Do CIO 100 Organizations Outperform the Market?

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- The CIO 100 Award, 1988 – 2012
- IT Innovation
- 25 years of honorees
- Analysis of top-ten honorees
- Another study of CIO 100, 1988-2007
- Future research directions

Overview

2

- 1988 study of 1,000 firms (Brynjolfsson et al)
  - $1 increase in a firm's computer capital associated with $5 increase in stock market value
  - Remaining $4 increase due to intangible assets
    - Intellectual capital
    - Skills, decision-making, work practices
  - Study didn't focus on IT innovation
- "IT doesn't matter," N. Carr, *HBR*, 2003
  - IT doesn't offer sustainable advantage

Preface

Do IT innovators outperform the market? 3
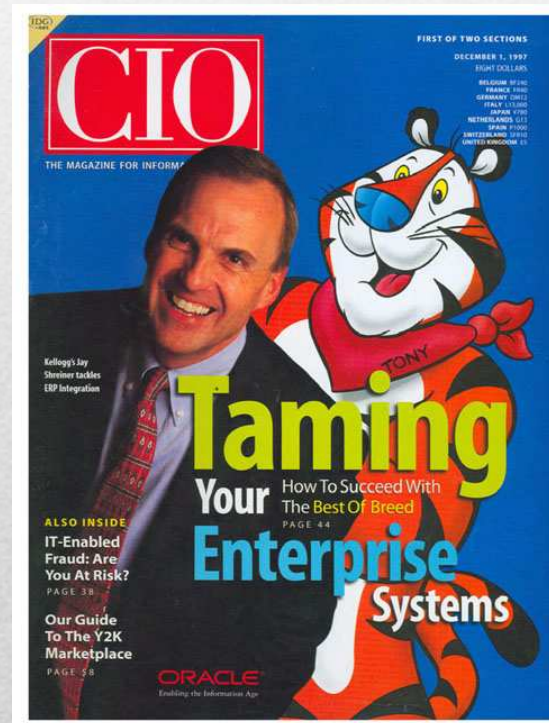
- Provides "technology and business leaders with insight and analysis on information technology trends and a keen understanding of IT's role in achieving business goals"
- Launched in 1987
- Free to qualified subscribers
- Circulation: 140,000 readers
- 160 awards for magazine/website
- cio.com, cio-asia.com

CIO Magazine

- Annual award
- Nominations
- Honorees
  - Well-managed projects
  - IT innovation
- 1988-2012:
  - 2463 honorees
  - 1478 unique organizations
  - 430 honored at least twice
  - FedEx led with 19 awards

The CIO 100 Award, 1988 – 2012

5

- American Hospital Supply, 1976
- American Airlines' Sabre, 1976
- FedEx: internet-based tracking in 1994
- eBay: launched in 1995
- Amazon.com: launched in 1995
- WalMart: RFID in 2003
- Others: big data analytics, cloud computing, virtualization, enterprise mobility, enterprise security, web services

IT Innovation: Classic Cases

6

- Creating new business value with IT innovation
  - Law firm uses IT to cross-sell
- Driving business growth with IT innovation
  - Internal collaboration, cost containment
- Transforming business strategy with IT innovation
  - Analytics to identify potential problems

