Digital Transformation in BFS Through Technological Innovation

trescon[•] C-Suite events

Dr. Paritosh Basu, Sr. Professor NMIMS University School of Business Management Goa, May 26, 2016 <u>http://www.innoventionians.com/</u>

N YO I I MARKAN

Acknowledgement

The author acknowledges that freely available graphics through internet have been used for this presentation with the objective of propagating knowledge.

Flow of Throughts

- Project Digital Transformation
- Introspection and Self-search
- ***** The Mission Critical Task Information Security and Safety
- IT Juris Prudence

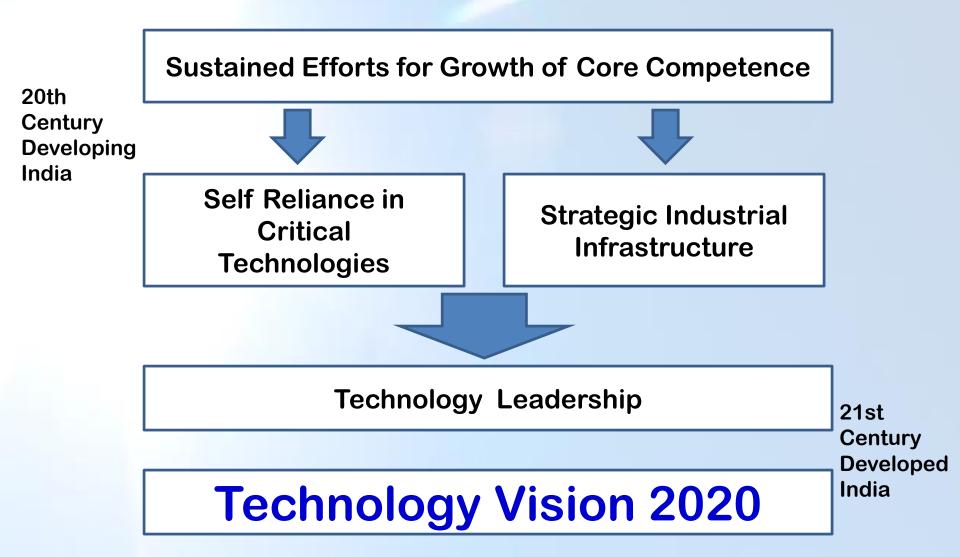
Project Digital Transformation

Don't challenge your limits, limit your challenges

"A vision is not a project report or a plan target. It is an articulation of a desired end result in broader terms". Ex President A. P. J. Abdul Kalam 5

