Business Development Tactics and Sales of Commodities along Farmside Operations

A Summer Project Proposal for

Post Graduate Diploma in Management

By

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PGFA2043

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Certificate of Approval

The following Summer Project Report titled "**Business Development Tactics and Sale of Commodities along Farmside Operations**" is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post-Graduate Diploma in Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the Summer Project Report only for the purpose it is submitted.

"Summer Project Report Examination Committee for evaluation of Summer Project Report"

	Name	Signature
1. Faculty Examiner	_____	_____
2. PMC Summer Project Co-coordinator	_____	_____

Date: 3rd Aug 21

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Samyak Jain** a student of PGDM, Jaipuria Institute of Management, has successfully completed his internship (from 15th May 21 to 15th July 21) as **Business Development Intern** at AGROWAVE.

During the period of his internship programme with us he was found punctual and hardworking.

We wish him all the best in future endeavors.

For Dagrowave Agscience Private Limited

Anu

Director

Anu Meena

Founder

Abstract

"Business Development Tactics and Sale of commodities along Farmside Operations"

By

Samyak Jain

Researchers have already studied about various business development tactics and how to sell commodities in tough situations. However, how the top management manages the situation has received less attention as this type of problem is managed by the low-level employees.

This research we have done also mentions the top management and lower-level management and their coordination during tough times. This is a very tough time as situation like this hasn't occurred in less than 100 years. Covid-19 Pandemic has disrupted all the operations of the businesses. Not only disrupted but many of the businesses were closed or bankrupt due to lack of funds.

This research suggests how to cope up with the pandemic and what steps to take when this type of situation arises. Various findings are:

- Businesses should reduce their operational costs by cutting all the unnecessary costs that are occurring. They should think on the foot and if possible, should take the first mover advantage.
- They should also think of launching new verticals according to the business mode of operation. Since our company was Agrowave which deals in fruits and vegetables from farmers to businesses or say consumer, so this is an ever-growing business since most of the population in India is of Vegetarians which deals with farm products.
- Also, the government policies have benefitted the organisation in the Agritech sector. Since government is now a days thinking about farmers and for their favour various policies are being formulated and this is benefitting the various organisation.
- We all arrived at general conclusion that if all the organisations within the same sector identifies the problem and correctly and finds the unique way to solve those problems then their will only be profit in this sector.
- In this sector, technology plays a pivotal role in keeping an organisation in race with competitors. Technology is changing daily and organisations will be successful only

and only if they adapt to these new changes. It was found that more organisations adopt technology, more will be the success rate i.e., less bankruptcy will be there in this sector.

Above findings have been placed keeping in mind all the Factors consisting in PESTLE analysis.

The methodology used here consisted three phases:

- A study of the start-ups for a period of 2 months approximately.
- Study of primary and secondary data sources.
- Also, studying the previous organisations and their way of working, we created a survey or say a questionnaire in which we target the normal consumer to fill that form and know about what those people think.

  Major data sources were the articles, journals, survey, detailed study of companies documents like feasibility reports, project reports etc.

Recommendations made after the study were:

- Launching of new vertical if needed.
- Technology adaptation
- Friendly Working Environment
- Flow of funds should not stop

Acknowledgement

"It is not possible to prepare a project report without the assistance & encouragement of other people. This one is certainly not an exception."

On the outset of the report, I would like to extend my sincere & heartfelt obligation towards all the personages who have helped me in this endeavour. Without their active guidance, help, co-operation & encouragement, I would not have been able to complete the project.

I am ineffably indebted to **Ms. Safia Sarfaraz** for conscientious guidance and encouragement to accomplish the assignment.

I am extremely thankful and pay my gratitude to my faculty mentor **Dr. Arpan Anand** for his valuable guidance and support for completion of this project.

I extend my gratitude to **Jaipuria Institute of Management Noida** for giving me this opportunity.

I also acknowledge with a deep sense of reverence, my gratitude towards my parents and member of the family, whom have supported me morally as well as economically.

At last, I present my gratitude to all my friends who directly or indirectly helped me to complete this project report.

Any omission in the brief acknowledgement does not mean lack of gratitude.

Thanking You,

Samyak Jain

Literature Review

How Indian Agriculture should change after Covid-19?

Due to Covid-19 we came to know about all the loopholes in the agriculture supply system. We realized the need of transforming agriculture system with digital solutions. It is need of an hour to transform Indian agriculture system with digital solutions as over 60% of the population is dependent on agricultural products. (Kumar, Padhee, & Kumar, 2020). Not only digital solutions will enhance the supply chain of this sector but also procurement and prices of the commodities will be the key change in this industry. Since India was hit with the pandemic, the procurement prices from the farmer went up as there was lockdown and no one was risking their lives between pandemic for supply chain so the prices of commodities as well as procurement prices went up due to which the overall costing increased. To help with digital solutions many of the agritech start-ups are working upon and producing a digital model in which they are using machine learning and predictive analysis to predict the future prices and according to that generating profit.

(Cariappa, Acharya, Adhav, Sendhil, & Ramasundaram, 2021) Covid 19 pandemic has affected the farm side operations and food chain supply very aggressively. Not only production got impacted but marketing and consumption also got affected. Because since there was lockdown, no eatery giants were opened so people started making things at home which led to increase in consumption of agricultural products as to make anything you need vegetables to make it happen, also since disease was spreading to boost immunity fruits are major sources for it, so people started consuming more fruits which led to increase demand in fruits and vegetables and supply chain was disrupted due to which supply decreased and consumption increased which led to unstable chain. Commodities started to begin scarce and there was shortage of many of the fruits and vegetables in the market.

Various strategies to follow post covid which will strengthen the supply chain of farm side operations. Buffer stock, collective farming, stakeholder partnerships, social safety net, risk management, Staggered procurement and pricing are some of the strategies that need to be followed to prevent any of this situation to happen in future.

