



Digital Disruption In Manufacturing Industry: Case Study On Repro India

Dr. Govardhan P K

Assistant Professor

Department of Commerce & Mgt

Vidyavardhaka first grade College

Mysore

Introduction

The manufacturing industry is facing many challenges today. From higher expectations from customers, to sustainable business practices, the manufacturing industry is dramatically transforming. Now, the adoption of new technologies is imperative for businesses to stay competitive in the age of increased global competition, elevated customer expectations, acute labour shortages, and ever-changing regulations. And, having access to real-time data and the insights it can provide can help avoid risks and prepare businesses for the future.

With so much innovation taking place in the manufacturing industry, it is important for businesses to get more insight into what transformative technologies are driving the modern manufacturing movement.

Objective

To study the effectiveness of Digitalization in Manufacturing Industry.

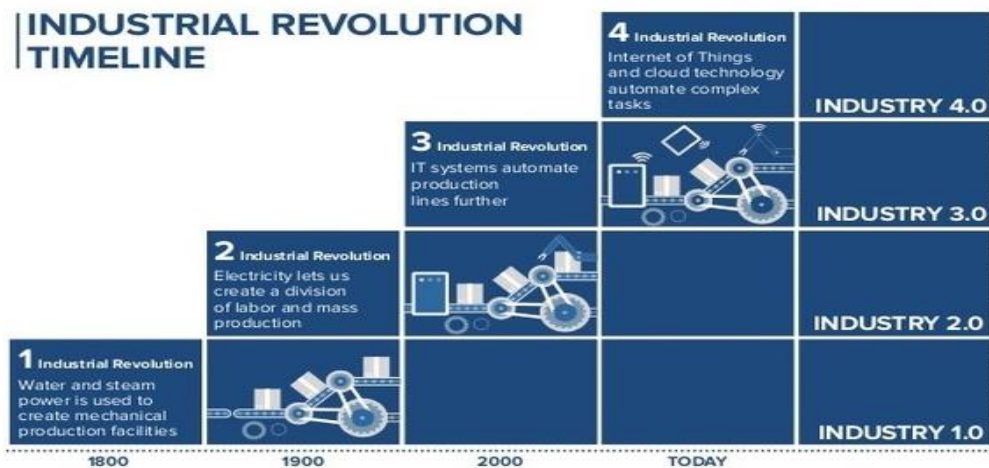
To study the organizational opportunities in capturing the market value using Digitalize Technology.

Concept of Digitalization in Manufacturing Industry

Digital transformation is the present Industrial Revolution. The rise of informed customers and innovative technologies have made the manufacturing industry an example of how effective modern operational strategies can reshape the overall operations of an organization. The amalgamation of production techniques with the latest technological developments have the potential to make manufacturing autonomous, cheaper and more efficient.

The 4.0 industrial revolution is moving manufacturers from mass production to customized production through a digital supply network. The fourth era of industry is the era of Cyber Physical Systems (CPS). CPS comprises of **smart machines, storage systems and production facilities** capable of autonomously exchange information, triggering actions and control each other independently. This exchange of information is done by the **Industrial Internet of things (IIOT)** in which thousands of sensors working real time and

transfer the data to a **local server** or a **cloud server** where the analysis of the data is carried out by developing predictive models with the help of the available data. The analysis helps the industries improve manufacturing processes, material usage, supply chain and life cycle management of the product.



Case Study – Repro India

Repro India began as a small printing press in 1990 has since grown into a comprehensive, international publishing industry services company. Repro India is a provider of content, print and fulfilment solutions. The Company is engaged in printing of magazines and other periodicals, books. The Company's product range includes textbooks, supplementary books, higher education books, distance learning, test preps and vocational courseware. It offers services, which include content designing to digital warehousing, content adaptation to multimedia enhancements, and producing books for students and clients. The Company offers solutions, which include content digitization, content conversion, content management, print on demand, short run printing, Web offset printing, sheet fed printing, warehousing and delivery. The Company serves publishers, corporations, education institutions and governments across Asia, Africa, Europe and North America. It has facilities in Navi Mumbai, Surat and Chennai.

