

Team Paper: Assignment 2

Background:

ABC university is a well-recognized and prestigious not-for-profit university in the Midwest. It attracts students from across the 50 states within the US, along with international students from many countries. It has Arts & Sciences, Engineering, Architecture, Medicine, Business School. Many of the courses are taught by well-renowned faculty.

With the move to remote and distance learning and online classes (especially spurred by the pandemic), the university has started looking at offering online degree programs. There are several advantages to it:

- Increase the visibility of the University and drive student recruitment
- Give access to students that otherwise cannot join the university
- Showcase and demonstrate the quality of the faculty
- Deliver innovative techniques in a flexible learning environment
- Create a catalog of digital content that can be leveraged across blended courses for degree and non-degree programs

There are also some downsides:

- Remote experience is not considered as rich a learning experience as in-person learning. Students will have limited direct interaction with faculty and with other students
- Collaboration opportunities across classes (e.g., with upper classmen for freshmen and sophomores) will be limited. Students may find it harder to find mentors and tutors.
- The students might be deprived of the entire on-campus experience – no access to campus gyms and sports facilities.

The university wants to start by offering a fully online Information Management and Cybersecurity Program. Based on the success, it also wants to explore offering a full online MBA program and an online Computer Science Program. It also wants to start opening the program to students that normally wouldn't be able to afford to enroll full-time and attend in person. At the same time, the university is very conscious of the student experience. It wants to make sure that the systems maintain their uptime and there are little to no disruptions caused by system or network outages. It also wants to provide students good online collaboration tools to interact with each other. The idea is to compensate for lack of collaboration that comes naturally by being in the classroom together.

The university also wants to move quickly, making some of the courses available as online in the Spring semester as a pilot. If the pilot goes well, it wants to expand the offering to include the entire curriculum for the Information Management and Cybersecurity program in one year. Depending on the return on experience, it wants to start an online MBA program in 2 years and an online CS program in 3 years. If things progress well, the university wants to be a leader in 5 years in online learning while retaining its position as a premier research and educational institution.

The University turns to the CIO to help draft a strategic plan to help support a full online program from the infrastructure and application perspective. The university does have in place some of the on-premise infrastructure needed and some of the systems required (e.g., LMS system, Zoom video conferencing technology, online course catalog) etc. but it has never done a full-online program. It will need to

procure new infrastructure (server and storage systems) to support the additional requirements, but it will be challenging to get in installed in the next 3 months, given supply chain issues. Furthermore, the system is expected to be available 24x7 99% of the time (barring routine maintenance), which is a higher uptime requirement that the IT Department has been able to meet thus far. Cloud services, by contrast, can easily meet that availability requirement but can be expensive. The university IT staff does include competent infrastructure experts and application support personnel, but the number is limited and cannot sustain a longer-term commitment to this project at present level. The university has not invested in social or collaboration tools for the students or faculty before and IT staff will need to learn how to support them. The department has good project staff that is eager to take on the project.

CIO's task

As the CIO you have been asked to develop the strategic plan:

- Transition 35 courses in the two programs fields of study to an online mode over the course of one year. 15 courses will be available in 3 months (spring semester) and the rest in another 11 months (next Fall semester).
- The system must support 300 students, and 28 faculty members. The system must scale to allow 100% of students and faculty to be online at the same time.
- Many of these students will not be local to the midwestern area – they can be anywhere in the US.
- In 2 years, the plan is to expand the system to support additional programs based on the goals mentioned above.
- Video conferencing (Zoom) and LMS systems must be available at the start but any other collaboration tools (e.g., Online discussion board etc.) can be available later (in a year).

For the strategic plan, you should do the following:

- Understand the business context – identify which universities offer online classes and what is special about them.
- Consider a strategy in which you must meet the short-term needs while also preparing for scaling up for the long-term. You can go with one option in the short-term and a different one in the long-term or stay consistent with one approach from the beginning to the end. Provide justification for whichever option you choose.
- Explore different options – do you want to get capabilities on-premise or go to a cloud provider.
- Or should the course work be hosted in-house or through partnership with another online provider like Coursera. What positions the university best for success? What are other universities doing?
- Consider whether the university should invest in Online discussion board, social platform to allow the students to connect with each other, polling software, etc. to improve the student experience.

Deliverable:

- You are required to deliver an IT Strategic Plan. To develop the plan, please conduct the following activities and show your analysis:
 - A Strategy Map
 - VSOM Map
 - SWOT Analysis
 - Capability Assessment
- The IT Strategic Plan should consist of the following:
 - Business Context
 - Business Objectives
 - IT Strategic Assumptions
 - Key IT Initiatives & Roadmap (3-year roadmap)
 - Key Enabling IT Capabilities
 - IT Risks
 - Metrics/KPIs
- I would strongly encourage you to start on this early and pace yourself. I would recommend breaking up the effort and deliverables by week:
 - Week 1: Understand the business context – research the area, the universities that provide online programs etc. How are they structured etc. There are for-profit and not-for-profit universities. How do they do things differently?
 - Week 2: Prepare some of the assessments: SWOT, VSOM, Strategy Map etc.
 - Week 3: Evaluate some of the technologies.
 - Week 4: Finalize the paper and

This would allow you to ask questions in the meantime and be prepared for the final deliverable. I would also start drafting the paper early. You can finalize it in the final week.