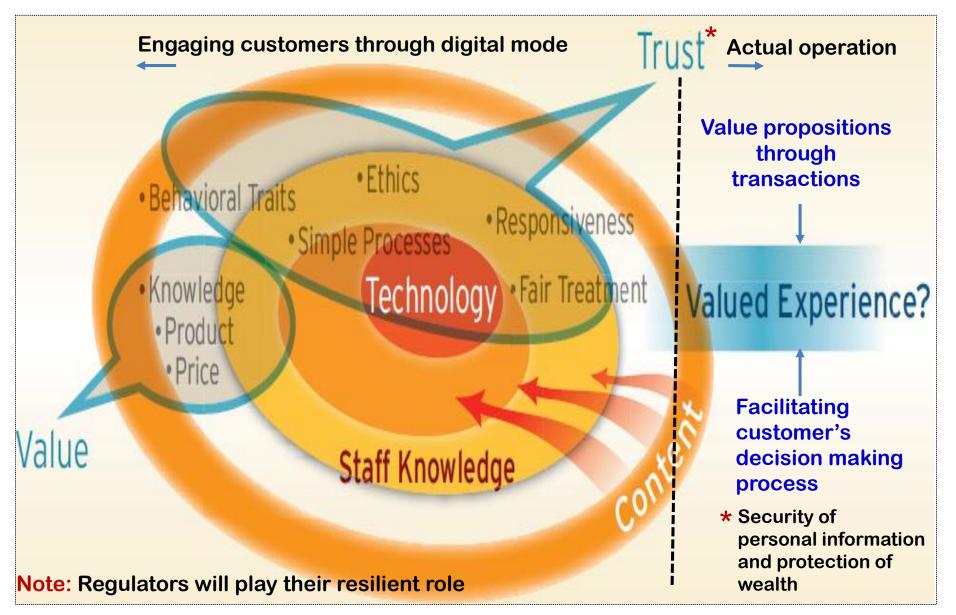
Towards a Technologically Strong India

A. P. J. Abdul Kalam's Technology Vision for India



Source: Vision 2020, by A. P. J. Abdul Kalam with Y. S. Rajan, Page 19, 1998

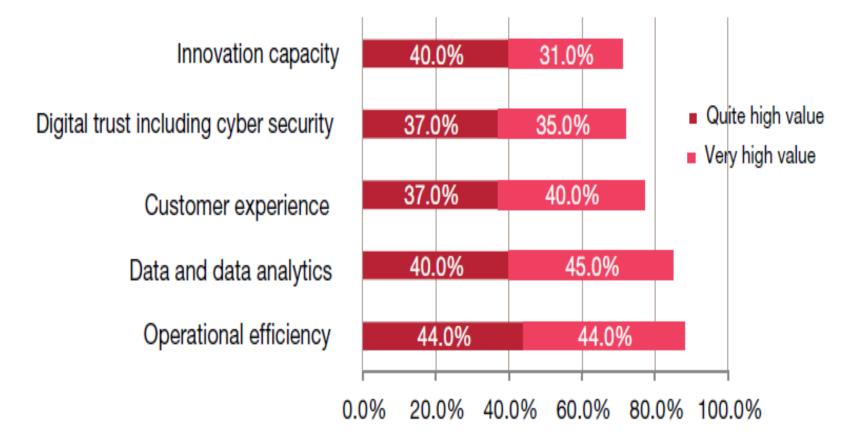
Generating Value from Digital Transformation



CEO's Thoughts for Directional Changes

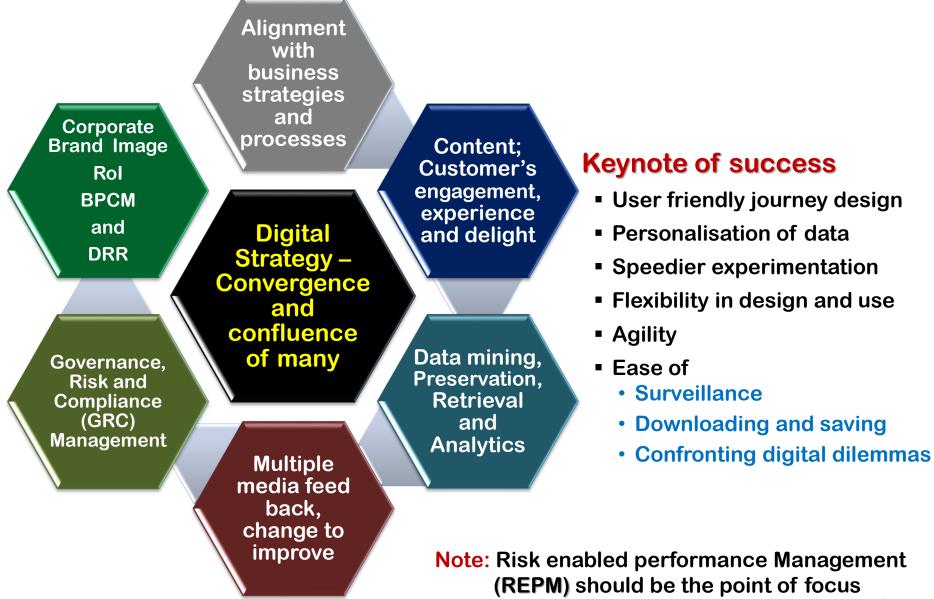
To what extent digital technology creating value in your organisation

Majority of CEOs in india believe that digital innovations to enhance customer experience are helping build customer trust, while at the same time enabling organisations to increase roi by decreasing operational costs.

