

CASE STUDY

Enabling Easy Information Retrieval

Vicisoft Solutions successfully implements ViciDocs to improve document retrieval at Moldtek Technologies

MOLDTEK Technologies Ltd (MTL) is India's leading plastic moulded containers supplier, offering plastic containers to paint, lubricant and edible oil companies in India. Moldtek was looking for a solution to manage its sales operations. The company previously used an Oracle-based system to manage its sales operations. These involved much interchanging of documents between customers and the company—purchase orders, invoice statements, cheques, and drafts—of which only a few documents were stored by the form-based Oracle system.

This system was useful only when the desired information was based on the limited information fields that had been entered into the system. For queries, enquiries or auditing, the original documents had to be retrieved from storage, as there was additional information present in these. The data storage and retrieval process was time-consuming and error-prone, as it depended on the employees.

Solution Implementation

To overcome these problems, Moldtek turned to Vicisoft Technologies Pvt Ltd (VTPL), a mid-sized solutions provider for document management and ERP. Vicisoft provided ViciDocs, a Document Management System. When integrated with the existing system in MTL the solution allowed hard copy scanning and storage in the repository, while entering the information in the Oracle System.

ViciDocs has certain properties which facilitated integration with the previous system. It is based on Distributed Component Architecture (DCA), which enables easier integration with the existing system. Web-based search facilities enable the retrieval of the documents without the installation of any client software. The software is extremely scalable and the existing network infrastructure can be used without any additional investment in hardware or server class machines.

Process Flow

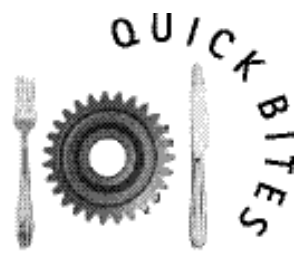
ViciDocs assigns a unique transaction ID to the various sales transaction forms. The ViciDocs component performs Optical Character Recognition (OCR) on the documents to be stored, creates an index, and stores the unique ID with the document. The index helps the users to retrieve the relevant files, information and scanned documents. It also helps them search the content of the documents and retrieve information with the help of this unique ID.

Benefits

ViciDocs offers a range of benefits. Some of them are listed below:

- Easy data storage and retrieval
- Retrieval of required information based on the contents of the documents
- Minimised dependency on scanning operators
- The fuzzy-logic-based indexing and search engine enabled information retrieval through full-text context search
- The multi-format nature of the solution enabled viewing of various types of file formats without using the original application.

With the application of ViciDocs, MTL considerably improved its data retrieval and data storage operations. Once it has been successfully implemented in Sales, this solution has been adopted in various other departments as well. The company is able to store all the relevant documents in the Repository, thus avoiding the time-consuming retrieval of hard copies.



Anil Bhardwaj, Secretary General, FISME

Proposed Increase in Sub-limit Within Priority Sector Lending for Micro Enterprises to Benefit MSMEs

“THE Government of India is considering increasing the sub-limit within priority sector lending from 4.9% to 6% for micro enterprises. This move holds great promise for MSMEs, almost 90% of whom do not have access to institutional funding. If the sub-limit is increased, an additional Rs 17,000 crore would be available for this sector. On an average, a loan of Rs3–5 lakh could be offered to lakhs of smaller enterprises. There is also an urgent need to update the age-old insolvency law to suit the current economic scenario in which SMEs operate. A bankruptcy mechanism needs to be in place for small enterprises as well.”

A Package Deal for SMEs

Implementing the latest technologies will help SMEs in the Indian packaging industry curb wastage and optimise production

GOODS packaging is one of critical aspects of product branding and marketing. The Indian packaging industry, which consists largely of small and medium sector players, manufactures a variety of flexible and rigid packaging materials. Though the industry has been growing at a consistent rate, there are several challenges that Indian SMEs must overcome.

SMEs in the packaging domain face the problem of managing the waste generated during various stages of the product lifecycle. According to PB Palekar, CEO, Shri Hari Packaging Industries Pvt Ltd, “Managing dry waste is one of the major problems for SMEs in the packaging domain. The main reasons for this are technological obsolescence and the lack of government initiatives to encourage waste management.”

To sort out the issue, SMEs need solutions such as formal waste recycling and development of eco-friendly packaging materials, such as organic plastic. Another issue is that the SMEs in the domain are largely fragmented in terms of their supply chain and logistics operations. The major reason behind this fragmentation is the lack of an effective data sharing system for proper communication. According to Vijay Murarka, Managing Partner, Hariwansh Packaging Products, “The issue can be sorted by ensuring real-time information sharing among manufacturers, distributors and the end-consumers in the packaging industry supply chain.”

