

ADOPTION OF E-COMMERCE PRACTICES AMONG THE INDIAN FARMER, A STUDY OF PUNE DISTRICT IN MAHARASHTRA, INDIA

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ABSTRACT

In recent years e-commerce is gaining immense importance in agricultural sector in India. In Maharashtra 4 Agricultural universities and 76 agricultural colleges had led foundation in agricultural sector growth. Collaboration with different foreign country like Israel to facilitate contemporary methods of crop production for additional crop production set technological advancement in Maharashtra. Proliferation of internet technology and its availability has increased and easier access to Maharashtra Farmers.

The study examined the response of U-Link Agritech Pvt. Ltd. working in the Pune District. The focus of study was to find response of farmers towards “direct-to-farmer” technology platform. This has been done by knowing farmers awareness level, attitude towards exiting e-commerce technology acceptance level. The study was conducted in Pune District.

This study has contributions and managerial implications to the information system knowledge base as well as agricultural sector in India. The rate at which technology innovations like the internet information is adopted by consumers constitutes an important part of the technology change or integration

The exploratory research design have been used for collecting secondary data like company sale order records ,books other record on the internet etc. while descriptive research have been used for collecting primary data

Key Words:- E-Commerce, Agriculture, Information Technology, Direct to Farmer, Adoption

INTRODUCTION

Customers and the competitive landscape are pushing agribusinesses to embrace personalized solutions that enable them to integrate product, service, and information together in new and innovative ways. Information technology advancements have made it easier to provide these tailored packages to clients. As a result, it's critical to comprehend how agricultural businesses use e-communications and e-commerce, as well as their influence on the distribution channel.

As agribusiness develops its distribution strategy, the fast development of e-business provides problems and possibilities at all levels of the channel. Given the apparently constant influx of new information technology and software applications, this problem is particularly tough. Nonetheless, agricultural businesses are pushing forward with their e-business plans, partly because they are afraid of losing clients to competitors if they do not. The results of a survey on e-business applications in agriculture are presented in this section. The results of the survey are presented in terms of overall attitudes about e-business and its implications for

distribution strategies and channel selection. E-business was defined as business operations conducted via the Internet for the purposes of the survey. E-business isn't only about selling products or services via the internet. Distribution of corporate information, marketing and product promotion, after-sales support, inventory management, and logistics are just a few examples.

Measurable Objectives

To Study farmers Profile of Pune distinct

To measure the influence of e-commerce usage on farming practices.

To investigate Problems faced by Maharashtra Farmers in Adoption of E-Commerce

To suggest solutions to the problems

Rational of Study

Maharashtra is highly industrialized state in India but Agricultural sectors in Maharashtra economy is of huge Importance. It continues to be the main occupation of state. Agriculture is dependent of Monsoon in Maharashtra. With the change in climatic conditions all over the world has forced to rethink traditional practices of farming. Thus there is need to use technology to overcome problems. Importance of technology can be needed in terms of increase in terms of Production and employment, Role if Information technology, commercialization, non dependency of climate, and effective use of Geographical System.

LITERATURE REVIEW

In this competitive global economy, it is critical for firms to adopt the most up-to-date methods and trends for conducting their operations. With the advent of technology, particularly the Internet, the world has discovered a new route of opportunity, allowing conventional company models to be replaced with a better model that is significantly superior in terms of efficiency, productivity, profitability, and competitiveness. This is where e-Commerce, which is essentially a short term for "Electronic Commerce," comes into play. Today's "in-thing" is e-commerce, a concept that encompasses the global information economy and includes electronic trading of products and services, electronic cash transfers, online procurement, direct marketing, electronic billing, and other activities conducted via the internet through a computer. E-Commerce does not alter the basic function of companies, which is to create profit from transactions, but it does alter the attitude of how to do so in a more effective manner. Simply put, this implies having knowledge at our fingertips without spending time, money, or effort, as well as conducting real-time transactions in a "borderless world" 24 hours a day, seven days a week. It is a Win-Win situation for all parties involved in e-Commerce transactions (both customers and sellers). It provides distinct advantages such as lower overhead costs, increased advertising market exposure, and less middle-man participation, all of which are clearly understood and quantified. The term "e-commerce" is divided into various categories. Among the sections are:

