

Introduction to IT Payoff

“Show me”

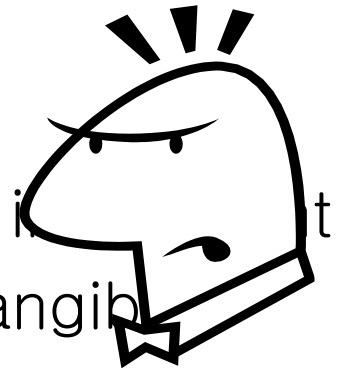


IT Payoff: A Dialog

■ A Dialog

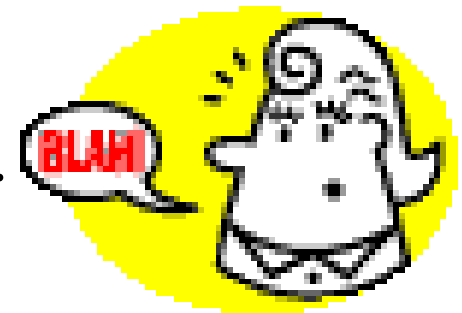
▶ Bob Graham (CIO)

- :Request approval for a \$14M IT investment
- :Not to show ROI, but to talk Intangibles
- :Why we need to justify IT investment??




▶ Pat Donahue (CEO)

- :Concerned with ROIs
- :Strategic IT investment, but ...
- :Board members' question
- :Capital expenditure proposals of CAM, CRM



IT Payoff: A Dialog

■ IT Payoff

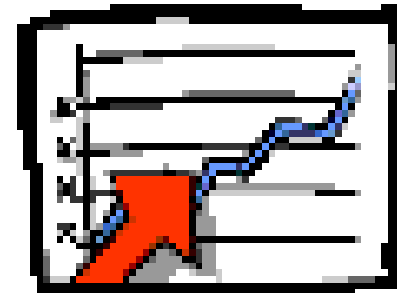
- ▶  after missing an opportunity
- ▶ Higher stakes in Biz
 - : DO NOT BUY, “It would be nice to have new IT”
 - : JUSTIFY THE EXPENSE !!

How has IT helped biz productivity, profit, or added value to customers?



■ Looking for ROI

$$= \frac{\textit{Profit Realized}}{\textit{Amount Invested}}$$



IT Payoff: A Dialog

- Clients will ask for projected benefits to justify the expense
 - ▶ Intel, Cisco, SAP, Oracle, ...
 - ▶ http://www.ism.co.at/analyses/ERP/Justify_ERP_Invest.htm
 - ▶ <http://www.oracle.com/us/solutions/cloud/platform-as-a-service/quantify-value-of-casb-wp-3497489.pdf>
- Same scrutiny as other investment is needed



Reasons for IT Payoff Measurement

Unconvinced manager may ask:

- How will one know if and when the payoff realized?
- How do we know if there's payoff at all?

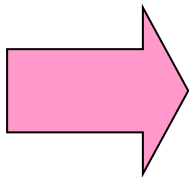
■ **REASON 1:** Competing investments

- ▶ Optimally allocate financial and people resources to all areas of the Biz
- ▶ Stronger voice of revenue-producing functions than support functions
 - ex) high-precision machine vs. ERP Upgrade

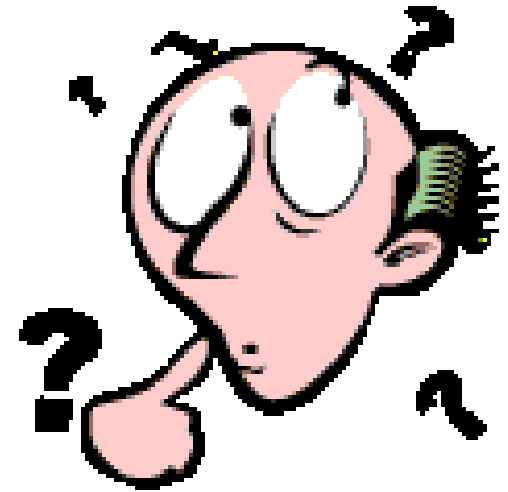
Reason for IT Payoff Measurement

■ REASON 2: Duration of Payoff

- ▶ How long it will take to see ROI?
- ▶ Seek near-term profitability
- ▶ IT tends to have less apparent and longer payoff duration



Hard to justify!



