

Assignment 1

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1) Introduction

1.1 Project Background

As a full stack developer in a leading enterprise solution provider called harmony One answers, the charitable organization known as "Merry Meal" has approached to implement a digital internet utility to turn their business paper-primarily based into digital-based. Mr. David, the manager, has assigned me to design the answers for the software. I, as a developer, will work collectively with or more applicants as an individual group to post a design inspiration, development plan, and functional utility.

MerryMeal has partnered with several meal provider carriers throughout the united states to deliver as quick as feasible. And for this we get a variety of help from the specialists. the use of only the fine satisfactory elements for every of our food, we usually strive to tailor the best quality food to the marketplace assured by means of superiors. additionally, considering proper dietary care, our group has been deployed to prepare a hot afternoon meal and supply it to folks that want it.

Merry Meal is a non-profit organization that launches and can provide a warm midday meal to certified adults who're unable to cook for themselves or balance their weight-reduction plan reputé because of age, disorder, or disability at their personal homes. Meal services will simplest be available Monday through Friday. For individuals who are away greater than 10 kilometers radius from the outsourced kitchen might be introduced to frozen meals and be served at weekend. furthermore, Merry Meal has serval meals carriers' partners throughout the united states of America in an effort to deliver quicker. As for now, Merry Meal is facing paper-based control problems wherein serving productiveness is gradual and complicated to manipulate as

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well as organize. As developers, we will make contributions to organization solution programs to increase control pace precisely and organizable.

The Application should allow,

- Members and Caregivers registration with their requirements
- Partners and Volunteers registration with their details
- Fundraising through Donors / Supporters
- Menu Planning and Preparation
- Meal Delivery Management of partners and riders
- Food Safety Management
- Reassessment of need evaluation, and,
- Management Information System for effective management

1.2 Pain Points

- Cannot gain and save user facts consistently as a current business makes use of paper-primarily based control.
- Cannot get a confirmation message from a member if the meal is brought by means of the rider.
- Cannot able to build connections between each role of a user in a business.
- No management system from the admin side.
- Can't update menu listing from partner side for members because of paper-based.
- Donation lack of proof because of susceptible information management.
- Can't inform all individuals automatically if service is unavailable.
- Do now not have any automatic document system to review.

As a business analyst or a professional who desires to pursue a business analyst career, its miles required to realize approximately a number of those exceptional commercial enterprise analysis strategies

a) SWOT Analysis

SWOT analysis is a system for distinguishing and analyzing an organization's strengths, weaknesses, opportunities and threats. These words make up the SWOT acronym.

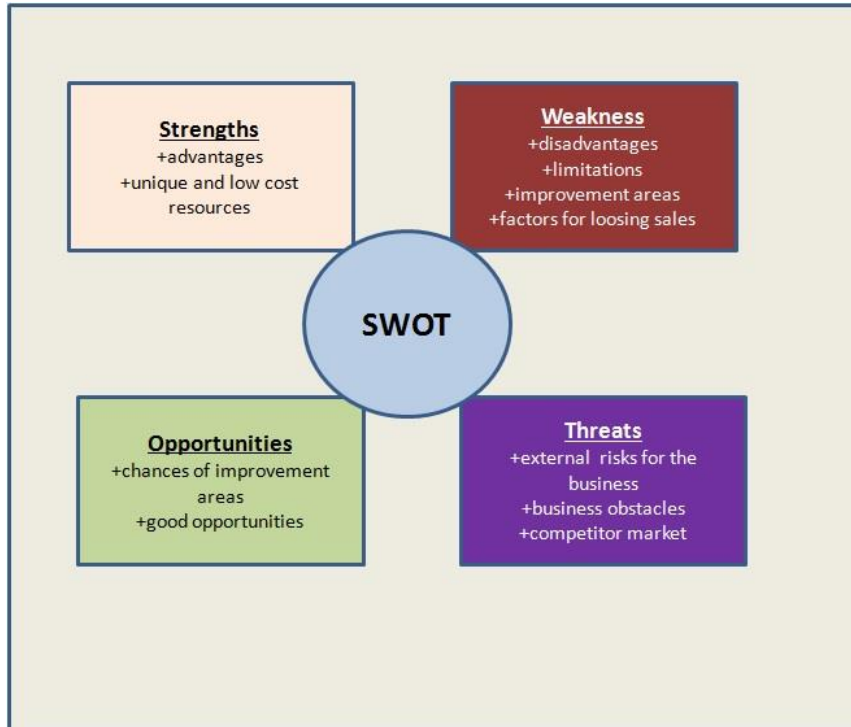
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The essential objective of SWOT analysis is to build familiarity with the elements that go into settling on a business choice or laying out a business system. To do this, SWOT analyzes the inside and outside climate and the elements that can influence the suitability of a choice.

