Montana Holds Case Analysis
MIS 321 Team Assignment

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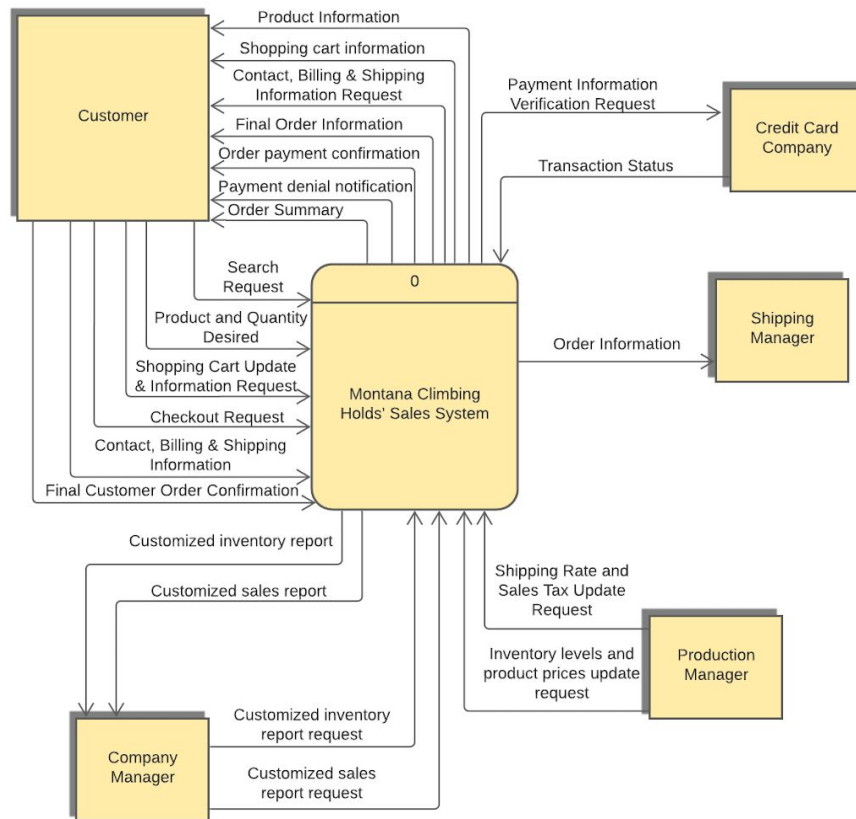*Team 5*
11/20/2020

Introduction:

Sasha Montana was a student at WWU studying Manufacturing and Supply Chain Management when she fell in love with rock climbing. She currently has a stable manufacturing job, but her ambition is driving her to combine two of her strengths, her profession and her passion for rock climbing. This brought about the idea of "Montana Climbing Holds" a company that sells climbing hand holds online. In recent years, the indoor climbing industry has expanded, especially among the younger generations. Many rock climbers would frequent climbing gyms, however it has become more common for climbers to build their own climbing gyms at home. Montana sees this trend as a great opportunity for her proposed company. Due to the pandemic, many climbing gyms are being forced to close making even more climbers create their own at-home climbing setup. Since climbing hand holds are such an important part of a home climbing gym for customization and route creation, Montana is looking to focus her sales of holds on the home consumer market.