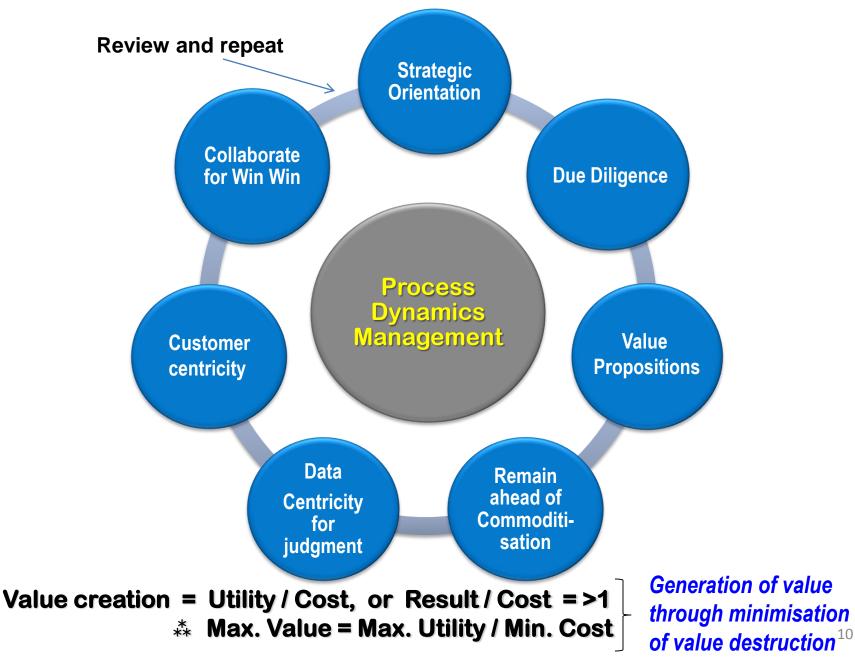


Source: 18th Annual Global CEO Survey: The view from India https://www.pwc.in/assets/pdfs/publications/2015/cii-banking-tech-summit-banks-taking-quantum-leap-through-digital.pdf

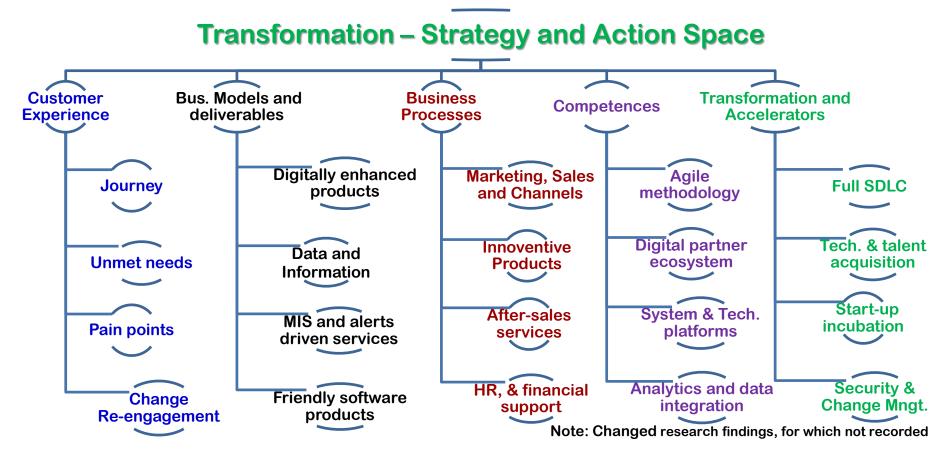
Digital Strategy – Convergence and confluence of many



Seven Seas Principles for Successful Digital Delivery



Organisational Transformation – Action Spaces

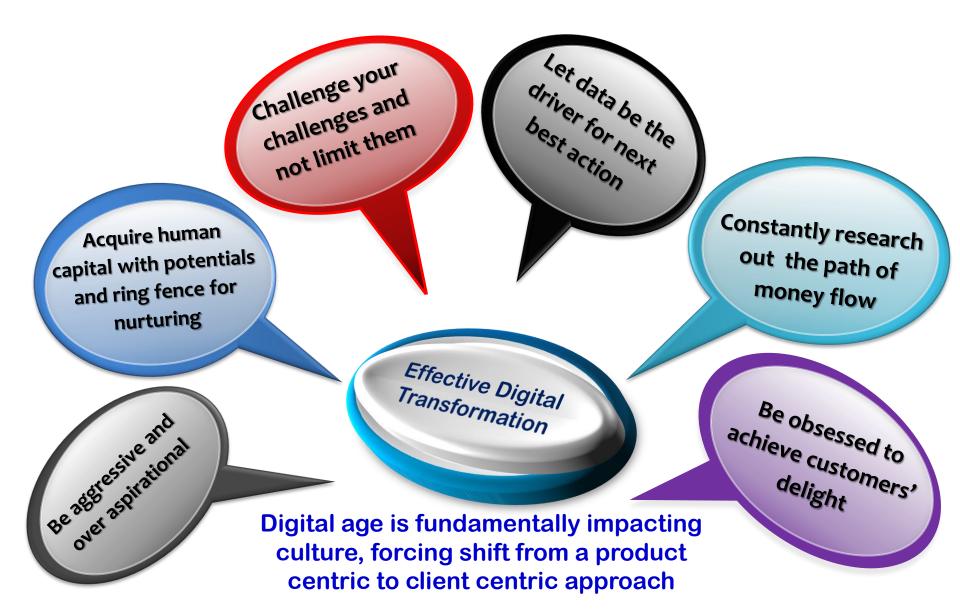


Imperatives

Diagnostic analyses of gaps from **next-in-class**, prioritization, fulfilment and speedier delivery with **first mover's advantage**