Organizations generally use SWOT analysis; however, it is likewise utilized by not-for-profit associations and, less significantly, people for individual appraisal. SWOT is likewise used to survey drives, items or ventures. For instance, CIOs could utilize SWOT to assist with making an essential business arranging layout or play out a cutthroat examination.

- **Strengths** – current operation excels at and what characteristic makes the company self-assurance in market competition, as an example, a strong brand, particular approach, specific loyal customer base.
- **Weaknesses** – pain points and inner elements which stop enterprises to lead in market competition, for example, a vulnerable brand, inconsistent technology support, do no longer follow a digital commercial enterprise approach.
- **Opportunities** – any opportunities or external elements that allow the company able to develop dramatically.
- **Threats** – external threats which can slow down regular commercial enterprise methods of employers.

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b) MOST Analysis

Most is short for mission, objectives, strategies, and tactics. Most analysis is used to enhance internal processes and company's way of life by way of analyzing the business enterprise's internal environment. Most analysis is extremely effective – and regularly empowers businesses with a new sense of capability and purpose. Most evaluation turns your vision and ambitions into sensible, plausible goals – and allows to construct successful businesses.

When you conduct most analyses, you provide clear targets to fulfill for every member of your crew within your business enterprise. At its middle, it enables you to ask the query, "how does this help us get to the next level?"

By way of doing this, it maintains your techniques relevant, justified, and centered at the goals which matter maximum. You may use most evaluations not simply in your internal methods but to further your advertising and marketing, income, increase, and human assets

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- Mission – whatever your goals are, mission statements for precise project need to be ambitious based totally on targets. Upon mission, analysis phase may be exceeded to subsequent stage to define objectives.
- Objectives – Unlike mission, objectives defined by way of crew have to be suitable in smart principle - this is unique, Measurable, achievable, realistic, and well timed. Ambiguous intention can be regularly hard and not possible to complete.
- Strategies – Strategy defines what techniques or tools could be used to acquire cutting-edge objectives set from the preceding stage. techniques may be complete, worried various kinds of strategies.
- Tactics – Tactics are a set of methods for sensible targets in the contemporary approach to gain commercial enterprise goal. processes are often a trustworthy procedure that crew members can execute.

