



Design of an innovative approach based on Service Learning for Information Technology Governance Teaching

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Outline

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1. Introduction



Aims

The aim of this paper is to present an Information Technology (IT) Governance subject design that is shared and complemented from two different Master Degrees in Informatics, one developed in the University of Alicante and other one developed in the University of Salamanca

Both proposals try to involve the students in the subject principles using a learning-by-doing approach through a service learning philosophy

Service learning

- Service learning is an experiential education approach that is premised in reciprocal learning (Sigmon, 1979)
- This definition was later precise through a typology that compares different programs that combine service and learning, thus this definition broadened the previous idea of reciprocal learning to include the important notion that the service learning only occurs when there is a balance between learning goals and service outcomes
- Service learning programs are distinguished from other approaches to experiential education by their intention to equally benefit the provider and the recipient of the service as well as to ensure equal focus on both the service being provided and the learning that is occurring (Sigmon, 1994)





Information Technology Governance

IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategies and objectives

(IT Governance Institute, 2003)

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Leadership Qualities

2. Context of the subjects



University of Alicante (Spain)

- In 2012–2013 academic course, the subject entitled *Dirección Estratégica de las Tecnologías de la Información* (Strategic Management of the Information Technologies) started within the Informatics Engineering Master Degree
- This is a mandatory subject of 6 ECTS (European Credit Transfer System), that is mean 60 hours of face-to-face lectures and 90 hours of autonomous student's workload. It is organized in 4 hours of lectures per week in one semester
- During the two firsts editions this subject was scheduled in the second year of the Master Degree, but taken into account students' recommendations, the subject was changed to the beginning of the Master Degree in the 2014–2015 academic course, i.e., in the first semester of the Master Degree

University of Salamanca (Spain)

- In 2014–2015 academic course, the subject entitled *Gobierno de las Tecnologías de la Información* (Information Technologies Governance) started within the Informatics Engineering Master Degree
- This is a mandatory subject of 6 ECTS (European Credit Transfer System), that is mean 60 hours of face-to-face lectures and 90 hours of autonomous student's workload. It is organized in 4 hours of lectures per week in one semester. It is scheduled in the second semester of the Master Degree

