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Digital Imperatives in Marketing: The Integration of Communications and Technology to Target Consumers While Protecting Privacy

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Digital imperatives in marketing: The integration of communications and technology to target consumers while protecting privacy

Cornerstone 3 – Interdisciplinary Informatics

Catherine Dwyer Seidenberg School of Computer Science & Information Systems

> Randi Priluck Lubin School of Business

Thinkfinity Midterm Report June 1, 2012

Abstract:

The purpose of the project was to develop an interdisciplinary Seidenberg/Lubin curriculum integrating information technology skills into the marketing program, while emphasizing the ethical issues involved in managing and protecting consumer information.

Background:

Over the past few years the practice of marketing has evolved to include new forms of digital media and marketers have begun to leverage the internet to reach consumers in transformative ways. By collecting consumer browsing patterns and applying advanced data mining algorithms, marketers have come closer than ever before to matching their message with the right customer at the right time. Though marketing managers are experimenting with advertising and promotional strategies in social and mobile media, the industry has yet to develop a set of best practices to guide decisions. In addition regulation of digital information is in its infancy and firms face a deluge of consumer data that must be analyzed and optimized.

For marketing professionals to succeed in this rapidly changing industry, a solid base in IT fundamentals is a requirement. Many successful marketers have self taught IT skills. However, this can be less than optimal. All sorts of 'homemade' JavaScript code and tracking mechanisms clog up Internet bandwidth, slowing down network performance. By studying the science of computing in an academic setting, marketing professionals can learn what techniques lead to effective and efficient software. In addition, by discussing the implications of what is being

called 'big data,' students can reflect on the social and ethical concerns surrounding information collection and individual privacy.

Midterm Thinkfinity Grant Results

The grant has been successful so far in leading to cooperation between Lubin and Seidenberg in developing innovative program offerings to graduate students in each of the schools. Students will benefit by broadening their academic knowledge in emerging areas of IT and marketing. Information technology is playing an increasingly important role in the business world and marketers would benefit significantly from understanding how the data are collected and used. Firms have begun to use social media properties such as Facebook, Twitter, YouTube and Wikipedia to communicate with customers.

The US Bureau of Labor Statistics reports expected growth in both IT and digital marketing fields presenting an opportunity to students who have studied social media and mobile marketing and technology.

The chart below outlines the goals of the project and the status of each goal as of June 1. 2012. As you can see we have made significant progress in our programs and intend to continue working toward MS programs in Seidenberg and Lubin.

| | Project Goals | Status June 1, 2012 |
|---|---|---|
| 1 | Survey of existing interactive marketing curriculum and technology curriculum - identify existing courses taught at other institutions - examine existing textbooks and cases for relevance to topic | We reviewed digital marketing courses in New York State to determine competition for emphasizing technology in our curriculum. Appendix A lists the University, Program and Courses in both accredited and non accredited schools. |
| 2 | Identification of data management/marketing topics and sub-topics Creation of data information technology/marketing modules. This includes developing lectures, online support material, hands on exercises, and case studies | The grantees met weekly throughout the semester to discuss digital technology and marketing concepts. The goal was to create modules of information including lectures and support materials. Appendix B lists the topics covered in our joint meetings. |
| 3 | Identify courses to insert information technology/marketing modules, if necessary recruit and train faculty in the curriculum | We chose to create two new courses: Foundations of Social Media and Mobile Technologies and Social Media and Mobile Marketing Strategies. See Appendix C for syllabi. |
| 4 | Pilot curriculum materials in graduate and undergraduate marketing courses | The courses will run in fall 2012 and will include continued cooperation between Seidenberg and Lubin faculty. |
| 5 | Submit proposals to Lubin/Seidenberg curriculum committees for new courses and /or additions to existing courses | Completed. |
| 6 | New courses are offered, and modules are included in existing courses | Fall 2012 |

Impact on Students and Faculty

Students have been impacted by the grant activity in the following ways. One undergraduate student has been hired as a research assistant. He has gained experience using development tools for both the Android platform and the iPhone platform.

