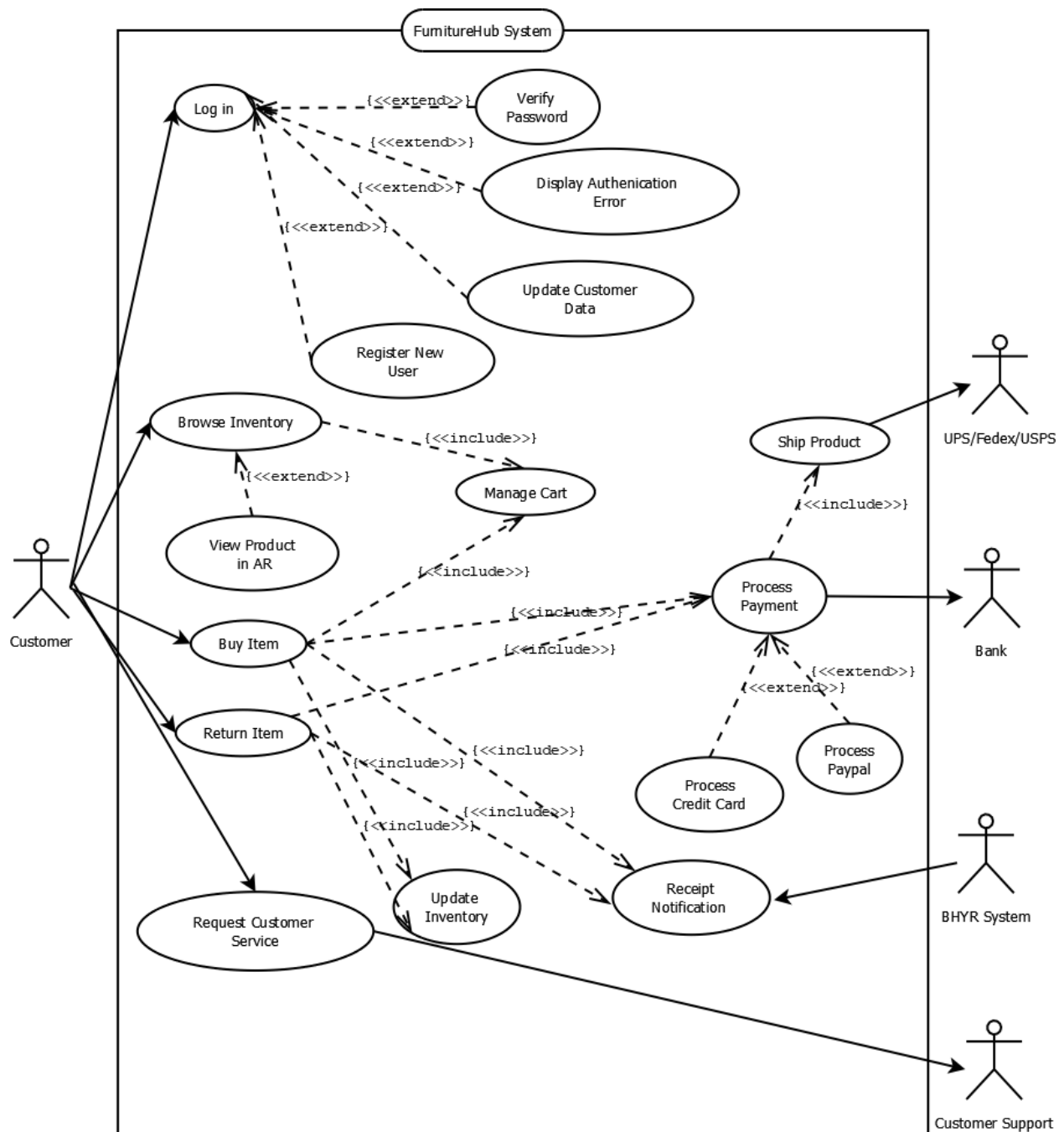
Use Case Explanation

There are many different tasks that a customer can perform within the BHYR Furniture

Retails system. The customer will start out by logging into the system. If it is a new customer

they will be prompted to create an account. All returning customers will be given the opportunity to update any personal data such as address, email address, or password.