There are also major discrepancies in the supply chain—inefficient demand forecasting, longer lead times, and increased inventory costs. SMEs in the packaging domain also have quality issues with their end products. The quality of the packaging material, a measure of its strength, integrity and durability, ensures the end-customer of product safety. Promotional appeal and uniqueness are other vital characteristics of a packaging material's quality characteristics. These can be achieved by quality labelling, unique logo imprints and other such methods.

In the last few years, several innovative solutions have been developed, which can enable SMEs to overcome the challenges faced by the Indian packaging sector. Some of these are discussed below.

The 4R Method for Packaging Waste Management

It comprises four essential elements—Reduce, Reuse, Recycle, and Recover. These can be implemented at all stages of packaging operations for minimisation and

prevention of waste generation. Indian SMEs can adopt the 4R methodology for effective waste management.

SMEs in the packaging industry can achieve waste reduction by improving demand forecasting. Small and medium-scale retailers in the packaging domain need to share their sales data with the corresponding manufacturers on a real-time basis. This will help manufacturers optimise the production of packaging materials according to consumer needs.

Packaging waste reuse is primarily a consumer initiative which can be taken up by both consumers as well as companies. For example, a mail sent within a paper envelope can be reused by the receiver for similar requirements. On a large scale, this will save a lot of



paper, while minimising waste generation by preventing the SMEs from overproduction of paper packets. “The waste recycling option can be successfully implemented by SMEs manufacturing plastic and paper packaging materials. These can collaborate with government-authorised waste recyclers for waste management, and the waste products can then be reutilised,” says Mr Palekar. These recyclers use formal waste recycling technology to recycle packaging waste in an eco-friendly manner, leading to safe recovery of reusable material and providing a recycled secondary product.

eBusiness: A Tool to Manage the SME Value Chains

Electronic Business Process Management (eBPM) or eBusiness is a business methodology which uses information and communication technologies to support end-to-end business processes in a value chain. “SMEs in the packaging industry can implement eBPM to interlink sales data among manufacturers, distributors, retailers and end-customers in the supply chain. We ourselves have implemented the SAP ERP module at our facility for facilitating data sharing and communication,” says Mr Murarka.

This will reduce redundancies in the supply chain and facilitate information flow between the end-customer and the manufacturer through the distributor on a real-time basis. Implementing this methodology will help Indian SMEs improve their strategic planning and demand forecasting, thus optimising the supply chain operations.

Machine Vision for SMEs

To manage quality, SMEs in the Indian packaging industry can implement automation systems such as machine vision systems along with quality control software. According to Juzar Gandhi, Proprietor, Raj Overseas, “Special-purpose machine vision systems have been developed for the packaging industry, capable of performing 100% inline quality inspection.” SMEs in the sector can implement machine vision systems to detect the tiniest flaw that might occur in the packaging process.

“These systems have an ‘Imprint Monitoring’ functionality, which reads the product information printed on the packaging in the form of barcodes. This, along with the colour defect identification feature, helps in identifying packaging flaws related to colour and labelling,” shared Mr Gandhi. Moreover, these systems can be integrated at various stages within the production line to ensure complete quality control.

SMEs in the packaging sector can successfully implement machine vision systems to optimise investments and operational costs on a long-term basis. Implementing modern technologies such as machine-vision technology, eBPM and the 4R methodology can help SMEs achieve global competence through improved quality, communication and waste management.

– PAYAL AGRAWAL

Jute Packaging Materials Act, 1987

IMPLEMENTED by the Ministry of Textiles, the Jute Packaging Materials (Compulsory use in Packing Commodities) Act of 1987 stipulates that the government can direct agricultural and industrial producers to package certain essential commodities in packaging made from jute.

Packaging material includes jute, jute yarn, jute twine, jute sacking cloth, hessian cloth, jute bags or any other packaging material containing not less than 75%, by weight, of jute.

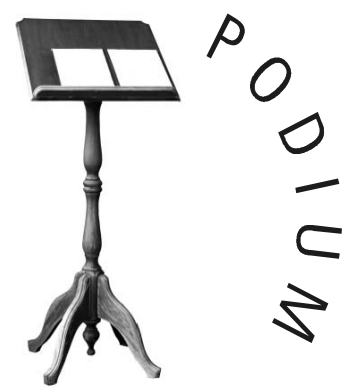
The Act also calls for the set up of a Standing Advisory Committee to be set up to aid the government in determining the commodity or class of commodities or percentages of the commodities for which jute packaging material shall be used. The committee will make recommendations to the Central Government after considering a few important factors. These include the existing level of usage of jute material, the quantity of raw jute and jute material available. The Committee will also take into account the protection of interests of persons engaged in the jute industry, the need for continued maintenance of the jute industry, and the quantity of commodities likely to be required for packing in jute material.