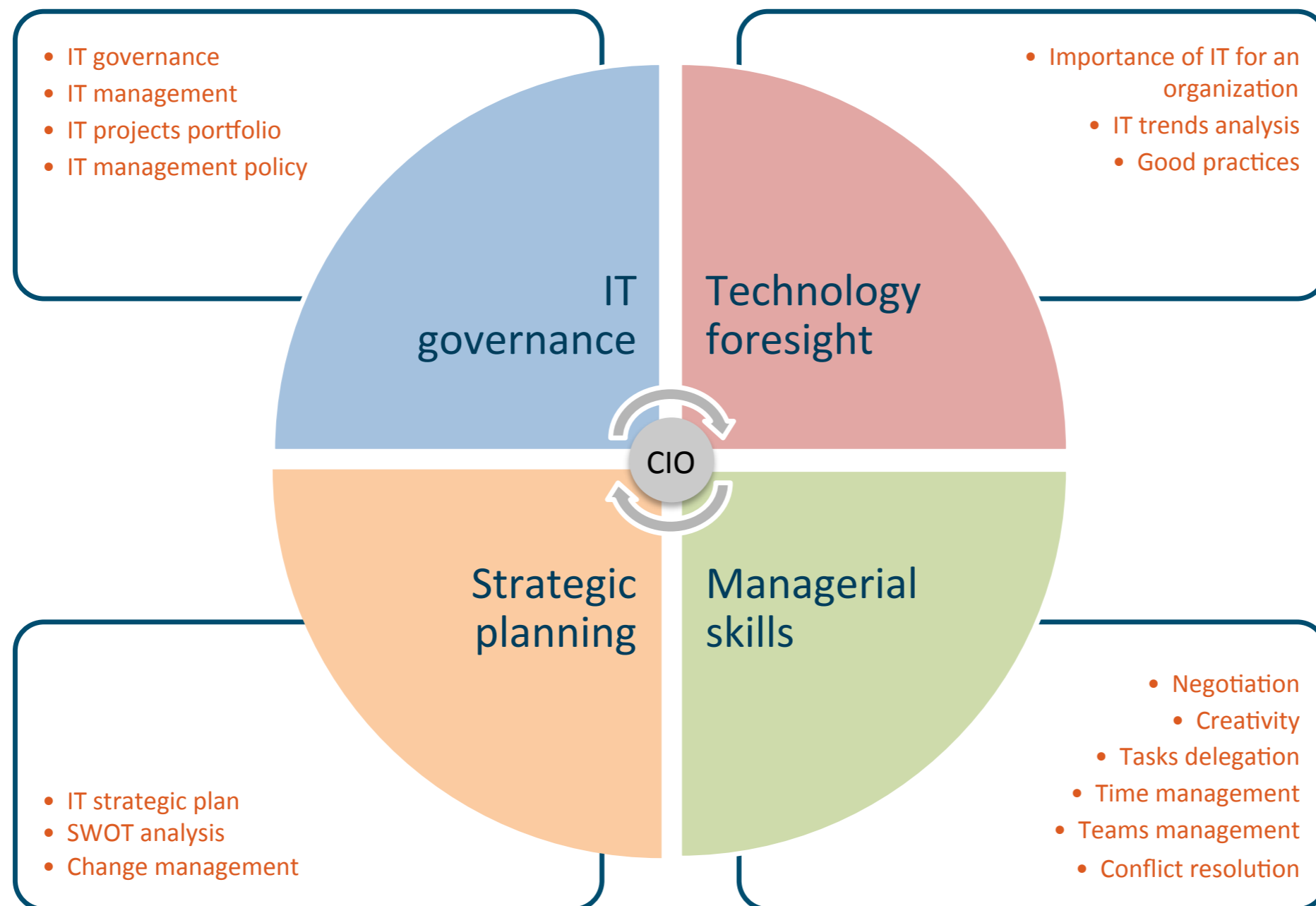
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