

R&D-Survey Project (CONCEPT NOTE/USE CASE)

SOFTWARE AS A MICRO SERVICE(SAAMS)

PROBLEM STATEMENTS:

The need for Research and Development (R&D) has become a necessary tool contributing to a huge improvement in the various sectors of a businesses in a variety of ways not limited to:

1. Innovation and Competitive Advantage

- Survey enables businesses to develop new products, services, or processes, keeping them ahead of competitors.
- Innovation helps differentiate offerings, making the business more attractive to customers.

2. Improved Efficiency and Cost Reduction

- Developing more efficient production methods or technologies can reduce operational costs.
- Survey can optimize resource use, leading to long-term savings.

3. Market Expansion

- Survey allows businesses to enter new markets with products tailored to local needs or trends.
- It supports diversification, reducing reliance on a single product or market.

4. Customer Satisfaction

- By understanding customer needs and feedback through survey, businesses can improve product quality and user experience.
- This leads to increased customer loyalty and positive brand reputation.

5. Revenue Growth

- New products can open additional revenue streams.
- Enhanced or improved products can command higher prices or reach more customers.

6. Attracting Investment

- Investors are more likely to support businesses with a strong R&D focus because it signals long-term growth potential.

7. Compliance and Sustainability

- R&D and Survey can help businesses meet regulatory requirements or environmental standards through cleaner, safer technologies.

As a great driving tool behind many success stories of several businesses across the world, many other had not been able to replicate an effective methodologies to handle their R&D and Surveys as it's based on accurate data collection via field and virtual means which involves direct or indirect interaction with people(Online/On field) of different environment.

Deploying field Enumerators/Research in such unfamiliar and unknown environment sometimes poses a great survival risk and challenge affecting the accuracy of authentic/organic data collection methodologies.

This project is therefore designed with the rightful technologies and tool as part of the microservices of the **AVAL Ecommerce project** to ensure high efficiency and effective R&D data collection to help position all organizations, businesses and services providers to enhance and better their day to day quality controls activities and compliance to match up with the competitive market trends and maximize revenue.

AIM/SOLUTION:

- To ensure a well-designed survey methodologies
- To create effective data collection strategies for effective R&D for businesses and Organizations
- To create residual income for the unemployed
- To cut down the risk involved in having Survey Administrator / Data Collector in unfamiliar environments for research
- To cut down huge cost and Time involved in surveys
- ETC.-----Many more

STAKEHOLDERS:

Amin(Aval):

- System administrators that runs and controls the entire system

Survey Sponsor / Client:

- The individual or organization that commissions the survey.
- Sets objectives, provides funding, and uses the results for decision-making

Survey Agencies:

- The individual or organization that accepts floating surveys commissioned by Survey Sponsor. (Must Run through admin's certification and compliance process to be visible on the system)

Survey Designer / Researcher(AI):

- Collaborate with stakeholders to design surveys that capture relevant and measurable data
- Designs the questionnaire and methodology.
- Ensure questions are clear, unbiased, and structured for easy analysis. and aligned with objectives.
- Designs training modules
- Design Qualification modules

- Set KPI for extra rewards
- Help determine sample size and sampling methods.
- Set up and test AI tools.
- Monitor data collection progress and troubleshoot issues.
- Ensure data integrity and completeness during collection.
- Identify and handle missing, duplicate, or inconsistent responses.
- Standardize data formats (e.g., dates, categorical labels).
- Code open-ended responses if needed.

Pay Master / Remuneration Designer:

- Designs payment structure per the various tasks
- Designs incentives and Rewards system based on performance.

Survey Administrator / Data Collector(AI/HI):

- Distributes the survey (online, phone, in-person, etc.).
- Ensures proper sampling and accurate data collection.

Respondents / Participants:

- The people who answer the survey questions.
- Their responses form the basis of the survey data.

Data Analysts / Statisticians(AI):

- Process and analyze the collected data.
- Draw conclusions and present findings.

Report Writers / Presenters(AI):

- Translate data into reports, visualizations, and recommendations.
- Communicate insights to stakeholders.

Ethics / Review Boards (AI-Discuss):

- Ensure the survey complies with ethical standards, especially in academic or medical research.

