"From insight to impact"

How (today) Technology INTEGRATION might matter more than Technology INNOVATION: A Decision Model Innovation Perspective

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Today’s Agenda

- **The RDA Business Environment: A Global Perspective**
  = How **Robotics** (& Globalization), **Digitization** & **Access-based Business Models** lead to the **Commoditization** of Products & Services across Sectors

- **Decision Model Innovation (DMI)**
  = An Approach to **Differentiate** your Company in **Commoditized Product & Service Markets** based on **Data Value Chains**

- **Two DMI Examples in India improving the Productivity in Agriculture and Last-Mile Logistics**
  = SatSure in Agriculture / Jivana Vitality in Last-Mile Logistics

- **5 Propositions from an Outsider**
  = Potential Implications for India & Lessons Learned from China
RDA Business Environment: Many companies face an increasing level of *Commoditization* of their products & services.

"Industry convergence represents the most fundamental growth opportunity for organizations and will redefine industry boundaries by shifting the focus from *individual products to cross-industry value experiences*..."  
(Gartner Group 2014)
Converging Industries & COMMODITIZATION: Missing differentiation is calling for new perspectives and value creation approaches for entire economies.

- **Commoditization** is defined as the process by which goods that have economic value and are distinguishable in terms of attributes (uniqueness or brand) end up becoming simple commodities in the eyes of the market or consumers. **It is the movement of a market from differentiated to undifferentiated price competition and from monopolistic competition to perfect competition. … when products become more similar from a buyer's point of view, they will tend to buy the cheapest.** (Wikipedia, 2018)
Decision Model Innovation: Decision Model Innovation as the next (r)evolutionary step in differentiation and value creation.

- Declining Profit Margins, Missing Differentiation Potential towards Customers etc.
- Robotics & Globalization: Sales Markets = Production Markets
- Digitization
- Access-based Business Models: Financial Crisis & Climate Change → Sharing Economy
- Converging Industries
- «COMMODITIZATION» of Products and Services

DECISION MODEL INNOVATION
Decision Model Innovation:
An alternative perspective to differentiate your company in commoditized/converging markets.

How to DIFFERENTIATE your VALUE PROPOSITION in Converging Industries?

Differentiation Potential

Level of Industry Convergence

DECISION Model Innovation
Business Model Innovation
Process Innovation
Product Innovation
Decision Model Innovation:
Step #1: Understanding the Decision Making Needs of your Customers/Company.

We don’t just ‘throw’ products & services at the customer...

We don’t make ‘NOISE’ to promote our company...

...but we LISTEN CAREFULLY to our customers to understand their KEY Decision Making NEEDS; i.e. what is the VALUE we can provide?
Decision Model Innovation:
Step #2: Innovative combination of technologies along the Data Value Chain.

INTELLIGENCE
Requirements

INSIGHTS
to be provided

Data VISUALIZATION
Technologies

Examples: WWW, Mobiles, Touch Screens, Bots etc.

Examples: Web Browser, Satellites, Drones, ‘Sensors’, Surveys, Experts etc.

Examples: Internet, WiFi, GSM, Bluetooth, LPWAN etc.

Examples: Clouds, Blockchain / Ledgers, Fog-based Computing, Data Lakes etc.

Examples: Neural Networks, Random Forest, Tableau etc.

Data GATHERING
Technologies

Data TRANSFER
Technologies

Data STORAGE
Technologies

Data ANALYTICS
Technologies
Decision Model Innovation: Step #3: Integrating players from your Business Ecosystem to access the technologies you need.

Align your Business Ecosystem Partners along the Data Value Chain to create the required INSIGHTS.

Integrate yourself into multiple Business Ecosystems along the Data Value Chain.

BEAT YOUR COMPETITION
SatSure’s DMI approach helps to improve financial inclusion & the productivity of farmers, banks and insurers in the agriculture sector.
SatSure’s Decision Model Innovation focus is helping its customers to reduce transaction costs.