This report will include a process model consisting of both a context DFD and a level 0 DFD. These data flow diagrams will give a visual understanding of what is required for the Montana Climbing Holds information system, and how the system will function. Along with this, the report will include data specification for a sample order payment confirmation as part of the "Verify and Confirm Credit Card Purchase" process. Finally, the report will conclude with an assessment of three separate eCommerce softwares and a recommendation on which software Montana Climbing Holds should acquire.
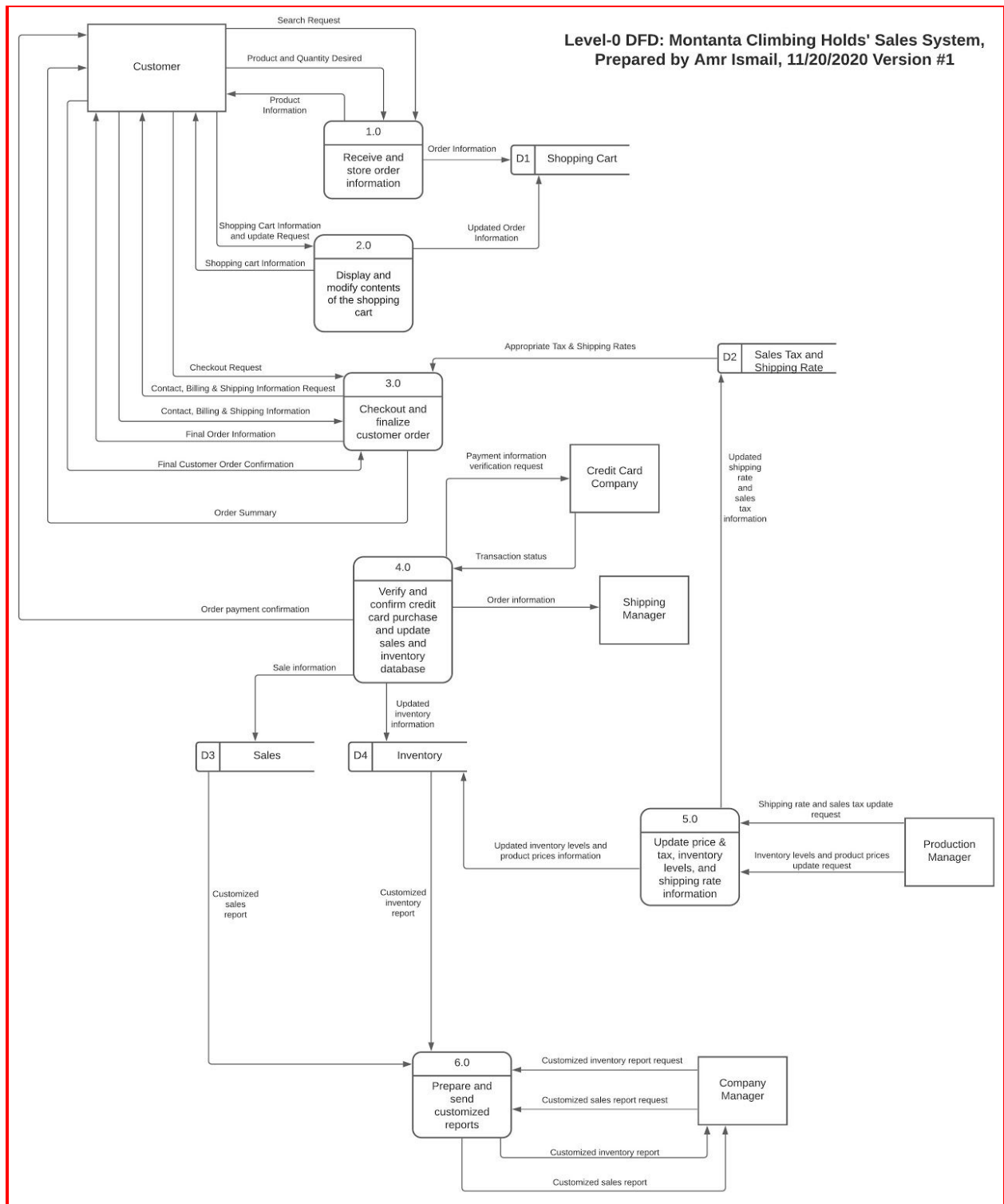
Process Model - Context DFD & Level 0 DFD:

Summary: Montana Climbing Holds' sales system processes orders, keeps price, tax, and shipping rate information up-to-date, and updates inventory levels when shipments come in and orders go out.

