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EtransQ A Logistic Solution

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Abstract- The transport industry in India lacks in the involvement of IT. Business is still carried using the traditional methods. Suppliers, Transporters and Agents have a limited business domain. In transport industry, clients have long term relationships. The only reason because of which suppliers and transporters loose the best deals available in market is the limited scope for searching new service providers. Tenders are available only in newspapers. Every tender is not suitable for every transporter. Sorting and searching is not possible manually, the solution to all these problems is given by E-transQ.

E-TransQ is an information system, focused on transport industry to enhance the capabilities of the suppliers, transporters and agents (STA). It aims to provide an innovative, profitable, knowledge based service to its users. The solution helps in increasing STA's business domain and profits.

E-TransQ embeds Internet based technologies with internal operating structures for earning business.

E-TransQ is user friendly 24*7 available and provides a secured and trustworthy environment. It provides a single platform where users can communicate, share information, increase knowledge and business capabilities

***Keywords*— Agent, Association, Logistic, Offer, Supplier, Transporter, Tender.**

I. Introduction

Logistics is one of the widely spread and demanding business domains. In the current scenario, all the work in the logistics industry is carried out manually; due to which the business is limited. It is quite difficult for the transporters, suppliers and agents to acquire the best deal. The profits decline when transporters are unable to find enough material to shipping. The communication medium is vocal (telephonic), which may create misunderstandings between organizations and lean to bad business relations and loss of trust. Also, there is no exposure to global market.

EtransQ is a PFS (Public Facing Site) for suppliers, transporters and agents to share a common platform and help in gaining profit. It aims to provide an innovative, profitable, knowledge based service to its users. The system is designed to meet business needs and it also serves as a social platform for the transport industry, where users can interact with each other. This platform shall be able to identify individuals and their association.

The concept is to bring out a search engine to search the work and working people on a common platform. This will ease the way people communicate and/or serve to fulfill the logistics requirements. The main principle on which this system is based is, "information sharing without business interference". The system is an information provider, which will not deal with the internal functioning of its clients business.

The proposed system will be beneficial for several users who are concerned with logistics industry. Users of this system are divided into three categories according to their business they conduct are Transporters, Suppliers and Agents.

II. Aim

Shaping EtransQ an online information and knowledge based system to be a recognized, professional, innovative and profitable service.

III. Objective

Providing the common platform for Suppliers, Transporters and Agents

- Providing an easy way to search for tenders and offers
- Building Trust and Relationships between consumers and service providers
- Easy and Improved Communication
- Providing enough options to get the best deal available in the market

IV. Architecture Development Using TOGAF's ADM

The TOGAF's ADM supports a number of concepts that are characterized as iteration. First iteration describes the process of both describing a comprehensive Architecture Landscape through multiple ADM cycles based upon individual initiatives bound to the scope of the Request for Architecture Work. Second iteration describes the integrated process of developing an architecture where the activities described in different ADM phases interact to produce an integrated architecture. In order to concisely describe the activity and outputs, this latter iteration is described in sequential terms.

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Third, iteration describes the process of managing change to the organization's Architecture Capability.

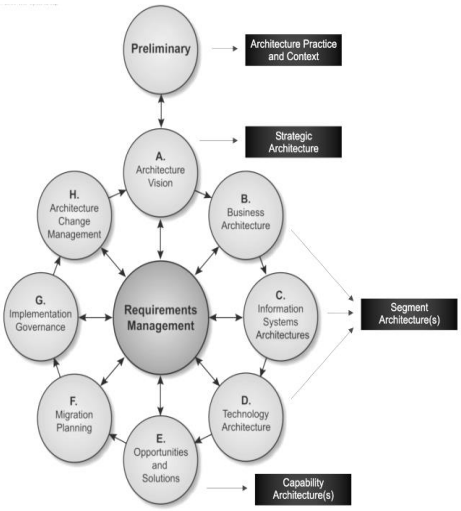

Fig.1 Architecture Development Method

V. Problem In Current Business Environment

The current system works in an ad hoc manner. This creates problems for suppliers in getting the best deal. Suppliers can only reach those transporters/agents that they are acquainted with or with whom they have worked. Searching for other service providers is a tedious task with no guarantee on the quality of services provided. Mouth publicity is the only way to ensure about the organizations working style. The process of finding a service provider starts when a product has to be shipped to a location. Suppliers generally prefer to hire services form the same service provider. In this process the supplier fails to get the best deal available in the market. Telecommunication is the only and fast way to communicate, it solely depends upon mutual trust. This is a risk that has to be taken to achieve goals.