CIO 100 Themes

25 years of honorees

8

- Schwab.com: overall return between 1988 – 2012
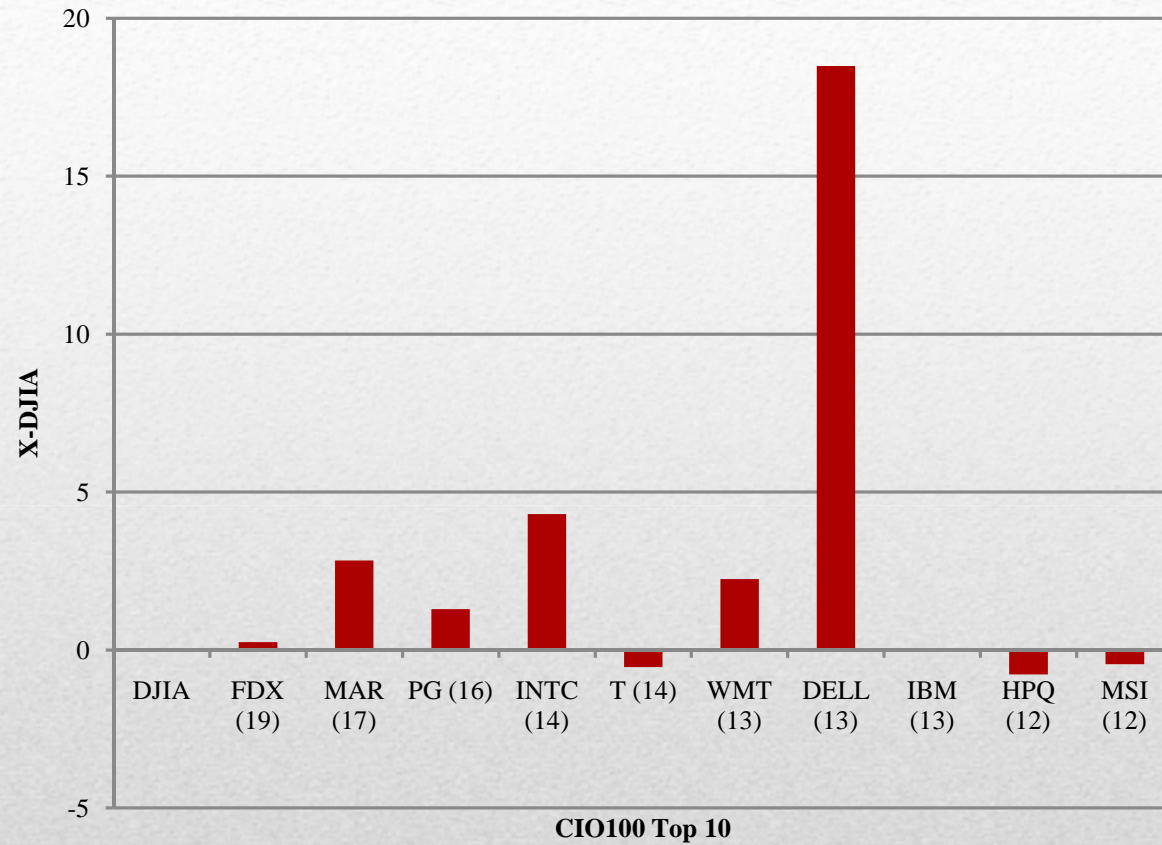- Dow Jones Industrial Average: +508%
- Top ten average: +1738%

Analysis

Company	#years	Symbol	% +/- DJIA
FedEx	19	FDX	+25
Marriott	17	MAR	+283
Procter & Gamble	16	PG	+129
Intel	14	INTC	+431
AT&T	14	T	-54
Wal-Mart	13	WMT	+225
Dell Computer	13	DELL	+1849
IBM	13	IBM	+5
Hewlett-Packard	12	HPQ	-77
Motorola	12	MSI	-45

Analysis of top-ten honorees 10

DJIA v. CIO 100 Top 10

eLeader Singapore, 2-4 January 2013

- Adi Masli et al, Returns to IT excellence: Evidence from financial performance around information technology excellence awards, *International Journal of Accounting Information Systems* 12 (2011), p 189 – 205

- Studied CIO honorees, 1988 – 2007
  - 954 awards
  - 373 firms
  - ROA for award year & subsequent two years

Another study of CIO 100, 1985-2007

12

R1: Do CIO award-winning firms perform better following the award than their peers?

→ yes, on average, they were higher than benchmark

R2: Does CIO award-winning firms' performance improve following the award?

→ No

R3: Do CIO award-winning firms no longer perform better than their peers after 1999?

→ Yes, except for most 6+-year awardees

Research Questions

13

- Multiple award winners perform better than others
  - Both pre and post 1999
  - Suggests IT capability is as important as IT innovation

- Award winners generally don't perform better post-award

Research Conclusions

14

- Superior IT yielded superior performance until 1999
  - 1990's IT boom
  - 1999 dot.com bust
  - Y2K diversion
  - IT outsourcing
- No difference after 1999
  - Except for group with exception resources
    - IT capital
    - IT human resources
    - Intangible resources & knowledge assets

Returns to IT Excellence: Conclusion

15

- IT capital investment riskier than non-IT capital
- 2002 Gartner survey: 20% all IT expenditures are wasted
- 2004 IBM survey of 1000 CIO's: 40% of all IT projects yield no ROI
- 2009 Standish: majority of IT projects are unsuccessful
  - 44% late, over budget, and/or missing required features
  - 24% are complete failures
- CIO projects are judged to be *successful*

Interesting statistics

- Has there been a change in IT excellence & performance since 2007?
- Compare performance of CIO 100 with
  - CIO-Asia 100
  - *Computerworld* Honors Program (1989-2012)
- Are IT innovation and IT capability correlated?
- How significant is the CIO leadership?

Future Research Directions 17

CIO

Comments?
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Thank you!