Context DFD:

Context DFD for Montana Climbing Holds' Sales System
Prepared by Jarod Ayala, 11/17/2020
Version 1

Level 0 DFD:

Level-0 DFD: Montanta Climbing Holds' Sales System, Prepared by Amr Ismail, 11/20/2020 Version #1

<u>Data Specification:</u>

Subtotal = {Unit Price, Quantity, Extended Price}

Grand Total = Subtotal + Shipping + Tax

Shipping Address = Client First Name + Client Last Name + Street + City + State + Zip Code + Country

Billing Address = Payee First Name + Payee Last Name + Street + City + State + Zip Code + Country

Order Summary = Product + Subtotal + Grand Total + Payment Method + Card Ending in:+ Shipping Address + Billing Address

Order Payment Confirmation = Order Number + Order Summary

NOTE: See "Order Payment Confirmation" below for reference.

To: jane.doe@gmail.com

From: CH@Montana-Holds.com

Subject: Order Payment Confirmation -- Order #303

Date: October 28, 2020 at 2:15 pm

Thank you for your purchase!

Hi Jane, we are getting your order ready to be shipped. For instructions on how to use or install your new product, please see the bottom of the item description on our website. Please reach out if you have any questions! We really appreciate your business and will do our best to ship as soon as possible!

_____

Order Number: #303

Order summary

Product	Quantity	Unit Price	Extended Price	
Fancy Foot Holds	6	$10.00	$60.00	
Jug Holds – Medium	8	$12.00	$96.00	
Subtotal			$156.00	
Shipping			$20.00	
Tax			$9.50	
Grand Total			$185.50	

Payment Method: VISA   Card Ending in: xxxxx6789

_____

Shipping Address	Billing Address
Jane Doe	Jane Doe
123 Vital Drive	123 Vital Drive
Bellingham, WA 98225	Bellingham, WA 98225
United States	United States

Contact Us:
Montana Holds
456 Main St.
Monroe, WA 98272
(360) 200-5555

Assessment of eCommerce Software:

System 1: Shopify - Shopify Plan
https://help.shopify.com/en/manual/intro-to-shopify/pricing-plans/plan-features

Functionality: 4

Shopify is mostly able to perform the required functions. It was noted that Montana Climbing Holds is especially interested in an information system that will "support sales, inventory management, and reporting". All of these capabilities are available with the Shopify plan. In regards to sales, Shopify is able to record and keep track of sales and data associated with sales. This information can also be accessed through sales reports. One of the features Montana Climbing Holds was interested in was showing customers the quantity left of items when searching on the online store. This feature is available but requires minor coding in which there are numerous tutorials within the Shopify forums. The Shopify plan allows for professional report creation and 5 additional staff accounts which are able to access more sensitive information within the system. This allows the production manager, shipping manager, and company manager to update their necessary information and receive reports. All reports are included with the Shopify plan, but some may take 12-72 hours to show changes in some reports. Shopify meets most functionality requirements, but due to the extra coding for displaying stock quantity (not included in basic functionality) the rating for this category is a four.

Reliability: 3

Shopify is a well known Saas eCommerce provider, they are publicly traded and used by many companies (both small and large). Shopify is very accessible to people interested in selling products online as they have a variety of pricing plans with different features. This does lead to the issue of scam stores on Shopify which will include card-testing and chargeback scams. This is a common issue with many eCommerce softwares, but is often more closely associated with Shopify. Shopify also had a recent data breach involving two of its own staff members. Overall Shopify is reliable service-wise but is lacking in reputation, due to this, Shopify is rated a three in this category.

Cost: 3

Shopify has 3 main pricing plans, Basic Shopify which is $29.99/mo, Shopify which is $79.99/mo, and Advanced Shopify which is $299.99/mo. For the requirements of Montana Climbing Holds, Shopify at $79.99/mo will encompass the majority of the companies needs. The pricing is a monthly subscription-based format which is standard for many Saas'. With inventory management, flexibility, customer service, and professional reports included, the cost is on the upper end. Finally, Shopify also

collects transaction fees which could be an unnecessary cost Montana Climbing Holds. Since Shopify is the most expensive eCommerce software being assessed, and is the only one with transaction fees, it has been rated a three in this category.

