

ADDRESSING THE IT VALUE DEBATE

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IT value measurement has been riddled with paradoxes that have left decision makers in the dark. Experts continue to argue the extremes from "IT is a commodity" to "IT is the greatest competitive factor of our time". We took a hard look at empirical data to come up with key findings that provide practical guidance for decision makers.

KEY FINDING # 1: IT IS NOT ABOUT HOW MUCH YOU SPEND...

Empirical data on the relationship between IT spending and corporate performance shows little or no correlation. This is likely due to:

1. IT improves organizational performance consistently **primarily** when combined with superior business concepts and practices
2. Studies indicate failure rates between 50% to 70% for IT intensive

projects (failure is defined as significant and unfavorable variance to budget, scope, or results objectives)

3. Competitive value derived from simple installation of technology is generally short term. Equal access to technology causes IT benefits to be recreated by competitors. This often creates a **necessity** for technology without improving performance relative to competitors. Value generated is passed on to the **industry's** customers.

Correlation between IT Spend and ROE



Source: Paul Straussmann, Value of Computers, Knowledge and Information, Data from 468 major Canadian, US and European Firms.

KEY FINDING # 2: THE EMERGENCE OF MACRO FORMULA...

Stock market data shows that higher margins are being achieved by internet based solution providers when compared to their less technocentric peers in **some** industries.

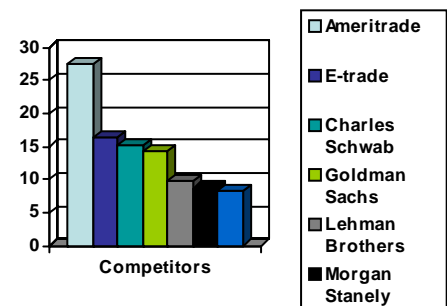
Ameritrade, E-trade, and Charles Schwab are the most technology & process automation focused companies in their industry - they also average higher net profit margins.

Google, E-bay, and Monster also

offer extreme examples in their respective industries. However, they are also products of 'economic speculation' (many entrants, high spend, many models, and many bankruptcies leading to highly effective survivors). These superstars leverage high caliber business practices in addition to technical concepts. The emergent formula for successes is:

Competitive Value = Superior business concepts + Superior management + Business integrated IT spending

Financial Services Net Profit Margins (%)



Source: 2006 stock market data obtained from SmartMoney.com
 * Although findings are similar for some groups, it should be noted that there is a high degree of e-business clustering across the economy indicating that industries vary dramatically in their ability to leverage IT capabilities.

KEY FINDING # 3: THE EMERGENCE OF MICRO FORMULA...

A study of 100 European manufacturing firms conducted by London School of Economics and McKinsey and Company showed that IT has an amplification effect on good management practices.

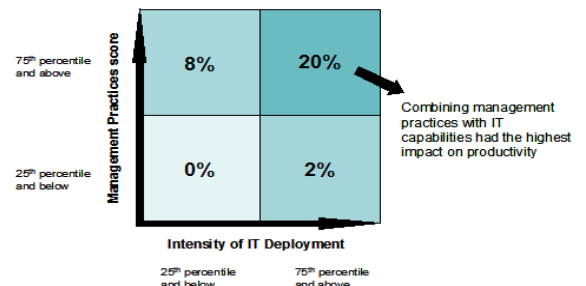
Information technology in absence of strong business initiative pro-

duces weak gains on over-all performance of the organization.

Good management practices are amplified to over double their effectiveness through appropriate, focused use of information technology.

Competitive Value = Superior Management practices + Supportive IT Spending

Management's Big Role



Source: London School of Economics, McKinsey Survey and Analysis of 100 companies in France, Germany, and the United States

KEY FINDING # 4: RED QUEEN ECONOMICS & VANISHING ADVANTAGE...

Access to information technology is open - that is everyone can acquire it. Therefore, IT alone can not provide a sustainable competitive advantage. This is the source of the IT value paradox — seeming competitive value simply becomes a necessary cost over time. This has 2 very large implications:

1. Continual IT investment is neces-

sary to maintain market position even though competitive benefits vanish.

2. Technology creates long term strategic advantage only when it used to effectively **support** organizational characteristics that offer long term advantage. Due to the complexity embedded in these scenarios, they are inherently difficult for competitors to imitate. This creates long term value from leveraging information technology.



The Red Queen is a character in Alice in Wonderland who's landscape keeps moving so she has to keep running just to stay in the same place. The same scenario holds for IT spending - value will hold (ie. Lower process costs) but competitive advantage does not.

TAKE AWAY FOR SENIOR EXECUTIVES...

CIO's & IT Leaders:

1. For technology adoption opportunities that competitors can easily emulate, the **cost** for the organization to stay with or ahead of the pack is in itself the key competitive differentiator.

2. IT 'spend value' can be enhanced by tuning spending towards supporting organization characteristics that are providing competitive advantage (and shake out un-necessary expenditures). Frameworks that correlate IT effort to the organizations competitive differentiators will produce long term benefits.

3. Because IT can have a significant amplification effect on good manage-

ment practices, working with peers to manage delivery risk across the value generating process is fundamental to attaining high returns on IT spend. Map relationships between IT activity, business activity, and all sub-outcomes necessary to produce performance value—manage delivery risk in and between each activity.

CEO's, CFO and non IT leaders:

1. For straight forward technology purchases that competitors can easily emulate—low ownership costs are paramount.



2. Correlate IT spend with key business management initiatives (lean processes, Six Sigma, yield management etc.). Look to measure IT return on the amplification effect IT effort can have on these initiatives.

3. Develop IT knowledge in non-IT leaders. Focus learning on how IT can and cannot amplify their results. Also, hold these business leaders jointly accountable for the IT amplification effect to promote clear communication of requirements, joint risk mitigation, and the overall collaboration necessary to achieve business results.

4. Identify key competitive advantages that your organization has and provide opportunity for investigation of how IT may amplify these strengths. Adapt a lower cost, fast follower strategy in the others. Calculate ROI in either case — take hard benefits at face value, and apply a discount to soft benefits.



Synovia is an IT Management Consulting firm dedicated to helping its clients achieve maximum value from information technology. We do this through methodologies that increase value derived from systems and improve IT operating efficiency. Ask us about our results.

FURTHER READING

- (1) Paul A. Strausmann, The Value of Computers, Information and Knowledge (1996)
- (2) Sarv Devaraj, Rajiv Kohli, The IT Payoff (2002)
- (3) Michael E. Porter, Strategy and the Internet (2003)
- (4) Nicolas Carr, IT Doesn't Matter (2003)
- (5) Charlie Feld, Donna Stoddard, Getting IT Right (2004)
- (6) Stephen Dorgan, John Dowdy, When IT Lifts Productivity, McKinsey Quarterly (2004)

Suite 1000, 888 3rd Street SW
Calgary AB T2P 5C5
Phone: 403-444-6899
Fax: 403-230-7908
Email: tjoshi@synovia.ca

Authored by Tim Joshi