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Chapter-1

Industry Outline

1. Overview

1.1 Introduction

Dagrowave Agscience Pvt. Ltd. is an organization whose Mission is to build sustainable mobile supply chain. It belongs to:

Sector: Agritech

Industry: Logistics and Supply Chain

Agritech Sector is one of the fastest growing Sector in India. We all know that all the population of country depends on agriculture as it is their prime source of livelihood. As agriculture comes under primary sector for Indian Economy. It contributes almost 20% to the GDP (Gross Domestic Product) which is enormous contribution towards country. Now, integration of agriculture with technology is what agritech sector is all about. Many people have understood the need of people with growing population and demand. Not only, for India but exporting agricultural products market is massive, if we go by the figures then in financial year 19-20, export of agricultural products amounted around $38 billion dollars for India. India, is the country which is largest exporter of spices to the world. Also, talking about producer and consumer, most of the agricultural products that is vegetables and fruits are consumed in India. But the main problem arises with the agricultural sector is in its operations, structural challenges, and that's what most people have understood and they are introducing new technologies in the agriculture sector to bridge those gaps. They are known as Agritech Start-ups. Considering NASSCOM Report, then we can say that there are almost 884 agritech start-ups in India that are revolutionizing agriculture with the help of technology. In this sector, logistics industry plays a pivotal role as if you are procuring produce from farmers but are not able to supply to market i.e., not able to transport to the market then it's are big complication for this sector.

Some of those start-ups are:

- BOHECO
- Ninja Cart
- Crofarm
- Waycool
- Gold Farm

- Agricx
- Agrowave (Dagrowave Agscience Pvt. Ltd.)
- Fasal
- Aibono
- EM3 Agri Services

1.2 Models

List can go on but these are the top 10 agritech start-ups till date who are modernising agriculture with technology and have succeeded it. These all Agritech start-ups are using machine learning, artificial intelligence, data science in some way or the other. But they all are transforming towards digital decision process. With the help of data and algorithms being used we were able to get, what we need to do in future. In this industry, most of the firms operate on these 5 business models.

1. **Upstream Marketplace model-** In this model, the start-ups are planning for long term, basically they look for what customers want next and based on data they take future steps.

2. **Downstream farm to fork supply chain model-** In this model, the start-ups are basically collecting the produce from farms and then they are bringing it to the market or "Mandis". They are directly purchasing produce from farmers and then bringing it to the customer or consumer.

3. **Farming as a service model-** In this model, start-ups are aiming towards farming equipment technology so that time consumed in farming is less and it can help in generating more revenue.

4. **IOT or Big Data led innovation model-** This model is being used as to autonomising the technology for data generation.

5. **Engineering led innovation model-** This model is being used for artificial intelligence and machine learning not only that, but how mechanical engineering can help in modernising agriculture is also been thought of in this.

1.3 Government initiatives

Government also knows how the demand for agricultural produced products is rising so government is also taking steps in the growth of the agritech sector in the country. They are

launching various schemes or say initiatives which will help in rise of the agritech sector in the country. Schemes like Pradhan Mantri Kishi Sinchayee Yojana (PMKSY) which is focussed on water irrigation in the farms. Also, the government has strong impetus that they will manage to double the income of farmers by 2022.

Talking about another initiative i.e., Agricultural Technology Management Agency (ATMA) whose work is to get the data from the farmers without internet i.e., whether internet is present there or not. It also plays a pivotal role in supply chain by uplifting the farmers.

More initiatives like:

TMA (Transport and Marketing Assistance)- where government provides a certain financial assistance for transport and marketing to advance agriculture.

Agri-Udaan- where it emphasizes on scaling-up food through mentoring of farmers and guiding them.

CHC (Custom hiring service centres)- in which they make sure that new equipment and machineries are accessible by farmers, so they provide it on rent.

1.4 The Road Ahead

Till now also Agritech sector has not fully shown its potential, but now people are realising that and they are moving towards this sector. It is not far away that the farming process will be made fully sustainable. In future, we can say that agritech start-ups will contribute almost 10% of employment for the people. In future, it is said that blockchain will be used which will enhance the transparency and traceability in agriculture supply chain. It is not far that we can see a common platform where sellers will be farmers and they will be directly selling to customers. Agritech companies can bring another green revolution like change in India.

Future will be like including smart farming, precision farming, vertical farming, robotics, and automation and many more technologies.

Chapter -2
Firm Outline

2. Firm Overview

Dagrowave Agscience Pvt. Ltd. known as Agrowave was founded in 2017 by Anu Meena (an IIT Delhi graduate). The main motivation for Ms. Anu Meena to start an agritech start-up was to solve the problem of her grandfather. Basically, the story goes as follows: her grandfather was a farmer and was having problem in selling their grown commodities from farms since there was problem of supply chain of commodities from farms to mandis or what we say to customers. From there, Ms. Anu Meena got the motivation of building a start-up that will enhance the supply chain for the farmers and will get them the right price for their commodities. This was the history of Agrowave, how it got started.

Fig.1

2.1 Mission of the Company

Mission of Agrowave is **"To enhance the life of farmer's economically".** Their objective is to improve the life of the farmers by providing them the right price for their produce or you can say for their commodities. Since, in our country approx. 60-70% of the population relies on the Agri-products and farmers are not given the right price for their commodities which results in waste of their produce and sometimes it also results in suicide of the farmers as they are not able to meet their daily needs or they are not able to feed their family because of very less price offered by the shopkeepers of the mandis that are in the city.

2.2 Vision of the company

One of the major problems reside here is the supply chain i.e., there is complexity in transportation of produce from farm to the mandis. So here lies the Vision of the company.

"To build sustainable supply of fruits and vegetables directly from farmers to provide them better returns"

Since we know that vision is long term and various missions combine to form one vision and this the vision that was not changed since the company was started.

2.3 Business Models

Business models are very much important for a company as they help a business to grow in real world. Business model can be defined as the model which decides the operation of the business, it helps in identifying the source from where we can generate the revenue, which market to target i.e., which customer base to build and from where we can generate the financing for our company that is from where to find the angel investors and how to convince them to invest in our company.

For this only, Business model canvas was developed keeping in mind that all information can be inscribed at one place so that it is easy to understand what is the model. And this model was developed by Alexandar Osterwalder of Strategyzer.

