INDIA'S TRADING INFORMATION SYSTEM IN LEATHER AND ITS RELEVANT AREAS

V.Nithya
Student, Department of Information and Technology
DMI College of Engineering, Chennai, India

ParvathyNair.M
Student, Department of Information and Technology
DMI College of Engineering, Chennai, India
paru23mano@gmail.com

Visali.V ,
Student, Department of Information and Technology
DMI College of Engineering, Chennai, India

Sharanyaa.S
Assistant Professor, Department of Information and Technology
DMI College of Engineering, Chennai, India
rnsharanyaa@gmail.com

Abstract **- India assumes a significant position in leather landscape globally. An optimistic target of 27 billion USD turnovers has been planned for the leather sector by 2020 from the current level of 12 billion. A software tool is being developed to analyse the periodic export/import data to know the growth pattern and to understand the dynamicity of the Leather Industry. Substantial employment growth is envisaged. This tool provides a annual statistical report for Indian Foreign Trade for leather, leather products export of meat and export of feed materials. Database on Indian Foreign Trade has been obtained from leather and raw material census data .The annual report of import and export data will be represented in a graphical format .The analyses of Indian Foreign Trade will be represented at global level.**

Keywords: Dynamicity, Livestock, Time series modelling

I. INRODUCTION

The leather industry in India holds an important position in contributing towards the economy of the nation as it is one of the oldest manufacturing industries. Recently, the export of leather and leather products gained great momentum and the export of Indian leather products have shown marginal growth. This is because of the best planning made by the industry for optimum utilization of available raw materials and resources.

The first Indian livestock census was carried out in 1951. It was supposed to be carried out once in every five years. Unfortunately, we are having the census data in an irregular (lag) period. Even though census data depends on time, the time series modelling cannot be applied as such, as the data is unevenly spaced. Unevenly sampled time series are common in many real life situations. The vast majority of methods however can only handle regular time series and cannot be easily extended to unevenly sampled data. It is a common practice to ignore the times and treat the data as if it were regular. This will clearly introduce a significant bias leading to incorrect predictions.

In 2005 two time series model was developed, one by assuming stationarity and the other by relaxing the stationarity assumption by allowing more general dependence on the current time, time difference and the state of process at a given time. Even though methods are available to tackle the unevenly spaced time series data, unfortunately none of the above methods can be applied for predicting the livestock population. This motivated to develop a new analytical tool which predicts how much of import and export is taking place from the year 2006 to 2015 in the Indian Foreign trade. This tool is required by the customers who are involved in the Indian Foreign trade and also needed by the Central Leather Research Institute (CLRI).

The software tool is developed using java language .Java technology is a programming language a development environment an application environment and a deployment environment .Itavoids platform dependencies and write once read anywhere language. The Java programming language is unusual in that a program is both compiled and interpreted. Java is a multi-platform, network-centric and object-oriented programming language. The software tool developed will produce a annual report of import and export in Indian Foreign trade.

This project is based on developing a software tool which analyzes the annual report of import and export data which include raw materials, finished leather and leather products. The data from 2006 to 2015 is taken for analysis. The output of the analysis will be in the table and graphical format which predicts how much of import and export of raw materials, finished leather and leather products have taken place globally.

II. RELATED WORK

The prediction software for livestock population and availability of hides and skins, named as LivSoft is a simple software tool for the prediction of livestock population and estimation of availability of hides and skins from the predicted livestock population. This software is developed for the benefit of leather industry/sector. Database on livestock population has been obtained from livestock census data. It automatically does the calculation by using the parameters like annual growth rate and standard error, basically which forms an input for the statistical model to predict the livestock population and thereby estimating the availability of hides and skins. This information helps the leather industry to plan appropriate strategies for improving their business, researchers for identifying the research problems and the ministries to frame appropriate policies to support famers as well as industries linked with livestock.[1]

