

SWOT Analysis to Support the Development of an E-Learning Strategy in HEI

A Step-by-step Guide

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MIELES 

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Step-by-Step Guide

Conducting an e-learning SWOT Analysis in Higher Education Institutions

Introduction

The SWOT analysis is a tool that can help Higher Education Institutions' (HEI) identify their strengths, weaknesses, opportunities, and threats. To prepare this guide we reviewed the literature and examined practices in the area of e-learning. We also draw on our own work at the non-profit organization, the Center for the Advancement on Research and Development in Educational Technology, where we designed and implemented more than 100 e-learning related projects around the world (Vrasidas, 2002; Vrasidas & Glass, 2002, 2004, 2005; Vrasidas, Glass, & Zembylas, 2009; Vrasidas, 2016, 2017). The templates and tools presented were drawn from this work and were empirically validated over the years and adapted from Vrasidas (2017) policy and strategy for e-learning toolkit.

SWOT Analysis

Figure 1 below illustrates SWOT values and categorize them into pairs with regards to internal and external factors or known as positive and negative.

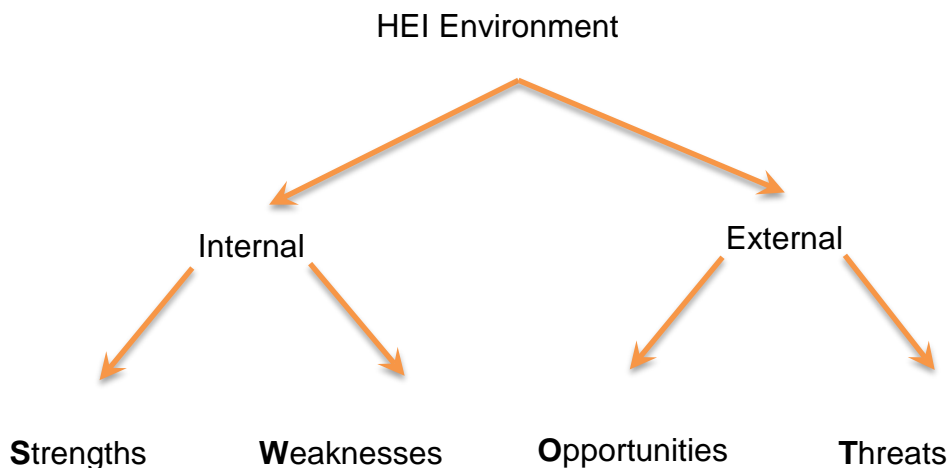


Figure 1. Internal and External HEI's environmental scanning through SWOT analysis

The internal factors concern an institution’s internal environment (strengths and weaknesses) whereas the opportunities and threats consider factors that come to influence out of the university’s borders and serve as the external environmental factors that will control the internal process of an institution. Table 1 shows the interconnection of SWOT items and how the outcomes of the summary can be interpreted and discussed to discover new opportunities and to manage and eliminate threats.

Table 1. SWOT Analysis Grid

	POSITIVE (+)	NEGATIVE (-)
INTERNAL	Strengths	Weaknesses
EXTERNAL	Opportunities	Threats

Definition of SWOT Components

Strengths

The Strengths category includes internal factors that are likely to have a positive effect on achieving the institution’s objective. They capture the positive aspects internal to each institution that add value or offer a competitive advantage. Strengths include the positive attributes of the people involved in the institution, including their knowledge, research, backgrounds, education, credentials, contacts, reputations, or the skills they bring to the organization. Strengths also include tangible assets such as available infrastructure, equipment, funds, established academic and administrative staff, students, and other valuable resources within the institution. Strengths describe the positive attributes, values, tangible and intangible attributes, internal to each institution or institution. They can be evaluated by area such as mission, vision, goals and objectives, institutional structure and more.

