

15 E-LOGISTICS



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1. INTRODUCTION

Logistics is division of an organization which plans, implements and controls the effective and efficient flow and storage of goods, services and related information from point of origin to point of sales/consumption in order to meet customer's requirements. It is an added part of business but essential and important division. Organization, many times, faces difficulty to manage logistics and thus building an E-Logistics and provide services to such organizations, transport companies and other institutions that are usually part of this Logistics part. E-Logistics is software with set of technologies for communication that transform important and essential processes of logistic department by sharing information & knowledge with partners involved in supply chain process. E-logistics in Uttarakhand is revolutionizing the way goods are transported and delivered across the hilly region, offering efficient, technology-driven solutions. With the rise of e-commerce and growing demand for faster deliveries, e-logistics companies provide real-time tracking, route optimization, and seamless last-mile delivery. The sector is helping local businesses reach wider markets and enhancing supply chain efficiency. As digital infrastructure improves, e-logistics is set to become a key driver of economic growth and connectivity in Uttarakhand.

2. SERVICE & ITS APPLICATION

E-logistics services will be a comprehensive solution for transporters and organizations, providing all the information they need for transportation planning, inventory and warehouse management, port management, larger-scale ship, airline, and rail scheduling, and task organization at the plant and store level. Business managers may plan and oversee specific tasks with the support of accurate reporting and analysis, which will enable them to deliver goods to the appropriate location at the right time. A centralized network will be made available by e-logistics for suppliers, warehouse managers, manufacturers, transporters, and retailers/distributors to share. This will improve the process as a whole and cut down on unnecessary overhead.

3. DESIRED QUALIFICATION FOR PROMOTER

The entrepreneur may have qualification of MBA or BBA and experience of handling supply chain division. Dealing with transporters, inventory manager and scheduling logistics need high level of skills of management. The team should be composed of skilled workers with experience in communication, dealing in transport, liasoning etc.

4. BUSINESS OUTLOOK AND TRENDS

The growth of share of electronic commerce in commerce in general has caused a need of an online access to logistic services amid suppliers and recipients on market. Growth of electronic commerce evaluating towards e-business has brought about a natural need of the growth of processes of the commodity flow service, in the area of the company front-office (e.g. sales, marketing, client service), as well as back-office (purchasing, warehousing, transport, production and co-production). The electronic data interchange between partners let them cooperate in real time and create an integrated supply chain. Efficient, reliable and effective functioning of supply chains requires beyond good management of physical products flow, set under functional and organizational aspect, a system of information flow.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

Due to shifting dynamics in both domestic and international delivery and sales marketplaces, enterprises have begun to utilize Internet tools to conduct electronic transactions with supply chain partners. The evolving expectations of customers and the technical capabilities of collaborating partners lead to changes in supply chain management. Stronger competition, shorter product life cycles on markets, technological advancements, and the globalization of business collaboration (e.g., in delivery, production, and distribution processes) have all put pressure on supply chains to change in several ways. These include accelerating order fulfillment times, expanding their global reach, increasing their elasticity, and enhancing their durability.

Similarly, the market potential for e-logistics in Uttarakhand is vast and growing, fueled by the rise of e-commerce, improved infrastructure, and the state's strategic geographic location. With an increasing demand for efficient and timely deliveries, especially in sectors like tourism, retail, and local handicrafts, e-logistics services can bridge gaps in supply chains and offer reliable solutions to businesses in urban and rural areas alike. The ongoing development of roads, airports, and digital connectivity enhances the efficiency of logistics operations, while government initiatives and investments in infrastructure further support sector growth. Moreover, Uttarakhand's unique geography, with its remote and hilly regions, presents opportunities for specialized logistics services, including last-mile delivery. As technology adoption increases and logistics operations become more automated, the e-logistics sector is poised to play a pivotal role in boosting local economies and facilitating faster, cost-effective delivery solutions across the state.

6. RAW MATERIAL REQUIREMENTS

1. Advanced computers with latest operating system and high speed processor

2. Network devices with infrastructure
3. Office setup for at least 10-15 employees

6. SERVICE PROCESS

E-Logistics application is quite a complex system and requires very detailed pre-development analysis. Team has to design efficient algorithms for every task and for every partner involved such that correct information gets transmitted on logistics channel. Typical tasks involved are

1. Checking Product availability
2. Placing Orders from customers
3. Real-time update on stocks
4. Real-time request to distributor/market place
5. Replenishment requests for all inventory
6. Dispatch request
7. Last mile delivery
8. Return requests
9. Risk Insurance

There are also other tasks involved. Every above task and other tasks are connected via API, Web XML, or other to ensure real-time information, purchases and delivery.

7. MANPOWER REQUIREMENT

Sr. No	Particulars	No.	No of month in year	Wages/Salaries per month (Rs. In Lakhs)	Annual Expense (Rs. In Lakhs)
1	Manager	1	12	0.25	3
2	Office-Support	2	12	0.12	2.88
3	Delivery Support	5	12	0.1	6
Total					11.88

8. IMPLEMENTATION SCHEDULE

Sr. No.	Activity	Time Required (in months)
1	Site Selection for Ware House	0.5
2	Arrangement of Finance	1
3	Machinery and Equipment purchase	0.5
4	Developing Portal	0.5
5	Order Integration and and Outbound Operation	0.75
6	Delivery Operation and mobility solution	0.5
7	Track and Trace	0.25
Total time required (some activities shall run concurrently)		4

9. COST OF PROJECT

Sr. No	Particulars	Annual Expenses (Rs. in lakhs)
1	Land	-
2	Building (Rented)	0.36
3	Plant & Machinery	0.87
4	Equipment and Furniture Exp.	3.96
5	Misc. Fixed Asset	0.02
6	Preoperative & Preliminary Exp.	0.32
7	Working Capital	3.21
Total Project Cost		8.73