Books on Demand (BOD) Business

In Oct 2015, Repro India had signed an agreement with Ingram Content Group (Lighting Source Inc.). As part of agreement Repro has got access to new sales channels without much inventory levels, custom issues and other costs.

For Ingram, the connection with Repro has helped in providing publisher customer advantage to access Indian market.

Ingram Content Inc. is a subsidiary of Nashville based Ingram Industries Inc. The company got its start in 1964 as a textbook depository has grown rapidly and transformed into a comprehensive publishing Industry services company that offers physical book distribution, Book on Demand (BOD) and digital solutions. Ingram's operating units are Ingram Book Company, Lighting Source Inc., Ingram Library Services Inc., Vital Source Technologies, ICG Ventures Inc.

Repro will be Ingram's Global Connect print provider, giving publishers from across the world the ability to make content available through local print-on-demand and distribution facility in India. Publishers can get their content closer to consumers and shorten delivery times to customers.

Repro will sell Lightning Source's international titles in India through the e-commerce sites like Amazon and Flipkart. That will help the company to generate large number of titles via the tie-up.

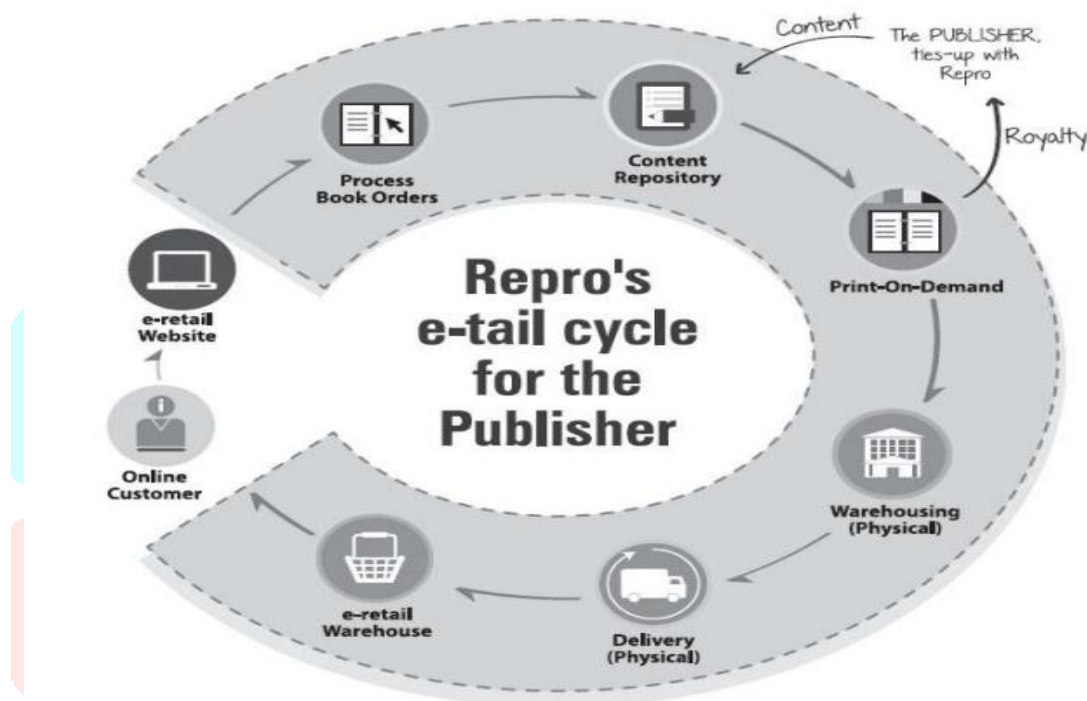
As a part of investments, the company has set up book factory in the Bhiwandi (Mumbai).

The long term partnership with Ingram will help the company to shift base from B2B business to B2C model. That is a big transformation which has happened in Repro India because of this tie-up.