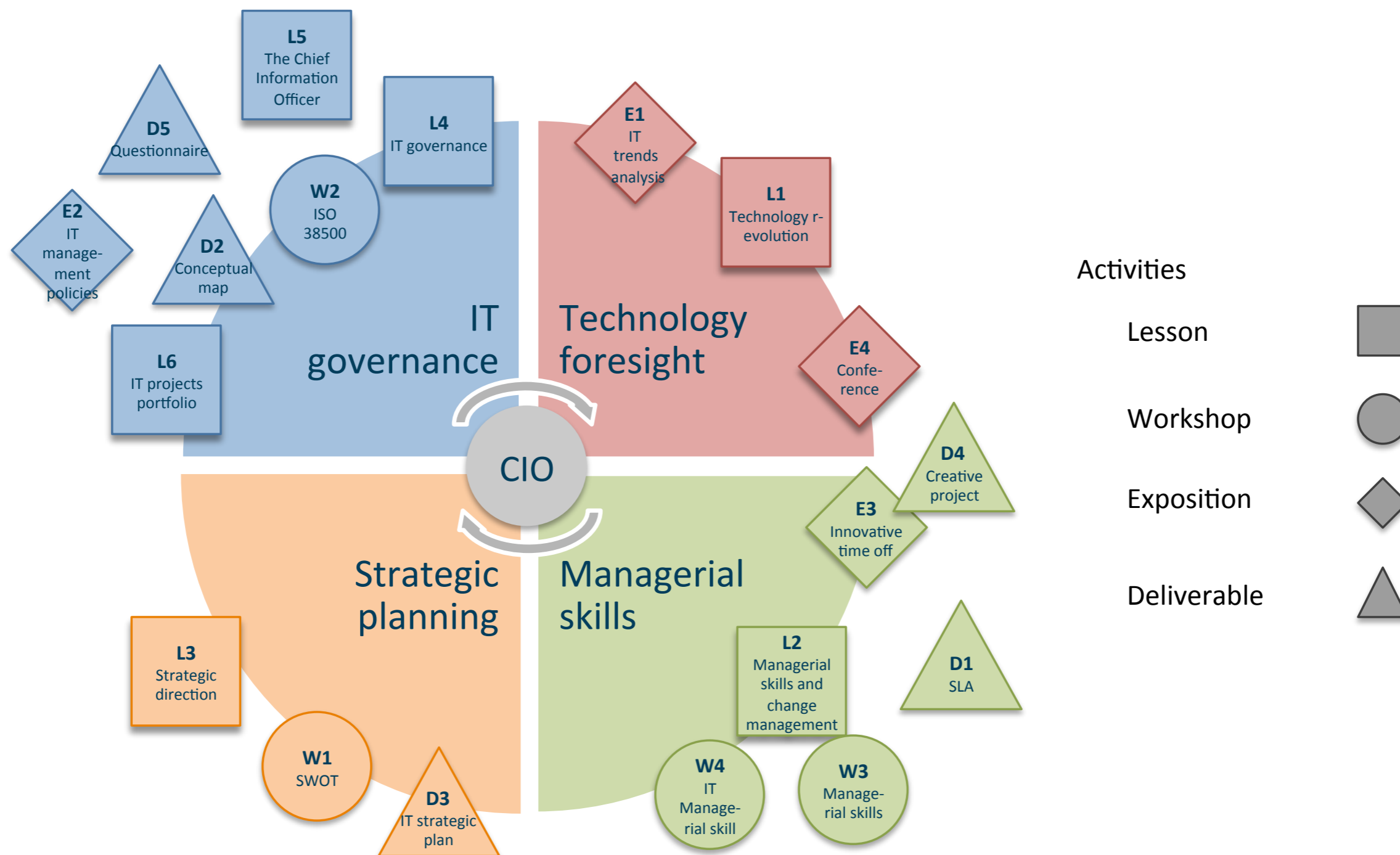
3. Shared instructional design principles



