

## JSS Academy of Higher Education & Research, Mysuru

(Deemed to be University – Accredited 'A+' Grade by NAAC)

# JSS College of Pharmacy, Ooty

(An ISO 9001:2015 Certified Institution)

# **Department of Pharmacy Practice**

### A Brief Report on Industrial Expert Interaction series 2023 – Lecture 1

(Enhancing interpersonal and professional skills)

Date: 26.03.2022

### *Name of the presenter:*

Mr Yuvaraj J Executive Director Delvin Formulations Chennai

Program Organized by:
Dept. of Pharmacy Practice
JSS College of Pharmacy, Ooty
&

**Title of the presentation:**Impact of digital technology in pharma / healthcare industry

Pharmacy Education Unit JSS College of Pharmacy, Ooty



With an objective of enhancing interpersonal and professional skills of the students, Department of Pharmacy Practice in association with Pharmacy Education Unit, JSS College of Pharmacy, Ooty has conducted Industrial Expert Interaction series. Industry expert interactions series provides a platform for budding Pharmacists to be aware of the skills required to enter profession and what Industry expects from the young graduates.

Mr. Yuvaraj J is an alumni of JSS College of Pharmacy, Ooty and he completed his Bachelor of Pharmacy (BPharm) and he also got his Master of Business Administration (MBA). He has 33 year of professional experience in sales, marketing and entrepreneurship. He worked in various capacities from medical representative to vice president in companies like Hoechst Marion Roussel, Dr Reddy's Laboratories and Ordain Health care etc. He has 15 years of entrepreneurial journey as Executive Director of Delvin Formulations, Life Sciences and Life Span Diabetes Clinics. He has expertise of three decades of business building in Pharmaceutical, Over-the-counter (OTC), fast moving consumer goods (FMCG), chain clinics and digital marketing etc.

Mr Yuvaraj started his presentation with a note on the development of pharmaceutical industry in India and how the digitalization is helping the pharmaceutical industry to develop the production and marketing. The pharmaceutical industry in India is currently valued at \$50 Bn. India is a major exporter of Pharmaceuticals, with over 200+ countries served by Indian pharma exports. India supplies over 50% of Africa's requirement for generics, ~40% of generic demand in the US and ~25% of all medicine in the UK

India also accounts for ~60% of global vaccine demand, and is a leading supplier of DPT, BCG and Measles vaccines. 70% of WHO's vaccines (as per the essential Immunization schedule) are sourced from India. The Average Index of Industrial Production of Manufacturing of pharmaceuticals, medicinal chemicals and botanical products in the FY 2021-22 is 221.6 and has grown by 1.3%. For the period 2021-22, export of drugs and pharma products stood at \$24.6 Bn compared to \$24.44 Bn as of 2020-21. The Indian pharma industry witnessed exponential growth of 103% during 2014-22 from \$11.6 bn to \$24.6 Bn.

Digital Technology and Consumers: In many ways, digital technology and customer service are a match made in heaven. Customers value the convenience of digital channels like chat, email, and text, and businesses have found ways to make digital customer service efficient and a boon to the customer experience. Most consumers now expect businesses to provide digital channels and many organizations have stepped up to the plate accordingly.

Digital impact on market place: Digital Marketing – By using various technologies, businesses are able to develop more targeted and sophisticated marketing campaigns. For example, businesses can use data mining and machine learning to analyze customer behavior and develop customized messages.

Digital impact on retail market: Technology is enhancing the retail industry in countless ways, from augmented reality and enhanced customer experiences to greater precision and control over marketing data and inventory management. Some of the key drivers of digital transformation in retail stores are greater competitiveness, improved efficiency, strengthened customer relationships, and increased revenue. The study results revealed that technological factors such as complexity, compatibility, cost, perceived usefulness, relative advantage and security influence the adoption of digital supply chain within retail industries.

Further, he has added and discussed various literatures representing the importance and danger of utilizing the digital on global public health, patient safety, and cyber security threats posed by illicit online pharmacies. He further narrated the scenario, how the online pharmacies are going to change the pharmacist role and consumer mind in utilizing the opportunities available.

