

# NATIONAL INFORMATION SYSTEM FOR FASHION AND APPAREL INDUSTRY (NISFAI) - CLOUD: A PROPOSAL

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**Abstract** *An information system is the lifeline of a modern nation. Information system is a dynamic network for preserving, ordering and transmitting knowledge. It can be defined as an organized set of operations (interface of people and machine) which systematically selects, processes, stores and retrieves information. Information systems are traditionally identified with highly technical or academic disciplines and industries. This paper has discussed application of web centric cloud computing technology in building an information system for fashion and apparel industry. A proposal is set up for National Information Systems for Fashion and Apparel Industry (NISFAI).*

**Keywords:** *Fashion, Apparel, Information, System, NISFAI*

## INTRODUCTION

Information is a vital national resource, just as essential to a nation's socio-economic development, well-being and security as other national resources, such as water and minerals. Beyond the boundaries of a country it provides an important basis for international relations, peace, prosperity and overall global development, the wealth of popular, intellectual, scholarly and research resources in libraries and information systems of a country is therefore one of its great strengths. But if information systems are not adequately supported and coordinated at all levels on the basis of carefully formulated policies and strategies their growth will be stunted and their useless efficient and productive (Neelameghan & Prasad, 1998).

NISFAI is a project to build a gateway for the fashion community to facilitate access to high quality and reliable information resources in fashion. It will be a decentralized network of all Resource Centers of Fashion, Apparel, Textile and Design and all fashion and apparel related information centres of the Government of India (e.g. Ministry of Textiles, Export Promotion Councils). This network will be later extended in a phased manner to include any other public or private institutes or museums capable of contributing valuable information resources to the network.

It will be administratively controlled by the NISFAI office preferably stationed in New Delhi, which will ensure the addition of only high quality resources to the NISFAI database through selection, standard documentation and

digitization. The NISFAI office will also be responsible for issues regarding quality control of information in the system, currency and updating of data, copyright and pricing of information.

## MEMBERS

### Lead Sites

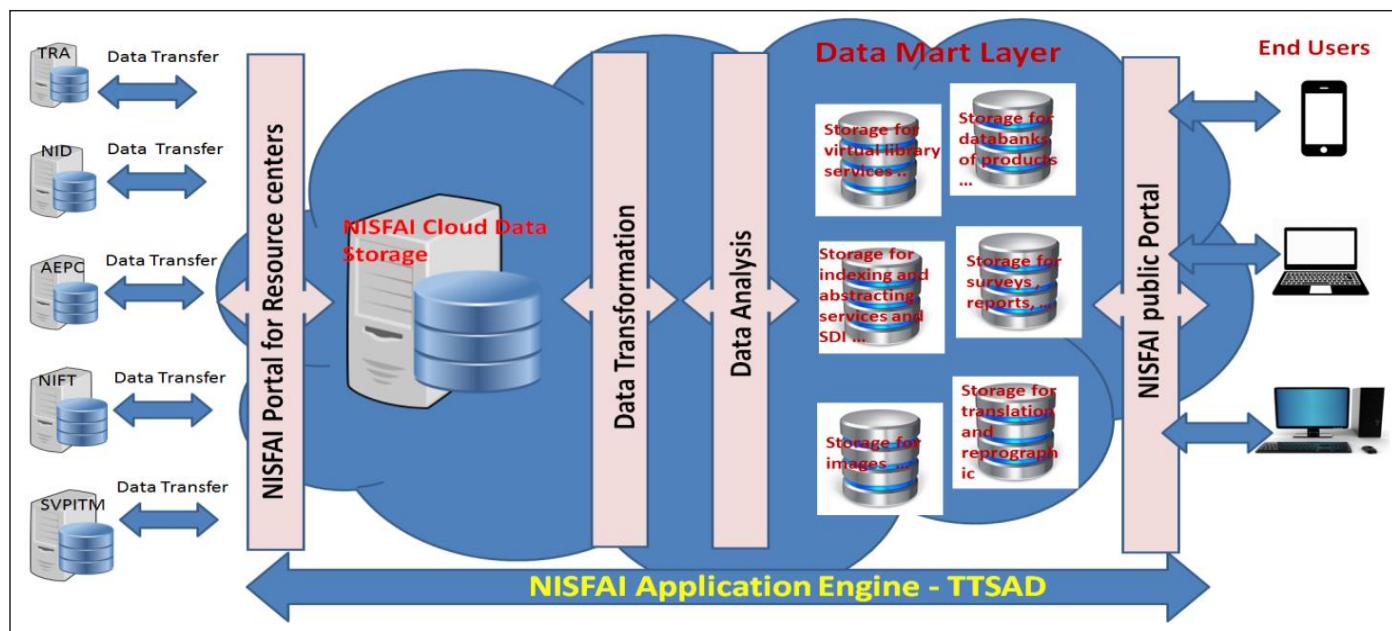
- Textiles Research Associations (TRAs)
- National Institute of Design (NID)
- Apparel Export Promotion Council (AEPC)
- National Institute of Fashion Technology (NIFT)
- Sardar Vallabhbhai Patel International School of Textiles & Management (SVPITM), Coimbatore

