Proto Model Approach To Create Metadata For Geographical Indications Of India

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Abstract: The paper presented a proto-model for creating the metadata for Geographical Indications of India. Initial work started for the GI products of Karnataka and explained the process involved in developing the database using D Space for the same. The study concluded that the database acts as a "vocal to the local" in creating awareness about GI products and their significance among the young generation as well as stakeholders of GI products.

Keywords: Metadata, Metadata for GI Products, Karnataka GI products, proto-model.

1.   Introduction

The creation of metadata is not a novel idea for libraries; the early examples were traced back to the Library of Alexandria in the 3rd century BCE. The modern concept of bibliographic control appeared in the 19th century, The Pannizi code was the first systematic cataloguing practiced in British Library, RDA is the trend. International institutions like IFLA, Library of Congress, ISO have developed metadata standards to ensure interoperability and consistency across systems. The digital revolutions brought swift changes in the libraries and the librarianship. The automated systems, networked environment, availability of electronic information sources, and creating, publishing, and distributing of information digitally have proved that standard metadata application is essential along with enriching content to reach the users. Semantic web initiative influenced the use of metadata to interconnect and establish a link between disparate datasets. With the proliferation of digital resources, metadata become essential for managing, describing, and preserving digital content. Preservation metadata ensures the long-term access and usability of digital objects and it enhances the discoverability and visibility of resources.

The Geographical Indications of Goods (Registration and Protection) Act, 1999) defines geographical indications (GI) as - "An indication which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristic of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be." Geographical indications are indications that identify goods as originating in the territory, a region, or locally in that territory, where a given quality,

reputation, or other characteristic of goods is essentially attributable to its geographical origin (TRIPS, Article 21.1).

2.   Need and Significance of the Study

Greenberg, J. (2004) explored the capabilities of two Dublin Core automatic metadata-generating applications, i.e., Klarity and DC-dot. The study experimented with the 29 resources obtained from the National Institute of Environmental Health Sciences. The results indicated that the metadata harvesting from META tags created by humans can have a positive impact on automatic metadata generation and based on the study results, the author opined that integrating extraction of harvesting methods will be the best approach to creating optimal metadata and more research is needed to identify when to apply which method. **Schuurman, Nadine & Leszczynski, Agnieszka (2006)** have described a framework for the creation of extended metadata for nonspatial attributes to incorporate in an ontological context. The study developed eight preliminary fields to add to existing metadata frameworks to enable ontological context to travel with the data. The study results explained the value of ontology-based metadata in highlighting descriptive and substantive differences between similar classification systems. The authors opined that the recognition of semantic heterogeneity is the basis for creating defensible data linkages between multiple datasets.

Park, J (2009) presented the state of research and practice from the functional perspective of Metadata quality. The author opined that quality metadata reflects the degree to which the metadata in question perform the core bibliographic functions of discovery, use, provenance, currency, authentication, and administration, and based on the study results, the emphasized the need for developing a common data model with the interoperability across the digital repository. **Ahonen- Rainio, P, (2006)** has introduced briefly the ISO 19115:2003 standard for metadata for geographic information. The author opined that metadata has a very important role in the information supply environment of geographic data and professional skills are required among the users to understand the importance of the crucial factors in the use of geographic information. **Winson, T. (2013)** explored the economic arguments for the implementation of the Geographical Indication system and opined that the protection of geographical indications is motivated by various socio-economic objectives such as increased rural incomes and consumer protection. **Yadav, P. K. (2017)** explained geographical indications to provide an overview of the geographical indication in the Indian scenario and also discussed the importance and protection of GI, nationally and internationally.

At present in India, the Office of the Controller, General of Patents, Designs and Trade Marks of the Department for Promotion of Industry and Internal Trade of the Ministry of Commerce and Industry is the only reliable source providing information about intellectual property rights through its official website http://www.ipindia.nic.in/. Many of the globally famous products that are part of Indian rich cultural heritage have been registered as Geographical Indications. The official website of IP India has a separate web page for Geographical Indications (GI) and the page is entitled "Geographical Indications Registry". This web page provides detailed information about the products registered under the geographical indications including their application, GI-sanctioned letter, validity, and

classification including an elaborated description submitted by the applicant. The information is available in different pdf documents.

As said by WIPO, building respect for intellectual property (IP) involves more than just enforcement; there is a need to educate, inform, and change attitudes among young people through relevant activities such as awareness-raising campaigns, public education, publicity materials, etc. Sirmon, David, Hitt, Michael, Ireland, R. & Gilbert, Brett. (2011) argued that the strategic utilization of metadata can be interpreted as a means of resource orchestration. The metadata is being applied to reutilize and recompile existing digital assets for the cost-efficient creation and marketing of new products and services, and the deliberate exploitation of market opportunities. Hence, the professionalization of metadata management should be understood as a strategic activity that generates valuable, non-imitable resources that form the basis for new business practices and competitive advantage – either by reducing operational costs or by extending strategic capabilities into new markets. With this background, to develop a reference source on the Geographical Indications of India, a proto-model approach is presented in the study.

