E – LOGISTICS

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 difficult 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.

2. SERVICE AND ITS APPLICATION

E-Logistics services will be complete solution for organization, transporters with all related information for planning of transportation, managing inventory/warehouse, managing at port, scheduling ships/airways/rail at larger scale, organizing tasks at plant and store level. With proper reporting and analysis, business managers can plan and lead certain tasks and thus help them to deliver products to right place on perfect time. E-Logistics will provide centralised network which can be shared by suppliers, warehouse managers, manufacturers, transporters, retailers/distributors. This will enhance the overall process and reduces overheads which are unwanted.

3. DESIRED QUALIFICATION FOR PROMOTER

An entrepreneur and team must have qualification of MBA and experience of handling supply chain division. Dealing with transporters, inventory manager and scheduling logistics need high level of skills of management.

4. INDUSTRY LOOK OUT 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 POTANTAIL AND MARKETING ISSUES. IF ANY

In the background of changing situation on local and global markets of delivery and sales companies more often use the Internet tools, letting realization of electronic transactions with partners in supply chain. Changes in management of supply chain happen with development of clients' needs and technological possibilities of cooperating partners. Globalization of economic companies' cooperation (e.g. in delivery, production and distribution processes), technological growth and innovative manners of economic activity, as well as stronger competition and shorter products life cycles on markets have caused pressure on changes of dimensions of supply chains' acts — shorter time of order's realization, global scope of activity, bigger elasticity and durability. One of fundamental tool of supporting business processes became electronic data interchange through the Internet. It has caused epoch-making change for clients' values — independent access to information about products' flow and localization of supply chain's partners.

6. RAW MATERIAL REQUIREMENT

1. Advanced computers with latest operating system and high sped processor
2. Network devices with infrastructure
3. Office setup for at least 10-15 employees

7. SERVICE PROCESS OUTLINE

E-Logistics application is very 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.

8. MANPOWER REQUIREMENT
1. Managers – 3
2. Technical/Office Support – 5
3. Marketing support – 5

9. IMPLEMENTATION SCHEDULE

E-Logistics application requires inputs from various departments and people involved in this chain and thus require lot of complexity in designing application. With help of IT company and skills of entrepreneur, developing such portal will take approximately 12-15 weeks. It requires developing modules of:
1. Order Integration
   – Web Service Integration, Customer number creation, Pin code based allocation
2. Warehouse Management

- Input to MRP tool, execution of order, SKU level tracking, Replenishment request

3. Outbound operation
   - Verification of order, packaging, labelling, output to logistic partner for pickup

4. Delivery Operation
   - Scanning of packaging, delivery go-ahead call, pin code based allocation

5. Mobility Solution
   - Delivery update –mobile based, Geo-based location and routing

6. Track and Trace
   - Customer interface update for tracking of package

10.   COST OF PROJECT

Sr. No.	Particulars	Amount in Rs
1	Land	₹ 0.00
2	Building	₹ 0.00
3	Portal	₹ 1,50,000.00
4	Equipments/ Vehicle/ Other fixed investment	₹ 3,39,000.00
5	Working Capital Margin (3 Months)	₹ 3,68,100.00
5	**Total Cost of Project**	**₹ 8,57,100.00**

(a)   FIXED CAPITAL INVESTMENT

Sr. No.	Description	Qtty	Amount	Total
1	Building Portal	1	₹ 1,50,000.00	₹ 1,50,000.00
2	Computers, Printers, Barcode Scanner	2	₹ 27,000.00	₹ 54,000.00
3	Office/Inventory setup	1	₹ 45,000.00	₹ 45,000.00
4	Vehicle/Bike	5	₹ 48,000.00	₹ 2,40,000.00
A	**Total**			**₹ 4,89,000.00**