Indian Leather Industry plays a vital role in contributing towards Indian economy. Also it is the core strength of the Indian footwear industry. According to the Indian leather industry about 37% of the total leather export value is from leather footwear. This shows the importance of studying the trends in leather footwear export, to assist in decision making process. This article proposes a time series model based on monthly export values of leather footwear from India during January, 1999 to March, 2013. In this article based on the information criterion, ARIMA (1,1,1) (2,2,2) model as a reasonable model to predict the export values of leather footwear from India. This proposed model is used to forecast the export values of leather footwear for the year 2013-2014. [2]

III. ARCHITECTURE

This software tool is mainly developed for the analysis of import and export taking place in the Indian Foreign trade. The export has three sub categories raw materials, finished leather and leather products which are stored in the database in the form of excel sheet. The sub categories in turn have two options major customers and major production with year which is the final output represented in table and graphical format.

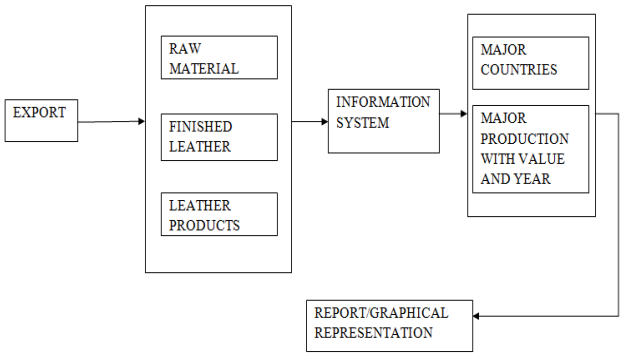

Fig. 1 Architecture diagram for Export

The import has two sub categories finished leather and leather products which are stored in the database in the form of excel sheet. The sub categories in turn have two options major customers and major production with year which is the final output represented in table and graphical format.

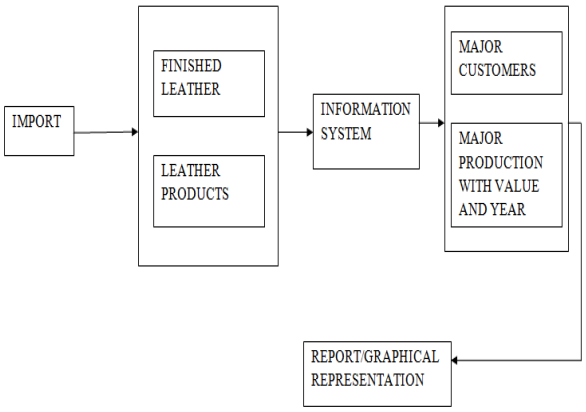

Figure 2: Architecture diagram for Import

IV. MODULE DESCRIPTION

This project is based on developing a software tool which analysis the annual report of import and export data which include Raw materials, finished leather and Leather products.10 years of data from 2006 to 2015 is taken for analysis. The output of the analysis will be the prediction of how much of import and export of raw materials,leather and leather products have taken place globally.

A.User Access Control and Admin

In this module, only authenticated customers are allowed to access the information which is controlled by the admin

B. Raw Materials

This module provides information about the export of raw materials taking place in the trade .Because raw materials are only exported, not imported.

C. Finished Leather

This module provides information about the import and export of finished leather taking place in the trade.

D. Leather Products

This module provides information about the import and export of leather products taking place in the trade .

E. Table Generation and Graphical Representation

This module generates the table and graph for the raw material, finished product and leather products. .

The two main inputs given by the user are import and export which has the sub categories Raw material, finished leather and the Leather products .The output will be represented in a graphical format .The output will be represented in a graphical format. The tool that is developed will be useful for the leather industry and the customers involved in the in Indian Foreign Trade.

This software tool has a database on import and export of Raw materials, finished leather and Leather products which is created using MYSQL. The front end of the software tool is developed using JAVA. It automatically calculates the annual report of import and export and thereby estimating the availability of Raw materials, finished leather and leather products.

The user will login using their username and password which will be authenticated by the administrator .The user can only view the report. The administrator can view the data, edit the data, delete the data and provide access to the authenticated user. The user after logging in can choose the category import or export. Then the sub categories such as raw material, finished leather and leather products can be chosen .After choosing the sub category the annual report will be displayed in a graphical format.