Fig.2

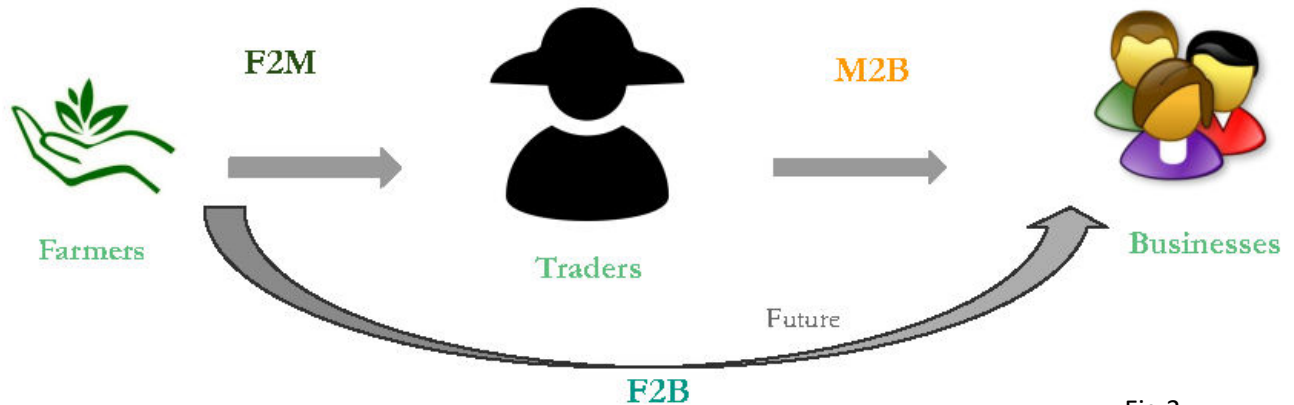Talking about Agrowave Currently, they are having 3 business models on which they are working.

Fig.3

Their 3 Models are:

1. **F2M (Farm to Mandi)-** In this business model, the commodities are collected from farms and then they are sold to traders sitting in mandi. Basically, what agrowave does is collect the produce from farms by giving right price to farmers and then all the transportation is done by agrowave and then it supplies the commodities to traders who are having shops in mandi. This is the offline model. Also, in this Agrowave adds its transportation costs and then sell the commodities to traders. It is called **Cost plus pricing or markup pricing** in which company adds a percentage to make profit after incurring all costs.

2. **M2B (Mandi to Business)-** Since, it is a start-up and procuring each vegetable and fruits from farmers is difficult now, so what Agrowave does is, the other commodities which they cannot procure from farmers they buy from mandis and provide it to Businesses i.e., hotels, restaurants caterers, PG's, Retailers etc. So, this is another business model which they follow providing exotic fruits, vegetables, and fruits which they are not able to procure from farmers.

3. **F2B (Farm to Business)-** Now, this is their most popular business model. In this, they procure fruits and vegetables from farms and then sell it directly to businesses unlike previous model in which they were purchasing from mandis and then selling to the businesses. Here businesses refer to hotels, restaurants caterers, PG's, Retailers etc. Their main work is of supply chain and they are doing it very efficiently.
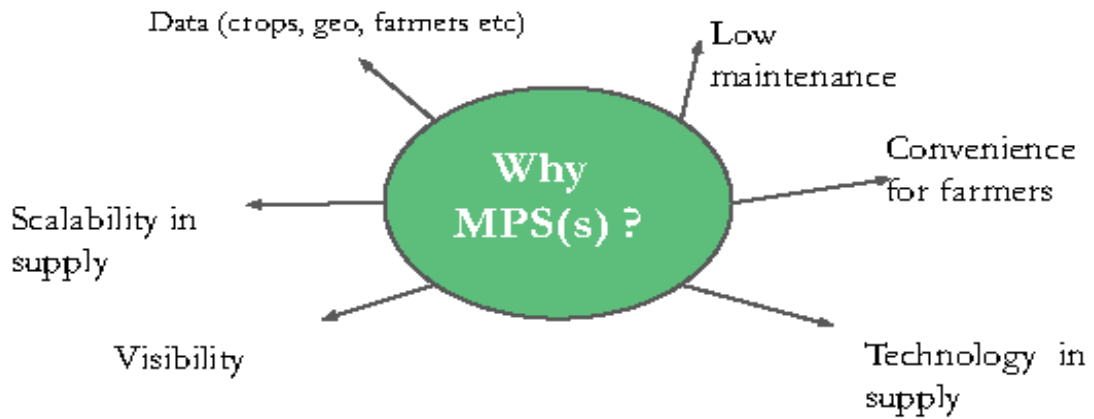
Let us talk about how they are building it.

Fig.4

Now, talking about how they are optimizing logistics and moving towards sustainability, image above is the answer.

They are building multiple **MPS (Mobile Pickup Stations)** near farms of the farmers so that collection of commodities or produce can get easier.

Advantages of MPS are:

- **Convenience-** MPS is convenient for both farmers and Agrowave also. Multiple Farmers of nearby location can come to MPS with their produce and Agrowave procurement team collects from their only.
- **Technology-** Since building MPS and managing MPS requires a good technical support which means that adding each MPS location on their website with correct latitude and longitude so that it is easier for procurement team to get to the right place at right time.
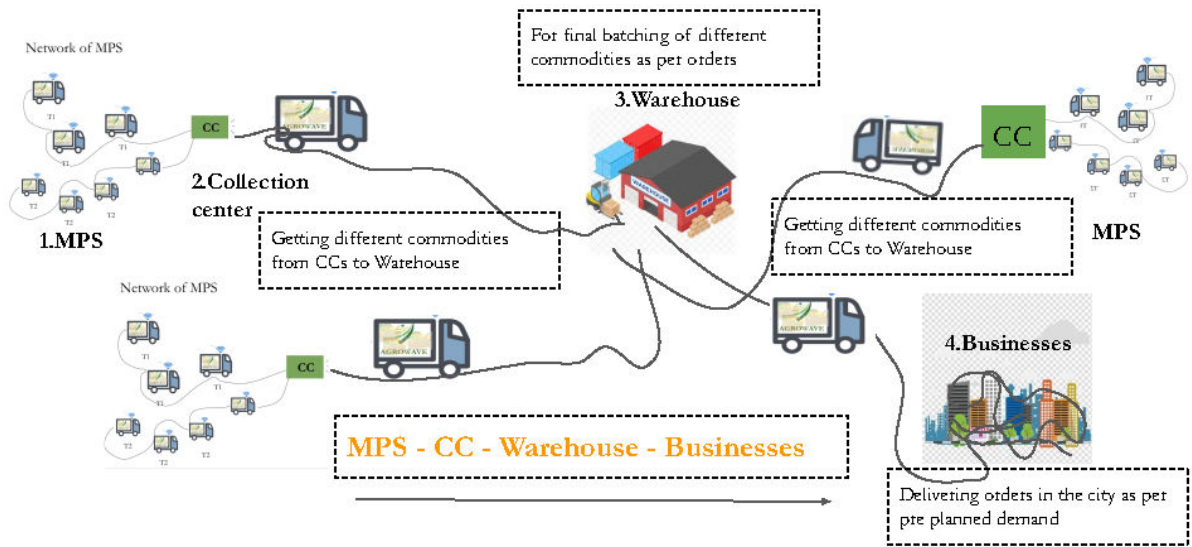- **Scalability**
- **Low maintenance**