"We always overestimate the change that will occur in next two years and underestimate the change that will occur in next ten. Don't let yourself lulled into inaction." Bill Gates

Six Mantras for Sustainable Digital Transformation



Quick Look at a Few Reported Developments

THE ECONOMIC TIMES

India may become global software superpower by 2020: Gartner PTI Mar 14, 2010

"India can well become the 'software superpower' of the world by 2020,

but all depends on <u>investments in workforce development</u> and countrylevel infrastructure

Generation Z

THE MARK HINDU April 17, 2013

In about <u>7 years, median age in India will be</u> <u>29 years</u>, making it the youngest country. India is set to experience a <u>dynamic</u> <u>transformation</u> as the population burden of the past turns into a <u>demographic dividend</u> – The target customer



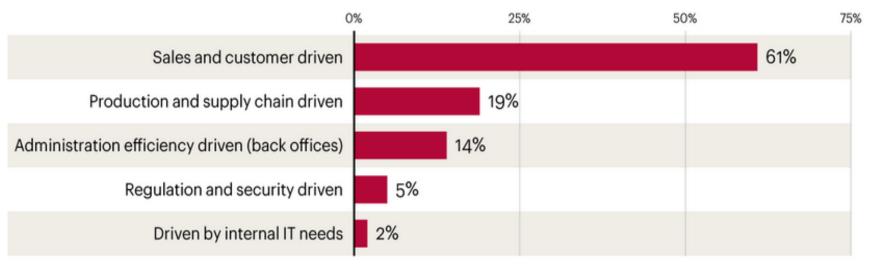
The biggest challenge before BFSI Sector here and now is How to penetrate into *Bharat* and make digital delivery a reality? Innovention™ is the call of the day and not only innovation

AT Kearny's Study Result - Projected Position IT in 2020

- IT requirements will grow rapidly until 2020
- Nearly 85% foresee a <u>significant increase</u> over the next few years
- Almost 75% say <u>time pressure for implementing</u> IT projects is also increasing

Sales and customers will be the focus of most IT investments by 2020

Expected % of investments in IT applications



Note: Percentages may not resolve due to rounding. Source: A.T. Kearney study of more than 150 chief information officers

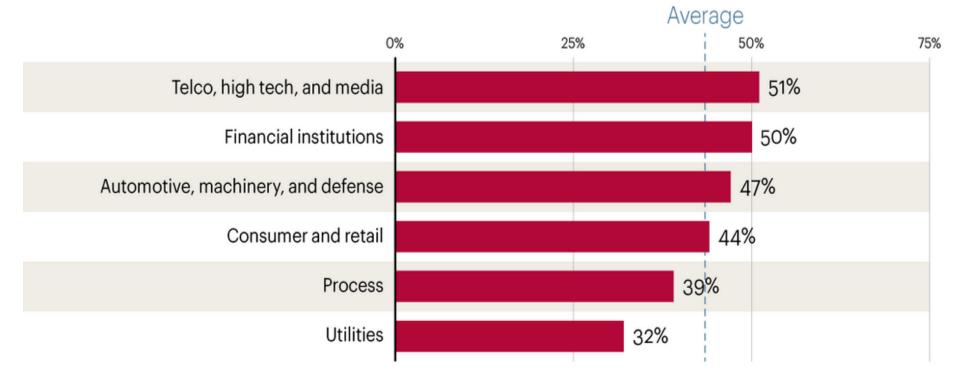
ATK surveyed > 150 CIOs of large global enterprises and leading midsized companies,

AT Kearny's Study Result ... 2

Figure 2

Almost half of companies expect to have a chief information officer on the board in 2020 "But a seat at the table doesn't make sense unless IT plays a central role in the business model"

Companies that expect to see CIO on the board



Source: A.T. Kearney study of more than 150 chief information officers

Point to Explore Can IT (BIS) function be a self-sustained Profit Centre with an EVA of 5%? 15

Time for Introspection and self-search



Make honest attempts for truthful assessment of the gap in reality



If you don't know what you don't know then you don't know how to fix it

There are three types of people in this world

those who make things happen, those who watch things happen and those who wonder what happened.

