**Computing Research Project**

**Topic – Digital Transformation Strategies (DX)**

**Theme – Remote Working**

* Page 1 - Research Title along with Your Name – Cover Page
* Page 2 - Abstract
* Page 3 - Acknowledgement
* Page 4 - Table of Contents

**RESEARCH PART (PART I)**

1. Introduction
   1. Research Background
   2. Research Purpose
2. Literature Review

10 to 12 papers (publications) you need to summarize after deeply reviewing them along with its title and authors list and publication year.

* *Pdfdrive.com*
* *Scholar.google.com*

1. Research Plan
   1. Research: define and its purpose along with its significance
   2. Research Philosophy (**Saunders’s Onion theory):** just 2-3 pages along with picture
   3. Gantt Chart and Work Breakdown Structures (WBS) for Research Proposal
2. Research Methodologies – Refer Green Color in the detailed guides below
   1. Primary Research – Define with example
      1. Primary Research Methodologies
      2. Survey
      3. Interview
      4. Observations
      5. Focus Group
      6. Merits/Demerits/Pitfalls for each method
   2. Secondary Research – Define with example
      1. Sources of data

Public Library, Online Material, Gov/Non-gov agencies, Commercial Sources, Magazines, Newspaper, Journals, Articles, etc.

* + 1. Secondary Research Methodologies

Literature review/grounded theory/case study/ethnographic/narrative research/phenomenological)

4.2.3 Merits/Demerits/Pitfalls for each method

* 1. Secondary Research (Desktop Research/ online research: Document analysis)

1. Research Approaches
   1. Qualitative Research
      1. Methodologies in Qualitative Research
      2. Merits/Demerits of Qualitative Research
   2. Quantitative Research
      1. Methodologies in Quantitative Research
      2. Merits/Demerits of Quantitative Research
   3. Mixed Research Approach
      1. 5.3.1 Methodologies in Quantitative Research
      2. Merits/Demerits of Quantitative Research
2. Research Design
   1. Saunders Research Onion Theory
   2. Compare among research methods and research approaches

**Comparison of data Approaches**

|  |  |  |
| --- | --- | --- |
| Quantitative Research | Qualitative Research | Mixed Research |
|  |  |  |

Conclusion: Choose the best approach and write the reason for choice.

**Comparison among primary methods:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Survey** | Interview | Focus group | Observation |
|  |  |  |  |

Conclusion: Choose the best approach and write the reason for choice.

**Comparison of secondary methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **LR/document analysis** | Grounded Theory | **Case Study** | Ethnography |
|  |  |  |  |

Conclusion: Choose the best approach and write the reason for choice.

1. Research Conduct and Analysis

7.1 Conduct Primary Research

**Survey:** complete process of conducting survey:

1. consider costs, access and ethical issues

|  |  |
| --- | --- |
| **Survey\_Considerations** | **Description** |
| *Cost* | Google Form is open-source tool to create the survey form. The participants only need to use the internet to participate in surveys. |
| Access | Can access in anywhere internet access. |
| Ethical | Make sure that the participants agree the consent to do the surveys. All the data are kept as confidential. |

1. **Objective of survey**: to understand their Pain points of Jumpstart during covid-19 + to know the actual or complete requirement for the solution they expect.
2. **Identify the tool: for** survey – Google Form or Microsoft Form
3. **Frame question** for survey:

ALL questions – 12 or 15

Open Ended - 2 or 3

Close-Ended – more than 10

**Pre-covid, during covid, post covid**

Sample Questions

Q1. Are you an existing customer or employee of Jumpstart?

* + Yes
  + No

Q2. For how long have you been purchasing from Jumpstart?

* + One week
  + One month
  + One year
  + More than one year

Q3. Do you like the services which Jumpstart offers?

* + Yes
  + No

Q4. How do you purchase from JumpStart before Covid-19?

* Visiting the store
* Online
* Both

Q5. How frequently do you visit the store in pre-covid?

* Daily
* Weekly
* Monthy

Q6. How frequently do you visit the store during -covid?

* Daily
* Weekly
* Monthy
* During no-lockdown

Q7. Can you please kindly give the suggestion upon JumpStart current system.

1. **Population Sampling**: categorization of participant
2. Participant must be a customer/employee of Jumpstart
3. Must use to buy products manually at the store during pre-covid
4. Must rate Jumpstart good among other retail stores
5. Participant can understand and read English
6. Participant has to use internet to fill up the survey
7. Participants are really interested in doing survey
8. **Distribute survey** (online via email): to how many it is distributed – at least 10 or 15 participants
9. **Collect and analyze results**: this would be in the form of Graphs (pie charts or bar graphs)

Chart, pie chart

Description automatically generated

Chart, pie chart, bubble chart

Description automatically generated

\*\*\* Conclusion: Justification of why they need to digitized JumpStart got to know about Jumpstart core business problems during covid-19, show the need for DX.

* 1. Conduct Secondary research (Identify Tools and techniques):
* Digital transformation:
* Scope of digitalization in Retail business: what benefits DX can bring in various areas of industry?
* Example of DX: refer case studies: [Present outcomes: What valuable information those studies have provided you to succeed in CRP project Aim.]
* **DX scope for Jumpstart: which digitalization's are possible for jumpstart:** take Mr. Martins list into consideration.

