# Implementing Health IT:

## A Few Caveats and Recommendations

**Prof. Guy Paré, Ph.D.**
Canada Research Chair in Information Technology in Healthcare
HEC Montréal

3rd Annual Conference of the McGill University Health Center's Institute
for Strategic Analysis and Innovation
October 21, 2010

# A path ridden with risks and dangers

- A few examples of “failed” health IT projects in Québec over the past 20 years
  - SIDOCI (1990s)
    - One of the very first experiments in the world to develop an integrated electronic patient record system
    - Project abandoned after 10 years and 92 M$
  - Arc-en-ciel (early 2000s)
    - One of the first pilot deployments of a health information exchange (HIE) solution in Canada
    - System used as a stand-alone EPR system mainly in clinics (14 M$)
- Ongoing major and risky health IT projects in Québec and elsewhere
  - DSQ (Dossier Santé Québec)
  - National Health Services (NHS) in the United Kingdom

# Caveats

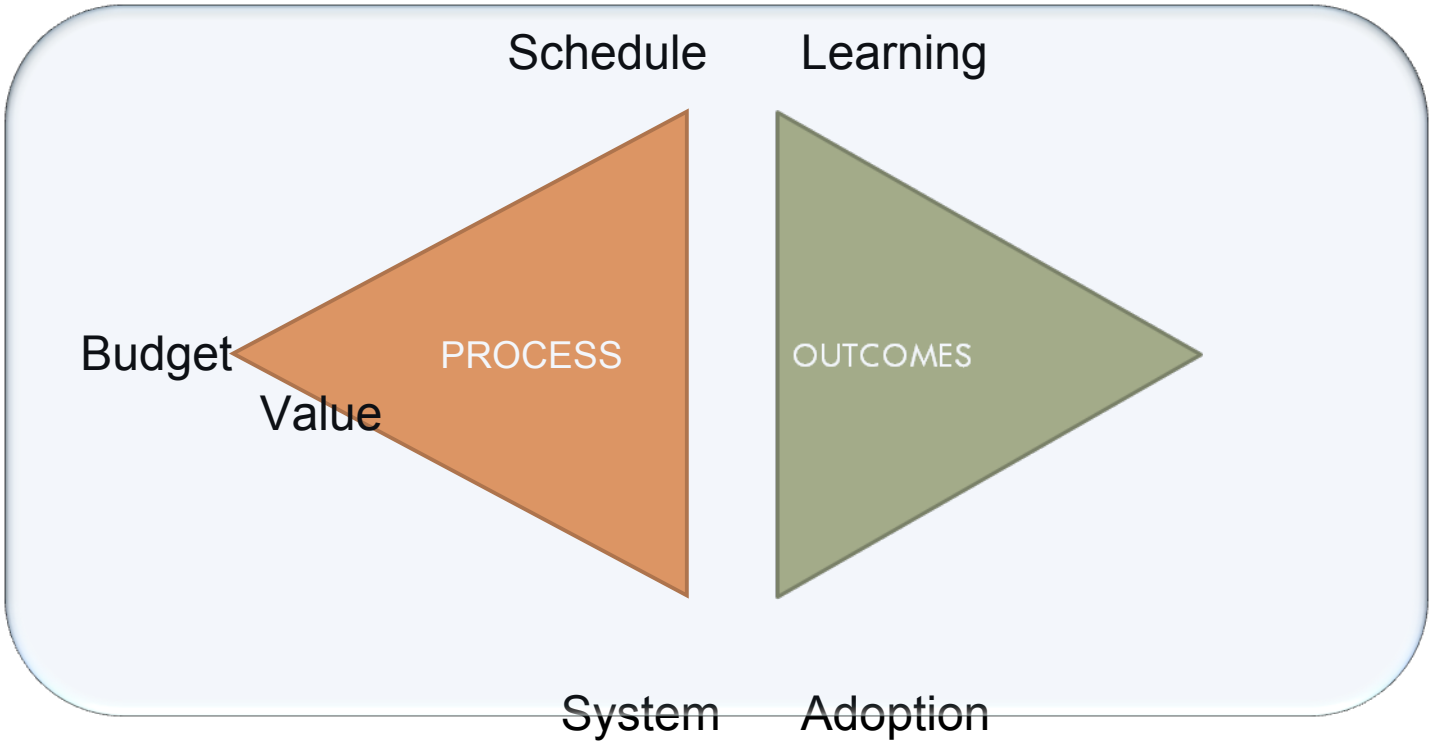
- Can we agree on what “success” really mean?
- How successful are “success factors”?