(b) WORKING CAPITAL

Sr. No.	Description	Total
1	**Salary**	**₹ 85,000.00**
1a	Entrepreneur	₹ 15,000.00
1b	Office Support – 2 @ Rs 10000 Per Month	₹ 20,000.00
1c	Delivery Support – 5 @ Rs 10000 Per Month	₹ 50,000.00
2	**Raw Material**	**₹ 5,200.00**
2a	Internet Connection Charges	₹ 700.00
2b	Annual Maintenance Charges for Portal	₹ 500.00
2c	Google Play Store	₹ 1,000.00
2d	Vehicle Maintenance	₹ 1,000.00
2e	Misc.	₹ 2,000.00
3	**Utilities**	**₹ 9,000.00**
3a	Power	₹ 1,200.00
3b	Water	₹ 300.00
3c	Fuel - Rs 1500 for 5 Vehicles per month	₹ 7,500.00
4	**Other Expenses**	**₹ 3,500.00**
4a	Transportation	₹ 1,000.00
4b	Advertising/Marketing	₹ 2,000.00
4c	Stationery	₹ 500.00
5	**Go-down Rent**	**₹ 20,000.00**
B	***Total***	***₹ 1,22,700.00***

11.   MEANS OF FINANCE

Sr. No.	Description	Percentage	Amount (Rs)
1	Promoter's Contribution	25%	₹ 2,14,275.00
2	Term Loan/Bank Finance	75%	₹ 6,42,825.00
	Total		**₹ 8,57,100.00**

(a) Cost of Production (At 100% Capacity)

Sr. No.	Particulars	Amount in Rs
Variable Cost		
1	Raw Material and Other Direct Inputs	₹ 8,700.00
2	Salary (60%)	₹ 51,000.00
3	Power (70%)	₹ 6,300.00
	Variable Cost 1 Month	₹ 66,000.00
	Total Annual Variable Cost	***₹ 7,92,000.00***
Fixed Cost		
1	Overheads (Go-down rent)	₹ 20,000.00
2	Salary (40%)	₹ 34,000.00

3	Power (30%)		₹ 2,700.00
		Sub Total	*₹ 56,700.00*
		Total for 12 Months	*₹ 6,80,400.00*
4	Interest		₹ 77,139.00
5	Depreciation		₹ 73,350.00
	Total Fixed Cost		**₹ 6,80,400.00**
	Total Cost of Production		**₹ 14,72,400.00**

(b) Turnover (At 100% Capacity)

Sr. No.	Description	Per 500 gms	Qtty per Day	Revenue per day	Revenue per Month	Revenue per Annum
1	Delivery Charges	₹ 60.00	150.00	₹ 9,000.00	₹ 2,70,000.00	₹ 32,40,000.00

12. WORKING CAPITAL REQUIREMENTS

Sr. No.	Description	Total
1	Entrepreneur	₹ 15,000.00
2	Office Support – 2 @ Rs 10000 Per Month	₹ 20,000.00
3	Delivery Support – 5 @ Rs 10000 Per Month	₹ 50,000.00
4	Internet Connection Charges	₹ 700.00
5	Annual Maintenance Charges for Portal	₹ 500.00
6	Google Play Store	₹ 1,000.00
7	Vehicle Maintenance	₹ 1,000.00
8	Misc.	₹ 2,000.00

13. LIST OF MACHINARY REQUIRD

Sr. No.	Description	Qtty	Amount	Total
1	Computers	2	₹ 27,000.00	₹ 54,000.00
2	Printers	2		
3	Barcode Scanner	2		
4	Office Networking devices and Infrastructure	1	₹ 45,000.00	₹ 45,000.00