- 1) **Business-To Business (B2B),**
- 2) **Business-To-Consumer (B2C)**
- 3) **Business-To-Government (B2G).**

E-commerce is conducting business transactions facilitated by the Internet or other electronic networks. It is the exchange of information, goods, services or money through the use of computers with customers (Business to Customer) or with other businesses (Business to Business). Whether you are marketing or selling products or services to your customers, or communicating inventory data to your suppliers, you are taking part in e-commerce

RESEARCH METHODOLOGY AND FINDING

The lack of trust by farmers to make Internet purchases as a barrier to e-commerce adoption. This question addresses the trust-building or negotiation process of the supply-chain. The limited ability to provide product recommendations over the Internet were a barrier to farmer adoption. Farmer's inability to find desired information conveniently over the Internet was a major barrier. These questions addressed the impact of e-commerce on the transaction process of the supply chain

TYPE OF DATA COLLECTION

1. Personal contact (Interview) - Farmers
2. Questionnaire – Farmers

The sample unit includes farmer in Pune District.

Population: - Farmers in Pune District

Sample Size: - 200 Farmers

Data Processing & Analysis.

The data thus collected from the dealers and farmer's survey has been analyzed as per the Research plan stated above. The techniques that are used for analysis of data are:-

- A. Tabulation of data.
- B. Pie charts: Analysis of farmer's survey.
- C. Bar graphs: Representing secondary information
- D. Pareto Analysis

DATA ANALYSIS

1. U-Link Agritech Pvt. Ltd. Services offer vs Customer acceptance in percentage:

Researcher selected people from different villages in Pune district .The sample unit includes farmer in Pune District. And the sample size is 200 farmers.

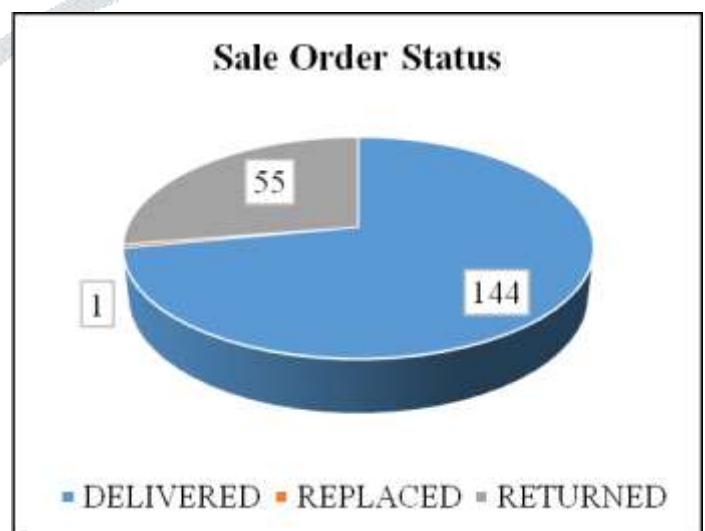
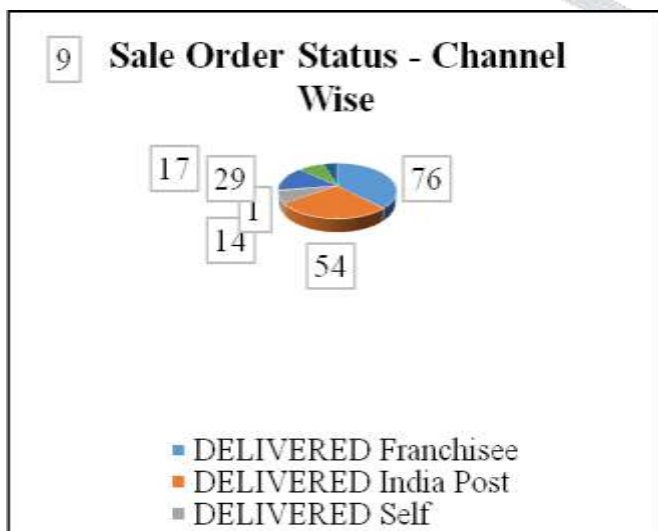
U-Link Agritech - Sale Order Status		
Sales Order Status	Order Count	Order %
Delivered	145	72.50%
Returned	55	27.50%
Total	200	100%



From pie chart 72.50 % farmers accept & use U-Link Agritech product & services, so need to retain this 27.50 % of farmers who have not use the product & Services which is offer by U-Link Agritech. So more scope to find out the way to acquire these farmers.