Lightning Source is one of the operating units of Ingram. Ingram Content Group is one of the largest aggregator and distributors of content in US. Repro has tied-up with them for becoming their global connect partner in India.

It means that publishers in India with whom Repro work, will be able to collect title from them and provide it to Ingram for global distribution through e-tail channels like Amazon, Flipkart etc. and vice a versa Ingram will be giving us their international title for distributions in India through retailer channels like Amazon, Flipkart, Paytm and Infibeam etc.

Repro has already created a market place on Amazon, Infibeam and Flipkart where Company is listing the titles. With this tie-up with Lightning Source company will have large number of international titles coming in.



Repro BOD Model creates supply chain with –

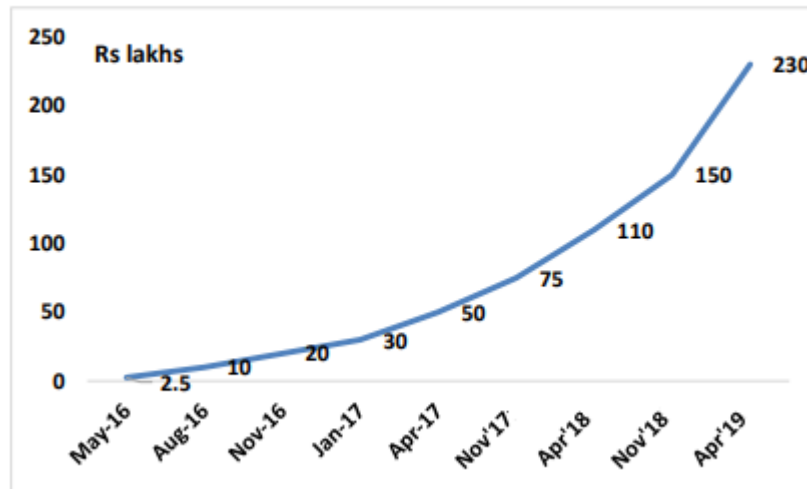
Zero Inventories

Zero Freight Costs

Almost Zero Book Returns

It offers an avenue to publishers to sell their full catalogue and fulfil demand without stocking. International Books Market in India stands around ~US\$ 100mn which is likely to grow multi fold over the next 3-5 years.

Revenue per Week BOD Segment



Publishing Industry set to grow at 18-20% Indian Book Publication Market Stands at Rs 37000cr which is 6th largest in the world. It is growing at 15-20% yoy. India ranks third, behind USA and UK in English language books. Publishing is a growing industry – especially in India. The CAGR for the total book market in India is 20.4% over the last four years and the total book publishing is estimated to be Rs 74,000 Cr in 2019-20. Against this growth potential, e-commerce trends are creating disruption and changing the way books are bought, produced and distributed. Repro aggregates content from the publisher (the content owners) and archives it in digital warehouse; accesses it on demand when an order is placed through an e-retail channel; produces, fulfils and delivers it ‘just-in-time’ to the end user – in India and across the world. The solution even extends to distribution and collection of books and titles. Repro India has been one of India’s largest and most comprehensive solution providers for educational publishing solutions. It has a position of leadership and strength in India and Africa markets, with strong relationships with some of the world’s largest publishers.

Conclusion

Digitisation and Industry 4.0 also means extra work for data security as they carry the potential risks of data exchange including IT security and industrial security.

However in manufacturing, managing strategic risk takes on an increasing degree of urgency, with the sector in the midst of an era of unprecedented changes and challenges. But with the help of Digital technology organizational economic factors presents a new opportunities to create and capture the market value. It result in shifts in a manufacturer’s ability to deliver products, manage the supply chain, and serve customers in the traditional manner.

Organizations must realize that digital business is a reality. Enterprises of all sizes and shapes are already carefully evaluating digital technologies and how they would impact their value chain. Further, companies will witness competition from unforeseen corners, which could disrupt their competitive position. Thus, it is paramount that organizations should plan for a robust, future-ready IT infrastructure. To succeed, they need to implement the right partner model, which allows business units to benefit from an entire range of expertise and services.