The customer will then be able to browse the inventory that is offered by BHYR Furniture Retails. If the customer finds an item they like they will then be able to add it to their cart. The BHYR Furniture Retails System allows for the customer to view the furniture in the room before it is bought with the systems augmented reality experience.

Once the customer decides that they would like to purchase a product the system inventory will remove the product and then the customer will be promoted to process a payment via Paypal or credit card. Once the payment has processed the system will send receipt notification to the customer.

If the customer is not happy with their purchase they have the opportunity to return the item. When an item is returned it will be added back into the systems inventory and the payment method will be refunded. A return receipt notification will then be distributed to the customer.

The customer will also have the ability to contact customer service is they have any questions in regards to any open order or processed return.

Part Four: Project organization

Organization Structure

The organizational structure that the project will use is the Matrix Organization. A sample matrix organizational structure is provided and will be discussed in further detail later on with a clear reporting structure and roles.
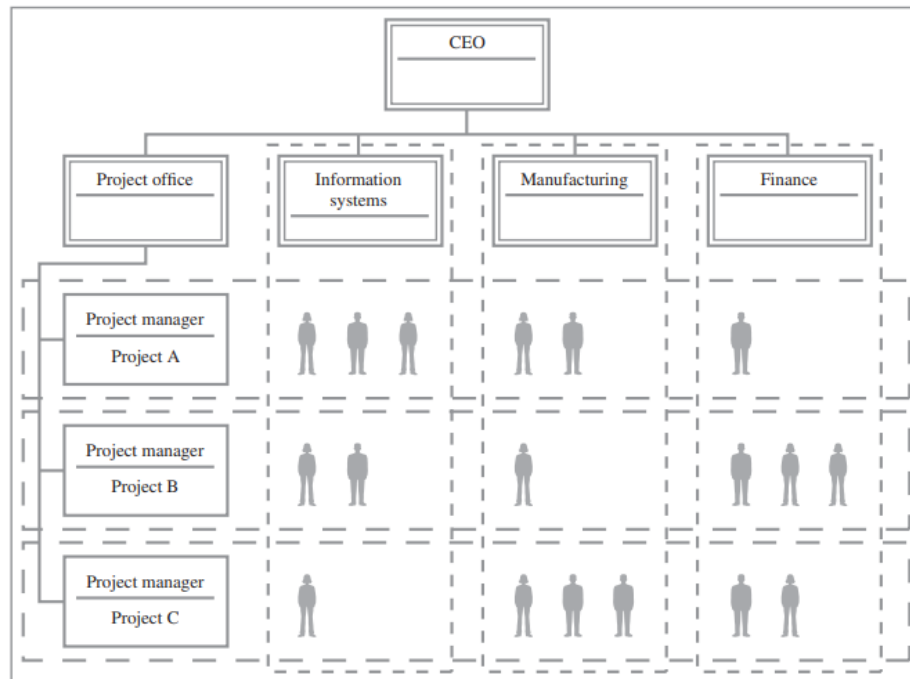

The basis on which the project will take on this organizational structure is because of the many important benefits. For a project with attention to detail and vast amount of interworking project components, the matrix organizational structure proves to be ideal with its increased communication efficiency, project focus, employee motivation, high level of integration and helps the project team maximize their resource usage.

A matrix organization allows for multiple departments to easily communicate and collaborate on a project because employees do not just answer to one functional manager, but multiple. This allows for issues to be resolved more quickly. Employees also have more

autonomy and input in this project following the matrix organizational structure, leading to better teamwork across multiple departments. The flow of resources such as equipment and personnel are shared across different project teams and managers will work in their area of expertise which boosts overall productivity. With many components to this project, the matrix organizational structure also allows for high integration reducing the chances of 'who did what' and 'what goes where' conflicts.

