UiO : University of Oslo

IN5431 – Jan 19 2025

IT and management – introduction



Agenda

1. Introduction
2. Course outline
3. The course assignment



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Introduction

Why do we need management – and leadership?



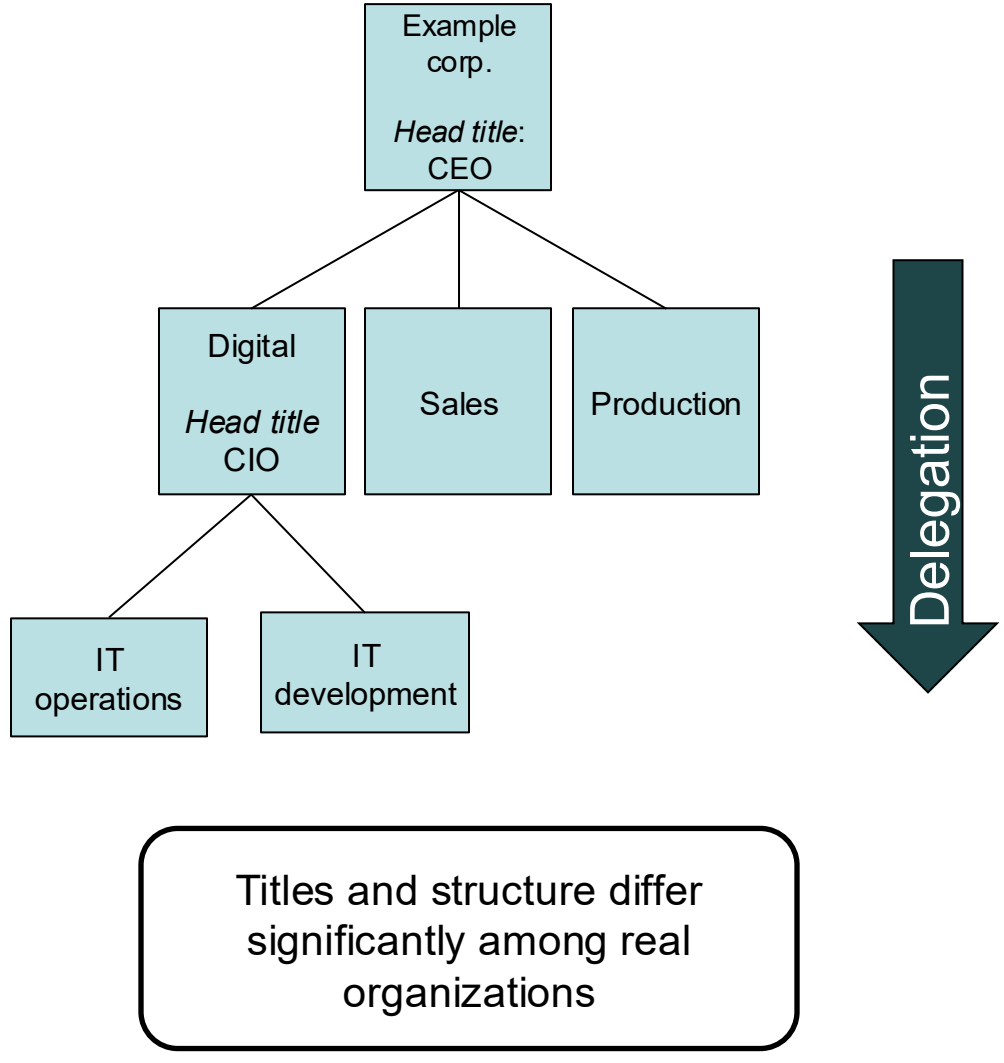
Structure and delegation

- Most organizations divide responsibility in a structure of units – the organizational chart.
- Units need *representation*: on behalf of a given unit someone is delegated be allowed to make commitments on behalf of the unit, and be held accountable for it.

- Example:

  In the example organization to the right, the CIO commits, as head of the Digital division, to take care of IT development on behalf of the entire organization.

  The CIO delegates this to the head of IT development – who uses her staff and budget to deliver on the commitment.