### Partner Sites

- Ministry of Textiles,
- Export Promotion Councils,
- Other subordinate bodies,
- Trade associations,
- Educational institutions other than NIFT,
- Museums, and
- Any private corporate body.
- Technology perspective (Kumar & Dutta, 2006).

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## ARCHITECTURAL DIAGRAM FOR NISFAI APPLICATION ENGINE – TTSAD



Source: Rathod, 2020.

**Fig. 1: NISFAI Application Engine -Transfer Transform Store Analyze and Distribute (TTSAD)**

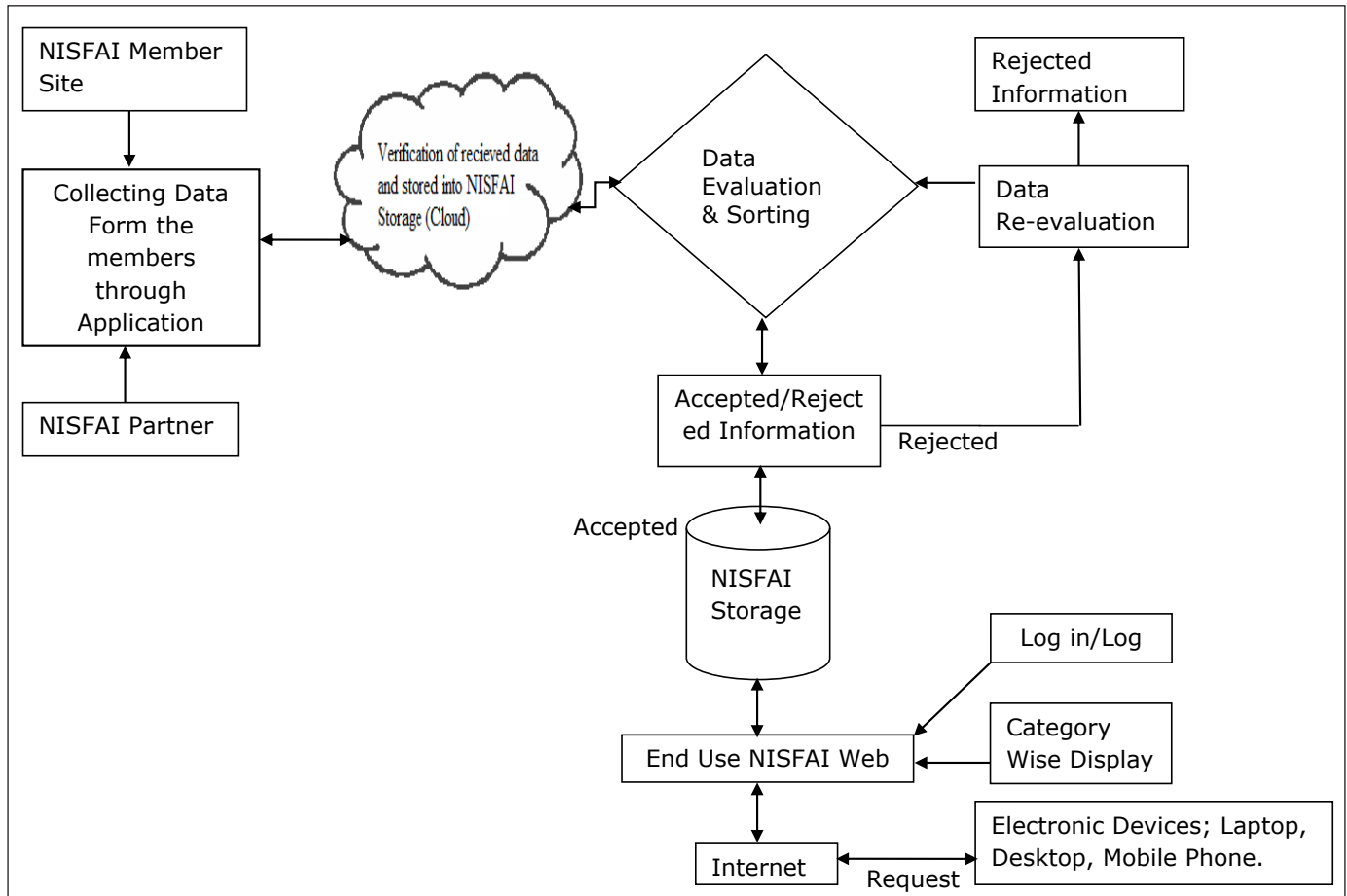
Cloud platform is chosen for the NISFAI proposal because the Cloud has the capability of scaling in the form of increasing the storage as and when required and also the stored data is fault tolerant and is highly reliable as the cloud infrastructure provides auto back up facilities and a very fast storage and retrieval features.