<u>Ease of use (for customers and management): 5</u>
Shopify has often been applauded for its ease of use for both customers and managers. Managers can also select from a variety of templates for the online store that customers can access which further simplifies the design aspect. Customers will find the eCommerce store that they experience very easy to navigate due to these templates and Shopify's structure. The online stores can follow the standard design in which there is the product selection, shopping cart, cart editing, and of course checkout. The system is already developed with options for email confirmations, credit card authentication, so all customers have to do is select what they want, enter information, and Shopify and Montana Climbing Holds will take care of the rest. Overall, Shopify is very easy to use both for managers and customers which gives the software a score of five in this category.

<u>Level of vendor support: 4</u>
Shopify has a very easy to navigate FAQ and forum where managers using the service can post questions and others can answer. Along with this, Shopify also has 24/7 customer service that can answer any questions or troubleshoot any issues. Overall Shopify's customer service is pretty standard for eCommerce systems, but does not go above and beyond giving it a score of four in this category.

<u>Flexibility: 5</u>
Shopify overall offers a lot of flexibility, with different plans and add-ons, you can customize the system to meet your businesses needs. Currently, the Shopify plan is what is recommended for Montana Climbing Holds given their current situation. However, add-ons such as the POS Pro offers far more capabilities. For example, if the firm decides to expand to a brick and mortar store, POS Pro allows for unlimited registers and store staff, as well as omnichannel selling features. Finally, if Montana Climbing Holds experiences significant growth and finds that the Shopify plan no longer keeps up with the volume and requirements of the firm, the plan can always be upgraded to Advanced Shopify. Since Shopify offers a lot of flexibility, it has been given a five in this category.

System 2: Wix - Business VIP
https://www.wix.com/ecommerce/website

Functionality: 5
Wix has the ability to perform required functions with ease. Wix offers very basic inventory management but this includes automatic database updating and editing which is what the firm requires. Wix also offers easily created reports that can be accessible to managers with permissions to access. Custom reports can also be made to fit the needs of any manager. A special feature that Montana Climbing Holds was looking for was the capability to show quantity left of a product to the consumer. This is very simple to do in Wix and requires no extra coding. Overall Wix can effectively support sales, inventory management, and reporting along with extra unique capabilities such as customer login and abandoned cart recovery. Wix excels in functionality giving it a score of five.

Reliability: 4
Wix is a very popular company in terms of supplying ecommerce software as they currently power more than 100 million sites. Wix is a publicly traded company that has been around for almost 15 years and also specializes in regular websites. Wix had encountered a minor security issue in 2016 in regards to admin data but has not had any major issues since. Overall, Wix is a reliable eCommerce platform, but will score a four in this category due to the minor data breach it experienced.

Cost: 5
One of Wix's major strengths is that they offer various different plans all at very affordable pricing. For Montana Climbing Holds, Business VIP at $49/mo would be the most effective plan. Wix also offers a Business Unlimited plan at $27/mo, Business Basic at $23/mo and a custom pricing option for their Enterprise level which encompasses many more features. Wix also collects no transaction fees, preventing any extra costs. Overall, Wix is the most cost effective option out of all eCommerce systems assessed, earning Wix a score of five for cost.

Ease of use (for customers and management): 4
Wix is very easy to use for managers. Although the interface is very easy to navigate, the platform does provide a lot of creative freedom in design which managers may find to be overwhelming. The website creation operates in a "drag and drop" style and reports are easily accessible. For customers, Wix has been reported to be very easily navigated like any standard eCommerce website. Wix even offers customer accounts for quick checkout which is a major convenience for returning customers. Although Wix is easy to use, there is concern about it being oversaturated with design options which

could leave managers overwhelmed. As a result of this concern, Wix scores a four in this category.