V. IMPLEMENTATION

The Home page is the login page. The users will be authenticate with username and password by the administrator .If authenticate user, then the user will the directed to the access page.

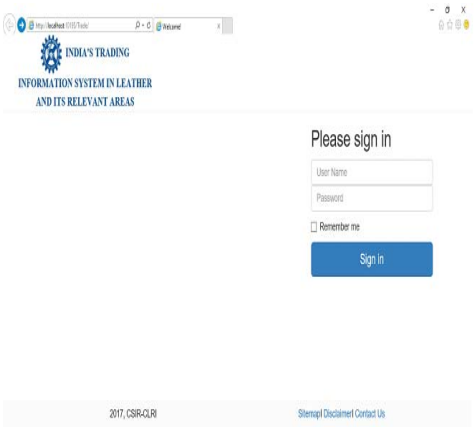

Fig. 3 Login Page

After entering the username and password the customer and admin will be directed to the access page in which the customer can only view the data. The admin can view the data, edit the data and delete the data.

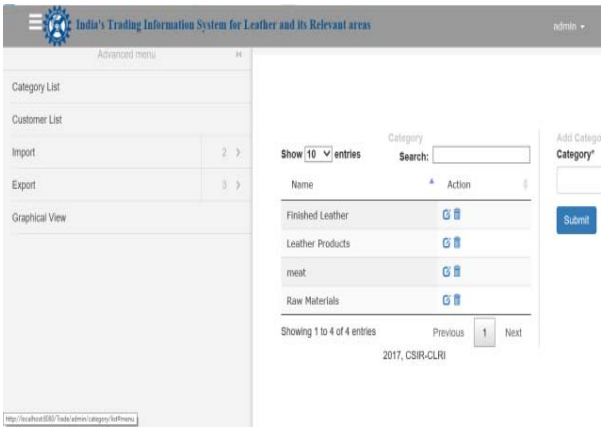

Fig. 4 Access page for admin login

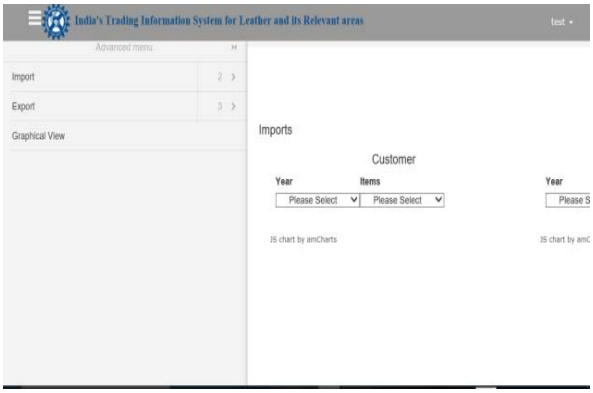

Fig. 5 Access Page for user login

On Login of Customer, the menu bar in the access page will have the options import export and graphical representations as the customer can only view the data. On login of Admin the menu bar in the access page will have the options category list, customer list, import, export and graphical view as the admin has the rights to edit, add, delete the data and allow only authenticated customers to access the information.

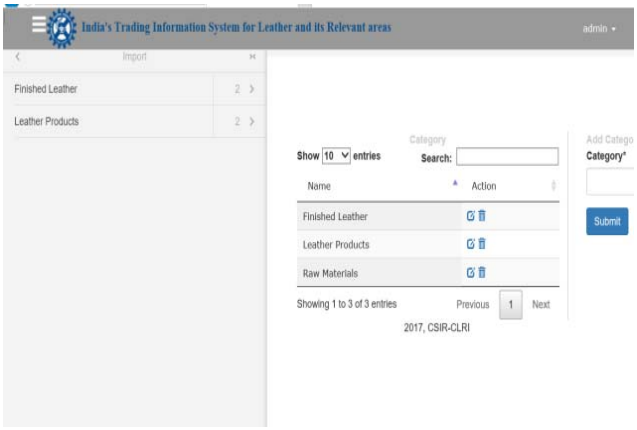

Fig. 6 Sub options of Import

The Import option has two sub options finished leather and leather products.