3.   Objective of the Study

To develop a proto-model to create metadata for Geographical Indications (GI) of India.

4.   Methodology

The study has considered the information published on the dedicated webpage for Geographical Indications in the IP India website as a reliable source for the details required about the GI products. The key elements were chalked out based on the description provided in the various documents on GI products.

The study has applied Ranganathan's Law of Local Variation to define book number. since the **first three digits of the pin code** indicate the regions, sub-regions, and, revenue districts, the same has been considered as a **book number,** and for Class Number, a widely used **Dewey Decimal Classification system** is considered.

5.   Metadata Elements of Geographical Indications Considered for Proto model

The following metadata elements have been considered for describing the GI-tagged products. In total, 15 elements were considered for the development of metadata.

1. Geographical Indication Product Image
2. Geographical Indication Name
3. GI Tag Number
4. Applicant Name and Address
5. Geographical Area
6. Registration Status
7. Certificate Number
8. Date
9. Validity
10. IP India Classification of Goods
11. IP India Class Number

12. IP India Journal Number
13. Subject
14. DDC Call Number
15. Description

5.1. Proto model Structure with Metadata Elements of GI Products

IMAGE of GI Product			
SN	**Metadata**		
1	Geographical Indication		
2	GI Tag Number		
3	Applicant Name and Address:		
4	Geographical Area		
5	Status		
6	Certification Details :	Date:	Validity:
7	Goods		
8	IPI Class :	Journal number :	
9	Subject :	Call No :	
10.	**Description:**		
	References:		

Figure 1: Document Structure Used to Create Metadata

5.2. Sample of the Document Created with the above Structure for a GI product
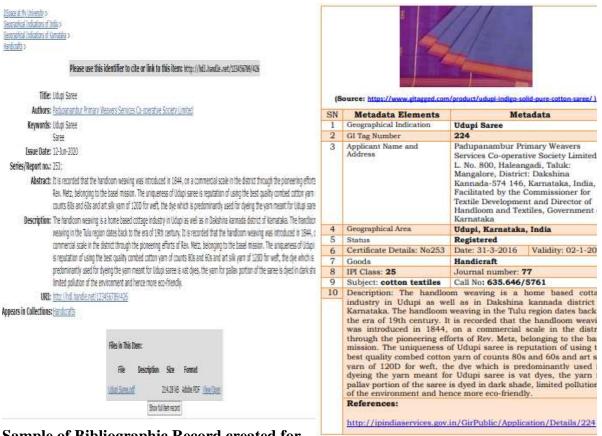
D Space software is used to create a database for GI products. The sample record was initiated for GI products of Karnataka. In D Space, a community is created and entitled "Geographical Indications of India" Further; it is divided into sub-community entitled "Geographical Indications of Karnataka". Communities contain collections, which is a grouping of related content.

Figure 2: Database developed for GI Products of Karnataka using D Space

46 goods are identified as the product of Geographical Indications of Karnataka, out of 46, **21 are agricultural products, 20 are handicrafts, 01 foodstuffs, and 04 manufactural products.** The present study has taken steps to create the metadata for the entire 46 products by using the above-mentioned structure initially. D Space software application is used to create a database for GI products of Karnataka. The digital library was built by using D space, the same platform has been used to develop the database.

Sample of Bibliographic Record created for the GI product

Sample Document created with proto model structure

Figure 2: Sample copy of the Document

By using the above-given data model, a database is created for Geographical Indications of Karnataka along with metadata. Now users can access and learn about GI product details in a single page, which is simple, attractive structure, and descriptive.

6.   **Conclusion**

An international patent analytics and market research company surveyed the students, scholars, teachers, and managers of 203 educational institutions in Karnataka, Tamil Nadu, Kerala and Telangana found that the respondents are not fully aware of the benefits of intellectual property and other related issues and also 35% of the respondents are not aware of intellectual property rights. The study suggested spreading the knowledge about IPR through

awareness programs and also recommended inculcating the IP concept in curriculum discussion to increase the knowledge and benefits of protecting IPRs (Sharma, N. C., 2018). As said by WIPO, building respect for intellectual property (IP) involves more than just enforcement; there is a need to educate, inform, and change attitudes among young people through relevant activities such as awareness-raising campaigns, public education, publicity materials, etc. The present study has created a database on the geographical indication of Karnataka with a proto-model, to create awareness among the young generation about the products accorded under GI Tags, and their value, which may motivate them to exploit the opportunities and benefits in the present techno era. The database will act as a "vocal to the local" in creating awareness about GI products and their significance among the young generation as well as stakeholders of GI products.

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