Reason for IT Payoff Measurement

■ REASON 3: Overall Economic Picture



President D. Trump, 2019 trade War
between U.S and China, COVID-19,...

- Closer scrutiny of the payoff expected

IT Investment measurement

- Profitability
 - ▶ C/B analysis(NPV)
 - ▶ ROI(IRR)

Average Revenue per User (ARPU)

- Payments and Other Fees
- Advertising



IT Investment measurement

■ Productivity

- ▶ Efficiency
- ▶ Quality



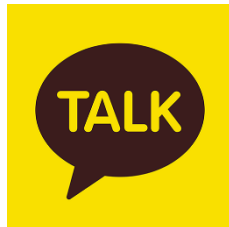
■ Customer Value

- ▶ Greater Loyalty & long-term retention



IT Payoff : A Case

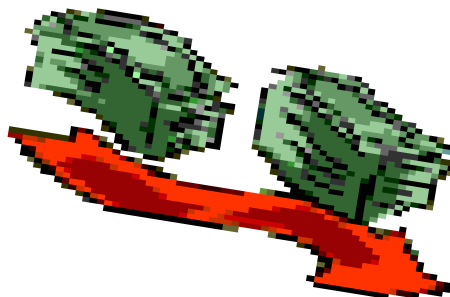
■ Kakao Services



Kakaodriver

kakaobank

■ Walmart Inventory Mgmt. System



IT Payoff : A Case

■ Regulations

▶ Digital TV



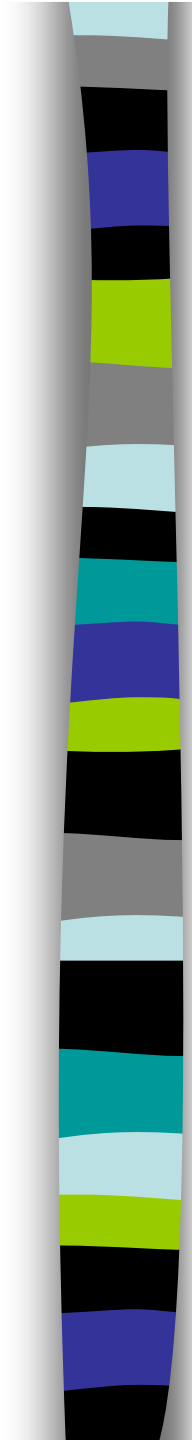
■ Productivity Paradox

▶ *“We see computers everywhere except in the productivity statistics”*



The IT Payoff Paradox

Paradox : A statements that is
seemingly contradictory or
opposed to common
sense and yet is true.

- 
- Inconclusive nature of IT payoff
 - ▶ “D-TV investment” Who enjoys the fruits?
 - ▶ Arno Penzias stated, “negative effects from IT, and also successful NY MTA case”
 - ▶ IT Investment: 45% of all capital Exp.
 - ▶ High profile disasters in IT

 - Open debate on “IT productivity paradox”