Examples of strengths are:

- Partnerships with other institutions
- Faculty and staff support the mission and vision of the institution
- Quality Academic Programs and Student Services
- Dedicated and Highly-skilled faculty and staff
- Gender equality
- Accessibility
- Positive reputation
- Proactive student support
- Positive climate

- Affordability
- Sustainability initiatives/ practices
- Technological infrastructure
- Research groups recognised internationally

(Khaing, Win & Aung, 2016, Martinho et al., 2016; Vrasidas, 2017)

Weaknesses

The Weaknesses category covers those factors that are within the institution's control and detract from its ability to obtain or maintain a competitive edge. These factors are most likely to have a negative effect on achieving the institution's objective. Institution weaknesses might include:

- Aging facilities
- Lack of financial resources
- Limited resources for faculty and staff professional development
- Lack of access to skills or technology
- Insufficient collaboration and communication across the institution
- Weak ecosystem for research and innovation
- Poor Internet connectivity and speed
- Low teaching quality
- Low levels of industry connectivity
- Pedagogic and curriculum issues
- Lack of funding
- Slow adaptation to market demands
- Wicked application/ registration process
- Access to counseling on broader issues
- Lack of skills and experience among faculty members to use e-learning

(Smith 2006, Khaing; Vrasidas, 2017; Win & Aung, 2016)

Opportunities

The Opportunities category entails those external to the institution factors that most probably will bring a positive effect on achieving or exceeding the institution's objective(s), or goal(s) not previously considered. Reflecting on the opportunities assess the external attractive factors that represent the reason for each institution to exist and prosper. Opportunities may be the result of education and research growth, societal trends, technological advances, resolution of problems associated with current situations, or the ability to offer greater value that will create a demand for the institution's services.

Threats

Threats category covers external factors and conditions that are expected to have a negative effect on achieving the institution's objective(s), or making the objective redundant or unachievable. Threats include factors beyond humans' control that could place the institution's strategy, or the sustainability of the institution itself, at risk. These

are also external and people have no control over them, but may benefit by having contingency plans to address them if they should occur. A threat is a challenge created by an unfavorable trend or development (e.g. economic crisis, conflict, etc.).

Useful Tips and Questions to Conduct a SWOT Analysis

Tips

To do a SWOT analysis that is both effective and meaningful requires time and effort by a team. Some useful tips, before you begin are described below:

- Bring stakeholders together to establish a team dynamic
- Allow enough time for thorough discussion and reflection
- Start with weaknesses and then move to strengths
- Refer to institution's weaknesses as institutional "concerns"
- Classify threats according to their "seriousness" and "probability of occurrence"

SWOT category related questions are listed below.

Strengths can be obtained by asking questions such as:

- What do you do well? What do you do better than anyone else?
- What are your core quality programs of study?
- Which programs of study are likely to have more success if delivered via blended learning or e-learning?
- What advantages does your institution have?
- What do people in your institution see as your strengths?
- What unique ICT resources and infrastructure can you draw upon that others can't?
- What is your institution's greatest accomplishment?
- What e-learning and infrastructure resources do you have?
- What are our competitive advantages?
- What are our core competencies?

Weaknesses can be obtained by asking questions such as:

- What could you improve?
- Which areas can be improved?
- What should you avoid?
- What are people in your institution likely to see as weaknesses?
- What factors lose your reputation?
- What areas are we avoiding?
- Where do we lack resources?
- What are we doing poorly?

Threats can be found by asking questions such as:

- What obstacles do you face?
- What are your competitors doing?
- Are quality standards or specifications for your products or services changing?
- Is changing technology threatening your institution?
- Do you have high percentage of dropouts or any other problems/issues/concerns?
- Could any of your weaknesses seriously threaten your institution?
- What situations might threaten your efforts?

Opportunities can be found by asking questions such as:

- What good opportunities can you spot?
- What interesting trends are you aware of?
- Does it represent an ongoing opportunity, or is it a window of opportunity? How critical is your timing?
- New technologies?
- Niches that competitors are missing?
- New needs of students/faculty/staff?
- What opportunities exist in the area, or in the environment, from which you hope to benefit?
- Which are the unexploited opportunities for e-learning at your University?
- Which challenges exist in your University for which e-learning is a potential solution?