# 1. What does "success" mean?

- System was delivered within **budget**
- System was up and running on **time**
- System has been widely adopted and **used** by staff
- System has reduced administrative personnel and **costs**
- System has generated **productivity gains**
- System has led to a reduction in the **average blood pressure** of hypertensive patients

…

# Health IT success is multidimensional

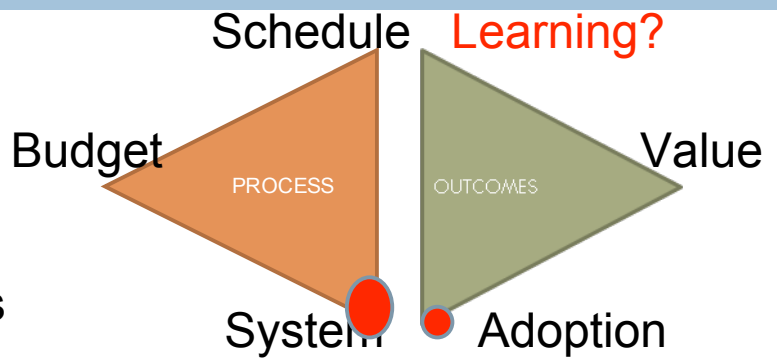



Source: Nelson (2005)

# The real question is *success for whom?*

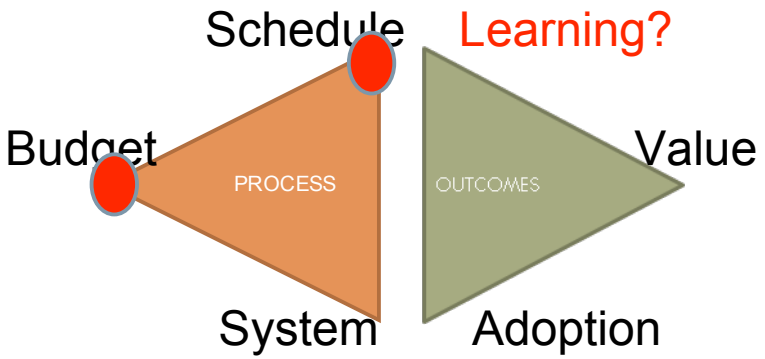
SYSTEM ANALYSIS AND DEVELOPMENT

IT staff, system providers, system integrators



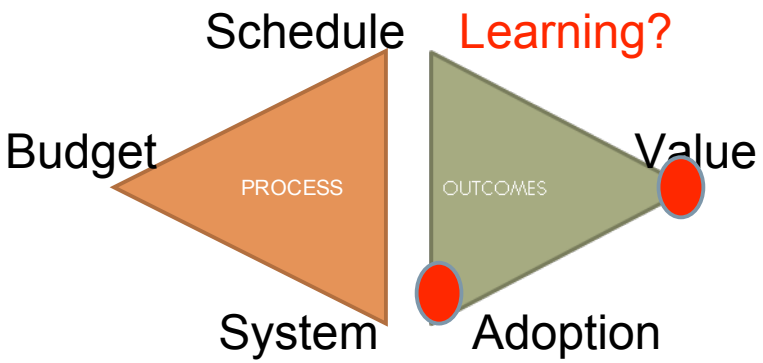

PROJECT MANAGEMENT

IT project manager, top-management




