



The Impact of a Sound Business Model and a New Technology Implementation

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SU Research Week: 31 July 2009





BACKGROUND

- DOES IT MATTER?
- “As information technology’s power and ubiquity have grown, its strategic importance has diminished. The way you approach IT investment and management will need to change.”

» **Nicholas Carr, (2003) HBR**





Questions

- Are there empirical evidences that can help us understand/measure the impact of a sound business model when matched with a new technology?
- What can we infer for companies who implemented new technologies but failed to transform?





New Organization???

- In 2003, Apple introduced the iPod with the iTunes store, revolutionizing portable entertainment, creating a new market, and transforming the company.
- But Apple was not the first to bring digital music players to market.
- Why iPod and not the Rio (1998) or Cabo (2000), succeed?





What Apple did?

- It took a good technology and wrapped it in a great business model.
- Apple's true innovation was to make downloading digital music easy and convenient.
- The company built a ground breaking business model that combined hardware, software, and service.



– M Johnson et al (Dec 2008), Harvard Business Review , p.51



The Power of IT to Accelerate Organizational Transformation

- Otis Elevator - a manufacturing company
 - Transformed to a logistical and service company
 - Benchmarking with Ritz Carlton, Southwest Airlines, Disney and UPS
- Equity Bank – a MFI
 - Converted to a Commercial Bank (2005)
 - Aiming to be the most preferred bank not only in Kenya but in all of Africa





Strathmore Business School

Boeing Plant (pre-2003)





Boeing Plant (2008)





Business Model - Definition

- A Business Model defines how an organisation interacts with its environment to define a unique strategy, attract the resources and build capabilities required to execute the strategy, and create value for all stakeholders.
 - » **L. Applegate (Jan 2008), Harvard Business School**





Business Model: Elements

- Customer Value Proposition
- Profit Formula
 - Revenue model, cost structure, margin model, resource velocity
- Key Resources
 - People, technology, equipment, facilities, etc.
- **Key Processes (operational and managerial)**
 - » M. Johnson et al (Dec 2008), Harvard Business Review





Mapping of Processes

- **Best Practices for SAP implementation in Kenya (Research)**
 - The study established that top management support, effective project management, **business process reengineering**, data conversion and phased project implementation approach are critical to success in SAP project implementation in Kenya.
 - » C. Kirimi & F. Acosta (2009), Strathmore University





Mapping of Processes

- CVS, Cisco and Otis Elevator are among the many companies gaining a market edge by competing on technology-enabled processes – carefully examining their working methods, revamping them in interesting ways, and using readily available enterprise software and networking technologies.

» **A. McAfee & E Brynjolfsson (2008) – Harvard Business Review**





Mapping of Processes

- Otis Elevator (What they did?)
 - Start with a clean sheet of paper;
 - Map all the processes including sub-processes and then deploy e-Logistics and the technologies behind it.
 - “Had we done the opposite, use Information Technology with broken or inefficient processes, it could have been a very costly mistake.”
 - » **Ari Bousbib (2005), CEO – Otis Elevator (HBS Case)**





Mapping of Processes

- **Kenya Pipeline Company (Research)**
 - **Only 25% of the business process mapping was done** and largely ignored as they were under pressure to complete the project within the agreed project plan.
 - However in their attempt to beat the deadline, the project had an over expenditure of **Ksh53Million** and **11months overdue**.
 - » **S. Omondi & F. Acosta (2009), Strathmore University**





Equity Bank Ltd.