Implementation of a SWOT Analysis

The primary purpose of the SWOT analysis is to identify and assign each significant factor, positive and negative, to one of the four categories.

Therefore, before tackling the technology issues, an overall analysis of the institutional structure needs to be examined following a four-step approach as described below:

a. Collect general information of the institution

- Facilities and spaces
- Academic policies
- Strategic Objectives
- Overall vision and mission of the institution
- Strategy of the institution
- Summary and attach full document if there (this is crucial since the involved parties and consortium will align the overall strategy with the e-learning strategy to be developed in WP2).

- b. Examine the current status of ICT Infrastructure
 - Internet
 - Computers and Networks
 - Technology resources and equipment
- c. Investigate digital literacy level of Faculty/ Staff/ and Students
 - Professional development on ICT
 - Staff and Faculty training on ICT
 - Students workshops on the use of ICT
- d. Analyse the current state of online learning by asking key questions such as:
 - How can elearning help my institution achieve its objectives?
 - Where and how e-learning fits into the institution?
 - What are the institution's objectives in initiating an e-learning project and are they aligned with the overall mission?
 - Is there support for the initiative from the key stakeholders in the institution?
 - What are the risks involved in implementing this strategy?
 - What is the vision that supports the implementation of an e-learning strategy?
 - What is the goal for the end result?

The SWOT analysis process contains six steps as outlined below:

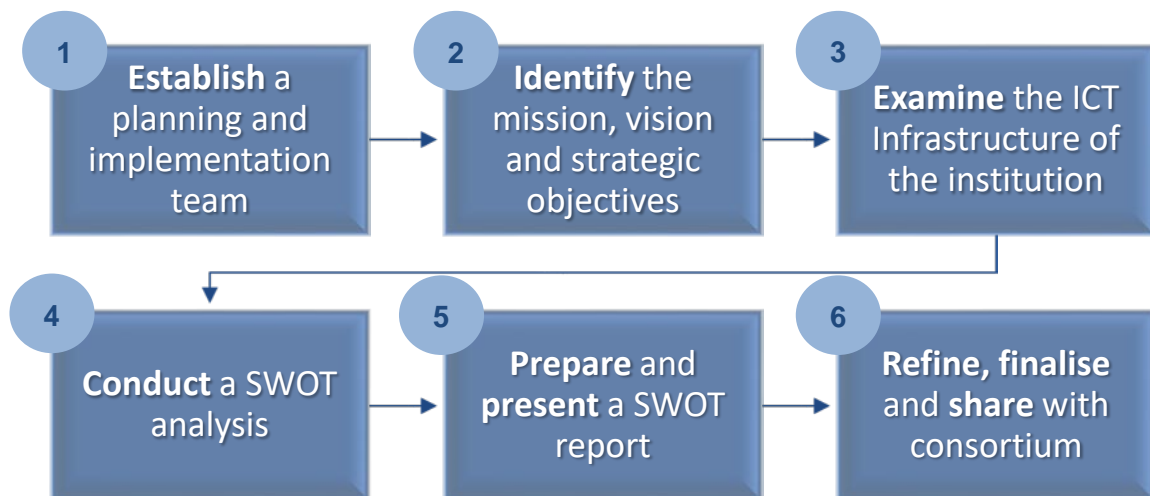


Figure 2. **The six steps process for conducting a SWOT analysis for MIELES.**

The six step process presented in Figure 2 needs to be thoroughly planned. In step one, the establishment of the team to be engaged in SWOT committee will take place (and later in the e-learning strategy development). Step two refers to the identification of the institution's present mission, vision and strategic objectives. Moving on to the next step, the committee will examine the ICT infrastructure and e-learning of the institution and then conduct a SWOT analysis. Step five is associated to the SWOT

report and consists of the pre-final form of the report. The end result will be a realistic appraisal of institutional strengths, weaknesses, opportunities and threats (step 6). The key objective is to develop an e-learning strategy which requires the completion of the described steps. The outputs of SWOT report (output of WP1) will serve as components of the upcoming strategy on e-learning (output of WP2). Once these questions have been answered and finalised, the committee can now use the SWOT analysis to develop the strategy for achieving the project's objective. The forthcoming e-learning strategy should be considered along with each institution's vision and mission.