Trainers:

- Train Survey Administrator / Data Collector on complex surveys that requires special training modules

Supervisors(Discuss if necessary):

- Comes into function in special cases where Re-recruits comes into play

TECHNOLOGY:

***AI:**

- Kasada-Place Call to administer questionnaires
- Questionnaire Wizard-To design all possible questions based on set objectives
- Forms and Tools Wizards-Design all types of forms and available tool to design all types of questionnaires

***Google Proximity Beacon**

***GPS Location**

***Radar -To See live movements of field Survey Administrator / Data Collector**

***Payment System**

***Web (For relevant stakeholders)**

***Mobile App (For Survey Administrator / Data Collector, Respondents / Participants and**

***relevant stakeholders)**

***Languages:**

- Golang
- Java

***Chat**

***Notification Dashboards**

***QR Code Scanner**

***SMS Alert/Notifications**

***Rating and Review system for rating and reviewing amongst all stakeholder members**

***Multi-Language System**

SIMULATION:

USE CASES

Amin(Aval):

Survey Sponsor / Client:

*****Onboarding/Registration Process***-MTZ**

- Goes to the web platform/system and select registration
- Register as Individual, Business or Organization with details -MTZ
- Sets objectives in a form of problem statement
- Sponsor selects Survey Area :
 - Country
 - Region
 - City
 - District
 - Town
 - Zones
 - Geo-Fencing
- Sponsor set's dedicated Project budget and payment terms and breakdowns
- Sponsor set Survey category (Eg.: Environmental Protection, Air Pollution, Etc.)
- Sponsor sets payment structure according to work progress
- Sets Project Timelines (Duration)
- Uploads Training/Reference materials where necessary

- Sponsor fund their account wallet (Bition) on the system
- Sponsor then publish the project which goes to float on the platform of the Survey Agencies

Survey Agencies:

*****Onboarding/Registration Process***-MTZ**

- Agency gets onto the Web Platform and select “Survey Agency” as Registration option
- Registers with the following details:
 - Business/Company Name
 - Location (Country, Region, City, District, Town, Zone, etc.)
 - Business Registration
 - Business Profile (Must follow a template since it will be displayed on the Timeline of the Agency’s account like ad DP of a sort)
 - CV of expertise (Survey Designer / Researcher, Pay Master/Remuneration Designer/Accountant, Data Analysts / Statisticians, Report Writers / Presenters, Trainers, Ethics / Review Boards, Senior Supervisors, etc.)

*****Gigs/Survey Projects (Demographics Based) on the Float*****

- Survey Agent upon seeing the published survey project from Sponsor with basic details
- Agency clicks to see full details of project including Sets objectives and timelines
- Agency upon satisfactory review clicks on “Accepted” to lock the project to their dashboard.
- The agency then prepare a complete survey plan (Including: Questionnaire, Demographics, Zoning, Training, Secondary Qualifications, T&C, Timelines, Survey Administrator / Data Collector recruitment and Deployment, KPI Rewards, Geo-fencing, and all necessary Algorithms, etc.) in accordance with the set objectives of the sponsor for review and approval by sponsor to meet the payment terms of the sponsor
- Ones Agency receives payment the project is then commenced and Sponsor can track the status of the project on daily basis via the available tools with a tracking code with incremental reporting system
- The project then runs through the stipulated plans with accepted T&C till finish
- A detailed report is then packaged for the sponsor
- Rating and Review is exchange between Sponsor and Agency

NOTE:

- *Published projects comes with a display Title, country, name of Sponsor, category of survey (Eg.: Environmental Protection, Air Pollution, Etc.) the total dedicated budget for the project
- *There must be some grace period for the agency to decline survey acceptance after accepting after which there will be no reversal
- *The Sponsor has the right to take off published survey within the grace period for review (Discuss) before the approval by Systems Admin

*****Gigs/Survey Projects (Non-Demographics Based/General) on the Float*****

This happens to be one of survey type where sponsor seeks for general public opinion

- Survey Agent upon seeing the published survey project from Sponsor with basic details
- Agency clicks to see full details of project including Sets objectives and timelines