2. U-Link Agritech Pvt. Ltd. Channel wise Order Deliver & Returned Analysis:

Sale Order Status - Channel Wise		
Sale Order Item Status	Shipping provider	Total
DELIVERED	Franchisee	76
	India Post	54
	Self	14
REPLACED	Franchisee	1
RETURNED	Franchisee	29
	India Post	17
	Self	9
Total		200



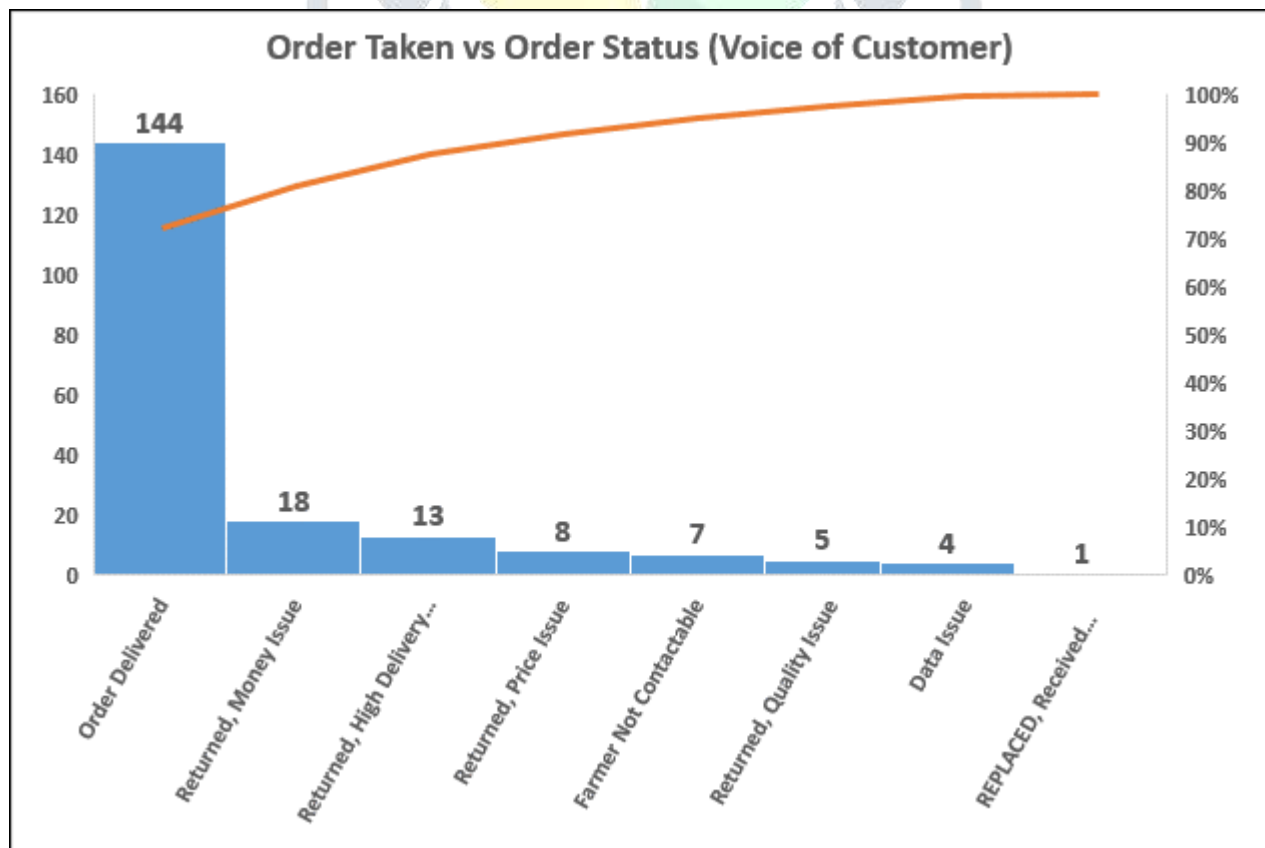
As U-Link Agritech build channel wise platform to provide product & services in the rural area. There are three mode where company reach to Farmer.