- **Geo-Locations**

1. Harvesting (Plucking) 2. Farmer going to MPS 3. Quality check at MPS

4. Branding 5. Loading 6. MPS

MPS - CC - Warehouse - Businesses

Fig.5

Their working is as follows:

MPS- Multiple Commodities are collected from multiple MPS's

Collection Centre- Now multiple commodities from multiple farm gates or MPS are collected in the collection centre.

Warehouse- From collection centres the commodities are sent to warehouse for final batching and proper solicitation.

From warehouse the commodities are shipped to Mandis, Businesses like hotels, retailers, customers etc.

Chapter-3

Job Description

3. Job Description

Job Title: Business Development Intern and Farmside Operations Intern

Department: Marketing and Operations

Location: Work from Home

Job Summary: Sales Pitching and Helping in Procurement of Commodities

Key Responsibilities:

- Researching about the businesses, retailers, hotels, caterers etc.
- Collecting the information about all the businesses that we can target.
- Generating leads about potential clients.
- Pitching the customers i.e., telling them what we are doing and what are we selling. Basically, having them understand about our commodities and how it will help them reduce their costs.
- Taking order from the customers i.e., there are 2 modes through which they can order, either by giving us order directly or they can order from the Android application named **"Agrowave"**
- Payment Collection, now after the customer has placed the order it is our responsibility to get the payment done by the customer. Also, if the customer faces any hurdle in payment, it is our duty to get it resolved.
- Follow Up Process with all the customers that have been onboarded or not.
- Developing Posters for Marketing purpose of the company on various social media platforms like: LinkedIn, Instagram, Facebook, Twitter etc.
- Procurement of the Commodities from farm side.
- Managing the supply chain from negotiation of the commodities to the safe set delivery to the warehouse.
- Data Entry of all the MPS on regular basis on admin portal of the website so that we can have all the latitudes and longitudes of the places from where the commodities have been gathered.
- Looking for farmers from which we can procure commodities by reducing our costs.

Working Conditions: Flexible, 7 days a week.

Report To: Safia Sarfaraz, Assistant Manager (Business Development)

3.1 Rationale & Objectives of the Project

Following are the Objectives of the project:

- Working with the business development team to cope up with the current situation of the company.
- Prospecting new clients, onboarding them, doing market research of new clients using digital tools.
- Converting leads to customers, deal closure, customer feedback, retention of the customer (Customer stands for businesses).
- Using digital analytics tools to analyse which commodity is well-liked, based on the results, pitching it to the clients with the right price.
- To study various marketing strategies.

Above Objectives will assist me not only gaining knowledge about how things work in industry or how a company work but will also enhance my skills. Things that will be upgrade or say will enhance me are:

- Interpersonal Skills
- Strategical Thinking
- Presentation Skills
- Communication
- Negotiation Skills
- Knowing How supply chain works
- How to handle Logistics
- Handling different types of people
- Social Media Marketing
- Designing Skills
- Report Making Skills
- Email Etiquettes

3.2 Scope of the Project

This Project is determined for building business presence in the market and getting business grow in the market. Basically, this project is of marketing and sales domain in which we are required to sell the commodities that are procured by the business. This not only enhances the skills of one but also lets them understand the true nature of the market. Since selling the commodities to the retailers, hotels, caterers etc gives you the understanding of on ground situation. This report not only disclose us about the sales and marketing domain but also it tells us about the operations domain which is one of the major departments of the company since the work of the company is in logistics and if operations are not handheld correctly then company can incur losses and one can go bankrupt.

This analysis covers:

- How sales and marketing is done by the organization.
- Business Development Tactics of the organization i.e., how an organization is building itself by taking small steps.
- Operations of the company and to be specific Farmside Operations of the company.
- How Company is managing its supply chain and how logistics of the company works.
- New Philosophies on how to increase the customer base of the company and how to reduce cost of the company.
- Also, to know about how a company increases its online presence i.e., what is their strategy when posting an article or poster on social media.

Major Focus for the study of this project was **Marketing Sales and Farmside Operations** of the company.

Chapter– 4

Job Analysis

4. Job Analysis

While being on the job, several tactics which involve analysis part were taken place in which we determine the needs of the company and we got to know in which direction is the company moving.

Also, we invented several ways through which we were being able to add value to the company.

- **Finding potential buyers for our commodities:** Now, before beginning any of the work we first had to find the contact numbers of potential buyers which include retailers, hotels, caterers, businesses etc. Doing research was need of an hour as Covid lockdown was going on and many of the businesses came to halt due to which we were finding it difficult to look up for potential buyers. Also, since we deal in bulk commodities and only businesses like retailers, hotels, caterers purchase commodities in bulk so it was a challenging task for us to get right contact who can purchase these commodities.

- **Pitching:** Now, after previous step then the main work is to pitch the businesses about what our company is, what are we doing and about our products or say commodities. Since, these businesses were long established so they must have their previous suppliers who were providing them commodities. To understand what that person wants as every person is different and that is what I learnt as while we were cold calling the potential buyers, I was encountering with a different person every time. Let me write an instance, I called a retailer and he was more interested in quality of the vegetables and fruits rather than price whereas one of the retailers was more interested in price and many other instances happened which made me understand that while on the call you need to judge your customer instantly, what does that person wants and offer them that only.