Factors of IT paradox

■ Anecdotal evidence

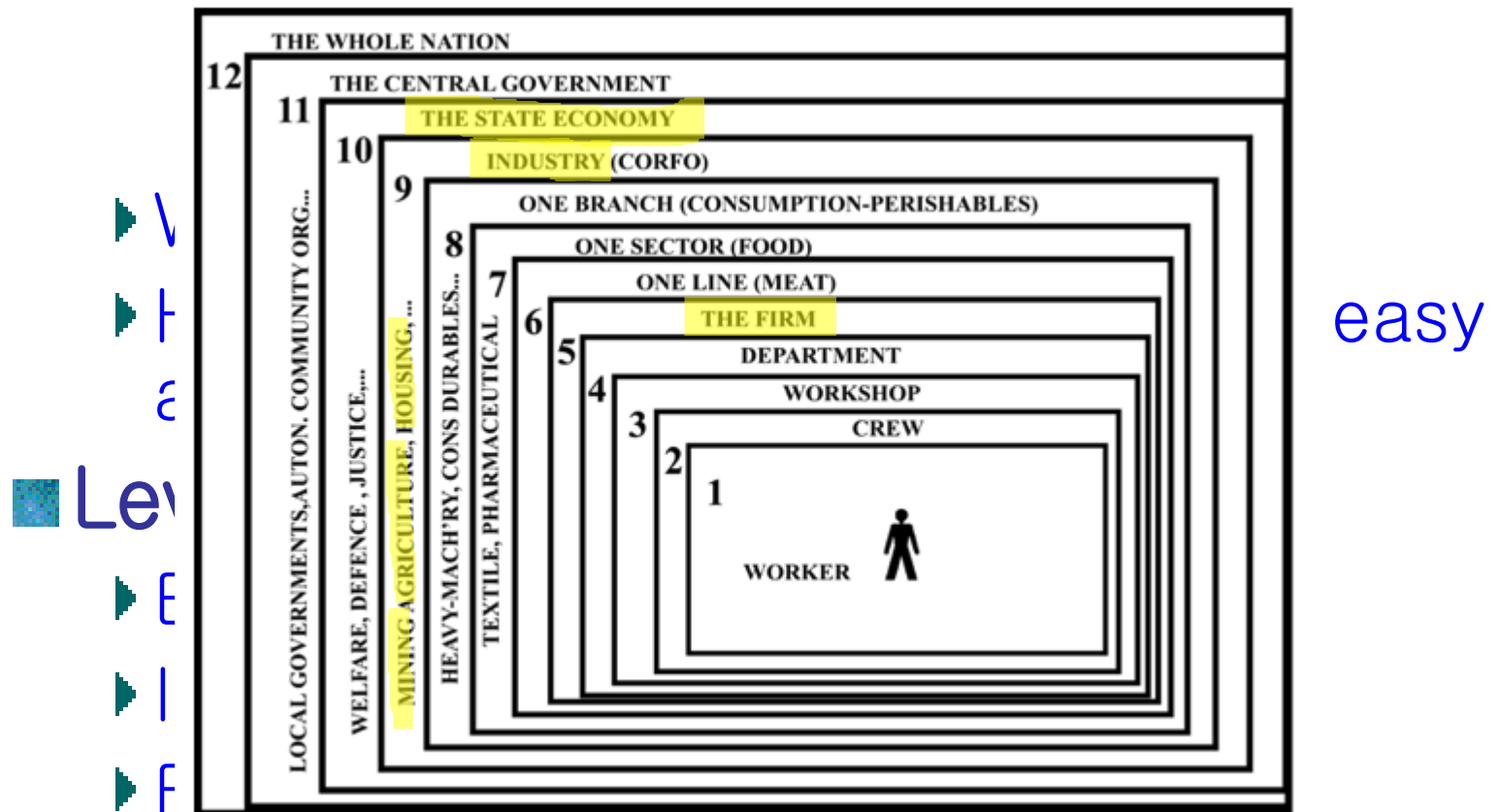
- ▶ Generalization errors
- ▶ Hershey(Fatal Failure), ...
- ▶ IBM(Big Success), ...

■ A Snapshot View

- ▶ “*It takes time*” → Time lags
- ▶ Learning and adaptation occurs
- ▶ “Hang in there until the creases are ironed out”

Factors of IT paradox

- Isolating the IT effect
 - ▶ Protech solution case





Factors of IT paradox

■ Aggregated Analysis

- ▶ IT is implemented at a process level, however, we look at the organizational level!

■ Complementary Factors

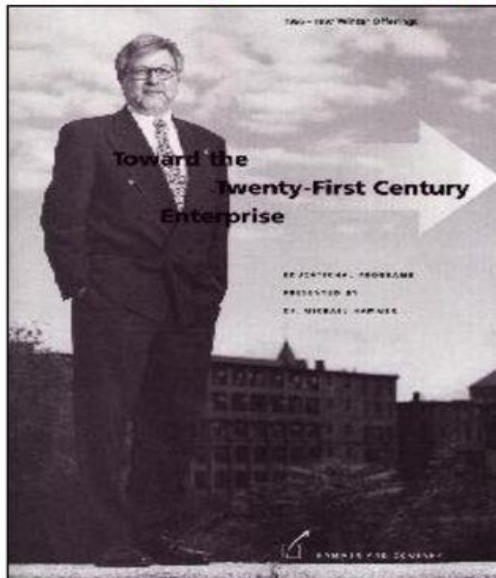
- ▶ To realize maximum benefit from IT
 - Not only investment in IT,
 - but also IT-driven reengineering