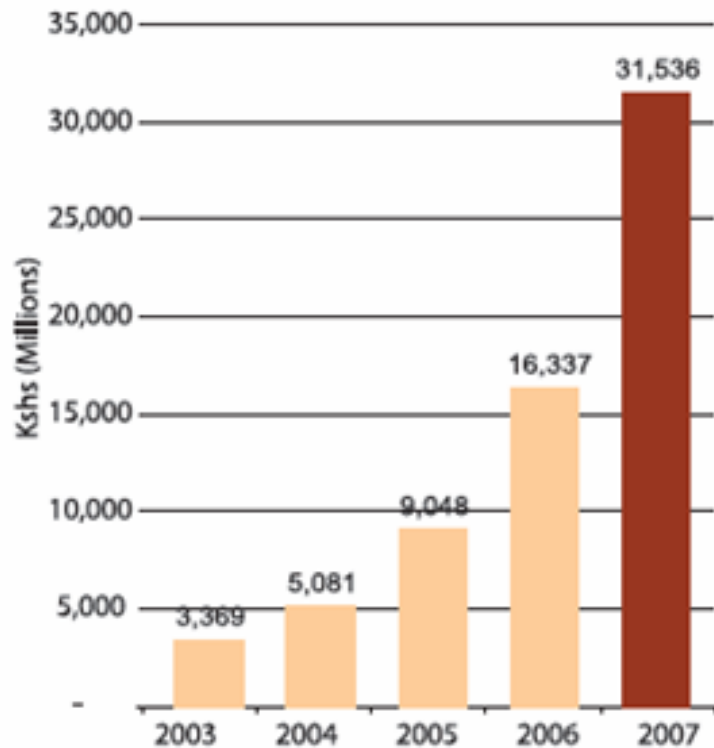
- Implemented new technology (Finacle Systems) in 2005; cost more or less Ksh1B.
- New Business Model
 - Customer Value Proposition
 - Profit Formula
 - Key Resources
 - **aggressive staff capacity building through hiring of new staff with specialised skills and competencies as well as staff training and development**
 - **Key Processes**
 - Application Business Process Re-engineering





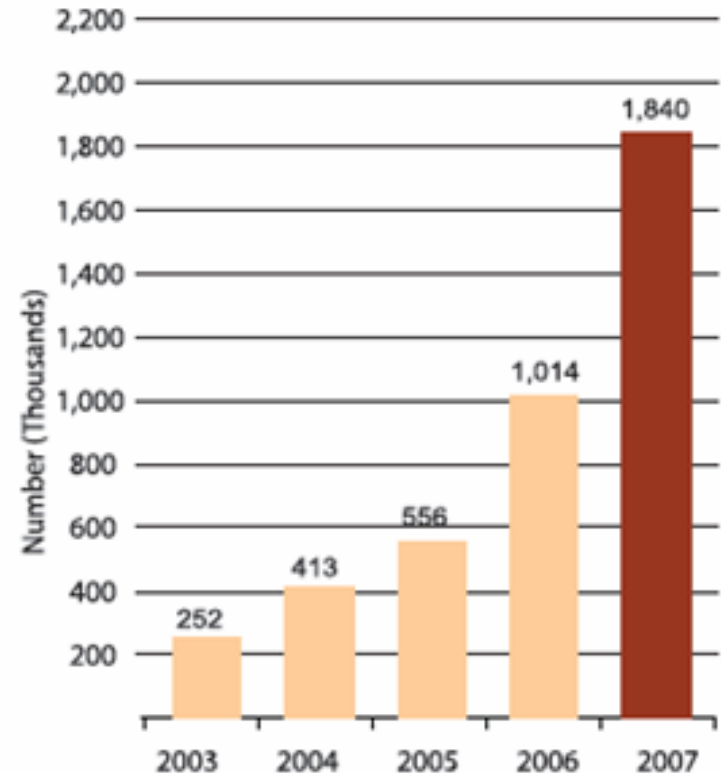
Equity Bank Results (2005-2007)

