

It is valuable to generate an executive document that shows a portfolio of IT proposals for the company under study, where the student applies the knowledge and skills acquired in class and the experience of their professional performance during the Software Engineer Educational Program. The main purpose is that students know the implications related to the implementation of a solution that strategically poses the management of IT in an organization.

This document presents the guidelines for the development of the final project of the Information Technology for Business (ITB) course. This guide includes the requirements, the expected content, as well as the information regarding the presentation format.

Objective:

Present a formal document that shows the company's strategic technology plan, according to the knowledge acquired during the information technology for business course and ISW educational program.

Specific objectives:

- Link the business vision and the competitive strategy with the technology vision in order to achieve strategic improvements in the organization.
- Identify the problem, need, or opportunity of a technological proposal in a hypothetical company.
- Analyze a company according to its value chain and its primary and support activities.
- Identify the scope of different information technologies in the company you are working.
- Generate value proposals based on information technologies to contribute to the achievement of the vision, mission, and objectives of the hypothetical company under study.
- Define in a formal document a strategic plan project based on information technology.

Guidelines and Requirements:

In a creative way, develop the final project considering that you can advise an investor that is coming to Ciudad Obregón with the desire to invest in various businesses. The business that he wants to carry out is (**the one that has been assigned to your team**). The entrepreneur wants to develop new, innovative businesses, nothing like what already exists. Use the most appropriate technologies to serve their potential customers innovatively and with modern business models.

Give him 3 technological proposals for his business to become that differentiating business. The investor does not have budget restrictions.

The investor wants at least one of his technological proposals to use the following technology (**assigned**). For the other two technologies, the teams must propose the ones that you consider the best for the business.

Team #	Business	Tech 1	Tech 2	Tech 3
1	Fuel station	Blockchain		
2	Gym	Smart sensors		
3	Home stay for seniors	Smart sensors		
4	Sports school (soccer, baseball, basketball)	Artificial reality		
5	Restaurant	3D printing		
6	Carwash	Robotics		
7	Grocery stores	Digital twins		
8	Pet care	Green IT		
9	Sports Bar or Bar	Augmented reality		
10	Garden center	Digital twins		
11	High School	Internet of things		
12	Event organization services	Artificial Intelligence		
13	Company to buy and sell items for the aquaculture industry	Autonomous Vehicles		

- Make research, via the Internet, for similar businesses, and go and visit similar businesses and gather data to work with the information for the next elements
 - Kind of business
 - Brief history, main customers, products, competition, processes
 - Business evolution for the last 10 years
 - Problematics in the use of the technology
 - Describe the services provided by this type of company.
- The document must contain hypothetical data from the case you are working with, and adequate characteristics to develop and propose an information technology plan.
- Identify and describe a reference model that serves as a context to understand the future operation of the company.
- The work must be done in teams.
- The proposal must consider the external and competitive environment of the company under study in an ideal way.
- You must work to develop the strategic profile (vision, mission, competitive advantage, competitive strategy, business processes, value chain, etc.) which must be proposed and clearly described in the project.
- Consider the following questions:
 1. What characteristics would the business have to generate competitive advantages that differentiate it from the competition and meet business challenges?
 2. What proposal would you make using the assigned information technologies?
 3. What would be the other two proposals that you would make to the entrepreneur using the other available technologies?
 4. What would be the competitive advantages that must be achieved in each of the proposals?

Document structure

Cover sheet

- It must contain the logo of the institution
- Name of the project “Technological proposal for the company Company Name”
- The name of the subject
- The teacher's name
- Name of the team members
- Date

Table of contents

- Use the topics of the Structure of the Strategic Planning document
- Use the numbering “Multilevel Scheme” (1. 1.1 1.1.1 etc.)
- Use Arabic numerals for pagination
- Use tabs aligned to the right filled with dots, for example:

Introduction 5

1. Introduction.

- The most important things are readability and clarity.
- Present and describe the objective.
- Contents of the Introduction will include
 - Company Name.
 - Type of business.
 - For the background (Brief history, main customers, products, competition, and business evolution) you must use your creativity to develop this part.
 - Analysis of strengths, weaknesses, threats, and opportunities, you must research for information about the commercial area of the business you are working with, and develop the SWOT
 - Regional context, you must research for information about the commercial area of the business you are working with.
- Length: not exceed 2 pages.

2. Strategic profile of the company.

- Statement of mission and vision.
- You must propose in detail at **least three strategic** lines or priorities of the company aligned with the business strategy, the first one must be the one assigned to the business.
- Length: not exceed 2 pages.

3. Business processes.

- You should research via the Internet a similar business as the one assigned to your team, and describe the services provided by this type of company.
- Create the value chain of the company.
- Describe the primary and support processes of the company. That is, describe in a table the processes included in the value chain. In this description include the following:
 - Name of the process.
 - Type of process (primary / support).
 - Description (what and how the process is done, what is the output or product).
 - Justification (why it is considered a strategic process for the business).
 - Describe the functional areas of the company that are involved in the activities of the process.

4. Proposals for process improvement using technology.

- Identify processes with the possibility of improvement that has an impact on the company's value chain and they support the competitive strategy. Justify your answer.
- A minimum of three technological proposals should be included in the project.
- The technological proposals must be based on three high-priority strategic processes.
- Complete a *technical sheet* for each technological proposal based on the previous elements of the document
- Length: 3 project formats (include images if necessary).

5. IT Strategic Planning.

- Design an implementation plan for the three proposed IT projects
- Each implementation plan must contain a line in time, along with an estimated investment.

6. Conclusions.

- Write an analysis about the expected business benefits such as the impact on profits, increase in sales, improvement in service, and improvement of processes, among others. Consider that this analysis will be directed to the business owner.
- Length: Minimum one page.

Video Specifications

1. All the members of the team, **MUST** participate, and show themselves to the camera.
2. A “picture-in-picture” format must be used, to show the digital presentation (PowerPoint, Google Presentation, etc.) and the speaker in a box within it.
3. You must take care of the clarity and quality of the image, sound, and text.
4. The text should be consistent with what is being exposed, take care not to be reading the text, and remember that it is only a guide in the presentation.
5. You must include a summary at the end of the work.
6. Each of the team members must give your conclusion regarding the work done.
7. You must host your video on a video-sharing site (like YouTube, Vimeo, Dailymotion, etc)
8. Publish the video's URL in this activity

7. Annex

A) (Mandatory) Develop a chart showing the relationship between:

- *Business Challenges (What is the BUSINESS CHALLENGE (PROBLEM) for the company?)*
- *Management (What DECISIONS should management make?)*
- *Organization (What RESOURCES (material and human) did the company have to achieve its objectives?)*
- *Technology (What INFORMATION TECHNOLOGY did the company use for the solution?)*
- *Information System (What FUNCTIONS do the information systems?)*
- *Business Solution (What BENEFITS has the company achieved?)*

B) (optional) Include specifications and / or documents that justify the description of some element in the development of the project.

C) (optional) Support documents, images or tables.