MOST Analysis



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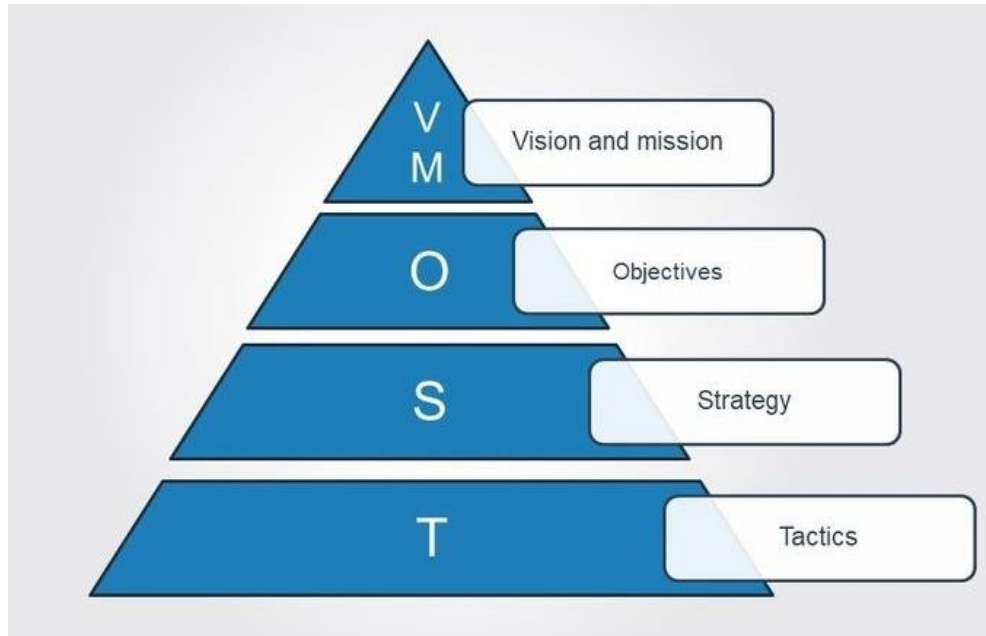
c) VMOST Analysis

VMOST analysis is a framework to investigate and evaluate whether an average method and helping activities are in alignment or no longer. it could be implemented for each current and destiny method. number one benefit of VMOST evaluation is to break down a strategy into each core issue which crew individuals can smooth to devour. VMOST stands for vision, mission, objectives, method and tactics. With the assist of VMOST analysis, items which aren't in aligned can be investigated by means of every crew member and first-rate in shape position from business can be identified.

- Vision – vision is a assertion to engage and encourage team individuals which describe destiny of modern device. venture statements cannot be shaped without imaginative and prescient.
- Mission – mission announcement describes high degree of what the team will do and the way to gain crew’s vision.
- Objectives – targets are formidable, clean and massive. that is the level wherein task statements are turned into fact. objectives are often massive item to attain.
- Strategy – method can be considered a small choice supporting described objectives. tasks may additionally come after every objective. crew has to reinvestigate those projects or strategies before definitely implementing it.

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- Tactics – tactics are the implementation element of strategy plan. list all strategies and discover what is lacking in excessive stage to get in more element as a lot as viable.



d) PESTEL Analysis

PESTLE analysis is a fact-locating pastime on external opportunities and threats in an effort to have an effect on an agency's selection. It investigates six outside factors which influences on business enterprise.

- Political – region tax policy, trade restrict, political balance and environmental rules.
- Economic – inflation, wage, age distribution, interest rate, alternate rate, loan, unemployment (countrywide) and fee of living.

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- Sociological – united states culture, work way of life, medical health insurance, population development rates, fitness, and protection.
- Technological – new technology, trending technology, a new idea in a digital location.
- Legal – import/export, get right of entry to substances, sources.
- Environmental – pandemics, worldwide warming, lack of sustainable sources, and different emergencies.



Most suitable business analysis for a project

Most analyses could be used for the Merry Meal project. With maximum analysis, the missions can be defined from business statements. Merry meal targets may be defined and immediately transformed into techniques. Upon each strategy, more than one tactic could be deliberate for execution to develop the web application

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1.3.1 Project goal

- Gather all the information and create a system.
- Being able to understand information approximately the food items.
- Save money and time by way of buying food items.
- Easy to connect to the merry meal business enterprise.
- User can easily discover the meals items of the internet site
- Making the website user-pleasant and with cutting-edge design.
- Handing over the finalized project on time earlier than the time limits.
- Complete the necessities given by means of the purchaser.
- Meet all of the functional and non-practical necessities given by way of the consumer.

1.3.2 Project Objectives

- Produce software design document
- Choose the ideal design and development methodologies with tools and strategies
- Produce a useful business application
- Compare the performance of a business application toward its design

1.3.3 Project scope

- Listing the food items MerryMeal website gives with the everyday.
- Add an online selling system to promote for the meals items.
- Database should be MySQL.