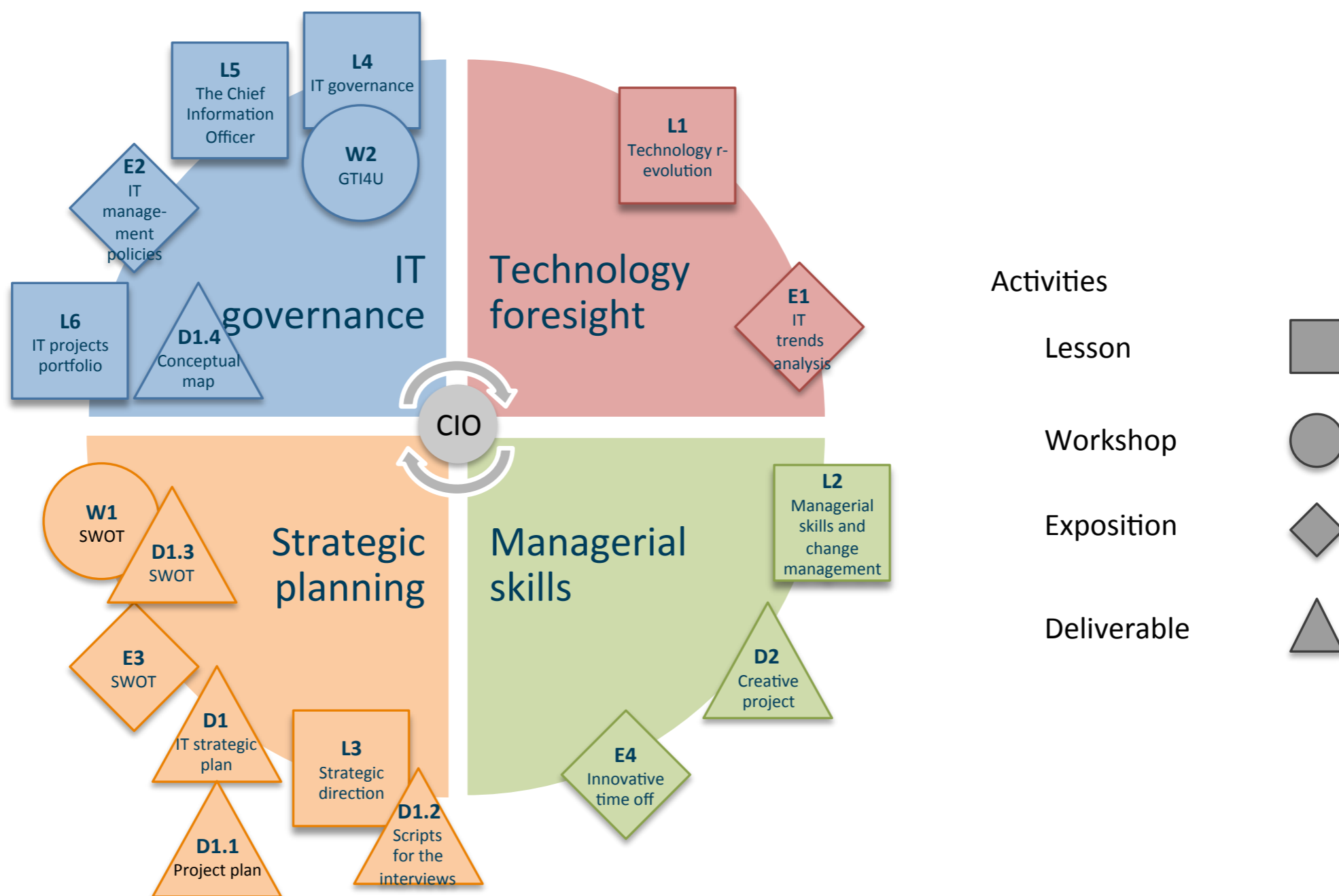
Subject structure



Subject structure in the University of Alicante



Subject structure in the University of Salamanca





Evaluation criteria in the University of Alicante

- Fundamental concepts questionnaire and conceptual map, individual evaluation (15%)
- IT strategic plan, group evaluation (40%)
- Managerial skills, workshop participation, continuous evaluation (20%)
- Good practices and technological trends, conference assistance (10%)
- Creative project presentation, individual evaluation (15%)

Evaluation criteria in the University of Salamanca

- IT strategic plan, group evaluation (85%)

- Performing of the work (40%)
 - Continuous evaluation, the working sessions minutes (15%)
 - Reasoned evaluation by peers, the project leaders evaluate the other participants, the participants evaluate the project leaders
 - Teacher's meta-evaluation (5%)
- The process (30%), made by the teacher
- The product (30%), the weighted average for every attendant to the final plan strategic presentation

- Creative project presentation, individual evaluation (15%)

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4. Service learning approach



Service learning approach

- It is achieved throughout the development of an IT strategic plan for a real company or department
- This strategic plan is the unifying thread for the subject development
- It is the framework in which the theoretical concepts, the practice, the managerial skills and the transversal skills are going to fit in
- At the end, the outcome must be a real product that will be useful for a real company or department, which is the value and the sense of the service learning approach

Service learning approach

- The students are organized as a project team, composed by a direction dome, a secretary and the rest of the workers
- The sessions devoted to work in the strategic plan are organized like a real company
- The students are treated like students, but like professionals that have to fulfill the assigned tasks. These sessions are not performed in the typical classroom, but in a meeting room
- All the sessions for the strategic plan development are scheduled before the subject starts
- The first of these sessions is devoted for a presentation of the company in which the IT strategic plan will be developed, and in the final session the strategic plan will be presented to be managerial staff of the company, in junction with the CIO of the company and the IT director at least

Main tasks for the development of the strategic plan

- Analyzing of other strategic plans related to the one to develop
- Making the scripts for the interviews
- Making the interviews
- Establishing the horizon
- Elaborating the mission and the values of the company
- Identifying the involved groups and the key factors
- Determining the strategic aims
- SWOT
- Identifying the scenarios and formulating the vision per aim
- Identifying the goals per aim
- Defining the shared vision
- Writing the strategic plan
- Making an executive summary and a conceptual map of the strategic plan
- Making the presentation for the managerial audience
- Presenting the strategic plan to the managerial audience



5. Conclusions



Conclusions

- The structure of two different subjects in two different universities regarding IT Governance in the scope of a Master Degree in Informatics Engineering has been presented
- Teachers of both subjects share the idea that they use techniques and tools that are within the context of the subject to design and put in practice in their teaching labor
- This is a “walk the talk” approach, because we use in our subjects the same strategies and tools for an effective direction and we put in practice the same managerial skills than an IT managerial or IT director
- We do not want to make a theoretical approach or go deeper inside the standards, as the ISO/IEC 38500:2008 among others
- We look for the students may discover their first approach to IT governance from a very practical and pragmatic perspective
- To do that, we have selected a service learning orientation, this way we use a project-based learning approach to drive the subject, but this project is based on a real company that is interested in receiving a final product, the IT strategic plan, to reflect and change its own IT approach



6. References



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