- **Data GATHERING** Technologies
  - Satellite Data, on-the-ground data from sensors, weather data, economic & agronomic data, personal data

- **Data TRANSFER** Technologies
  - Internet & LPWAN in the future

- **Data STORAGE** Technologies
  - Gathine (Data Fusion Solutions / Data Lake)

- **Data VISUALIZATION** Technologies
  - Mobile Phones, PCs via APIs

- **Data ANALYTICS** Technologies
  - Pixel Analytics, Machine-Learning
Jivana Vitality’s DMI approach helps to improve the access to clean drinking water & the productivity of workers with a lack of formal education – also to overcome the last mile-logistics challenge.
Jivana Vitality’s Decision Innovation focus allows the company to be highly efficient and therefore to pay good salaries to its staff.

Data GATHERING Technologies

Customer Interaction App / Delivery Management App /

Data TRANSFER Technologies

Internet, GSM & LPWAN in the future

Data STORAGE Technologies

Cloud

Mobile Phones, PCs

Data VISUALIZATION Technologies

Watershop-specific ERP System, Automated Analytics, Tableau

Data ANALYTICS Technologies

Internet, GSM & LPWAN in the future

Cloud

Mobile Phones, PCs

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Proposition #1:

The impact of *Decision Model Innovation* is based on technology *integration* leveraging technology *innovation* along the *Data Value Chain*.

India has the potential to apply Decision Model Innovation in multiple areas and nurture domestic companies into national and global leaders. However, it might often be not clear about the areas where domestic companies can achieve competitive advantages for global markets.

→ *see also Proposition #5*

While China is trying to focus on a few key areas to push for technology *innovation* leadership based on long-term strategic foresight, it pushes *domestic* companies strongly towards technology *integration* to build national and global champions.
Proposition #2:

Technology *integration* based on *Decision Model Innovation* can increase *immediately* the *productivity* in many sectors such as agriculture (e.g. SatSure) or for low-income groups (e.g. Jivana Vitality) in India.

Economic and political stability is (long-term) built on productivity increase rather than job creation. Technology *innovation* enables productivity increases – technology *integration* realizes productivity increases. India needs to use technology *integration* to increase productivity especially in sectors where people lack formal education.

China has understood that creating jobs won’t be enough to ensure stability. This is why it is investing basically most resources on climbing up the value creation ladder...however, China might miss as well that value creation is mostly an *creative integration* rather than a *innovation* challenge.
Proposition #3:

Technology *integration* requires more *applied* research activities between academia and companies.

Switzerland’s competitiveness depends 40% on the technology *innovation* capabilities of its universities but 60% on the technology *integration* capabilities of its “InnoSuisse” program between Companies & Universities of Applied Science. Is India aware of “InnoSuisse”?

* Percentages have to be interpreted figuratively

In China, the Science & Technology Commission and many more government bodies are carefully studying the successful applied research systems of Germany and Switzerland and try to transfer it to China.
Proposition #4:

Technology **innovation** requires a suitable environment – especially for **real-world testing**.

India has shown tremendous technology **innovations** in selected areas – from Aadhaar to the Mars Mission etc there is proof. However, natural strengths such as a diverse culture and infrastructure are not leveraged to attract companies to build the potential for global technology **innovation** leadership out of India.

China has developed and partially executed long-term plans where they see potential for global technology **innovation** leadership. China then develops the suitable policy and infrastructure environment.
Proposition #5:

Emerging markets are still following too often the technology innovation & technology integration trends where they have comparative disadvantages.

India is likely to be the most attractive consumer and infrastructure market in the world – with respect to growth & size. Multinationals should listen to India’s request rather than India listen to what Multinationals suggest.

Since China has opened its economy, Multinationals had to contribute directly to the local economy and domestic companies in strategic sectors. While India might not follow the same practice it could request solutions for problems that matter primarily for India.
ध्यान देने के लिए आपका धन्यवाद
Thank you for your attention

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