BHYR's Project Matrix Organizational Structure
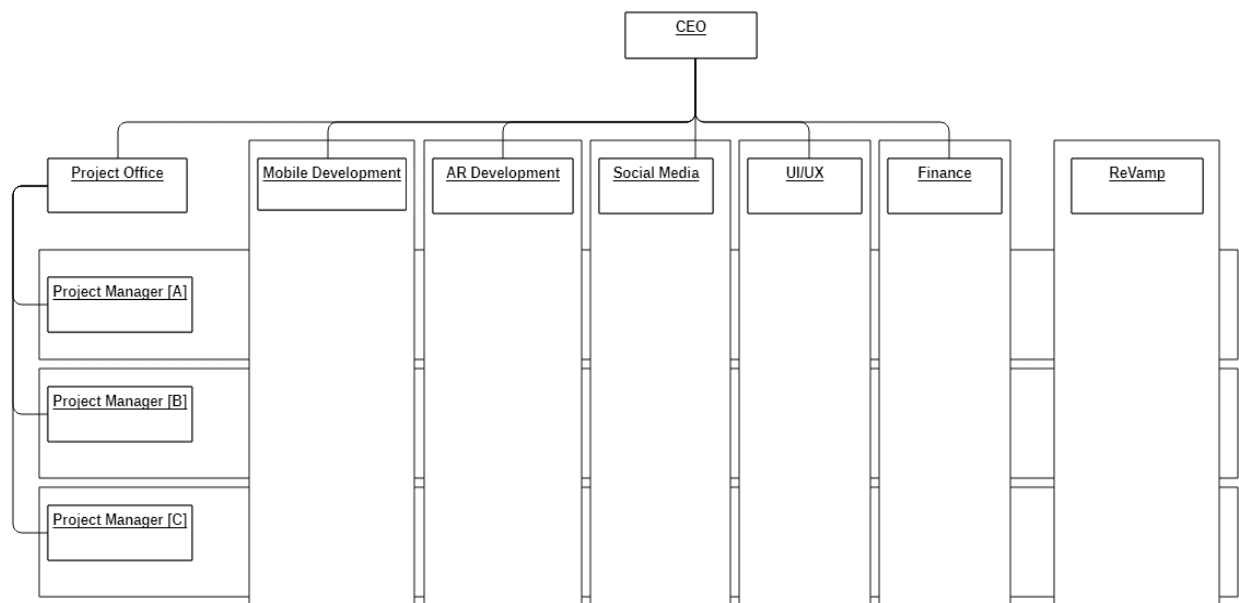
Stakeholders

As represented in the project organization, BHYR Furniture Retail is working in conjunction with contractor ReVamp. BHYR Furniture Retail is outsourcing some of the development work from ReVamp who will dedicate personnel to mobile development and augmented reality development. The key stakeholders consist of BHYR Furniture Retail and ReVamp.

Project Roles

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The roles encapsulated within this project include the following:

Management roles:

- CEO

- Project managers

Project team roles:

- Mobile developers (both BHYR's Furniture Retail internal employees and ReVamp outsourced developers)

- Augmented reality developers (both BHYR's Furniture Retail internal employees and ReVamp outsourced developers)

- Social media managers

- UI/UX developers and testers

- Financial advisors

Reporting Structure

Project team members will usually report to their respective project manager, however this may not always be the case. Due to the nature of the matrix organizational structure, project team members are not restricted to reporting to one manager. All project team members can report to managers of a different project team if they are doing work that applies to a different project team. A mobile developer from project team A may choose to report to the manager of project B if they have done work for project team B and vice versa. However, work done for project team A must be reported to project manager A, etc.

References

IEEE Mobile/App Guidelines. (n.d.). Retrieved November 01, 2020, from https://brand-

      experience.ieee.org/guidelines/digital/mobileapp-and-responsive-design-

      guidelines/mobile-apps/

Lucid Software Inc. (2020). UML Use Case Diagram Tutorial. Retrieved November 29, 2020,

      from https://www.lucidchart.com/pages/uml-use-case-diagram

Steigrad, A. (2020, March 21). Raymour & Flanigan going ahead with festive sale despite

      coronavirus. Retrieved November 01, 2020, from

      https://nypost.com/2020/03/20/raymour-flanigan-going-ahead-with-festive-sale-despite-

      coronavirus/

Wilson, M. (2020, September 04). Ikea's e-commerce was already pretty bad. During COVID-

      19, it absolutely fell apart. Retrieved November 01, 2020, from

      https://www.fastcompany.com/90547486/ikeas-e-commerce-was-already-pretty-bad-

      during-covid-19-it-absolutely-fell-apart