Growth in Customer Deposits



250% growth in 2 years

Growth in Customer Numbers



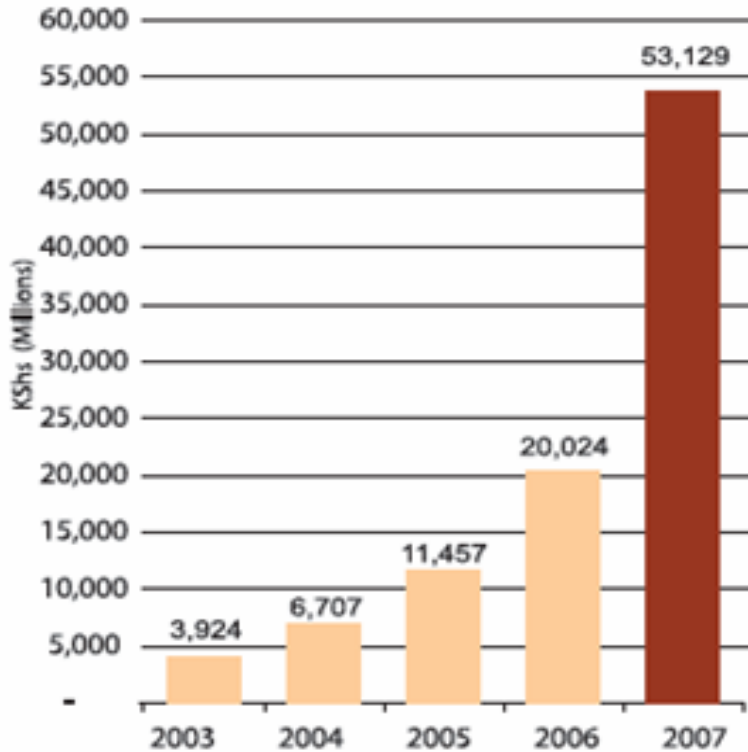
230% growth in 2 years





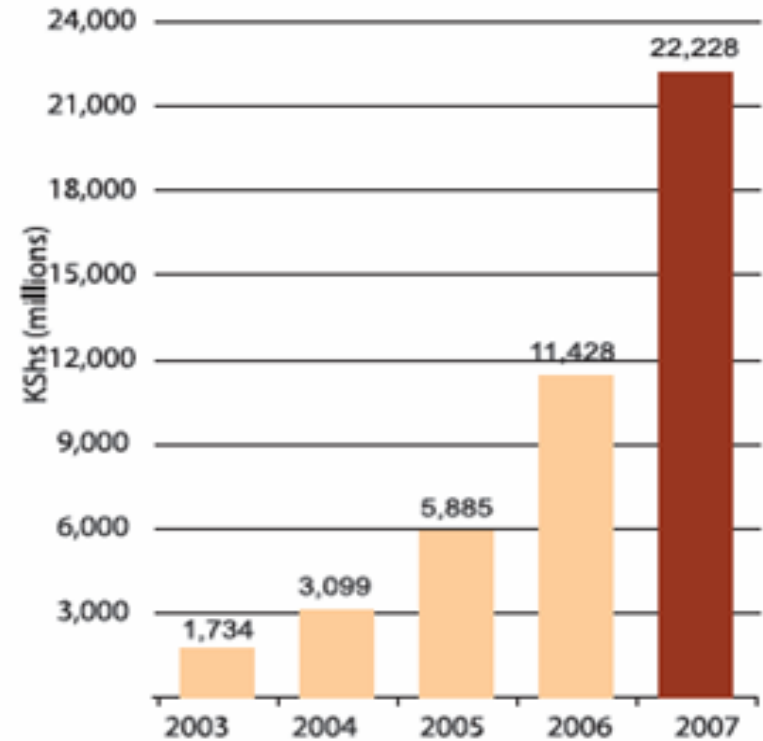
Equity Bank Results (2005-2007)