- **Collecting Order and Payment:** After pitching to the clients, some of them gave order instantly which we need to punch it in the agrowave system so that it can be delivered on the next day. Sometimes, clients were like we will give the order around 7-8 pm on the same day and since many of the interns were pitching so commodities got sold out easily so we must make sure that when the customer orders there is plenty of the stock available. Also, after ordered is delivered we were required to collect the payment from the client. Payment was collected in 2 forms:

- o **Digital:** Payment was collected digitally at the time of delivery. Our delivery person had a **Paytm QR Code** through which clients could scan and do the payment right there.
- o **COD (Cash on Delivery):** Or the clients could pay through cash at the time of delivery.

- **Follow up:** For the customers who didn't show interest in buying commodities, we were doing follow up with them on daily basis so that they might show interest in buying commodities and many of the clients were converted with this tactic. Not only with the non-interested clients but also with the clients who ordered commodities and delivered to them, we also took their feedback and if there was any loophole we gave alternatives to rectify it.

- **Building Customer Relationships:** It's not like the client got the order and you just remove him from your contacts. It's all about relationship, how you build a relationship with your customer so that the same person orders from you again n again. So, for that I had a chat with customers on daily basis not only about the order or commodities but also about normal well-being so that trust factor is built which is a stepping stone of relationship.

Here are some images of orders:

Fig.6

4.1 Conducting Survey

Now, our company was serving in 3 verticals i.e., F2B, M2B, F2M. We need to expand the business so for launching of new vertical we conducted survey among normal consumers and we found some interesting statistics. Here, I am going to show some of the stats generated by google form and then interpretation will be done in further part where SPSS was used and research work was done.

Which mode do you prefer to buy Fruits and Vegetables
216 responses
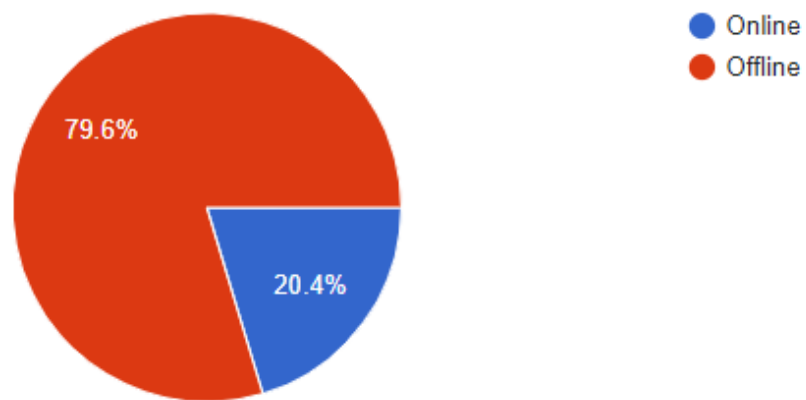
What do you look while purchasing fruits and vegetables?
216 responses

Fig.7

From where do you purchase fruits and vegetables?

216 responses

- Mandi
- Retailers
- Farmers

34.7%

6%

59.3%
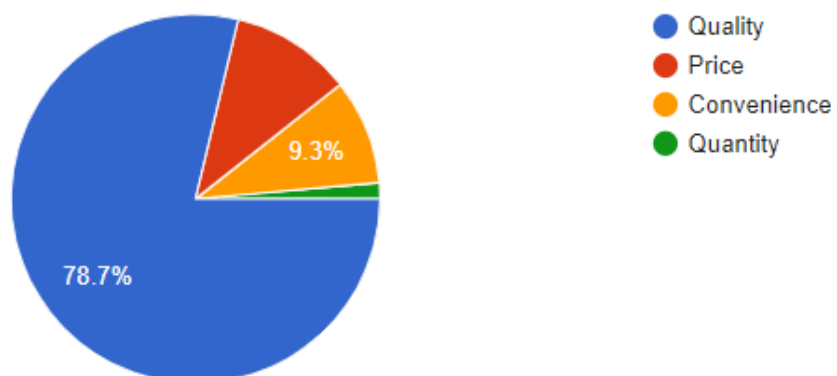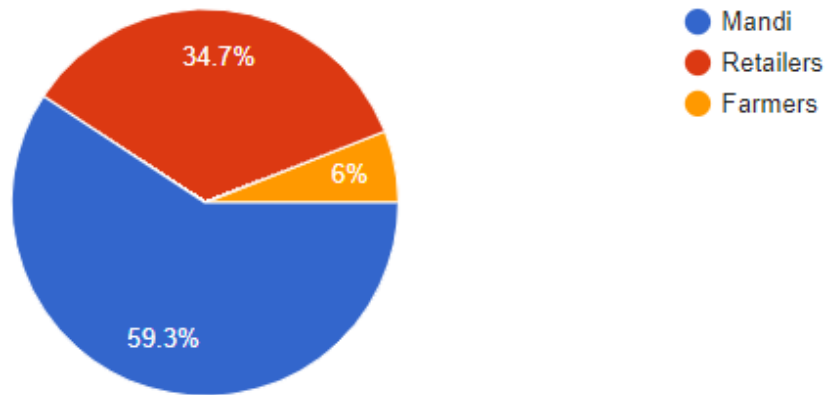
Which do you prefer?