- 1) India Post
- 2) Franchisee
- 3) Field Officer (Self)

Above is the channel wise efficiency analysis wherein most the delivery done by company via franchisee & India post to achieve the delivery TAT.

3. Product as well services Acceptance & Returned Products % Analysis:

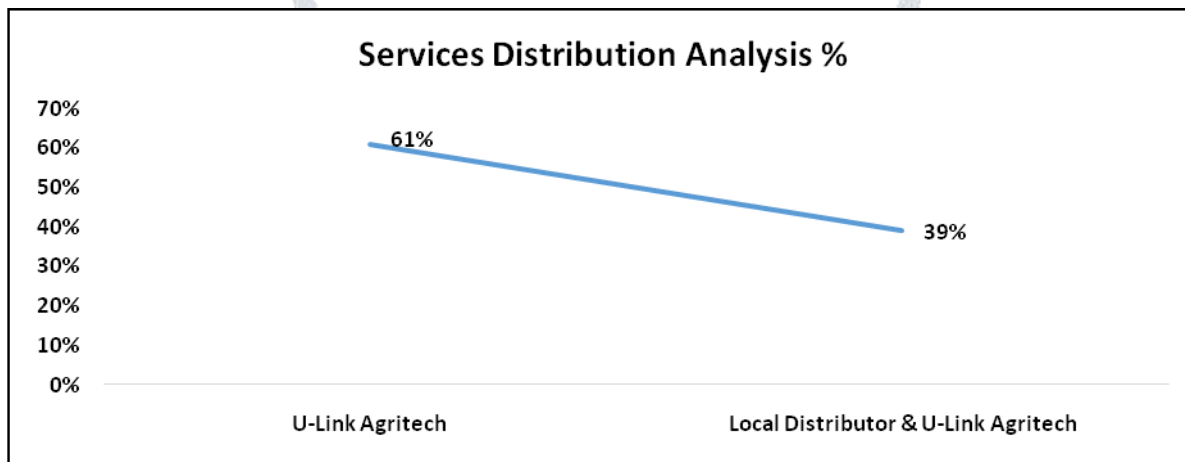
Order Taken vs Order Status (Voice of Customer)	
Order Status - Voice of Customer	Total
Order Delivered	144
Returned, Money Issue	18
Returned, High Delivery Time	13
Returned, Price Issue	8
Farmer Not Contactable	7
Returned, Quality Issue	5
Data Issue	4
REPLACED, Received damage	1
Total	200



While delivery observed that most of the farmer order product basis on Agricultural planning according to the Land as well as crop situation & plan to order product according to future requirement. But some time due to weather change farmer need urgent delivery where supply chain achieve the delivery TAT. But due to product & supply chain limitations unable to meet farmer expectations.