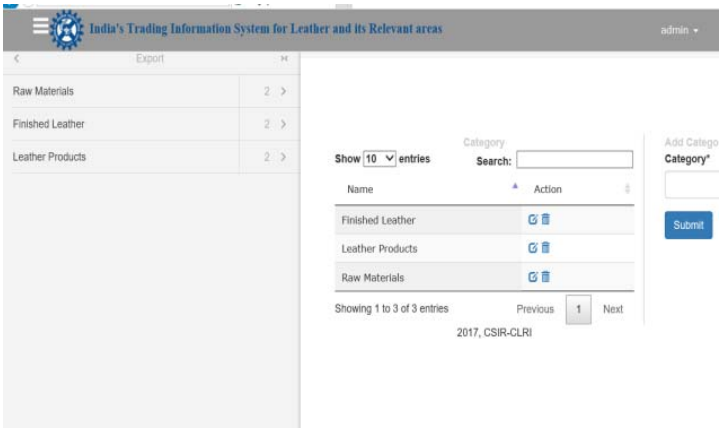

Fig. 7 Sub options of Export

The Export option has three sub options raw material, finished leather and leather products.

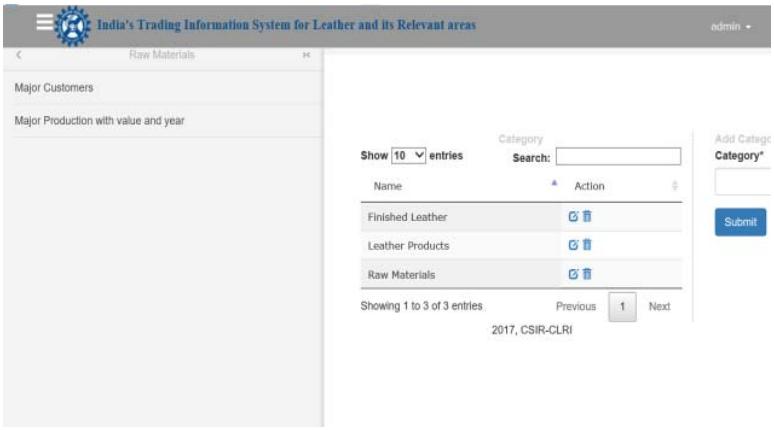

Fig. 8 Sub options of Raw material

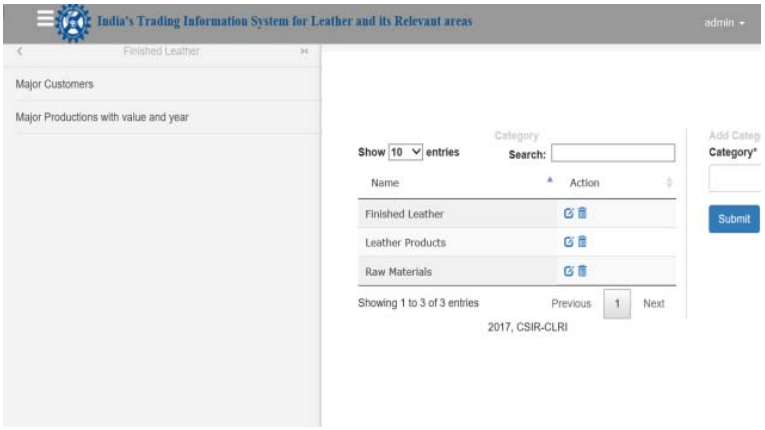

Fig. 9 Sub option of finished leather

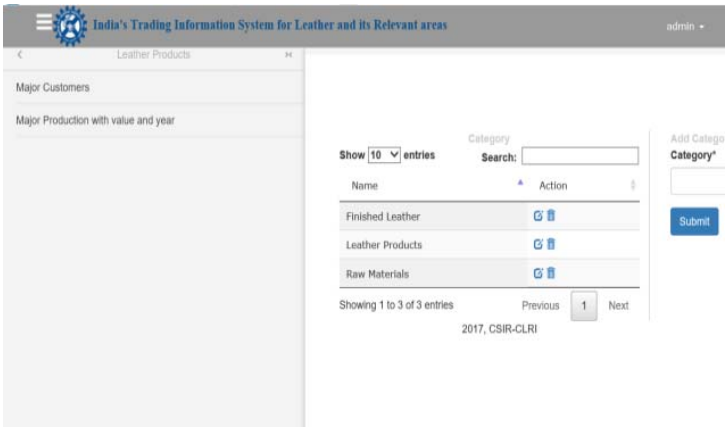

Fig. 10 Sub option for Leather products

The three categories raw material, finished leather and leather products have two sub options Major customers and Major production with country and year.