The Future of Healthcare: IoT technology innovations increase the ability to store information, treat more patients, diagnose illnesses faster, among other benefits. Digital healthcare will allow users and doctors to become more connected – no matter where they are located.

Benefits of digital health: Expanded access to health care to historically marginalized communities. Decreased health care costs for both patients and providers. Improved patient health outcomes through personalized treatment plans. Increased operation efficiency at health facilities, such as hospitals.

### Why digital pharmacy is important?

The possible benefits of digital pharmacies include the potential to decrease drug errors, improve prescription accessibility, and provide pharmacists more time to consult with patients. Digital health supports improved communication between health care providers, health care services and health care users.

After the presentation, staff, scholars, PG and Pharm D Students were encouraged to interact through question-and-answer session. Mr Yuvaraj J clarified few doubts regarding digital impact in pharmacist's role. The event was coordinated by Dr S Ponnusankar Department of Pharmacy Practice. About 87 participants comprising of students and staff from Department of Pharmacy Practice attended the event.

### Glimpses of the presentation - Industry Expert Interaction Series





# **Digital Impact:**



# Digital Impact = Using Digital technologies to impact

• Business



- · Provide new revenue stream
- · Camouflages product/service with Technology
- · Conduct business on a new domain/platform
- · Create value generating opportunities

#### Customer / Consumer:

- Customer reach
- · Create a New belief system
- · Change their purchase behaviors
- Convenience choice

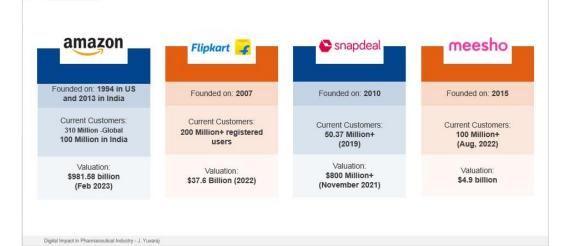
## Indian Public

- Internet: 15<sup>th</sup> Aug 1995
- Mobile Ph: 1995 (Delhi)
- Smart Phone: 2009
- 3G: Dec'2008
- Google: 2004-05Facebook: 2006
- Instagram: 2012
- WhatsApp: 2009



## **Digital Impact on Marketplace**





# 'Digital impact' in Literatures..!?



Digital danger: a review of the global public health, patient safety and cybersecurity threats posed by illicit online pharmacies 2016 Jun; 118(1):110-26. Tim K Mackey <sup>1</sup>, Gauvika Nayyar <sup>2</sup>

#### Abetract

Background: Amidst the rise of e-commerce, there has been a proliferation of illicit online pharmacies that threaten global patient safety by selling drugs without a prescription directly to the consumer. Despite this clear threat, little is known about the key risk characteristics, central challenges and current legal, regulatory and law enforcement responses.

Sources of data: A review was conducted of the English literature with search terms 'online pharmacies', 'Internet pharmacies', 'cyber pharmacies', 'rogue pharmacies', and 'e-pharmacies' using PubMed, JSTOR, and Google Scholar from 1999-2005.

Areas of agreement: Illicit online pharmacies are a rapidly growing public health threat and are characterized by a number of complex and interrelated risk factors.

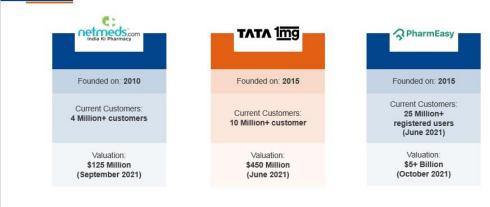
Areas of controversy: Solutions are varied and are of questionable utility in the face of evolving technology that enables this form of transnational cybercrime.

Growing points: Legal, regulatory and technology solutions must address the entire illicit online pharmacy ecosystem in order to be effective. https://pubmed.ncbi.nlm.nih.gov/27151957/

Digital Impact in Pharmaceutical Industry - J. Yuvaraj

# **Digital Impact on Pharmacy - India**





Two Models: Inventory based & Market-Place Models

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