- ▶ ERP & BPR

Factors of IT paradox

ERP & BPR: M.Hammer's View

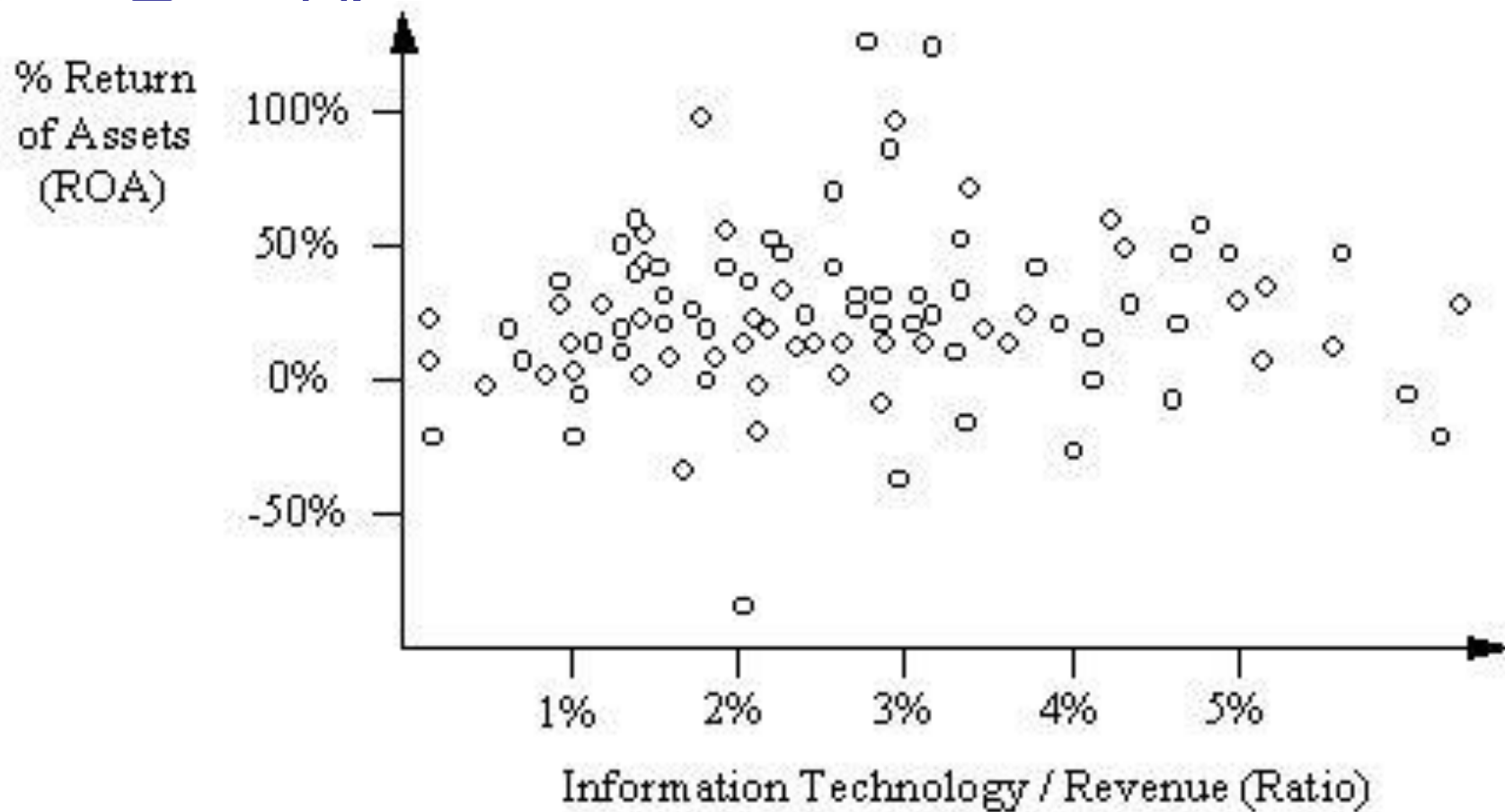
Hammer: ERP Implementation is Forced Reengineering



- ERP implementation MUST be integrated with reengineering implementation.



Paradox still exist?





Beyond the paradox

- Positive side of the debate
 - ▶ Realization of the issues and inter-connection with payoff
 - ▶ Under more scrutiny than ever
- Robert Solow's words
- New paradox emerging
- Issues forefront
 - ▶ Objectives set up front
 - ▶ Time-based criteria established