216 responses

- Doorstep Delivery at same or less price
- Doorstep Delivery at same or more price
- Take Away at same price

26.9%

65.7%

Age

216 responses

- 18-30
- 31-40
- 41-60
- 60 and above

90.7%

18-30
196 (90.7%)
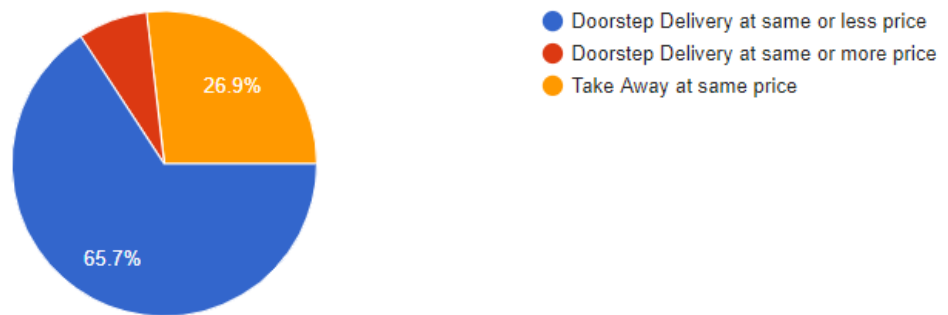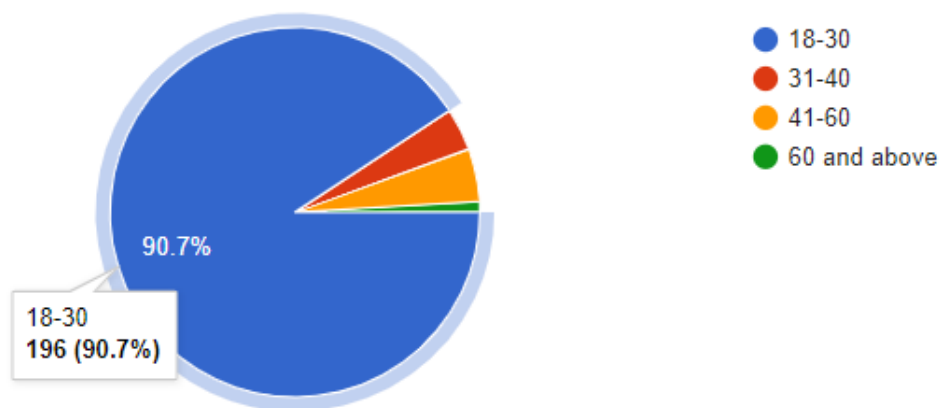
Gender

216 responses
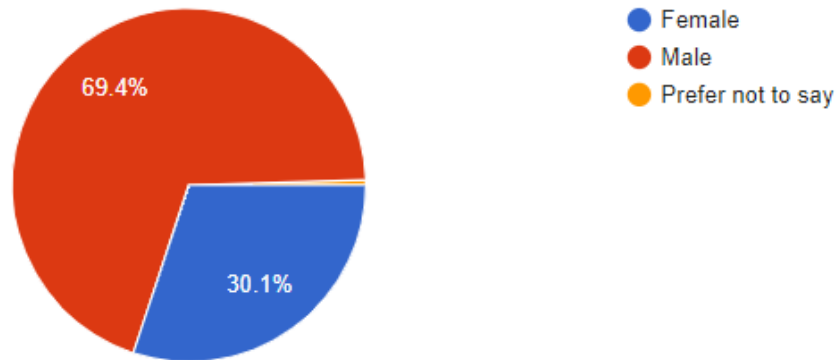
Based on these questions in google forms. A survey was conducted and decision was taken whether to launch a new vertical or not.

Further interpretation with the help of statistics tool SPSS will be explained in next chapter i.e., **Research Design**

Chapter- 5

Research Methodology

5. Research Design

Two types of Research design are there which are used in this study.

- **Descriptive Research Design:** We know that this research design is the type of design in which we search for solutions for the problem which is not clearly defined i.e., we will get the results but those results will not be conclusive. In this project we have done descriptive research.

  We basically researched basis on secondary data available with us and we did read some of the literature counterparts to which we wrote literature review as mentioned in the report above. Also, we did conduct interviews within focus groups where we mentioned the problem and we took several ideas from the people present in the focus groups and then we started working on the solution for the company.

- **Experimental Research design:** This is the research design in which scientific approach is used in a quantitative manner such that hypothesis is framed. For hypothesis purpose we used this type of design. In this certain set of variables are set constant and other set variables are decided by the responses of the user or consumer.

With the help of survey we conducted, we took some of the important business decisions through which we even launched a new vertical in which we began selling the commodities and generated revenue.

5.1 Sampling Frame

For this research, we have used multiple sampling techniques.

- **Clustered Sampling:** We know that, clustered sampling is the sampling in which subgroups of whole population is taken instead of single group. Like, age factor has been taken as the subgroup here in this research.

  18-30

  31-40

  41-60

  60 and more

Age is the subgroup in which we have divided the population for this research

Age

217 responses
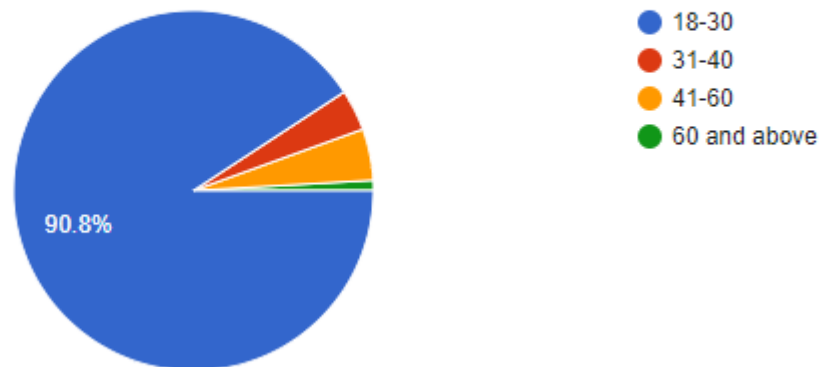
- **Judgemental Sampling:** This was another sampling technique which was used when doing this research. This sampling technique is defined as the technique in which researcher selects the population based on his/her judgement. So, for this research my population was mostly working professionals in engineering background as working professionals doesn't have time to go to the market and buy commodities so they want it to be delivered to their home, that was my target audience.

- **Snowball Sampling:** While designing survey, we were not sure that which sample frame to choose like who to choose to fill the survey so we asked our friends to recommend this survey to their friends or acquaintances to fill the survey. There was risk that we can get same answers as of same views of friends.

- **Convenience Sampling:** It is the easiest form of sampling technique as in this sampling technique we selected the participants based on their availability and willingness to participate. We sent survey to those people who were keen to help by filling it and were accessible that is they were not occupied with their work. So, that we get honest results.

5.2 Data Collection Procedure

We conducted **Survey**, and for that we used **Google Forms** in which users had to fill it and we got the desired results.

A Questionnaire was created based on where we want to expand out our business and then based on that we selected google forms as a tool as it directly converts those responses into a spreadsheet through which we can analyse data.