The nine students of the Spring 2012 section of CIT342, Systems Analysis and Design, taught by Professor Dwyer, also benefited from the activities of this grant. Professor Dwyer developed mobile laboratory exercises using resources from this grant, and tested out the material as a pilot in CIT342. Those students spent two weeks in a mobile development laboratory, and went on to design a mobile application as their final class project.

Next Steps

Both the Seidenberg course and Lubin course will be offered for the first time in the Fall 2012 semester. Professor Dwyer will teach IS676 – Foundations of Social & Mobile Technologies. The course is open to both Seidenberg graduate students and Lubin graduate students. Professor Priluck will teach MAR646 Social Media & Mobile Marketing Strategies.

Professors Dwyer and Priluck will continue to work on refining the course content and identifying the interdisciplinary connections between the courses. An outreach will be conducted to identify social media industry partners to serve as advisors and sources of internship and employment opportunities for Pace students.

Appendix A

DIGITAL MARKETING COURSES

New York State

| University | Program | Course(s) |
|---|----------------------------------|---|
| New York University School of Continuing and Professional Studies | Digital Marketing & Advertising | Integrated Marketing Communications Mobile Marketing: Reaching the Third Screen Examining Social Media Networks for Brand Value |
| IE Business School | Master in Digital Marketing | Digital Advertising Evolution Introduction & Trends in Online Advertising Digital Communication, Brand Awareness & Social Media |
| Internet Advertising Institute | Training | What Senior Executives Need to Know About Digital Marketing |
| University of Pennsylvania. Wharton School of Business | MBA in Marketing | MKTG 668 Monetizing Emerging Interactive Media MKTG 729 Special Topics - Interactive Marketing: Marketing in the Age of the Empowered Consumer |
| University of Michigan. Ross School of Business | BBA in Marketing | MKT 322 Digital Marketing |
| UC Berkeley Extension | Certificate Program in Marketing | X461.7 Consumer Buying Behavior in an Age of Social-Media-Driven Relationships X464.4 Strategies and Technology for Online Multimedia Ad Campaigns |
| Rutgers. Center for | Mini-MBA: Digital | Key topics: Digital Marketing Strategy, Social |

| Management development | marketing | Media Marketing |
|--|--|---|
| University of Michigan – Dearborn. College of Business | BBA in Digital Marketing | MKT 363 Digital Consumer Search & Marketing MKT 463 Digital Analytics and Content |
| Temple University. Fox School of Business and Management | BBA in Marketing | Marketing 3508 Digital Marketing (elective) |
| Quinnipiac University, CT. School of Business | BS in Advertising | MK 325 Interactive Digital Advertising MK 316 Advertising Design for New Media & Technology |
| Baruch College. Zicklin School of Business. | BBA in Marketing Management. Digital Marketing Track. | MKT 4555 Internet Marketing MKT 4123 Marketing Web Analytics and Intelligence MKT 4557 Digital Advertising MKT 4966/ MGT 4966 Social Media Marketing and New Ventures |
| Suffolk University. Sawyer Business School | -BSBA in Marketing (Marketing Innovation and New Media concentration) - MBA in Marketing | MKT 444 The Business of Social Media* MKT 477 eMarketing MKT 844 - The Business of Social Media |
| West Virginia University. School of Journalism. | - Digital Marketing Communications (DMC) Graduate Certificate; - MS in Integrated Marketing Communications. Online | IMC 640 - Introduction to DMC IMC 641 - Social Media/Marketing IMC 642 - Web Metrics and SEO IMC 643 - Digital Production for Interactive Media IMC 644 - Digital Campaigns IMC 629 - Mobile Marketing |