4. Other Than U-Link Agri Tech Pvt Ltd. Services used by Farmers Analysis:

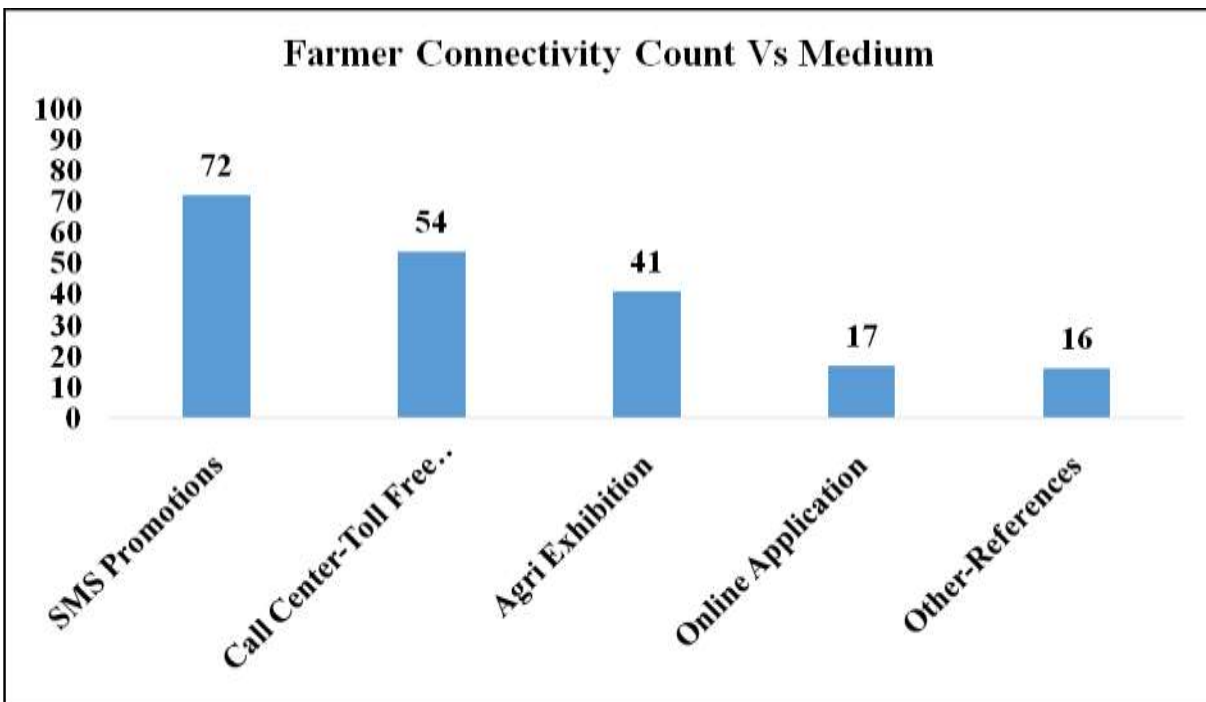
Services used by Farmers		
Service Network	Services Distribution Count	Services Distribution %
U-Link Agritech	122	61%
Local Distributor & U-Link	78	39%
Grand Total	200	100%



There are voice of customer captured where in customer awareness captured regarding the availability & service network distribution by different medium at the market place. Majorly observed that in compare to local distributor farmer acceptance towards the e-commerce & supply chain service. This analysis will be differ by geographical level but at the moment for Pune district this acceptance is more than the other existing traditional distribution network.

5. Awareness medium of U-Link Agritech among farmer:

Awareness medium of U-Link Agritech among farmer		
Medium	Farmer Connectivity Count	Farmer Connectivity %
SMS Promotions	72	36%
Call Center-Toll Free Number	54	27%
Agri Exhibition	41	20.50%
Online Application	17	8.50%
Other-References	16	8%
Total	200	100%



In e-commerce first thing to acquire customer profile in company data base. To take the effort to acquire farmers profile many ways of communication. Above is the count & % wise analysis that the medium through farmers are involve in into the e-commerce & supply chain network to aware & avail the product as well as service which is offered by company.

1. Reasons behind diversion of the Farmer from U-Link Agritech:

Diversion Reasons of the Farmer from U-Link Agritech			
Customer Feedback	Sale Order Status	Order Count	Order %
Returned, High Delivery Time	RETURNED	13	43%
Returned, Price Issue	RETURNED	8	27%
Returned, Quality Issue	RETURNED	5	17%
Data Issue	RETURNED	4	13%
Total	-	30	100%