- Agency upon satisfactory review clicks on “Accepted” to lock the project to their dashboard.
- The agency then prepare a complete survey plan (Including: Questionnaire, General Demographics, General Secondary Qualifications, General T&C, Timelines, General Public as respondent, Standard Rewards, etc.) in accordance with the set objectives of the sponsor for review and approval by sponsor to meet the payment terms of the sponsor
- Once Agency receives payment the project is then commenced and Sponsor can track the status of the project on daily basis via the available tools with a tracking code with incremental reporting system
- The project then runs through the stipulated plans with accepted T&C till finish
- A detailed report is then packaged for the sponsor
- Rating and Review is exchange between Sponsor and Agency

Survey Designer / Researcher(AI/HI):

- Designer enters the dashboard of the Agency to study the Sets objectives
- Designs the questionnaire and methodology by creating and designing all possible forms using available regular tools or by using Form Wizard (An AI Tool to handle all kinds of Forms Designs-Agency has to buy into their tools arsenals)-MTZ .
- Designer ensures questions are valid, unbiased, and aligned with objectives Standard.
- Designs training modules (with incentives and rewards where possible) on special occasion where training is required for Survey Administrators before dispatching
- Design Primary and Secondary Qualification modules to be able to select the right Survey Administrators for the job
- Set KPI reward points for extra rewards
- Sets Remuneration points for payment rewards
- Sets Timeline for the survey questionnaire administration/Respondent (Finishing with in time forms part of the KPI Reward for Survey administrators and Respondents)
- Designer sets all necessary demographics, monitoring tools, KPI Reward points and AI tools
- Designs how products (Tangible and Intangible) should be introduced to the field (Online and in-person)

NOTE:

- *Agency can demand for materials from Sponsor to train Survey Administrators where necessary*
- *There must be a common grounds for Sponsors and agency to communicate (Chat)*
- *All communications must be internal for the purpose of dispute resolutions, No out of platform communication*

Pay Master / Remuneration Designer:

- Design remunerations quota to match remuneration point set by Survey Designer
- Design KPI reward quota for KPI Reward points
- Handles all other cash related transactions (Eg.: In a situation where physical products are involved)

NOTE:

Remunerations usually designed to covers all inclusive stakeholders of the project (Eg.: Survey Administrators, Respondents, On-Field Supervisors, Etc.)

Survey Administrator / Data Collector(Online):

Survey Gigs appears on the Dashboard of the Survey Administrator based on demographics and other criteria set by the Survey Designer of the Agency

-Same process as that of Respondent

NOTE:

***Survey Administrators too can see Gigs on their dashboard as Respondent also do**

Respondents / Participants (Online Case)

Survey Gigs appears on the Dashboard of the Respondent based on demographics and other criteria set by the Survey Designer of the Agency

*****Onboarding/Registration Process*****

- The Respondents gets onto the Aval Platform account and navigate to the Micro-Services zone to locate Survey (A user sees a display of common/General surveys) and navigate to Registration

-Select on registration choose Respondent

-Registers with the following details:

- Bio Data
- Academics Qualification
- Marital Status
- Other Important Demographic Info
- Location (Country, Region, City, District, Town, Zone, etc.)
- A brief Personal Profile (Must follow a template since it will be displayed on the Timeline of the individual's account like a DP of a sort)
- CV to prove expertise (Can employ CV wizard to build one or Upload one in PDF)
- Advise on other info (Discuss)

-Respondent see a display of the request and click open to see summary info of the survey (Category, Etc.) including Primary Reward (Cash/Bition) and KPI Reward points with rewards.

-Survey Administrator had option to Accept or Decline the Survey Gig

-Upon acceptance, the a secondary qualification questionnaire from agency opens to be walked through

-Upon success, the T&C comes next for respondent to read and accept or decline

-Upon acceptance, the survey questionnaire begins and runs through to the end as the system monitors the speed and accuracy of the respondents.

- System acknowledges respondents and grants primary reward in accordance with speed and accuracy plus KPI rewards.
- A referral link can be available for respondent to share via WhatsApp, SMS and email.

