



# Are Hospital Information Systems undergoing Disruptive Innovation?

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# The World around us



- Surrounded by IT applications which have eased our lives.
- ATMs, Ticket reservations – airlines, trains, buses
- Internet Banking, e-mitrans
- Applications for Passports, colleges
- IT returns

# Our Patients



- Well informed, IT savvy, demanding
- All use mobile phones – base to smart
- Their GURU Google informs them about their diseases
- They send their investigation reports to the doctors on whatsapp, email etc.
- They use apps to order food, groceries, clothes etc.

# Wearable Medical devices



# Patient Waiting Rooms



# Healthcare industry Disruptive Innovations



Idea to provide quality and lower costs

Delivery of healthcare that shifts the central focus from the acute care hospital to outpatients facilities and home care

Consumer orientation

Patient activation - Archimedes Indigo

Population Health Management/Hot Spotting

# Hospital Information Systems



- Hardware
- Software
- Network
- Manware

# Hospital Information System



- ADT incl Registration
- OPDs
- Laboratory
- Radiology
- Wards
- OT
- Pharmacy
- CSSD
- Others



# Hospitals – The Gaints



- Big corporate hospitals have Hospital Information Systems which schedules appointments, operations, tracks investigations ordered.
- The HIS is installed by big players such as Wipro, CDAC, TCS and others
- The HIS is expensive and requires periodic upgradations, which again are costly

# Hospitals – Smaller private



- Since the Patients are well informed the hospitals feel the need of HIS
- The HIS solutions provided by the big IT companies are costly, requires trained manpower and recurring budgets
- These hospitals are ignored by these IT Cos
- Small startups move in to provide HIS

# HIS solutions through disruptive innovation



- Disruptive Innovation theory was postulated by Prof Clayton M. Christensen
- It basically says that Big companies look to upend customers and they constantly innovate and upgrade to satisfy these customers
- The low end customers are ignored and that is when startups come up with solutions which are cheap, low on quality but affordable.

# The End Result



- The classic Hospital Information Systems will now be dominated by solutions which incorporated mobile communication, wearable medical devices, Body Area networks etc.
- The HIS has to be cheap and affordable plus scalable.

# Innovation at Mahatma Gandhi University of Medical Sciences and Technology, Jaipur



- Develop a workforce in Health Informatics
- Doctors and patients use whatsapp to communicate
- Hospital management runs on mobile communication
- Look for solutions which incorporates mobile data into the database ???????



**THANK YOU**