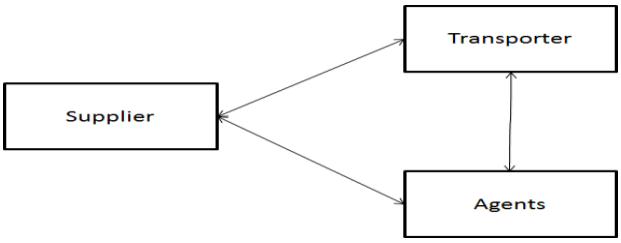

Fig.2 Baseline Architecture

A. Process Description

Process description describes how the various working of the organization. It includes all the processes and sub processes occurring in the enterprise. These processes are described as follows:

1) Finding Tenders: Transporters only have newspapers to search for Request for Tenders (RFT). As the ads are providing in few newspaper there are chances that tenders may remain unattended or some may cross their last date of application due to lack of knowledge or information.

2) Finding Offers: These are often done via telephonic communication. When the business is running low or when empty vehicle returning from some place, the transporters/agents try to make some profit from it by making some offers cheaper than the market price. This offer is either search by some agent/supplier via telephones or they have to search it in some newspaper or personal websites.

3) Searching Vehicles: These transporters usually uses their own vehicles, and in the time of need hire some vehicles from other transporters or agent. In this situation they contact each other via telephones, but due to limited contact in the telephone diary the communication is limited too.

4) Finding Association and Building Relation: Business relations are established via mutual friends and their working experience. This system is still dependent on mediator and build in the time of need.

VI. Solution

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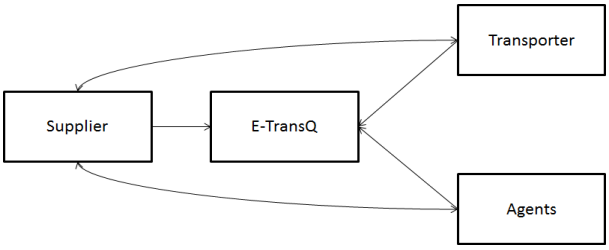

Fig.3 Target Architecture

A. Providing Common Platform for Suppliers, Transporters, Agent

The suppliers, transporters and agents require a common platform where they can know each other, know about their work experience and specialties. They lack an information base to enhance and exchange knowledge about the market. In the current system the information is hard to find, they have to go through various newspaper, contact as many associates as they can to know, discover, search any tender/offers. Besides serving the functional requirement the PFS will encompass the information about the major deals available in the whole market of India. This information will be delivered with the help of agents and recommender system. The agents will keep the track of each user and will help him getting the best deal with the help of his previous act and interest. The information system has a specialized built in recommender system, whose sole function will be to suggest better options for the users. It will not only help users to find other known organization, it will also help in getting results that best suit the deal.

B. Improved and Efficient Vehicle Search and Offer

Companies usually do not own vehicles for transport. They hire vehicles from transporters. When transporters do not have enough vehicles to transport, they face problems in searching for vehicles. Sometimes a situation arises when load has to be shared with other transporters/agents.

These situations are critical and time bounded not allowing information to reach to the correct person (Transporter/agent) in time. Their main goal is to generate as much profit as they can. When business in running low due to unavailability of consumers for service, telephone communication is not enough to coupe up with this situation as the contact via telephones are very limited. So they require a proficient system to find them an appropriate and efficient vehicle search.

C. Improved Request for Tender

Suppliers can publish tenders through print media such as newspapers or can on their private websites. To judge the quality of any service provider, suppliers depend upon their personal experience or recommendations from their associates. However it is not always possible to get the best deal available in the market. There is no single platform where suppliers can gain knowledge about transporters who provide services of their interest. People (STA) require a platform where they can associate and share their knowledge.

D. Setting Trust and Relation

Association and relation helps in understand business better and creating a level of trust between them. In today's scenario they lack the efficient method to search and discover the transporters, suppliers and agents to do their work. There is no appropriate method to rank people and their trust level.

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