NOTE:

- *Survey Gig only display a nice banner with survey name and agency logo including the initial payout reward and Timeline to finish a survey and other few details*
- *Secondary Qualification form is a short and distinct questionnaire to pick the most qualified respondent (Judgement by the system algorithm can decline a respondent at this stage)*
- *Individual can apply for account approval in order to receive highly paid Gigs-MTZ*

Respondents / Participants (In-Person/Over Phone Case)

In this case a Survey Administrator does all the questionnaire administration with the Respondent (Question & Answers) -Usually on the field

- The Survey administrator read intro and T&C of the project with Respondent's benefit (If available) and it will be at the discretion of the respondent to participate*
- The Respondent has option to Accept or Decline the exercise*
- Upon acceptance, a secondary qualification questionnaire from agency opens to be walked through with Respondent*
- Upon success, the T&C comes next for respondent to read and accept or decline*
- Upon acceptance, the survey questionnaire begins and runs through to the end as the system monitors the speed and accuracy of the respondents.*
- System acknowledges respondents and grants primary reward in accordance with speed and accuracy plus KPI rewards.*
- A referral link can be available for respondent to share via WhatsApp, SMS and email in a case where the Respondent handles the process himself or herself via a share link.*

NOTE:

The Survey Administrator administer the questionnaires to the Respondent either from his or her device or share a generated link (With Survey administrator's code) to the respondent via WhatsApp, SMS and email to his or her device whilst Survey Administrator only provide assistance or guidance (in-person or Phone) per the Set objective of the sponsor and the design of the Designer)

Data Analysts / Statisticians:

Here the Data Analyst has a choice to either use our AI Tools or Regular Manual Tools

Manual Tools

- Use statistical tools (Excel, SPSS, R, Python, etc.) to analyze survey results.
- Calculate descriptive stats (mean, median, frequency) and inferential stats (correlation, significance testing).
- Segment results by demographics or other variables.

AI Tools

Admin's Powerful AI tools will be available for use throughout the entire Data Analytics process
(Agency need to purchase into their arsenals of AI Tools)

Report Writers / Presenters:

Here the Report Writer has a choice to either use our AI Tools or Regular Manual Tools

Manual Tools

-Use report tools (Excel, SPSS, R, Python, etc.) to design report based on Data Analytical results.

AI Tools

Admin's Powerful AI tools will be available for use throughout the entire Report Writing process
(Agency need to purchase into their arsenals of AI Tools)

- Reporting & Visualization.
- Create clear charts, tables, and dashboards to present findings.
- Write analytical summaries and provide insights to stakeholders.
- Highlight trends, patterns, and actionable insights.

Ethics / Review Boards:

Here the Report Writer has a choice to either use our AI Tools or handle Manually

Manual Tools

-The Agency uses his internal members to achieve the needed result

AI Tools

Admin's Powerful AI tools will be available for use throughout the entire Ethics / Review Boards process
(Agency need to purchase into their arsenals of AI Tools)

- Recommendations & Decision Support
- Help decision-makers understand what the data reveals.
- Offer data-driven recommendations based on survey findings.

Trainers:

Trainers within the Agencies acts as module trainers in training the Survey Administrators

- Upon the Trainer getting to know the training modules designed by the Designer, the Trainer build training manuals
- Trainer trains Survey Administrators per the scheduled timelines

NOTE:

- This usually occurs in situations where the nature of survey from the Sponsor involves Products or Services
- The system must allow Survey Administrators to subscribe to training

- Agency must be able to use the system to create training for Survey Administrators to subscribe, after which the Agency connects the survey Gig for trained Survey Administrators to subscribe to the actual survey
- Training can be virtual (On Zoom or any other virtual platforms) or in-premise per the module design of the Agency
- The Survey Administrator must get access to details of the training when Gig appears on their dash (Type of Industry, Duration, Incentive, Etc)

Supervisors(Discuss if necessary):

Supervisor role will be needed in some occasions where Survey Administrators need to work and report to a supervisor.