Choice is yours Getting into the first group will need Innoventive Leadership



The Mission Critical Task - Information Security and Safety

Key Finding from a Researched out Report of Capgemini

Information Security Benchmarking 2014 Information Security assessment of companies in Germany, Austria and Switzerland February 2015 Despite a high top management attention and increasing budgets, Information Security must undergo a deep transformation to improve alignment and cooperation with business **Capgemini** Consulting Fransform to the power of digital

Certain Questions for Introspection

Ten **Commandments** for Information security and safety

- Does the <u>Audit Committee review</u> Information Security (IS) Risks and management systems at periodical intervals
- * Is IS at the top of the agenda for the CEO and CFO
- * Is IS Risk an integrated item of the <u>Risk Register and ERM</u> Framework
- * Are <u>business goals aligned</u> with goals for IS process
- Is there adequate <u>financial commitment</u> for introducing IS Systems commiserating with <u>size and expanse</u> of the organisation
- * Are security risks ignored by business decision makers
- Is there a proper <u>training</u>, <u>communication and change management</u> system related to any <u>BIS initiatives</u> of any stature
- ***** Do IS Managers have <u>predefined KRAs and KPIs</u> for their deliverables
- Is there <u>structured IS awareness</u> system throughout organisational hierarchy
- * Is IS Management a part of Sustainability Management

Information Security should be a part of the DNA of any Organisation

Information Security Measures Benchmark (ISM-Benchmark)

Ms. Yasuko Kanno, Chief Advisor,

IT Security Center, Information-technology Promotion Agency (IPA)

http://www.ipa.go.jp/files/000011796.pdf Japan

Table 2 ISM-Benchmark List of Evaluation Items

- 1. Information Security Policy
- 2. Security Organization
- 3. Categorization of Information Assets
- Handling of Information Assets
- Outsourcing Contracts
- Employee Contracts
- Security Training
- 8. Physical Security
- 9. The Third Party Access
- 10. Safe Installation
- Documents and storage media
- Security in operational environment
- Security for IT system operation
- 14. Countermeasures against Malware
- Measures for Vulnerability
- 16. Measures for Communication Networks
- Prevent Theft or Loss of Media
- 18. Access Control Data
- Access Control Applications
- 20. Network Access Control
- 21. Security in System Development
- 22. Security Management of Software
- Measures for IT system failure
- 24. Incidents Handling
- 25. Business Continuity Management

Areas for Benchmarking Information Security

Learning Points form Capgemini's Research added with Present Author's Thought Lines

Strategy and Governance

- Business Strategy
- Aligning IT Strategy with Business Strategy.
- Governance
 Structure
- Compliance
 Management
- Enterprise Risk Management (ERM)
- Opnl. Vs. Mngt Planning and Control
- BCM & DRM
- Audits Internal & Management
- Data Privacy
- Security Incident

Ogranisation and People

- Ogranisation Structure
- Roles and Responsibilities
- Aligning both Goals of People and Orgn.
- Employee Training and Awareness
- Security Expert Training
- Security Service Improvement
- Co-operation with Corporate Security
- Relationship with Business Units
- Social Media

Process

- Identity & Access
 Management
- Threat and Vulnerability Mgt.
- Patch Mngt.
- Information
 Classification
- Sourcing and Vendor Management
- Secure Application
 Development
- Backup
- Mobile Devices
- Retention and Investigation of Data
- Cloud Computing
- User Access Mngt.
- Change Management

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Technology

- Firewalls and Host to Host Connectivity
- Remote User Access
- Web-based Apps
- Malicious Content Protection
- Network Inclusion
 Protection
- Wireless Network
- Data base Security
- Server and System Security
- Last Mile Device Security
- Application Security
- Physical Content Security
- Data Corruption Sec.

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Your Presenter Suggests

Ethical Hacking

Must be a compulsory task in IT security management framework

Note: Adequate measures must be taken to ensure that such inclusion in no way violates any prevailing legal or regulatory provision in vogue.