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1.3.4 Project out of scope

- Upload the comments alternative and rating system to get the user's thoughts.
- Develop FAQ pages to remedy the issues frequently requested by the customers.

2) Project Initiation

2.1 Enlist Project Stakeholders: - Merry Meal Organization

2.2 Feasibility Study

a) Technical Feasibility

Each member of the team has the appropriate knowledge, organization have enough equipment to develop the project objectives on time.

b) Operational feasibility

We have enough manpower to work on the project with the backup developer so there will be no issue in the future. Have all the hardware and software requirements to develop the application on time.

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c) Economic Feasibility

- Cost

Serial Number	Tools	Cost for Month (USD)
1	WIFI	\$6.00
2	Draw.io	\$10.00
3	Microsoft 365	\$9.99
4	Human Resources	\$200.00 for each member
	Total Cost	\$825.99

- Returns

As Merry Meal is a non-profit organization, the only gateway to collect fund is by donations which mean the return may be inconsistent. As a result, there is no way to measure and compare the matrix between costs and returns.

d) Legal Feasibility

The website meets the cyber law rules and other regulatory frameworks.

e) Schedule Feasibility

The project is very time time-consuming we are capable of doing the things on given time.

f) Risk Feasibility

Risk can come and goes, and no one has control over it, but the team working on it has appropriate knowledge of handling each risk gently to finish the project on time by resolving every unwanted, unaware trouble.

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2.3 Design considerations (UI/UX)

Components	Accessed user types	Description
Responsive Navigation bar	Any users.	Navigation panel of the website
Common footer	Any users	Important Links, Social Media Links, Copyright section
Highlighted Information	Admin	Displays the total number of funds, users, volunteers, and delivered meals.
Login	Any users	Common login form for all users
Registration	Any users	User registration form
Landing Page	Any users	The common landing page of the website
Rider Dashboard	Riders	Rider Details
Admin Dashboard	Admin	Master Dashboard for admin
Partners Dashboard	Partner	Partners information
Caregiver Dashboard	Caregiver	Caregiver availability, Caregiver accessibility
Member Dashboard	Member	Order details and member details
Volunteer Dashboard	Volunteer	Check for food safety, Setting status of food safety
About Us	Any Users	About us details
Contact Us	Any Users	Contact us details
Terms & Conditions	Any Users	Terms & conditions of the company

2.4 Dependencies

- Logical dependencies
- Resource dependencies
- Preferential dependencies
- External dependencies
- Cross-team dependencies

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2.5 Project Assumptions

- Outsourced kitchens should have legally recognized food licenses.
- Rider should have a valid riding license.
- Member should confirm their age, disease, or disability.
- Members and caregivers should confirm their location. (To check if they're in 10km radius of outsourced kitchens.)
- Volunteers – Check the food safety
- Caregivers – Take care of members

2.6 Project Constraints

- Project must be completed within 25 days
- At least 4 members have to be available for the development
- Network has to be accessible.
- Browser application must be installed.
- Should have general knowledge about technology.
- At least 3 backup members needed
- Testing team will be constant with 2 members

2.7 Project Milestones

Milestone ID	Milestone	Issue Date	End Date
01	Planning and gathering	13/01/2023	18/01/2023
02	Risk analysis	19/01/2023	20/01/2023
03	Development and Integration	21/01/2023	03/02/2023
04	Evaluation	03/02/2023	06/02/2023

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2.8 Project Deliverables

- Project Report
- Project Presentation
- Source Code

2.9 Functional Description

S. No	User Types	Role based access
01	Member	Must be able to register, to login, to view meal, to select and request the meal, to see /update profile, can see the accepted message of meal request. Have access to about us, contact us, terms and conditions, feedback pages.
02	Care giver	Must be able to register, to login, to view meal, to select and request the meal, to see /update profile, can see the accepted message of meal request, have access to about us, contact us, terms and conditions, feedback pages.
03	Partner	Must be able to register, to login, can able to add meal, can update the availability of meals, able to see requested meals, to see /update profile, can accept or deny the meal request, have access to about us, contact us, terms and conditions, feedback pages. Able to menu planning and preparation.
04	Volunteer	Must be able to register, to login, to see /update profile, able to see requested meals and details