NOTE:

Systems Admin must consider the role of a supervisor

MONETIZATION:

**The use of available AI Tools (Eg.:)*

**Premium Accounts for all stakeholders (Agencies, Survey Administrators, Respondents, Etc.)*

EMPLOYMENT AN OTHER OPPORTUNITIES:

**Earn from home privilege*

**Extra income source for students*

**Job opportunities for marketing agencies*

**Income for all*

**Opportunities for Businesses and Organizations to penetrate into the unknown*

GENERAL NOTE:

-Agent after setting up full survey project publishes the project in the system for approval

-Upon approval a project tracking code is generated which updates the sponsor's dashboard for tracking the progress of work

- Most of Systems Admin's payment deductions are automatic except otherwise

-System must allow long term/continuous survey (Eg.: Annual Survey Gig where Data Collection happens on monthly basis)

INDUSTRIES:

Healthcare

Education

Consumer Goods

NGO

NPO

Professional Services

Retail & E-commerce

Hospitality & Tourism

Government & Public Sector

Technology & Software

Finance & Banking

Telecommunications

Manufacturing

Media & Entertainment

Fashion

Real Estate/Shelter

Pharmaceuticals & Biotechnology

Automotive

Aerospace & Defense

Energy

Consumer Electronics

Chemicals & Materials

Medical Devices

Food & Beverage

Environment

Areas of Survey under INDUSTRIES:

1. Pharmaceuticals & Biotechnology

- *Developing new drugs and therapies*
- *Clinical trials and regulatory testing*
- *Genetic engineering and personalized medicine*

2. Technology & Software

- *Artificial Intelligence and Machine Learning*
- *Cybersecurity*
- *Software development and cloud infrastructure*
- *User experience (UX) testing*
- *Beta testing feedback*
- *Product-market fit surveys*

3. Automotive

- *Electric vehicles (EVs)*
- *Autonomous driving technology*
- *Fuel efficiency and safety improvements*

4. Aerospace & Defense

- *Aircraft design and aerodynamics*
- *Satellite and space exploration tech*
- *Advanced weaponry and surveillance systems*

5. Energy

- *Renewable energy (solar, wind, biofuel)*
- *Battery and storage solutions*
- *Energy efficiency and smart grids*

6. Consumer Electronics

- *Smartphones, wearables, and home devices*
- *User interface innovations*
- *Hardware miniaturization*

7. Chemicals & Materials

- *Advanced polymers and composites*
- *Sustainable and biodegradable materials*
- *Industrial and agricultural chemicals*

8. Medical Devices

- *Diagnostic tools and imaging equipment*
- *Minimally invasive surgical devices*
- *Implantable technologies*

9. Telecommunications

- *5G and next-gen networks*
- *Internet of Things (IoT) innovations*
- *Network infrastructure and security*
- *Service quality surveys*
- *Customer churn analysis*
- *Network performance feedback*

10. Food & Beverage

- *Nutritional science and fortified foods*
- *Sustainable packaging*
- *Flavor and shelf-life enhancement*

1. Healthcare

- *Patient satisfaction surveys*
- *Market research for new treatments*
- *Employee satisfaction within hospitals*

2. Education

- *Student and parent satisfaction*
- *Course and faculty evaluation*
- *Alumni feedback*

3. Retail & E-commerce

- *Customer satisfaction (CSAT)*
- *Net Promoter Score (NPS)*
- *Product feedback and usability*

4. Hospitality & Tourism

- *Guest satisfaction surveys*
- *Experience and service feedback*
- *Post-stay or post-visit evaluations*

5. Government & Public Sector

- *Census and demographic surveys*
- *Public opinion polls*
- *Community feedback on services*
- *Utilities*

7. Finance & Banking

- *Customer satisfaction*
- *Product/service usage surveys*
- *Risk and market perception studies*

9. Manufacturing

- *Supplier satisfaction*
- *Product quality surveys*
- *Employee feedback*

10. Media & Entertainment

- *Audience preferences*
- *Content feedback*
- *Brand perception surveys*

SMILAR /RIVAL PROJECTS:

**<https://www.surveymonkey.com>*

**Google Forms*

**Jotform*

**Survey Sparrow*

**QuestionPro*

FRONT END FEATURES

To be discussed with UI/UX-Front-end Designer

PROJECT DEVELOPMENT PARTNERS (Co-Owners)

- Jonathan-Backend Architect and Developer
- Adams-Front End Architect and Developer
- Richard-UI/UX aesthetics Designer
- David-Project Originator/Concept Developer