Fig. 11 Output 1-Table Generation

The report that is generated in a table format can be represented in graph using Ajax. The output 2 represents the graphical format. The output will be generated for three categories Raw material, Leather and Leather products.

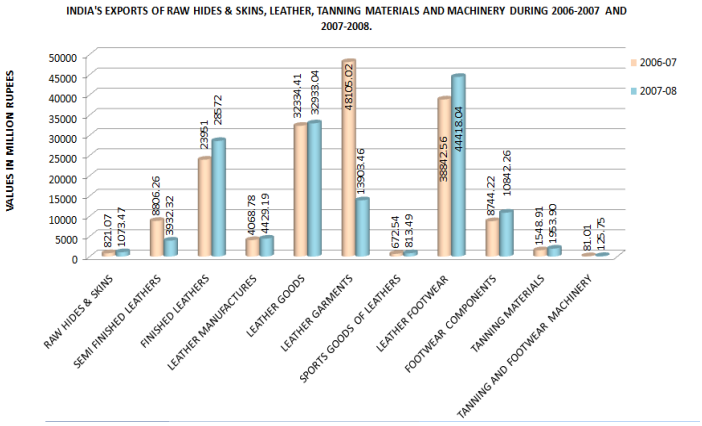

Fig 12 Output Page 2-Graphical Representation

VI. SOFTWARE DEVELOPMENT

The Software tool is developed using Java with MySQL as the backend in Net Beans 8.0 .MySQL is a Relational Database Management System .The output which is generated as a report to the user will be stored in the database. The output is represented in graphical format using Ajax.

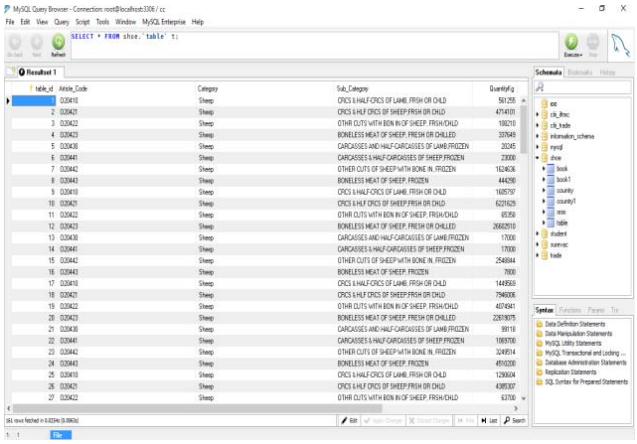

Fig. 13 Database

VII. FUTURE ENHANCEMENT

This tool can be developed as an application in android, which can be easily accessed by the user. It can be deployed in any platform for better performance. Other than raw materials, finished leather and leather products some more categories can be added for analysis.

VIII. CONCLUSION

The software tool is a user friendly tool .It analysis the data of raw materials, finished leather and leather products and estimates how much of import and export has taken place over the years .This information helps the customers who are involved in the Indian Foreign Trade .The customers decide whether or not to involve in the trade business using this tool .This will also help the leather industry .Therefore this tool will play a major role in the Indian Foreign Trade.

REFERENCES

[1] K.M. Jagathnath Krishna, S. Nithiyanantha Vasagam, K., Giriyappa& D. Chandramouli. “Application of Time Series Modelling for Predicting the Export Potential of Indian Leather Footwear”, European Journal of Business and Management
[2] A Software Model for Estimation and Prediction of Unevenly Spaced Livestock Population
[3] www.clri.org