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05	Rider	Must be able to register, to login, to see /update profile, able to see the delivery details of meals, can update the delivery status of the meal, can see the pending deliveries, have access to about us, contact us, terms and conditions, feedback pages.
06	Donor	Able to donate money for the organization, have access to about us, contact us, terms and conditions, feedback pages.
07	Admin	Able to menu planning and preparation, accept the meal request, able to check quality assurance of partner kitchens, able to see list of donations, able to regresses the members and care givers.

Non-Functional

S. No	Requirements	Purpose
	Usability requirement	An interface should be simple to understand and remember how to use.
	Serviceability requirement	The speed with which the product can be put into service when it breaks down, tasks such as monitoring the system and repairing problems that arise

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	Manageability requirement	To ensure product development goals are successfully met.
	Recoverability requirement	To repair or replace system components predictably, with minimum work effort, and with no loss or disruption of business functionality.
	Reliability requirement	To ensure the system can avoid, detect or tolerate faults in the software and ensure that these faults do not lead to system failure.

2.10 Risk Analysis and Evaluation

a) Identify Possible Areas of risk in the application development process

- Internal risks
 - Technological risks
 - Schedule risks
 - Cost risks
 - Performance risks
- External risks
 - Economic risks
 - Natural risks
 - Political risks
 - Market dangers
 - Human issue risks

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b) Analyze and Evaluate

➤ Feedback Gathered

- Links are not working
- UI needs to improve
- System response could have better
- Icons or Buttons are not well visible

➤ Next Planning

UI will improve

The navigation panel would be simple

Response time would be minimized

c) Prepare Risk Matrix

S. No.	Risk Type	Risk description	Risk Likelihood	Risk Impact
01	Schedule Risk	The deadline got extended due to doubtful requirements.	Very unlikely	Very high
02	Tech Risk	Server and software program issues that cause device downtime.	Unlikely	Very High
03	Cost Risk	The amount allocated for	Likely	High

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		assignment is insufficient.		
04	Performance Risk	Can't reach to expected performance and quality.	Likely	High
05	Economic Risk	Cost of undertaking is exceeded due to increment of Dollar charge.	Possible	Low
06	Political Risk	Modifications in taxes and import, export legal guidelines.	Unlikely	Low
07	Environmental Risk	Hurricanes, Tsunami	Unlikely	High

		Consequence				
		Negligible 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Likelihood	5 Almost certain	Moderate 5	High 10	Extreme 15	Extreme 20	Extreme 25
	4 Likely	Moderate 4	High 8	High 12	Extreme 16	Extreme 20
	3 Possible	Low 3	Moderate 6	High 9	High 12	Extreme 15
	2 Unlikely	Low 2	Moderate 4	Moderate 6	High 8	High 10
	1 Rare	Low 1	Low 2	Low 3	Moderate 4	Moderate 5

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d) Risk Response Analysis

S. No.	Risk Type	Risk description	Risk Response Plan
01	Schedule Risk	Deadline got extended due to doubtful requirements.	Explain the uncertain requirements to customers and get deadline extended.
02	Tech Risk	Server and software program issues that cause device downtime.	Need to gear up with backup equipment.
03	Cost Risk	The amount allocated for the assignment is insufficient.	Economizing resources to reduce costs
04	Performance Risk	Can't reach to expected performance and quality.	Re-determine the source code and improve the performance by simplifying it.
05	Economic Risk	Cost of undertaking is exceeded due to increment of Dollar charge.	Have a look at the future monetary and then change the decisions according that.
06	Environmental Risk	Hurricanes, Tsunami	paying attention to the climate forecast.