Disruptive Technology Trends – Combat and / or adapt Learning Points form 12 Technology Trends by Brian Sollis

- **Social Media-1 is dead** Lifespan of Whatsapp and Twitter not known
- Future of Search Engine Lies outside Google > 88% of consumer is presently influenced by other consumers' online comments
- **Instruments Connected to Internet 80 Billion by 2020 number**
- Product Redundancy Galore Torch, Compass and many more
- Death of eCommerce Mcommerce has almost taken over
- **Wirtual Reality Experiments** Killer Apps for Consumer Markets
- **Beath of Generation Y (Millennials)** Generation Z Kids to be the focus
- New Hollywood YouTube and Vine
- **Greed to Impede Innovation Flocking towards Startups**
- Cryptocurrencies 163 in Number
- Privacy Virtually lost
- Digital Marketing Mass Personalisation and Full Funnel Marketing

Future is for Innoventians – Add Invention to Innovation and Value Creation



IT Jurisprudence for IS Audit

IT Jurisprudence – What and Why

What

- * Jurisprudence is the <u>theory and philosophy</u> of law. Helps to gain deep understanding about
 - Nature of Law
 - Legal reasoning, systems, institutions, applications and implications for non-obeyance
- * Contemporary philosophy of Law addresses two groups of questions
 - Internal to law and legal systems
 - ✤ Of law as a particular institution Political and Social
- ***** Answers to such questions are found in
 - Natural Law Accessible to human reasons
 - Legal Positivism Force of law coming from basic social evidences
 - Legal Realism The real world practice determines what law is
 - Critical Legal Studies
 - **▲** Law is largely contradictory,
 - Can best be analysed as an expression of the dominant social group

English – Jurisprudence, Latin – Jurisprudentia = Knowledge of Law

IT and Jurisprudence – Why

Situation may come to work with reference or relation to any of the following legislations and hence **Ensuring Compliance** is a must

- 1. Information Technology Act, 2000
- 2. IT (Use of Electronic Records and Digital Signatures) Rules, 2004
- 3. IT (Other Standards) Rules, 2003
- 4. IT (Certifying Authorities) Rules, 2000
- 5. IT (Certifying Authority) Regulations, 2001
- 6. The Cyber Regulations Appellate Tribunal (Procedure ...) Rules, 2003
- 7. Blocking of Websites Order, 2003
- 8. IT (Security Procedure) Rules, 2004
- 9. The Indian Penal Code (as amended by the IT Act)
- **10.** The Indian Evidence Act (as amended by the IT Act)
- 11. The Code of Criminal Procedure and the IT Act.
- 12. Information Technology (Amendment) Act, 2008
- 13. The Income Tax Act, 1961 and all Acts for Indirect Taxes (Proposed GST)
- 14. The Companies Act, 2013

Doctors receive structured knowledge on Medical Jurisprudence

IT and Jurisprudence – Why ...2

- Maintenance of <u>books of accounts</u> at the place of business
- <u>Movements</u> of data / information from one country to other
- Permanent establishment (Tax Jurisdiction) issues arising from
 - Hosting of data and software
 - <u>Accessing</u> working systems from <u>other countries</u>
 - <u>Reviewing</u> reports by users of other countries
- Legal <u>evidences</u> (Business User)
 - Customers' <u>personal data</u> being used
 - <u>History</u> of transactions and events
 - Reports and documents
 - Software configuration and maintenance
 - Control on access rights for <u>defined roles</u> and positions
 - Proceedings of video and audio conferences
 - <u>White board print out for meeting records</u>
 - Customer relying upon information content for investment decision

Is there any Substitute of applying 6WH Principle to IT operation? (What, Why, When, Who, Whom, Which and How)

IT and Jurisprudence – Why ...3

- * Legal evidences (BIS Team)
 - Right for configuration and codification
 - QC clearance
 - Right for modification software or master data
 - Purging-off and / or archival of records (Destruction of evidence)
- ***** Mails Movements electronic records
 - Data and records and
 - Tele-caller / recipient as per HLR and VLR of a Telco

"<u>Spend time with corporate counsel</u> to understand thoroughly the requirements of any new or evolving <u>regulations that affect your business</u>" *

> The New CIO Leader Setting the Agenda and Delivering Results by Marianne Broadbent and Ellen S. Kitzis

*The Presenter's view is to first make it a <u>subject of study for IT curriculum</u>

In contemporary Digital World IT Jurisprudence is not Nice but Must to Have

It will be useful to watch a small video clip on Behavioural Psychology

Further Thoughts



"The essence of management lies in dropping the last letter and make it 'Manage Men'! It is still better to drop the last two letters and make it 'Manage Me'!"