10. MEANS OF FINANCE

Bank-term loans are assumed @ 60 %

Sr. No.	Particulars	Annual Expenses (Rs. in lakhs)
1	Promoter's contribution	3.49
2	Bank Finance	5.24
Total		8.73

11. LIST OF MACHINERY EQUIPMENT REQUIRED

A. Machinery

Sr. No	Particulars	Unit	Price per Unit(Rs. in lakhs)	Total Amount (Rs. in lakhs)
1	Computers with all necessary hardware and installed Windows	2	0.30	0.60
2	Network Installation	1	0.05	0.05
3	Printer	2	0.08	0.16
4	Barcode Scanner	2	0.03	0.06
Grand Total Amount				0.87

B. Furniture & Equipment

Sr. No	Particulars	Unit	Price per Unit(Rs. in lakhs)	Total Amount (Rs. in lakhs)
1	Building Portal	1	1.20	1.20
2	Office Set Up	1	0.50	0.50
3	Vehicle/Bike	5	0.45	2.25
4	Others	-	-	0.02
Total Rs.				3.96

All the machines and equipments are available from local manufacturers. The entrepreneur needs to ensure proper selection of software and proper type of machines and tooling to create modern and flexible outcome. It may be worthwhile to look at reconditioned imported machines and tooling. Some of the machinery and tooling suppliers are listed here below:

1. Arihant Computers

582 Tyagi Market,

Dehradun City,

Dehradun – 248001

2. Jack Infotech

Shop No.9 Lower Ground Floor,

Capri Trade Centre, Chakrata Road,

Dehradun - 248001 (Near Lic Building)

3. Bike Bazar

22/1, Gandhi Rd, Race Course,

Dehradun, Uttarakhand 248001

4. B K Motors

182, Chakrata Rd, Seyad Mohalla,

Khurbura Mohalla, Dehradun,

Uttarakhand 248001

5. The Timber Street

176/127 Chakrata Road Nimbus Tower,

Bindal Bridge, Tiraha,

Dehradun, Uttarakhand 248001

Besides these, online platforms such as India Mart, Trade Mart, OLX, etc., can also be explored for online ordering.

12.SALES REALISATION

Sr. No	Service	Sales in Percentage	INR
1	Delivery	25.0%	20.53125
	Total	100.00%	20.53125

13.PROFITABILITY CALCULATIONS

The basis of profitability calculation:

Sr. No	Particulars	Annual Expenses (Rs. in lakhs)
A.	Sales realisation	20.53
B.	Cost of production	
i)	Raw materials	0.00
ii)	Utilities	1.42
iii)	Manpower Cost (Salaries/wages)	11.88
iv)	Administrative expenses	0.04
v)	Packaging Cost	0.00
vi)	Material Lost Cost	0.00
vii)	Selling & distribution expenses	0.66
viii)	Repairs & maintenance	0.10
ix)	Rent	0.60
x)	Interest	0.59

xi)	Misc. expenses	0.00
	Total (B)	15.29
	Gross profit/loss (A – B)	5.24
	Less: Depreciation	0.68
C.	PBIT	4.56
D	Income-tax	-
E	Net profit/loss	4.56
F.	Repayment (Annual)	-0.16
G	Retained surplus (E-F)	4.73

14. BREAKEVEN ANALYSIS

Fixed cost	
Land & Building Rent	0.60
Depriciation	0.68
Interest	0.59
Manpower	3.56
Total Fixed cost	5.43
Variable cost	
Raw materials	0.00
Utilities	1.42
ManPower	8.32
Administrative expenses	0.04
Selling & distribution expenses	0.66
Total Variable cost	10.44
Contribution margin	49%
Break-Even Point in Value	11.09

15. STATUTORY/GOVERNMENT APPROVALS

According to the Multimodal Transportation of Goods Act, 1993, an unregistered multimodal transport operator is strictly prohibited from engaging in multimodal transportation operations. It regulates the movement of goods from India to countries outside of India or within India using one or more modes of transportation based on a single transport contract.

The law governing a number of topics, including registration, cancellation, and appeals against such registration or cancellation of registration of multi-modal transport operators, is covered in Sections 3, 4, 5, and 6 of the Multi-Modal Transportation of Goods Act. Where appropriate, entrepreneurs can get in touch with the State Pollution Control Board.

Visit the official government website (Bureau of Indian Standards) for product notices at <http://crsbis.in/BIS/> Entrepreneurs may contact the State Pollution Control Board when relevant.

16. TRAINING CENTERS AND COURSES

There are few specialized Institutes that provide certificate and diploma certification in web development design and backend coding. The most famous and authenticate Institutions are as follows:

- **Indian Railways Institute of Logistics & Materials Management**

111, Oriental House, 19 Commercial Center,
Yusuf Sarai, Near Green Park Metro Station Gate No. 2,
New Delhi-110049

- **Per-tecnica - Logistics & Supply Chain Management Institute.**

703, Dega Towers, Raj Bhavan road,
Hyderabad

- **Graphic Era University**

566/6, Bell Road, Society Area,
Clement Town, Dehradun, Bharu Wala Grant,
Uttarakhand 248002

- **Doon Business School**

Mi-122, behind Pharma City, Selaqui Industrial Area,
Dehradun, Central Hope Town,
Uttarakhand 248001

Swayam portal (link: <https://swayam.gov.in/>) can also be accessed for enhanced learning on business commerce, accounting, production, marketing, and areas of entrepreneurship.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.