Growth in Total Assets



364% growth in 2 years

Growth in Gross Loan Portfolio



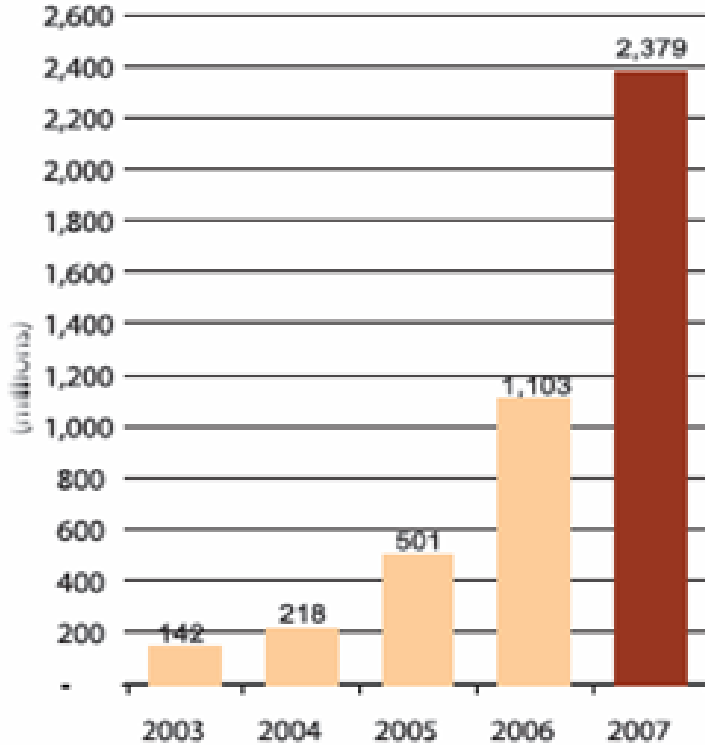
278% growth in 2 years





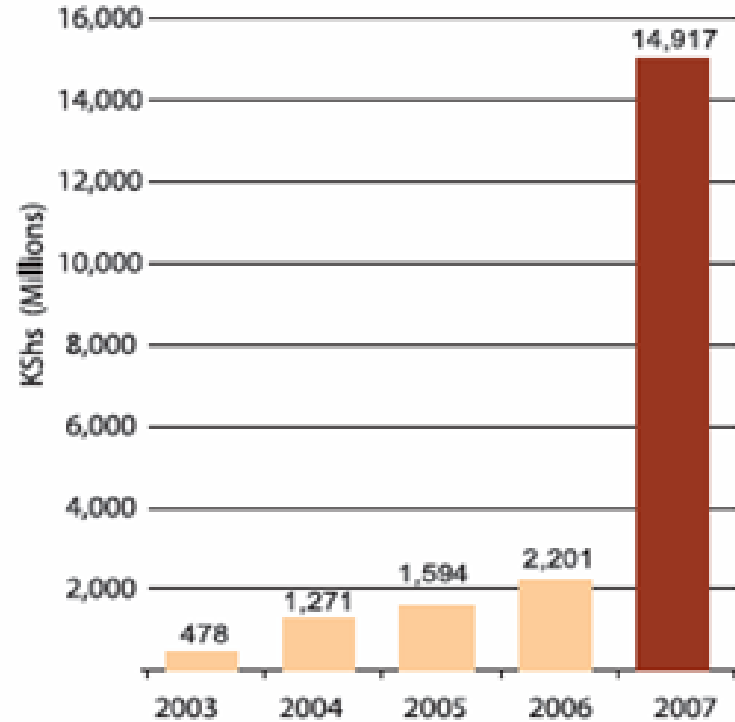
Equity Bank Results (2005-2007)