14. PROFITABILITY CALCULATION

Net Profit	**₹ 16,17,111.00**
Net profit Margin	49.91%

(a)   Profitability Projection

Sr. No.	Particulars	UOM	Year Wise estimates					At Full Capacity
			Year 1	Year 2	Year 3	Year 4	Year 5	
1	Capacity Utilization	%	30%	40%	50%	60%	70%	100%
2	Sales	Rs Lakhs	₹ 9.72	₹ 12.96	₹ 16.20	₹ 19.44	₹ 22.68	₹ 32.40
3	Raw Materials & Other Direct Inputs	Rs Lakhs	₹ 2.38	₹ 3.17	₹ 3.96	₹ 4.75	₹ 5.54	₹ 7.92
4	Gross Margin	Rs Lakhs	₹ 7.34	₹ 9.79	₹ 12.24	₹ 14.69	₹ 17.14	₹ 24.48
5	Overheads Except Interest	Rs Lakhs	₹ 6.80	₹ 6.80	₹ 6.80	₹ 6.80	₹ 6.80	₹ 6.80
6	Interest	Rs Lakhs	₹ 0.77	₹ 0.77	₹ 0.77	₹ 0.77	₹ 0.77	₹ 0.77
7	Depreciation	Rs Lakhs	₹ 0.73	₹ 0.73	₹ 0.73	₹ 0.73	₹ 0.73	₹ 0.73
8	Net Profit Before Tax	Rs Lakhs	-₹ 0.96	₹ 1.48	₹ 3.93	₹ 6.38	₹ 8.83	₹ 16.17
9	Profit %		-9.93%	11.44%	24.27%	32.81%	38.92%	49.91%

The basis of profitability calculation:

This unit will have capacity to deliver 54,000 items/year (on the average of 150 items/day).

The margin we get per 500 gms will be 60 INR.

Energy Costs are considered at Rs 7 per Kwh and fuel cost is considered at Rs. 65 per liter. The depreciation of plant is taken at 10-12 % and Interest costs are taken at 14 -15 % depending on type of industry.

15.   BREAKEVEN ANALYSIS

Sr. No.	Particulars	UOM	Value
1	Sales at Full Capacity	Rs Lakhs	32.40
2	Variable Costs	Rs Lakhs	7.92
3	Fixed Cost incl. Interest	Rs Lakhs	8.31
4	Break Even Capacity	% of Installed	**33.94**
	[BEP = FC/(Sales -Variable Cost) *100]	Capacity	

16.   STATUTORY / GOVERNMENT APPROVALS

The Multimodal Transportation of Goods Act, 1993 regulates the transportation of the goods from India to outside India or within India involving one or more modes of transport on the basis of the single transport contract and according to it an unregistered multi-modal transport operator is absolutely forbidden to carry on the business of multi-modal transportation.

Section-3, 4, 5 & 6 of Multi-Modal Transportation of Goods Act deal with the law regulating various aspects such as registration, cancellation and appeal against such registration or cancellation of registration of multi-modal transport operator. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

17.   BACKWARD AND FORWARD INTEGRATIONS

The concept of multimodal transport is not new and efforts to establish a suitable legal regime for multimodal transport were first made by the International Institute for the Unification of Private Law (UNIDROIT) in the 1930. At that time, these efforts were weighed more theoretical than practical in commercial circles (UNCTAD, 1994). The term multimodal transport was introduced officially by the United Nations sponsoring Multimodal Transport Convention in 1980 but the term attained legal recognition on 1st January 1992 with the introduction of the 1992 UNCTAD/ICC Rules for Multimodal Transport. Initially, in India there was no uniformity in multi-modal transport of goods. Government introduced a uniform system with an opinion that absence of uniformity leads to ambiguity and imbalance of interests between operators and cargo owners.

18.   TRAINING CENTERS AND COURSES

Following are few best institutions for logistics learning across India, they provides the best course in this field to give learner's practical education.

1. Indian Railways Institute of Logistics & Materials Management (IRILMM)

This is dedicated to the profession and practice of Materials Management in its most liberal and widest interpretation, with emphasis on capacity building in Public Procurement. It has national presence with 6 chapters spread all over India. IRILMM is a unique not-for-profit registered society, created and backed by an extensive pool of Supply Chain Professionals having unmatched depth and breadth of experience. In the field of Public procurement, it is conducting one year distance-education diploma in "Public Procurement and Supply Management"; regular training programs and Consultancies.

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

Pertecnica's Supply chain management is rated as best training institute by the industry experts across globe for its robust training methodology and curriculum design .This training prepare students for International careers in Sourcing , Procurement ,Transportation, contracts ,Warehousing and inventory management . This course is best for students all branches of engineering and general disciplines like Economics, commerce …etc who wants to build their careers in general management and leadership roles in India, Middle –East, Africa, and Asia –Pacific regions.

Udyamimitra portal (link : www.udyamimitra.in) can also be accessed for hand-holding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

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.

Source:- Udyami Mitra/Sidbi