Consider costs, access and ethical issues.

|  |  |
| --- | --- |
| **LR/Case study\_Considerations** | **Description** |
| Cost |  |
| Access |  |
| Ethical |  |

(a) Content analysis

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Title | Reference Link | Outcomes |
| 1 to 7 key papers |  |  | .  .  .  . |
|  |  |  | -  -  -  - |
|  |  |  | -  -  -  - |

(b) Trend analysis

Attach some graphical evidence: u can present some analysis records collected on different retail business progress, their impact\_status during pre-covid and post covid and use of Digitalization in the Business during the pandemic.

* 1. Graph on how various retail industries impacted during the covid: few analysis
  2. Graph on Remote Working impact on retail market
  3. Graph on how DX play vital role in help the industry in its growth

\*\*\*\* Conclusion: Justification of how Researched solution will meet the requirements of Jumpstart

Reference Link:

Secondary Research Analysis (Document based):

Literature Review Process: stepwise highlight

<https://www.google.com/search?q=literature+review+process&rlz=1C1GGRV_enIN753IN753&sxsrf=ALeKk01BhMT_-Ll4jhTKHGQK2Npuq0OCsA:1621578730255&tbm=isch&source=iu&ictx=1&fir=KMXfKqPuOctsyM%252CFEikhVlHQQCpiM%252C_&vet=1&usg=AI4_-kSi-V5iDySfOUnGHgVQUg5fSEG7Lg&sa=X&ved=2ahUKEwjaqMTBk9rwAhWSXSsKHVqxCGIQ_h16BAgMEAE#imgrc=RxUPngqrpHrnWM>

<https://www.questionpro.com/blog/secondary-research/>

<https://www.questionpro.com/blog/secondary-research/#:~:text=Secondary%20research%20or%20desk%20research,involves%20using%20already%20existing%20data.&text=Secondary%20research%20includes%20research%20material,already%20filled%20in%20surveys%20etc>.

<https://www.oxbridgeessays.com/blog/how-to-dissertation-secondary-research-4-steps/>

<https://www.statista.com/topics/6239/coronavirus-impact-on-the-retail-industry-worldwide/#dossierContents__outerWrapper>

Data analysis(qualitative): Trend Analysis, content analysis+secondary Research use with example +sources of information+checkList for a critical Literature Review + references in the bibliography)

Analytical techniques: Content and Trend Analysis [how Literature Review got conducted and helped in collecting what data/information? + Data Sets]

<https://www.scribbr.com/methodology/content-analysis/>

<https://www.scribbr.com/category/methodology/>

**Project Part (Part II)**

1. Project Proposal
   1. Project Aim, Objective, Scope (features which your application can provide to Jumpstart users/employee), Constraints, Assumptions & dependencies
   2. Project Environment (System requirements – hardware, software requirements, User requirements, Project blueprint [flowchart/ wireframes/Axure prototype, storyboard, IA, etc.], application working Process – Business Process

9. Communication with Stakeholders:

* List down who are they in this business case

**Communication Matrix: Plan** out the following:

Who are sender and Receiver?

What is the purpose of communication?

What outcome is going to be achieved?

What is the channel of communication? - Medium

What is the frequency of communication?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sender | Receiver | Purpose | Medium | Frequency |
| Acedora PM | Jumpstart Emplyee/customer | Communicate to provide the solution & recommendation | Microsoft Teams | once in project Life |
| Acedora PM | Senior Manager of Acedora | Plan project flow | Email, Microsoft Teams | Twice per week |
|  |  |  |  |  |

10. Project Implementation: attach all evidence of implementation

10.1 Source Code and evidence (SS of project results)

10.2 Post -implementation Survey: survey objective: to understand the pulse of Jumpstart customer/employee about online Shopping system

Survey Frame - 6 to 8 questions

Q1. Are you a customer or an employee of jumpstart?

Q2. Would you like to have an online shopping system which can provide 24\*7support for customer?

Q3. Would you prefer to use Payment Gateway in purchasing items at JumpStart?

**Conclusion: through the above analysis u can predict here about how well your recommendations are liked by Jumpstart people.**

11. Reflection on Research Methods

11.1 Effectiveness and challenges of methods applied

(a) Survey:

* + - * Effectiveness: how effective survey techniques have been to achieve CRP objective/goal
      * Challenges:

(b) LR/case study:

* + - * Effectiveness: how effective LR/Case Study techniques had been to achieve CRP objective/goal
      * Challenges:

11.2 Alternative methods to overcome the challenges:

Interview beats survey: talk about how Interview overcome the challenges which are existing in survey + statement of conclusion must include why still survey we applied.

Any alternative technique for LR/case study:

12. Conclusion: summary of how you have successfully achieved your CRP objectives and how which research methods have made this possible.

12.1: future research considerations:

13. Bibliography: in Harvard Referencing system

14. **Appendix**: rest evidence attaches here [both survey templates SS /observation and witness records, ***Research Proposal Template***