Consumer Behavior

This form is built to gather information about consumer behavior, what they look when they purchase fruits and vegetables.

Name *

Short answer text

Age *

○ 18-30

○ 31-40

○ 41-60

○ 60 and above

Gender *

○ Female

○ Male

○ Prefer not to say

Which mode do you prefer to buy Fruits and Vegetables *

○ Online

○ Offline

Fig.8

What do you look while purchasing fruits and vegetables? *

○ Quality

○ Price

○ Convenience

○ Quantity

From where do you purchase fruits and vegetables? *

○ Mandi

○ Retailers

○ Farmers

Which do you prefer? *

○ Doorstep Delivery at same or less price

○ Doorstep Delivery at same or more price

○ Take Away at same price

5.3 Data Analysis

Now the, main part comes where the data we collected with the help of google forms is analysed with the help of **SPSS (A data analysis tool).**

We added data into SPSS and then perform certain tests like T-test, ANOVA test, even Regression also to find out whether we should launch new vertical targeting consumers or not.

Hypothesis 1: Gender and choosing price and quality over other variables

Objective: To find whether there is any significant relationship between gender and choosing price and quality while buying commodities over other variables.

Step 1: Framing Hypothesis

H0: There is no significant relationship between gender and choosing price and quality over other variables.

H1: There is significant relationship between gender and choosing price and quality over other variables.

Step 2: Validation of the text

Independent Variable: Gender **(Nominal Scale)**

Dependent Variable: Choosing price and quality over other variables **(Interval Scale)**

Step 3: Analysis and Interpretation of T-test

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Price and Quality	Male	65	5.80	1.970	.244
	Female	150	5.97	1.852	.151

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Price and Quality	Equal variances assumed	.097	.755	-.594	213	.553	-.167	.280	-.719	.386
	Equal variances not assumed			-.580	115.127	.563	-.167	.287	-.736	.403

Fig.9

Looking at the group statistics table in the image above:

N1(Male): 65   **Mean:** 5.80

N2(Female): 150   **Mean:** 5.97

Looking above details we can say that females are dominant over males i.e., Females look price and quality more than males over other variables.

From Independent Samples Test Table

Looking t value of equal variances assumed= **.594** which states that there does not exist significant variation of difference between groups.

dF (**Degree of Freedom**) value states the error between the groups Since

N1+N2-2= 65+150-2=213

There is no error in test.

P value: 0.553

P value> alpha

0.553>0.05

Conclusion: Accept Null hypothesis as p value is greater than alpha. It signifies that there is no relationship between gender and choosing price and quality over other variables while buying commodities.

Hypothesis 2: Age and from where do you purchase fruits and vegetables

Objective: To find whether there is any significant relationship between age and purchasing of fruits and vegetables mode or not.

Step 1: Framing Hypothesis

H0: There is no significant relationship between age and purchase of fruits and vegetables mode.

H1: There is significant relationship between age and purchase of fruits and vegetables mode.

Step 2: Validation of text

Independent Variable: Age **(Nominal Scale)**

Dependent Variable: From where do you purchase fruits and vegetables **(Interval Scale)**

Step 3: Analysis and Interpretation of ANOVA Test

→ **Oneway**

ANOVA

From where do you purchase fruits and vegetables?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.248	3	.083	.221	.882
Within Groups	79.525	212	.375		
Total	79.773	215			

Post Hoc Tests

Homogeneous Subsets

From where do you purchase fruits and vegetables?

Test Duncan[a,b]

Age	N	Subset for alpha = 0.05 — 1
41-60	10	1.40
18-30	196	1.46
60 and above	2	1.50
31-40	8	1.63
Sig.		.587

Fig.10

From ANOVA Table:

Interpretation of dF value (Degree of Freedom)

Between Groups: No of groups-1 = 4-1 = 3

Within Groups: Sample size – No of groups= 216 -4 = 212

Interpretation of F value

Mean square between group – Mean square within group = **0.221**

Variation between the group is more than variation within the group.

Interpretation of p value

P value= 0.882

P value > Alpha

0.882>0.05

From Duncan Post Hoc Table

Since all the variables are in the same group so, there is no significant relationship between different groups.

Conclusion: Accept H0 i.e., Null Hypothesis. It states that there is no significant relationship between age and purchase of fruits and vegetables.

Hypothesis 3: Age and mode of purchasing fruits and vegetables

Objective: To find whether there is significant relationship between age and mode of purchasing fruits and vegetables.

Step 1: Framing Hypothesis

H0: There is no significant relationship between age and mode of purchasing of fruits and vegetables.

H1: There is significant relationship between age and mode of purchasing of fruits and vegetables.

Step 2: Validation of text

Independent Variable: Age (**Nominal Scale)**

Dependent Variable: Mode of Purchasing fruits and vegetables **(Interval Scale)**

Step 3: Analysis and Interpretation of ANOVA Test

Oneway

ANOVA

Which mode do you prefer to buy Fruits and Vegetables

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.412	3	.471	2.968	.033
Within Groups	33.625	212	.159		
Total	35.037	215			

Post Hoc Tests

Homogeneous Subsets

Which mode do you prefer to buy Fruits and Vegetables		
Test Duncan[a,b]		
		Subset for alpha = 0.05
Age	N	1
41-60	10	1.50
60 and above	2	1.50
31-40	8	1.63
18-30	196	1.82
Sig.		.229

From ANOVA Table:

Interpretation of dF value (Degree of Freedom)

Between Groups: No of groups-1 = 4-1 = 3

Within Groups: Sample size – No of groups= 216 -4 = 212

Interpretation of F value

Mean square between group – Mean square within group = **2.968**

Variation between the group is more than variation within the group.

Interpretation of p value

P value= 0.033

P value < Alpha

0.033<0.05

From Duncan Post Hoc Table

Since all the variables are in the same group so, there is no significant relationship between different groups.

Conclusion: Accept H1 i.e., Alternate Hypothesis. There is significant relationship between age and mode of purchasing fruits and vegetables.

Hypothesis 4: Satisfaction level with current commodities and way of procuring on the basis of Age and Gender.