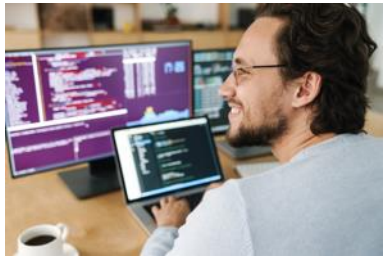
Titles and structure differ significantly among real organizations

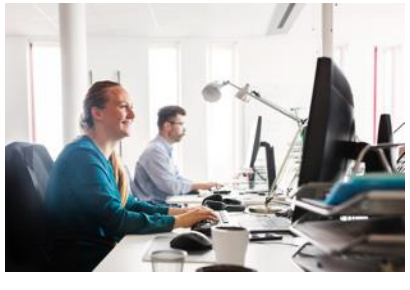
Prioritization

- In a typical organization, there is no shortage of good suggestions for improvement – both from internal and external stakeholders
- An important part of the responsibility of the executives of an organization is to:
  - Understand the current situation: how is the organization fit for current and forthcoming challenges?
  - Categorize and analyze possible options to improve
  - Prioritize these options and then initialize concrete initiatives to achieve the desired results

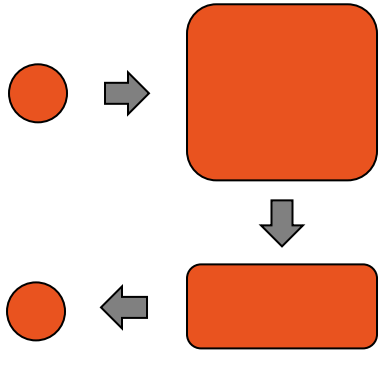


«How does the interplay between people, processes and technology affect the adoption and application of IT in an organization?»





People



Processes



Technology



THE SOFT SIDE OF software

1 of 7 TEXT ONLY

Views from the Top

TRY TO SEE THINGS FROM A MANAGER'S PERSPECTIVE

KATE MATSUDAIRA

I can remember the very first software project I worked on. Back then, most programming was for shrink-wrapped software that would spend years in development (since you released only every few years and had long dev cycles because patching bugs was so costly).

For two years I worked on a project, and when it finally shipped, I can remember our VP talking about the launch. I had never had much exposure to him (I was new, a grad straight out of school), but I remember his speech about the launch clearly. He talked about some of the key features and mentioned a few of the people involved.

At the time, I had the impression he was out of touch; the people he recognized weren't the ones who had contributed the most code, and the features he called out were important but not the ones that had been the major engineering challenges. I can remember thinking, *"How can he not know what is going on in his team?"*.

Of course, now, almost 20 years later, my perspective is quite different.

I have had the opportunity to manage very large teams, including some even

> …leading a group of people effectively is dependent on so many factors: the team culture, the organizational goals, and, of course, the individual personalities. What worked really well for one person in one environment doesn't always translate to a new place. That is why adaptability and flexibility are important traits

Matsudaira K. Views from the Top. *ACM queue*. 2017;15(5):5–11



«Be generous and tolerant – more generous and tolerant than you feel comfortable with"

«Dare to take a stance»

«Try to stay calm. It is a job, and you do the best you can»

Karen Dolva, CEO, No Isolation



«Be stubborn on the vision but flexible on detail"

«Failures need to become a badge of honor. If you learn from your failures, you will become better in the future.»

«The proposal for anything new needs to be meticulously and collaboratively planned by teams. »

Werner Vogels, CTO, Amazon

Sources:
https://podcasts.apple.com/in/podcast/karen-dolva-no-isolation/id1046838131?i=1000473942872 (in Norwegian)
https://www.obforum.com/article/advice-from-amazons-cto-experiment-more-measure-relentlessly-and-learn

Learning objectives

- **Knowledge objectives**:

  Know about of typical challenges related to IT management and governance, e.g. project management, change management, and enterprise architecture in organizations. And what are typical tools to meet these challenges?

  Be aware of the specific challenges of inter-organizational and national IT governance.

- **General competence**: Be able to reason about how a given organization's processes, systems and structure may affect its efficiency, its ability to change, and to what extent it is prepared for innovation.

IT executives

- An important goal is to give you a better understanding of what typical Norwegian IT executive works with. To prepare you both to serve in the role yourselves, to work for and with IT executives – or to study them.
- Kotter clearly distinguishes between management and leadership (see Kotter, 2000)
- This distinction is, very simplified
  - Leadership focuses on change, and on aligning people
  - Management focuses on planning, and on organization
- In the everyday life of a Norwegian IT executive, these should be regarded as *modi*. Most IT executives need to combine these modi.

Kotter. (2000). What Leaders Really Do. The Bottom Line, 13(1), 53. https://doi.org/10.1108/bl.2000.17013aae.001

Course outline

Strategy and strategic context

Management tools and frameworks – «the CIO toolkit»

Designed for digital

The CIO role

- The most valuable managerial IT capability should be embodied in the role of the CIO, commonly the highest-ranked IT executive in an organization.
- Although CIOs' exact roles and responsibilities may vary among firms and with the maturity of the organization and may range from assembling IT capabilities to preserving and advancing the vitality of IT activity, their core responsibility is to manage the IT function and generate business value from it
- With the rise of digital transformation, the CIO role in many firms has become even more strategic, able to shape the firm's trajectory and initiate change within it.