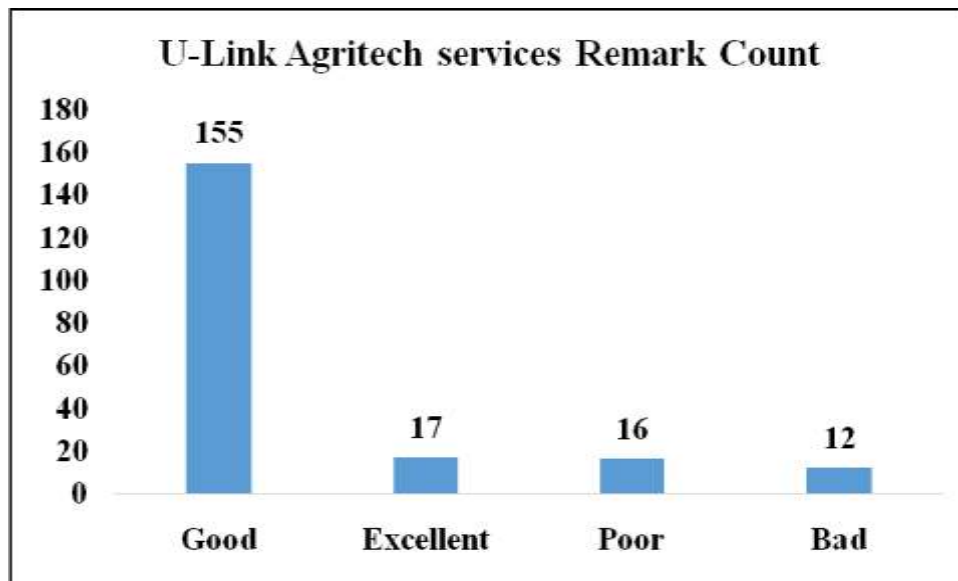


From above chart it conclude that most of the farmers are diverted because of High Delivery Time & Price issue across the district. There are more focus required to improve distribution channel performance & product pricing strategy.

2. Remarks of farmer who used U-Link Agritech services:

Here I gave remark of farmers who used **U-Link Agritech services** according to Excellent, Good, Poor and Bad

Remark	Count of Remarks
Good	155
Excellent	17
Poor	16
Bad	12
Total	200



Farmers have given the remark about **U-Link Agritech services**, such as 17 farmers feel it is excellent, 155 feel it is good, 16 feel it is poor & 12 farmers feel it is bad.

Problem Faced by Maharashtra Farmers.

- Basic Computer Literacy
- Internet Connectivity
- Non Uniform Distribution Methods
- Low literacy rate
- Reluctant to Adopt new technology
- Lack of rural Infrastructure
- Lack of innovation

CONCLUSION

1) E-Commerce growth Impact on market, it changes to the Mechanics of Business

Market has changed with the introduction of E-commerce methods, and the impact it will have on your business. Indeed, a proven way of increasing the likelihood of business survival and success is to take a strategic marketing approach; a long term view, which, based on the marketing environment, looks at the way forward for a business over the next one to three years.

2) E-Commerce growth Impact on Sales through direct selling

Most businesses are adopting a view that Web site sales are one of many sales channels, rather than the only channel. Also direct marketing approach that cuts out the “middleman” and enables direct interaction with customers and consumers

3) **E-Commerce growth Impact on Supply Chain Management, as Customers Drive the Supply Chain**

Along held view in manufacturing is that the main differentiator between competing suppliers is product quality. However, with manufacturing quality approaching parity across the board, meeting specific customer demands for product delivery is the next critical opportunity for competitive advantage.

4) **Customer Expectations are raised by e-Commerce**

The convenience and flexibility of E-commerce technology, enabling buyers to purchase products and services on web sites through the Internet, has raised customer and consumer expectations to demand

5) **Reliable and flawless fulfillment processes**

Margins are being squeezed, because customers are not used to paying for the picking, loading, and delivering activities, that they previously did themselves.

6) **Competitive Advantage Supply Chain Management (SCM)**

The scope of **SCM** covers all the complex interactions of managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehouse and inventory tracking, order entry and order management, distribution **logistics** across all channels, and delivery to the customer.

7) **Every system rides drawback with it. But it seen that technology gives much better advantages in 90% cases. But we can reduce gap of these drawback by implementing better platform for farmers and teach them for solution for this drawback. Company is not able to fulfil 100% awareness about their product in Pune District area. So, company has to focus more on the promotional activity to create awareness among the farmers.**

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