Level of vendor support: 5
Wix offers excellent support for vendors, especially with the Business VIP plan. With this plan, Wix offers priority customer support which is one step up from the 24/7 customer support. Customer service is available through phone, live chat and email. For these reasons, Wix scores a five for vendor support.

Flexibility: 5
Wix offers a lot of flexibility in both creative design and upgrading to different services. There are many additional applications that can be purchased if the eCommerce software requires something specific. Also the Enterprise level is all-encompassing with custom pricing, if Montana Climbing Holds grows out of the Business VIP that it is currently being recommended.
Because of Wix's great flexibility, it scores a five in this category.

System 3: Square - Retail Plus
https://squareup.com/us/en/point-of-sale/retail/features

Functionality: 4
Square Retail Plus' functionality meets almost all of Montana Climbing Holds needs. Square is very able to support sales, inventory management, and reporting. In regards to sales, their system covers all necessary basics that the firm requires. It effectively tracks sales data and can formulate sales reports. Square has an exceptional inventory management system for easy editing, updating, analytics and reports. Managers will be able to access all the reports they need to give them accurate and important information on how the business is functioning. Square currently does not have an app store which means that you are limited to the capabilities of the plan. One feature that Montana Climbing Holds was interested in was showing customers the quantity available of each item. Unfortunately it seems Square does not currently offer that feature and there is no application to fulfill that requirement. Square fills all requirements except for showing stock quantities to customers, because of this Square scores a four in functionality.

Reliability: 5
Square is very reliable and has had no recent issues of data breaches. For this reason, Square scores a five for reliability.

Cost: 4
The plan that is recommended for Montana Climbing Holds is the Square Retail Plus plan. It is available for $60 falling in upper-middle for pricing. Square also has a very powerful free plan, but unfortunately it does not offer some of the necessary features that the firm is looking for. Square also has a Premium plan with customer pricing for large scalable businesses, but this requires specific eligibility. Overall pricing is fair but could be considered on the expensive side for services provided. For these reasons, Square scores a four in cost.

Ease of use (for customers and management): 3
Square offers many unique design aspects, however it can be more difficult for managers to use than other eCommerce platforms on the market. Many users of the software have noted that there can be a large learning curve in getting familiar with and understanding the software. In contrast, Square is very easy for customers visiting your website. Square scores a three for ease of use as it is the most complicated out of all systems assessed for managers to use.

Level of vendor support: 3
Square offers 24/7 customer support over email, live chat and Twitter. However, Square lacks in phone service which many people prefer for troubleshooting issues and asking questions. Square's reasoning for this is that their eCommerce software is an online process that should have instantaneous online solutions. Even though they lack phone support, their live chat service is very effective. Since phone support is a standard characteristic of vendor support which Square is missing, it will only score a three in this category.

Flexibility: 4
Square offers a lot of design flexibility (even though it is complex to use). This means Montana Climbing Holds has a lot of design power if the company goes through a rebranding or style change. Square also offers a Premium plan if the firm outgrows the Plus plan, but the form would have to meet specific eligibility requirements to receive the benefits of the Premium plan. If Montana Climbing Holds opens a brick and mortar store, the Plus plan already has many features that would directly translate into a physical retail environment, limiting the need for extra software. Even though Square offers a good amount of flexibility, it will score a four because of the hurdle in having to meet eligibility requirements if Montana Climbing Holds chooses to upgrade.

Recommendation:
Given our analysis of Shopify, Wix and Square, the system that is best suited for Montana Climbing Holds is Wix: Business VIP. Wix's Business VIP plan is the only

system that was able to meet all of the firm's requirements while still remaining cost effective. In our analysis Wix scored 5's in functionality, cost, level of vendor support and flexibility. The only categories where Wix fell short was in ease of use due to the amount of options leaving managers overwhelmed, and reliability because of a minor data breach almost five years ago. However, Wix still scored high in these categories because the issues were perceived as minor. Overall Wix is the ideal eCommerce system for Montana Climbing Holds.