The Act specifies that an authorised officer may inspect premises or vehicles where commodities packed in jute materials are stored and may require that the commodity be produced for inspection. If the officer has reason to believe that any commodity has been packed in contravention of the Act, he may seize the commodity. If the commodity is packed in contravention of the provisions of the Act, the producer shall be punishable with a fine which may extend to an amount equal to double the cost of the jute packaging material which should have been used.



TOP GAINERS		TAKING STOCK			
		For the Week Ended August 28, 2009			
	Industry	Last Week Closing	Current Week Closing	% Change	
ABAN OFFSHO	Oil Exploration	1174.65	1571.3	33.77	
THOMAS CK IN	Travel Services	53.95	68.8	27.53	
ST TRAD CORP	Trading	306.25	375.85	22.73	
GUJ MIN DEVL	Mining	91.95	112.3	22.13	
BGR ENERGY		-	401.3	489.15	21.89

TOP LOSERS					
		Last Week Closing	Current Week Closing	% Change	
MONNE ISPAT	Metals - Ferrous	364.7	340	-6.77	
KOUTONS RET	Retail	386.5	366.15	-5.27	
M&M FINANSER		-	229.05	217.75	-4.93
MAX INDIA LTD	Diversified	191.4	182.95	-4.41	
REISIX TENR		-	831.35	800	-3.77



Q: I want to start a small manufacturing unit for peanut butter in Saurashtra, Gujarat. What is the potential of peanut butter in India? Which countries are major consumers of peanut butter?

A: Peanut butter is a paste made from ground roasted peanuts. It is a competitively priced, low-calorie and high-protein product with balanced nutritive values. It is an ideal alternative to dairy butter as a sandwich spread and is especially popular in niche consumer segments such as vegans or the lactose-intolerant.

Peanut butter is a popular sandwich spread in the US, the UK and Canada, as well as countries which are influenced by the US, such as South Korea, the Philippines and Thailand. Thus, peanut butter has good export potential. India is the second-largest producer of peanuts, cultivating approximately one-fifth of the peanuts produced worldwide. Peanuts and peanut-based products are a popular part of the Indian diet. Although the product is relatively unknown in India, there is huge potential for this product in the domestic market as well.

According to import-export data from the Department of Commerce, Ministry of Commerce & Industry, Government of India, the last three years have showed excellent potential for the trade in global markets. Despite this, Indian exports have increased only marginally in terms of both quantity and value. During 2004–05, the global trade in peanut butter was around 109,973 metric tonne, valued at \$188 million. A staple breakfast food in the US, statistics reveal that peanut butter is consumed in about 89% of US households. This is further evident from the fact that about one-third of the US peanut harvest is utilised for manufacturing peanut butter. This amounts to approximately 1.2 billion pounds of peanuts per year. The world's largest producer of peanut butter is Procter and Gamble, USA. Under the brand 'Jif', it has the capacity to produce 250,000 jars of peanut butter per day. Established manufacturers of peanut butter in India are the Ahmedabad-based companies Bajaj Foods Limited and Suprat Enterprise.

Q: What are the quality standards that have to be followed and from where can I obtain technological information to manufacture peanut butter?

A: Technology for manufacturing peanut butter can be sourced from any established food technology and machinery suppliers in India. Being an Export Oriented Unit (EOU), the manufacturing facilities, product and packaging quality will have adhere to the quality standards required in countries to which the product will be exported. The Bureau of Indian Standards (BIS) has also laid down quality norms for peanut butter in the IS 9037:1979 standard. In order to market the product in the Indian market, it is obligatory to meet the provisions of the Prevention of Food Adulteration Act, 1954 with Rules, 1955, for all ingredient and quality aspects. For technological information, bodies such as the Industrial Extension Bureau, Mott MacDonald India and Gujarat Agro Industries Corporation Ltd may be contacted.

RESPONSES BY DR SAKINA KHATOON, SCIENTIST, LIPID SCIENCE AND TRADITIONAL FOODS DEPARTMENT, CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE

The small and mid-sized sector is one of the vital cogs in India's wheels of progress. If you wish to know more about the sector, or how you can be a part of it, do send in your questions to us at sme@timesgroup.com. Every week, our panel of experts on the Podium will answer your queries and throw more light on the finer aspects of this sector.