University of Hradec Králové

IT Investment Evaluation

Josef Hynek

University of Hradec Králové

Presentation Outline

- Importance of the topic

- Historical perspective

- Lessons learned

- Role of IT specialists and the role of management

- Universities and IT

- Conclusions

Importance of the topic

Gartner, Inc:

• Worldwide IT spending totaled **$3.7 trillion**, up 6.9% from 2010 levels.

• Worldwide IT spending is forecast to total **$3.8 trillion** in 2012, a 3.7% increase from 2011.

• 80% of the IT investment is a "**dead money**" that are spend just to maintain business operations.

Importance of the topic

PriceWaterhouseCoopers:

• 70% of all IT investments are claimed to give no adequate return on investment.

• Organizations achieved expected benefits only 25–75% of the time.

Historical perspective

1977 – a computer on every desk

early 1990' – technology per se

mid 1990' – Y2K problem

2000-2001 – the collapse of dot com bubble

2003 – Carr's article "IT Doesn't Matter"

2007 – mortgage crisis starts in the U.S.

Are we more cautious?

The University of Economics, Prague:

• Only **30%** of Czech companies use some indicators in order to **determine benefits** of their IT investments.

Mizera, J., Pour, J.: Hodnocení investic do podnikové informatiky (2010)

Tomas Bata University, Zlín:

• Only **8% of Czech companies evaluate return on IT** investments while the evaluation of return concerning manufacturing machinery is absolutely common.

Sodomka, P., Klčová, H.: Investiční priority výrobních podniků do IT (2010)

Are we more cautious?

University of Hradec Králové & University of London:

90% of Czech as well as British companies agreed with the statement "Evaluating investment in ICT projects poses a number of problems that investing in other assets does not present"

75% of companies in both countries agreed with the statement that many **appraisal models** available to assess capital projects **are too theoretical** and difficult to apply in the real world.

Are we more cautious?

Main reasons for not-conducting formal evaluation:

- Project value and size

- Insufficient time and choice (urgency, replacement)

- Lack of formal procedures

- Identification of relevant benefits

- Quantification of intangible benefits

- Complex impact on the whole organization

Is IT different?

• There is almost a blind acceptance that IT investments are different, because IT is different

BUT

• IT projects compete for limited resources with alternative investment opportunities.

• Technology does not provide benefits of its own. It is the application of technology that produces real returns.

Who is in charge?

- Lack of accountability causes that managers often lay the blame on IT departments.

- Who is responsible for wasted money?

- Who owns IT projects?

- Is it IT department or management of the company?

  - *Technology per se*

  - *Technology closely linked to our business priorities*

The role of IT department

- The period when decisions were left to IT is over.

- It would be wrong to push them in the position where they just wait for orders.

- They must understand the problem that we need to solve in order to help us to select the appropriate technology.

- They should have a seat at the decision-making table.

- Decisions must get driven by business priorities.

The role of management

- Accountability for IT projects and their outcomes.
  - How much it will cost us? What are the benefits?
  - How the project will change/improve our position?
  - How many people will use it?
  - How it will influence/change other processes?
  - What are our competitors doing?
  - What are our clients expecting?
  - How shall we evaluate it? How shall we insure a return on our technology investment?

Universities and IT

- Universities are not typical business-like organizations.

- Technology is widely available to everyone else.

- Our strategy must focus on ways of its utilization.

- Many opportunities for being unique because of IT:
  - *IT professionals*
  - *Teachers education*
  - *IT in tourism and leisure management*
  - *IT in archeology*
  - *IT for record-officers*

Evaluation of IT investment

University of Hradec Králové

- Our strategy must focus on ways of its utilization
  - Strategic, analytical, and financial approaches
  - Benchmarking
  - Stakeholders involvement
    - *Our teachers*
    - *Our students*
    - *Our graduates*
    - *Our "business" partners (advisory boards)*

Universities and IT

- Vast variety of technology vs. focused approach

- **Strategic partners of UHK:**
  - Microsoft (cloud solutions, Office 365)
    - *Microsoft Innovation Centre*
  - VMware (Universal Desktop)
  - IBM (statistical and datamining software solutions)

Universities and IT

- Mistakes and problems at UHK:

  - Purchases of too special pieces of hardware

  - Poorly prepared introduction of Apple Macintosh computers

  - In-house development of study agenda IS

  - Co-existence of two different internal IS

  - Co-existence of central and local IT departments

  - Too fragmented research interests

Conclusions

• Information technology is different, but it does not mean that IT investments are automatically justified.

• Top management (not IT department) is responsible for technology budget approval and the sound and clear link between technology and our business objectives.

• Technology on its own cannot bring any major changes, the competitive advantage comes from its application.

• It is not an easy task to evaluate IT investment but we must not resign on it!

University of Hradec Králové