Scaling in the form of server capacity in handling the client request – as and when the client base increases the server capacity can also be increased without any hassle and without any change in the application code.

### Brief Steps about the Transfer Transform Store Analyze and Distribute (TTSAD) Engine

- *Stage Transfer* - Resource centers will be provided with web services to integrate their data with the proposed portal. Collect the data from the sources like TRA, NID, AEPC, NIFT, SVPITM through the NISFAI dedicated portal for the resource centers.
- *Stage Store* - The NISFAI engine collects the data stores it on the cloud storage for further processing of data.
- *Stage Transform* - As the data is collected from different sources the data will be in different format and different forms, hence the data has to transform to the required format.
- *Stage Analysis* - The transformed data is then analyzed for the required output like images, product sources, surveys... and the data will be bifurcated.
- *Stage Store 2* - The analyzed data is then sent to respective data marts, Data marts are small sized data bases compared to the central Database of NISFAI, the information in data marts pertains to a single interest. The data marts here will serve different purposes as mentioned in the objectives of the NISFAI. These data marts will help to respond to end-user with a fast response.
- *Stage Distribute* - The public portal for the end user to access our processed information.

## Data Flow Diagram of NISFAI (DFD)



**Fig. 2: Data Flow Diagram of NISFAI**

NISFAI lead Members are authorized members to provide the information to host and do transactions with NISFAI Web Portal. NISFAI Partners are involved in the business transaction of NISFAI and can provide the information to share or do the transaction in the NISFAI Web Portal. There will be Memorandum of Understanding (MoU) between NISFAI and Member/Partner and they should provide the information about their products and services, that information will be entered into NISFAI Information collection Application, which helps to collect the product details or services information to NISFAI. NISFAI Application is capable to verify the data and rejects unauthorized information. The Authorized information will be stored in the NISFAI Cloud.

NISFAI Storage is a cloud which will store the data and information which is provided by the member or Partner, the cloud may be owned or hired by service provider like SIFFY or TCS etc.

## SUMMARY

The activities of NISFAI in terms of processes and deliverables will be based on international standards of documentation for textual and visual entities; imaging activities for storage and retrieval techniques.

The infrastructure and financial support of NIFT/TRAs/NID/AEPC/SVPITM can make it a feasible programme in the near future. On the success of NISFAI the final edifice of an International Fashion Information System (IFIS) can be erected. The ambit of NISFAI will be broadened to cover the whole world to form an IFIS. NIFT's pioneering effort of forming an International Foundation of Fashion Institutes (IFFI) has already created a conducive atmosphere for such a project. If the dream of an IFIS can materialize it will create a truly global fashion.

## REFERENCES

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