Bendig et al., *When and why technology leadership enters the C-suite: An antecedents perspective on CIO presence*, The Journal of Strategic Information Systems, Volume 31, Issue 1, 2022

How do companies Transform for Digital?

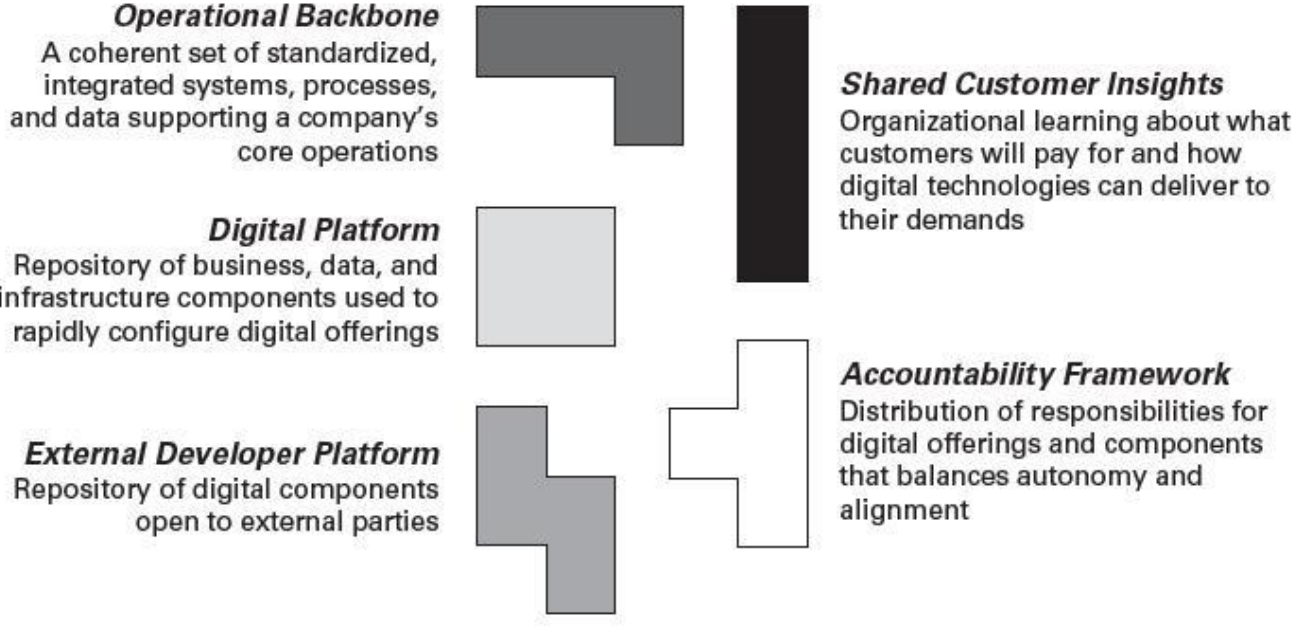


Figure 1.1
Five building blocks for a digital transformation

Group sessions and the course assignment

Group sessions in general

- Tips for deliverables
- Presenting deliverables
- Solving cases related to lectures (from the same week)
- Reflect and discuss important concepts

Group sessions starting 28/1

- Possibility to create groups – get to know the other students
- More information about case
  - Examples from last year
  - What is a good case?
  - https://mitsloan.mit.edu/teaching-resources-library/netflix-goes-to-bollywood

Start thinking about:

- Create groups, 3-4 pr. group
- Think about if you have a case that can be interesting
  - Deliverables is about IT management in one specific organization
- Thoroughly read through both the deliverable requirements
- Reach out to relevant organizations
  - Make appointments with the organization – when can they meet for interviews, etc.?

Submit the group to us (before 30th January)

- https://forms.office.com/e/6KmwQxusz3
- Only one from each group (Do this together or inform the rest of the group members when you submit)
- Include full name and username
- If you have found a case, include organization name as well



Grading

- Home exam = 40%
  - Group deliverables form the foundation for the home exam.
- Written individual exam 60%
- The final grade is a overall assessment

- In groups: Deliverable 1 and 2
- Individual: home exam + written exam

Assignment dates

Assigment	Hand-out	Hand-in	Presentation
Deliverable 1	19/01	01/03	Report
Deliverable 2	19/01	15/04	Report
Deliverable 3	20/5	22/05	**Home exam**
Written exam	01/06	01/06	**Multiple-choice**