Business Analytics and Financial Modelling

Day & Date:	Saturday, 7th May 2016
Time:	10:00 am to 11:00 am
Venue:	Auditorium, Symbiosis International University, Lavale campus, Pune
Speaker:	Mr. Murlidharan Nair
Report prepared by:	Ms. Shivika Gupta, Student, MBA - HHM (2015-2017)
	Dr. Harshada Tambe, Student, MBA - HHM (2015-2017)

Mr. Murlidharan Nair, Executive Director, Consulting Practices of Ernst & Young started his session by telling about his company and the work they do. He further informed that, healthcare marketing is expected to become $160 billion industry. He mentioned healthcare market as underpenetrated market in India due to:

- Low expenditure on healthcare as % of GDP.
- Low per capita expenditure
- Lowest bed density
- Low physician and nursing staff density

He said that big hospitals like Fortis are moving to third tier cities while Narayana Hrudalaya is moving to tier two and tier one cities so a mixed scenario is being seen in the country. Elaborating further said that the healthcare marketing is changing and this change is due to shift from communicable to lifestyle diseases, also favourable market investment supports the trend.

Talking about the difference between single speciality and mufti speciality he said that capital investment is high in multi-speciality and that Apollo Group is the biggest player in the healthcare sector at present. He gave a full overview of the types of healthcare services provided in India and the healthcare market from neurology, orthopaedics to urology, dermatology, and diagnostic services like SRL Diagnostics, Dr. Lal, Metropolis, and Thyrocare being the major players.

Talking about the medical devices industry he said that this sector has not seen major national transactions, most of the transaction is with foreign companies.

Mr. Nair said that the healthcare environment is changing very fast and coming two years will experience a very different healthcare market. Defining analytics as the discovery interpretation and exploitation of multiple forms of healthcare data to drive decision making for payers, providers and the consumers they all serve, he said that the drivers of analytics were demand from market and government, increase in healthcare cost that has led to increase in analytic market. The major problem is the resistance of doctors and hospital to share the data. Evidence based payment is now coming up that will hopefully tackle the problem of transparency in hospital billing and put a check on frauds done.

He defined pillars of healthcare data in terms of volume, variety, velocity and veracity. Analytics tools are used to capture the data, analyse it and present it in a user friendly way to benefit the physician and other professional to make use of this huge amount of data. Analytical software support decision making they are not designed to overtake human decision making. He gave an example of Toronto children hospital, where neonatal sepsis monitoring analysis showed the signs of symptoms and helped in early detection of the problem which reduced the mortality due to neonatal sepsis drastically.

Uses for analytics in healthcare:
- Identifying the risk population (evidence based program to identify the correct target population)
- Triggering timely admissions
- Minimising readmission
- Identifying hospital acquired conditions

Mr. Nair said that personalizing services and medicines will be future of healthcare (e.g. In Diabetes-looking through the past history and delivering the correct medicine dosage promptly will be possible. He said that now the machine have become intelligent enough to identify useful information from the not so useful information and machine learning has become very advanced reducing the number of outputs and making them extremely precise.

The session concluded by the speaker saying that analytics is not transformational technology, it augments the human perception and decision making and should be viewed as a helping tool and encouraging its use for delivering quality care to the patients.