| Portland State University. School of Extended Studies. Professional Development Center. | Multimedia professional program. | Five 3-Friday Courses: Introduction to Digital Strategies Social Media Marketing Search Engine Marketing Measuring and Optimizing Your Website Best Practices, Integrating Digital Media |
|---|--|---|
| Georgetown University. School of Continuing Studies | - Certificate in digital media management - Certificate in marketing | Viral Marketing: Creating Buzz on a Shoestring Budget |
| Chandler University (online, Arizona) | AS degree in Digital Marketing | DMK 201 Digital Marketing DMK 203 Media Effectiveness and Measurement DMK 299 Digital Marketing Project |
| Indiana University Bloomington. Kelley School of Business. | - Full-time MBA in Marketing - Undergraduate degree in Marketing | BUS-M 595 Digital Marketing M455: <u>Digital Marketing</u> |
| Huntington University. EXCEL adult degree program. | Bachelor's degree in Marketing | MKX 370 Digital Marketing MKX 340 Public Relations Including Social Media |
| Sacred Heart University. John Welch College of Business | Undergraduate degree in Marketing, concentration in Digital Advertising | MK 235 Digital Advertising MK 299 E-Marketing |
| The University of Memphis. | Customer-Driven MBA program, full- time. Services Marketing MBA Concentration | MKTG 7546 Marketing in a Digital Age |

| Bentley University. | Undergraduate and Graduate: MS in Marketing Analytics, Graduate Certificate in Marketing Analytics, MBA in Marketing | MK 361 eMarketing MK 725 E-Marketing |
|---------------------------|--|---|
| City University London | Short course | Digital Marketing: An Introduction (short course 10 weekly classes) |

Appendix B

| Month | Topics Discussed | Outcomes/Plans |
|-----------|--|---|
| September | Completed and reviewed focus groups with IT and Marketing professionals. | Recommended courses in social media and mobile marketing and technology in Lubin and Seidenberg. Met with Department Chairs to discuss the project. |
| October | New course in Social Media and Mobile Marketing including: books, topics, cases and exercises. | Developed a syllabus and began the approval process with faculty councils. |
| November | New course in Social Media and Mobile Technology including: software and hardware requirements, books and topics. | Obtained approval for Foundations of Social Media and Mobile technologies from Seidenberg and New York faculty councils. |
| December | Completed approval process for new courses discussed integration of the courses in Lubin and Seidenberg programs. | Scheduled Social Media and Mobile Marketing Strategies and Foundations of Social Media and Mobile Technologies for fall 2012. |
| February | Began discussions on new MS programs in Seidenberg and Lubin. Discussed program attractiveness for job market career changers and internship programs. Discussions of processing rates in the US and frequency constraints as they apply to marketing. | Plans to reach out to Lubin linked in to find partners for the program and develop an advisory board. Partner with career services Barry miller in career services |
| March | Discussions of the purpose, use and capabilities of technology. Hardware and software issues and concerns. Discussion of API, platforms | Developed content for the marketing and IT courses for fall 2012. Hired a research assistant to |

| | and databases. Each platform has its own performance constraints. | develop programs for students. |
|-------|---|---|
| April | Met to review xCode for iPhone apps and discussed implications for IT and marketing students. | Determined boundaries for the two courses with regard to IT instruction. Began courses in social media and mobile marketing at NYU school of continuing and professional education. |
| May | Discussed plans for a research projects in social and or mobile marketing and technology. | A number of academic projects are underway as a result of the grant including a study of mobile phone games, a text proposal and a joint paper on segmentation. |

Appendix C

Pace University - Lubin School of Business Social Media & Mobile Marketing Strategies- Fall 2012 MAR 646

Instructor: Dr. Randi Priluck, Professor of Marketing CRN:

Office: NYC One Pace Plaza W482

Phone: (212) 618-6451 E-Mail: Rpriluck@pace.edu

Office Hours: Thursdays 4-6 and Tuesdays 11:30-2:30

Course Info: http://blackboard.pace.edu

Introduction

Social Media & Mobile Marketing Strategies is a new graduate course in the MBA program marketing concentration. The course will provide additional training in digital communications strategies, an area of growth within the advertising business. The course will appeal to students who are interested in broadening their knowledge of online media options and creative strategies within the digital arena.

Course Description

This course introduces students to integrated marketing communications with a focus on social media and mobile communications. Students will develop skills in researching and writing a situation analysis, understanding consumer behavior and insights, segmenting and targeting consumer audiences and approaching 360 degree marketing communication campaigns with emphasis on the digital market space. Students will be introduced to digital media vehicles including social media communication strategies and platforms and mobile marketing (SMS communications, mobile web sites and mobile search) and will learn to successfully integrate digital with traditional media. Students will work with a client to evaluate their current social media and mobile executions and develop digital strategies aimed at specific goals for a brand.

