

The S-E-C-T-I-O-N-S Model

*Author's Note: For purposes of proprietary and potential confidentiality issues, the school used will be the **Cron Business School** and the academic program will be a **Master of Science in the Analysis of Marketing**.*

Introduction

When students at the Cron Business School (CBS) have completed the Master of Science in the Analysis of Marketing (MSAM), they will have acquired the technical expertise and knowledge required for all aspects of data analysis — they also will develop the strategic, communication and people-management skills that position them for leadership roles in any number of industries and disciplines. This program will be one of the few that allows students to complete all of their courses online.

Organizations of all kinds are eagerly seeking new ways to leverage the large and ever-growing stores of high-quality data now available. This program specializes in marketing analytics and helps students benefit from businesses' increasing focus on the analysis of customer data, a trend fueled by the rapidly-growing number of data sets enabled by various new technologies. The ideal CBS student attaining the MSAM will have a strong background in quantitative disciplines and desire to adapt and apply their skills to business and marketing. The courses include Introduction to Statistical Analysis, then Predictive Analytics and Data Collection; Database Systems Design and Implementation; and Data Warehousing and Data Mining. Predictive Modeling I and II are followed by either a capstone course or a thesis preparation. Two electives are chosen, such as Advanced Modeling Techniques and Marketing Analytics (Northwestern University, MS in Predictive Analytics, 2011).

Analysis

This essay will apply the SECTIONS model (Bates & Poole, 2003) for both selecting the technology for and preliminary structuring of the MSAM course at the CBS. SECTIONS is an acronym for the model frequently used to build distance education courses to ensure the many facets of an online course are addressed. As described by Bates & Poole, the eight elements of this model are as follows (p. 79):

- S:** Students – what is known about them; potential students; appropriateness of the technology.
- E:** Ease of use and reliability – is the technology easy to use; how well-tested is it?
- C:** Costs – what is the cost structure and how much does the unit cost per student?
- T:** Teaching and learning – what kinds of learning, instructional approaches and types of technology are needed?
- I:** Interactivity – what kinds of interactivity does this technology enable?
- O:** Organizational issues – what is required; what are the barriers to success; what changes are needed?
- N:** Novelty – how new is this technology?
- S:** Speed – how quickly can this course be started and changes made with this technology?

Students

Because this program is new and not widely-offered by other universities, a national and international pool of students is available. Candidates should have a strong background in quantitative disciplines (e.g., mathematics, physics, engineering, etc.) and want to adapt and apply their skills to business and marketing. It is ideal for the student who must, or chooses to, continue with their career and work towards their MSAM on a part-time basis. Offering this program in a fully-online manner allows students to progress at their own rate. Bates & Poole (2003) recommend that a clear list of guidelines be established for both what type of computer skills are expected of students and what type of technology they are expected to have access to in order to be successful in this course. Because this program will be taught fully online, it is imperative that the technology selected by the CBS be both reliable and easy to use for the students.

Ease of Use and Reliability

Bates & Poole (2003) state that it is important that “teachers and students not spend a great deal of time learning how to use educational technologies or making the technologies work” (p. 87). The learning management system (LMS) currently being used by the CBS as an asynchronous component for F2F classes is Blackboard, a world leader in providing both asynchronous and synchronous course support. Through careful study of an additional element in Blackboard, Wimba, students will be able to view recorded lectures; from time-to-time, a synchronous Wimba session, where all the students will participate simultaneously, will be

scheduled. In live sessions, through the use of a headset and microphone students will be able to interact with the instructor and each other (Morgan, 2009).

Costs

Ensuring the technological infrastructure is in place and is adequate is absolutely critical to successful delivery of distance education courses, and therefore, the cost of that infrastructure is a key factor in determining whether to proceed. While the intricacies of overall costing of this program are beyond the scope of this essay, Greville Rumble (2005) refers to the *systems approach*. While it will be much more expensive to get this MSAM program up and running in a distance education environment, as Rumble states, the *economies of scale* will ultimately allow this format to generate a higher profit, and more quickly than if this course were offered only face-to-face.

There are a number of other LMS platforms available to host this course – namely, Moodle, Sakai and Desire2Learn. Because Blackboard is already being used in the CBS for other synchronous learning, the initial investment into a new LMS would not be needed prior to launching this program. Thus, it is a strong contender for the LMS. Blackboard is a proprietary platform, and is more expensive than an open-source system such as Moodle, but with an open-source system more technical staff would need to be hired (UMD ELMS Committee, 2010).

Other labor costs to consider, however, include hiring an instructional designer, a teaching assistant and a writing coach. As suggested in Rumble (2005), these expenses will fall under the *materials subsystem*, which includes “the design, production, distribution and reception of course materials” (p. 5).

Teaching and Learning

Questions include the kinds of learning needed, what instructional approaches will best meet the needs, and the best technologies for supporting this teaching and learning. This MSAM will be a new course model within a well-established, traditional teaching environment.