SYSTEM IMPLEMENTATION / CHANGE MANAGEMENT

Project champion, targeted users



# Recommendations

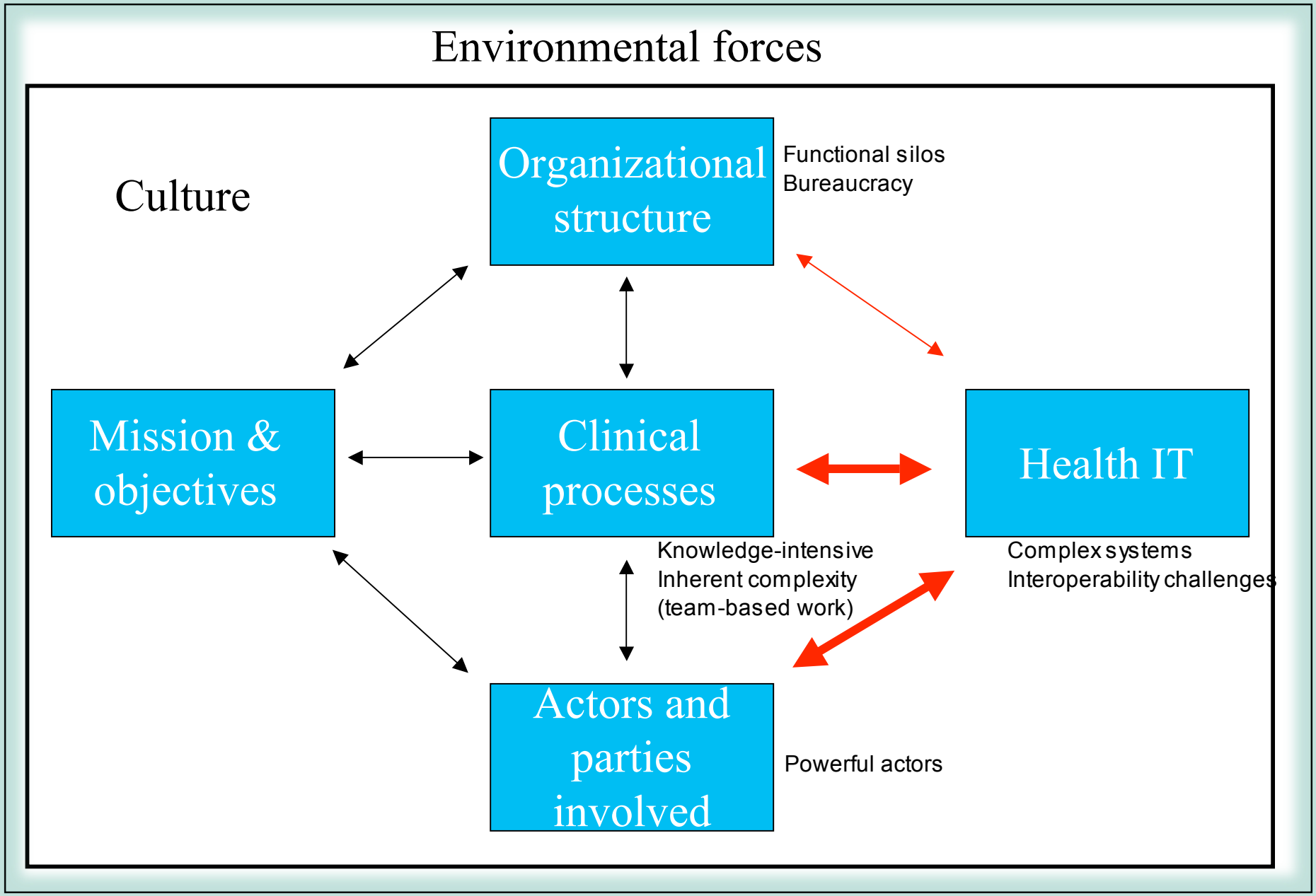
- Managing towards a successful health IT implementation implies careful attention to what success criteria are used and whether the different stakeholders involved in the implementation process share these goals
  - To do so, a detailed and rigorous business case is required. The BC must distinguish between overall project objectives and specific benefits
  - Conflicting views about project objectives must be reconciled early in the process
  - Managing stakeholders' expectations early on is also key

# 2. How successful are “success factors”?

Is there a **definite list** of key success factors?