Development of a SWOT Report

All strategic planning at each institution should be founded in the overarching principles of the institution's vision, mission, and values (Vrasidas, 2017). In most cases a well-structured brainstorming session primed with a current environmental scan will identify the major external trends and potential events that the institution needs to address and/or monitor. Utilizing a SWOT worksheet (see Appendix) the planning committee can identify the major trends and emerging events as these were identified through the SWOT analysis.

The report should have the following headings:

- Introduction – overview of institution (1 page)
- SWOT Process (describe who participated in the process, names, role, how many times you met, etc.) (1 page)
- Strengths – list in order of priority (1-2 pages)
- Weakness – list in order of priority (1-2 pages)
- Opportunities – list in order of priority (1-2 pages)
- Strengths – list in order of priority (1-2 pages)

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Appendix A - Checklist Guide



This Checklist Guide of SWOT Analysis provides a series of steps to assist institutions in developing an e-learning strategy in HEI, and to guide them in putting the factors derived from the analysis into practice. This checklist also will be useful to institutions in discussing with governments and other stakeholders the development of an e-learning strategy. The following Checklist articulates a set of steps as described below:

STEP 1

- ✓ Establish a planning and implementation team and assign roles and responsibilities (create a list of 10-15 people together with their responsibility towards SWOT analysis process).

Recruit members from staff, faculty, careers, IT and students and assign roles (i.e. e-learning developer, e-learning curriculum designer, e-learning content developer, Stakeholder, Distance learning unit administrator, Instructional designer, IT officer, instructor, DL instructor, etc.). Include at least 3 high level decision-makers [Rector and 2 Dean(s) of Departments from Education and ICT or a closely related field]. The established committee will be the same for the development of the e-learning strategy (output of WP2).

STEP 2

- ✓ Identify the present mission, vision and strategic objectives of the institution.

STEP 3

- ✓ Examine the current state of the institutional infrastructure
- ✓ Analyse the current state of e-learning at the institution
- ✓ Review all four categories in detail to gain a clear understanding of SWOT definitions and components

STEP 4

- ✓ Conduct SWOT analysis by capturing SWOT factors which are relevant in each of the four categories
- ✓ List your institution's strengths / weaknesses and potential opportunities / threats by completing the SWOT worksheet
- ✓ Prioritize 2 - 4 most important items per SWOT category (low priority, average priority and high priority)
- ✓ Report key points from SWOT analysis

STEP 5

- ✓ Prepare a **SWOT report** summarizing your findings.
 - ✓ Under each of the sections, prioritize your findings
 - ✓ Present the report internally to get feedback
- This report will aid the development of an e-learning strategic plan which is the outcome of WP2.*

STEP 6

- ✓ Refine and finalize report
- ✓ Share with consortium



Appendix B – ICT Infrastructure

Describe the current ICT infrastructure at your institution. The table below is a guide.

ICT Infrastructure	Yes	No	Additional Information (e.g. estimated numbers)
Computers			
Laptops			
Handheld devices (e.g. tablets, mobile phones)			
Printers			
Scanners			
Photocopiers			
Internet Access			
Internet Connectivity			
Wi-Fi			
E-library			
Institution management support			
IT support			
Software systems			
Management Information System			
Computer laboratories			
Digital Library Software			
E-learning Software			
Website			
Teleconferencing (video-conferencing)			
Learning Management Systems (LMS)			
E-mail			
Virtual Learning Environment			
Internet based learning resources			
Multimedia resources (online or offline)			
Help Desk service			



Appendix C - SWOT Analysis Worksheet

Internal Factors	Prioritization		
Strengths (+)	Low Priority	Average Priority	High Priority
Weaknesses (-)			

External Factors	Prioritization		
	Low Priority	Average Priority	High Priority
Opportunities (+)			
Threats (-)			