Growth in Profit Before Tax



375% growth in 2 years

Growth in Shareholders Funds



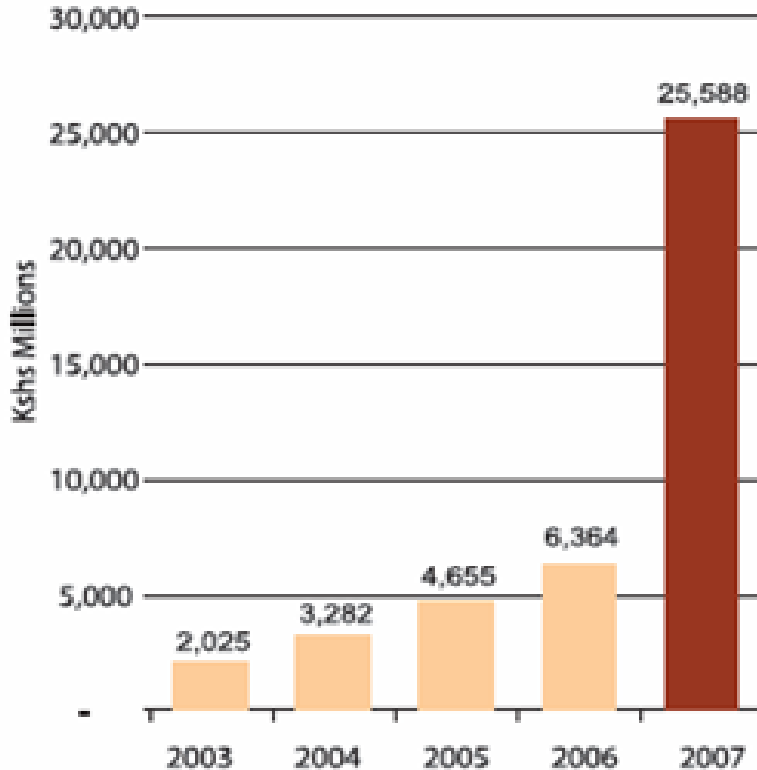
836% growth in 2 years





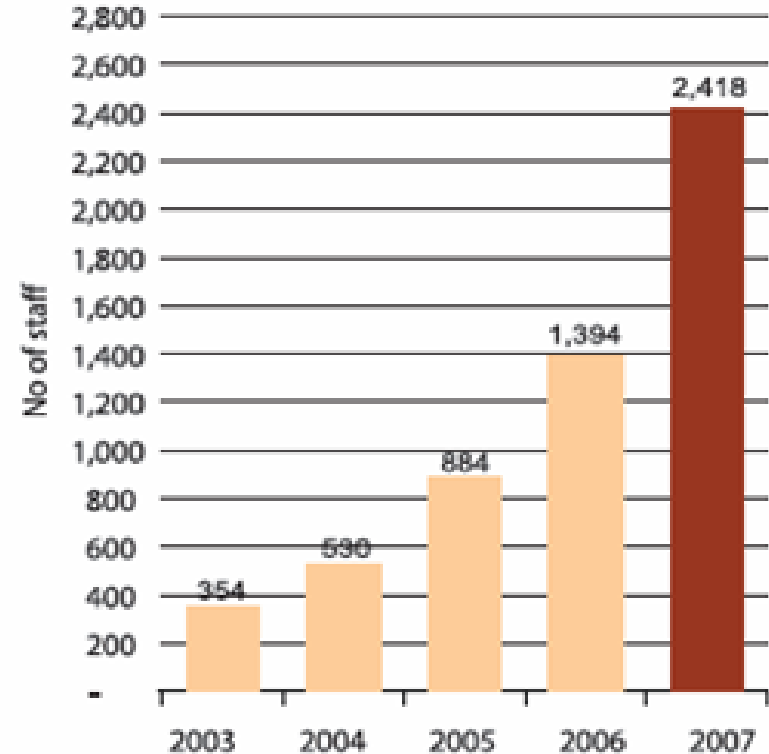
Equity Bank Results (2005-2007)

Growth in Liquid Assets



450% growth in 2 years

Growth in Staff Numbers



174% growth in 2 years





Apple Results

- In just 3 years, the iPod/iTunes combination became nearly \$10 billion product, accounting for almost 50% of Apple's revenues.
- Apple market capitalization catapulted from around \$1 billion in early 2003 to over \$150 billion by late 2007.

– M Johnson et al (Dec 2008), Harvard Business Review





Otis Elevator Results

Figure A United Technologies Stock Price January 1, 2003–January 1, 2004

UTC SHARE PERFORMANCE



Source: Company documents.





Conclusion

- Information Economy Benefits
 - New Technology + Old Organization = Ok, but disappointing results
 - New Technology + New Organization = 10x Results





Recommendation: Institutional Research

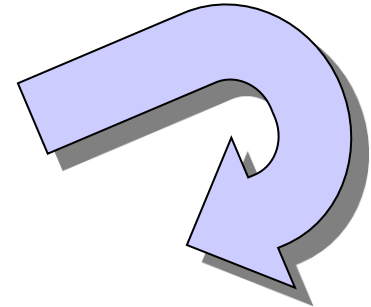
- **An Evaluation of Strathmore University's AMS Implementation**
 - 2002 Converted from College to a University
 - 2004 Initiated SUMMS project
 - 2006 AMS implementation commenced
 - 2009 we are still experiencing some challenges and still far from the promised of full benefits of a new system.
- Why?
 - Change Management Related Issues?
 - Business Process Related Issues?
- Why the need for this study?
 - Knowledge Management
 - Growth





Recommendation: Industry Research

• Old Organization +
New Technology (**Ok
but frustrating results**)



What?

**Till
When?**

How?

**How
much?**

New Organization +
New Technology (**10X
Results**)

Organizational, Management, Technical Issues???





Asanteni!!!

- Special thanks to all my students (past and present) who participated in my research activities.





Current Researches

- **Technostress** (MBA-1 Class Alpha)
- **Cyberchondria** (MBA-1 Class A)
- **Status of ICT in the Health Sector** (MCOM-1 Groups 1-4)
 - IT Enabled Business Model, Outsourcing
 - IS Planning, IT Governance
- **Status of ICT in the Hospitality Sector** (MCOM-1 Groups 5-8)
 - IT Enabled Business Model, Outsourcing
 - IS Planning, IT Governance