Is there a **recipe** for health IT project success?

# Why are health IT implementation projects so **unpredictable?**

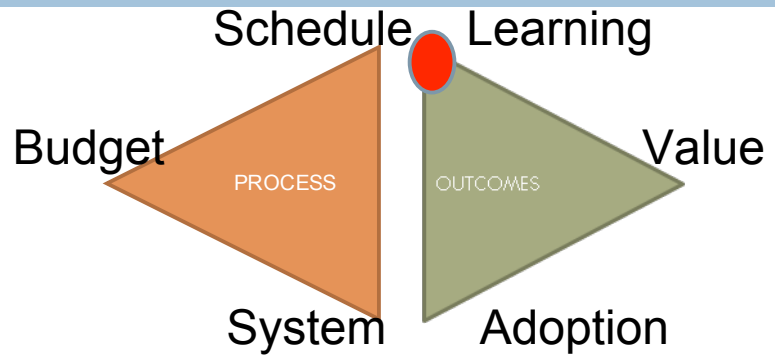


# Recommendations

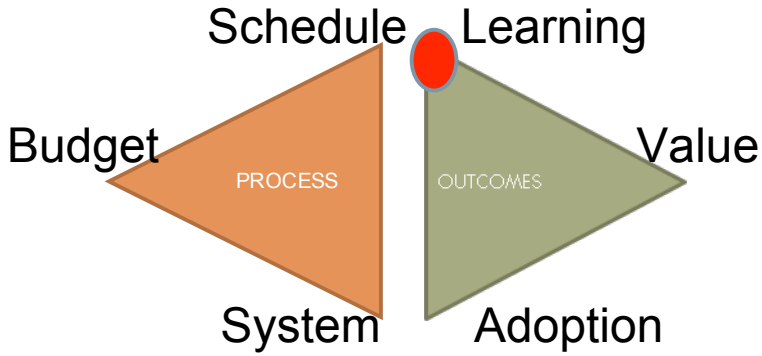
- Overlooking the fact that the implementation of health IT systems fundamentally affects the clinical processes, organizational structures, as well as staff responsibilities and competencies, is one core reason for implementation failure
  - Too often we hear IS professionals and project leaders speaking about « rolling out » a system or planning its « diffusion ». This underestimates what health IT implementation is all about, that is, a sociotechnical change, not a mere technical project
  - It is imperative to see and manage health IT projects as organizational development initiatives since we draw upon IT to generate new organizational forms of delivering care

# *Sine qua non* for success: learning

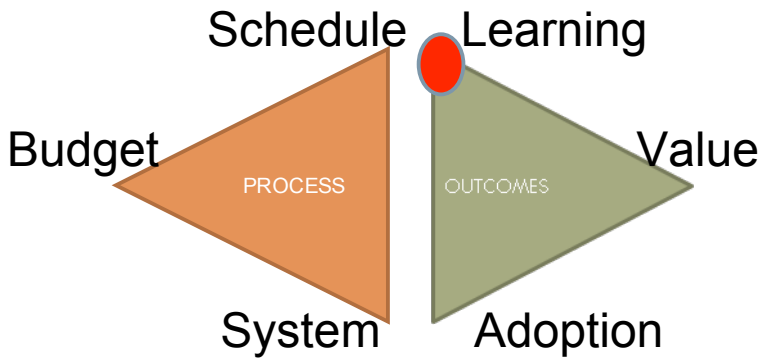
SYSTEM ANALYSIS AND DEVELOPMENT




PROJECT MANAGEMENT




SYSTEM IMPLEMENTATION / CHANGE MANAGEMENT



# In the end, since every IT project is unique…

*"What is a successful implementation can only be discovered in the very **process of doing** the implementation"* (Berg, 2001)