Objective: To find whether there is significant relationship between satisfaction level with current way of commodities based on Age and Gender.

Step 1: Framing Hypothesis

H0: There is no significant relationship between satisfaction level with current way of commodities based on Age and Gender.

H1: There is significant relationship between satisfaction level with current way of commodities based on Age and Gender.

Step 2: Validation of text

Independent Variable: Age, Gender **(Nominal Scale)**

Dependent Variable: Mode of Purchasing fruits and vegetables **(Interval Scale)**

Since there are multiple IV and One DV, so it is called **Multiple Regression.**

Step 3: Analysis and Interpretation of Regression Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.030[a]	.001	-.008	2.078

a. Predictors: (Constant), Gender, Age

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.901	.650		9.084	.000
	Age	-.039	.268	-.010	-.144	.886
	Gender	.120	.305	.027	.392	.695

a. Dependent Variable: Satisfaction

Fig.11

Model Summary Table Interpretation

R square (Coefficient of Determination) = 0.001 or 1%

This signifies that there is approximately 1% of variation in Gender and age who are satisfied with the current way of procuring commodities.

Coefficients Table Interpretation

1st Variable- Age (-0.10,0.886)

Beta= -0.10

It states that there is negative relation between age and satisfaction level with the current way of commodities.

P value = 0.886

Alpha = 0.05

P value > Alpha

0.886 > 0.05

It means that there is no significant relationship between age and satisfaction level with the current way of commodities.

Conclusion: Accept Null Hypothesis (H0). There is negative and no relationship between age and satisfaction level with the current way of commodities.

2nd Variable- Gender (0.027,0.695)

Beta= 0.027

It states that there is positive relation between gender and satisfaction level with the current way of commodities.

P value = 0.695

Alpha = 0.05

P value > Alpha

0.886 > 0.05

It means that there is no significant relationship between Gender and satisfaction level with the current way of commodities.

Conclusion: Accept Null Hypothesis (H0). There is positive and no relationship between age and satisfaction level with the current way of commodities.

Chapter -6

Results and Conclusions

6. Conclusions

On behalf of all the research work we have done we have found resolution to the problem we were trying to solve. These resolutions came after extensive researching and running data analysis tools. Random audience was selected was test and results came out.

Resolution for the problem we came across are:

- Launching of a new vertical i.e., F2C (Farmers to Consumers). We are currently serving 3 markets but the main market in these tough times is the consumer market as consumer is sitting at home and ordering products or say commodities online. So, we conducted a survey to see how people will adapt, if we deliver fruits and vegetables to their homes and we came across some positive results.
  In previous chapter we used tool SPSS and denoted some of the results we analysed from the survey, we saw that if we launch new vertical then we will be benefitted and our profit share will also increase and there will be a new way for brand recognition.
- Focus on more marketing activities as profit share will increase only and only if people are going to recognise our brand as a trustful brand.
- Also, we got that people belonging to age group 18-30 are keener towards purchasing fruits and vegetables online as compared to other age groups. Since this age group is of young aged working professionals whom don't have any time to go to marketplace and buy stuff so they are preferring doorstep services on same rate.
- We also concluded that, this is the best time for launching Farmer to Consumer vertical as Covid -19 has stopped every business but people are buying fruits and vegetables because that's a necessity for them. If they don't buy that, what will they eat. So, it's the best time for us to launch this vertical.
- People are willing to spend extra bucks for doorstep deliveries of fruits and vegetables so it's the best way to increase our brand awareness as well for expansion.
- Currently, we are delivering in Delhi-NCR that too only in selected localities. This is the best time to expand our business to all the localities in Delhi since it was suffering from an acute attack of Covid-19

Chapter – 7
Suggestions/ Recommendations

7. Recommendations

7.1 Suggestions

All the recommendations that were made keeping in mind about the accountability of the profit share of the business as well as expanding the reach of the business. Also, these recommendations were also implemented while being an intern in the company. Recommendations that were made by us were:

- Expansion of the business in more districts of Delhi-NCR. Currently, Agrowave is only delivering in South west Delhi district and Gurugram only. But if Agrowave covers every district of Delhi by keeping the price same then it will benefit the company as there are more and more vendors here in East Delhi and 2 vegetable mandis are here like Vasundhara mandi and mandi near Anand Vihar.

- One more proposal or say recommendation that Agrowave can implement is improvising the android application and become more technology verse. Currently, Agrowave has only android application and not an iPhone application and many of the consumers who are wealthy and order online have an iPhone due to which that share of market is also an untapped potential for the company.

- Also, Improvising the android application for better user experience as currently I feel that the application is complex, sometimes the laymen and then business people get confused in the section of bulk ordering and normal ordering. So, if the application could be like whenever the person orders something in more quantity, its cost price automatically comes in the cart regardless of the cost price when customer was looking originally. It will give them a sense of discount and it will act psychologically.

- Game activities or Something like motivation sessions if happen in the organisation then the interns will also feel like giving their 100%. That's missing and needs attention. Employee's mood also depicts the business a company is doing. If Employee is happy then business will prosper.

7.2 Limitations

All the limitations that are being recorded in this document are written keeping in mind about what could be the limitations that business is facing and not being able to adapt to the following conditions and prosper. Basically, keeping in mind about Limitations that are holding the company to cope up with the competition.

Limitations are:

- Covid-19 Pandemic is the biggest limitation currently as this has disrupted all the workings of the company and its customers. Since here customers refers to businesses like hotels, caterers, retailers, and many more which are disrupted due to pandemic and affected the company in their revenue.

- Since it's a start-up and only 5 years have passed since it started so experience is also a limitation here. Need more of experienced candidates so that business can move in right direction.

- Funding could also be a limitation as it's a start-up so really need to pull up the investors to invest, provide funds for proper operational activities.

- Government Policies are also the limitation as one must be bounded by the policies and then run their business. Due to regular updates in the government policies for farmers, it's a challenging task to cope up with. So, it's also a limitation for the company since it is acting as a barrier in the growth factor of the company.

- Operating in a particular locality is also a limitation as expansion is necessary for a business to grow and prosper. Currently, it is serving only a particular district in Delhi and a city in Uttar Pradesh named Gurugram. So, it is working in a particular boundary and that's a limitation.

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