Professor Sara Guri-Rosenblit of The Open University of Israel describes in her 2009 article, *Diverse models of distance teaching universities*, that “the new technologies have actually turned the dual-mode provision into a leading model in most higher education systems worldwide, as many conventional universities decided to adopt them for offering various forms of distance teaching” (p. 3).

The types of courses offered in the MSAM will require a great deal of intricate demonstration by the instructor about such tasks as data collection, data warehousing, mining and analysis; statistical modeling and predictive analytics. It is important that the instructor be able to demonstrate clearly how the statistical calculations are done. The use of recorded Wimba sessions using Blackboard’s demonstration application would allow students to watch, and re-watch, these demonstrations by the professor until they can replicate the techniques on their own.

Typically used in a synchronous program delivery, the Whiteboard, as described by Pullen & Snow (2007) is a feature available in most LMS platforms that will display a precomposed graphic using common software programs that can generate a JPEG or PDF image or document. The instructor can then “annotate the images during the presentation with lines, rectangles, handwriting and text in any color, a very useful feature for maintaining the attention of the visual learner” (p. 140). When recorded, it can be used asynchronously; when used in a live demonstration, it would need to be a scheduled, synchronous session.

Fahy (2004) states that learners not only require skilled instruction, but also need feedback so they can monitor how they are doing in the course, discover errors they have made in either logic or calculations, and to learn what they should do differently (or continue to do) to gain mastery of the subject matter. A self-assessment tool where the instructor can prepare quizzes with included pop-up answers will provide this feedback to students. It is important to make sure this is available in the selected LMS.

Interactivity

A good model for the course designers of the MSAM to research will be the WebTycho platform used by the University of Maryland University College. A veteran provider of both distance and face-to-face teaching, UMUC has stayed with their proprietary platform, yet made multiple enhancements to it over the years. The cornerstone of WebTycho is the *conference* section of the course. The instructor posts a short written “lecture” and then poses one or more questions. The students are expected to review the instructor’s written lecture, read the required and supplemental readings that relate to the topic, and then formulate a response to the question. As students post their response, classmates are expected to read the responses and, where appropriate, make comments, ask follow-up questions, or otherwise engage each other. The instructor’s role, somewhat in the background, is to moderate these responses, making sure students are staying on track with the topic, and are providing the correct answers. The knowledge gained by the student would be an example of the *individual activity*, and the interaction between students and students and the instructor would be the *social activity*. Bates & Poole (2003) state that “both kinds of interactions are important in learning, and both kinds of interactions can be differentially facilitated by various technologies” (p. 99).

Moore & Kearsley (2005) discuss keeping the extent of student participation that is needed at the forefront when planning the online course. They refer to the type of discussion groups noted above in the WebTycho conferences, but also go on to suggest adding more structured activities such as group projects, quizzes or role playing exercises. They state that especially in an asynchronous environment, participation is not likely to happen unless it is well planned and instructors have training to facilitate it” (p. 120). It is critical to ensure the LMS selected will provide clear, easy-to-use discussion threads so students can interact with both the instructor and each other.

Organizational Issues

This category refers to support the program is receiving from the administration, and whether that support is being shown in the form of staff such as instructional designers, IT support personnel, and teaching assistants. Although it has come slowly, the lack of classroom seats Monday through Friday has proven to the dean of the CBS, as well as the provost of the university, that they must fully support the progression to online learning if they are to keep pace with their peer institutions who are moving, or have already moved, to distance education.

Novelty

Interestingly, Bates & Poole (2003) state that novelty is perhaps the least-important criterion, yet Bates (2005) states “it is better to be at the leading edge, just behind the first wave of innovation, rather than at the bleeding edge” (2005). A few of the cautions he points out include that “software may not be fully tested and reliable, or the company supporting new technology may go bankrupt” (2005). A strength for the selection of Blackboard is that this

system has been used in the CBS for nearly ten years, and they have seen the stability of the system and have a good working relationship with the company.

Speed

There is ample time to develop this course initially and make sure it is right. It is important that updates to course material be done promptly and frequently. Through the use of an instructional designer, the instructor's initial program along with desired changes can be implemented accurately but promptly. As Bates (2005) states, the advantages to using technologies that can enable the MSAM to be easily developed and maintained are important, as this field of analytical marketing is evolving and will change rapidly, unlike fields such as history or English literature, where the content does not change quickly.

Conclusion

This list summarizes the application of the SECTIONS model to this program:

Students – There is an unlimited pool of technically-capable students.

Ease of use – Blackboard is already in place and is thoroughly known.

Costs – Use of Blackboard would substantially reduce the initial costs because it is already in place.

Teaching and learning – Faculty and an instructional designer who know Blackboard are on staff.

Interactivity – Blackboard will allow for good discussions between students and students and faculty.

Organization – The dean supports Blackboard’s choice, and may provide more staff and funding.

Novelty – Blackboard is reliable, tested and is familiar to the CBS faculty and staff.

Speed – Blackboard is easy to use, and files and revisions can be uploaded easily and efficiently.

After applying the SECTIONS model to this new program, it is recommended that the Cron Business School move forward with designing their Master of Science in Analysis of Marketing using Blackboard 9.1.

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