Learning Objectives

The purpose of the course is to prepare students for careers in digital media, advertising, social media or mobile marketing such that graduates will develop skills in campaign development and execution.

*Communicate effectively using appropriate digital marketing terms

*Segment and target markets for social media and mobile strategies

*Examine the advertising industry and understand the key media elements

- *Plan effective strategies for integrated communications using traditional and new media
- *Integrate digital campaign strategy with firm objectives, brand strategy and media plans
- *Develop campaign strategies for firms and recommend appropriate implementation
- *Track campaigns using various metrics and techniques for communications evaluation

Grading

Grading will be based on two exams (midterm and final) and a comprehensive student project with a real world client. Grades will range from A through F as per the Pace University grading system. Additional in-class assignments and exercises will be graded. Class participation will be a requirement in the course.

Policies

This is a very difficult and time consuming course. Students are expected to work hard both individually and with a team. Grades will be penalized for lack of participation in the team's effort. Students are responsible for work missed during regular class sessions. Class attendance and participation are integral components in the grading process. All papers must be turned in on time. Late papers will be penalized one grade (ie: A to B). Exams are to be completed on an individual basis.

Please make sure to cite all sources in papers/slides to avoid plagiarism. Do not cut and paste text from the internet into papers. You must cite all your sources both in the text of the document (last name of author and date) followed by a full citation in the reference section of your paper. Cite sources on Powerpoints at the bottom of each slide.

Readings

The professor will select readings and cases appropriate to the digital arena from Facebook, Twitter, the Direct Marketing Association, the Mobile Marketing Association, the 4 As, Industry articles and blogs, Mashable, the Mediapost and ClickZ. The changing nature of digital communications requires flexibility. The professor will consider current industry books as there are no textbooks currently appropriate in this discipline.

Examples of Readings:

- 1) Social Media Marketing: Strategies for Engaging in Facebook, Twitter & Other Social Media by Liana Evans ISBN-10: 0789742845
- 2) The Mobile Marketing Handbook: A Step-by-Step Guide to Creating Dynamic Mobile Marketing Campaigns by Kim Dushinski ISBN-10: 091096582X
- 3) Brand Media Strategy by Antony Young ISBN-10: 0230104746

Semester Project

Student teams will act as consultants for clients or advertising agencies on behalf of a client to develop an integrated communications solution to a specific brand problem. In collaboration with the faculty member students will consult with clients to develop a creative brief. The brief will include agreements between the students and client on objectives, targets, creative requirements, media considerations and budget. Students will respond to the brief by writing a comprehensive situation analysis for the client followed by a creative strategy execution plan for integrated marketing communications aimed at the goals in the brief.

Clients will then host students to present their work to their team of industry executives and provide feedback on the project.

Schedule of Topics

Week One

Introduction to Digital Advertising

The Social Media and Mobile Industries

Agency/client interface

New and traditional media comparisons

Examples of successfully integrated marketing strategies

Week Two

Digital Media for Communication Strategy

Similarities and differences between digital and other media

Advantages and disadvantages of digital relative to other media

Due: Team Project Client Meeting

Teams will meet with clients to develop creative briefs for digital communications

Week Three

Research for Advertising Decision Making

Researching and writing a creative brief and comprehensive situation analysis

Primary and secondary sources of information

Collecting data for advertising decision making

Week Four

Segmenting and Targeting for Social Media and Mobile Marketing

Quantitative methods for measuring and evaluating targets

Consumer engagement with digital media

Understanding usage behavior in social media and mobile

Segmenting for location based strategies

Week Five

Strategy Planning for Digital Strategies

Developing measureable objectives for campaigns

Cost analysis of social media and mobile marketing campaigns

Comparison of digital media to other forms of media in terms of reach, frequency, cost and integration

Due: Situation Analysis and Executive Summary for the Client

Week Six

Mid Semester Review of Advertising Strategies

Using the situation analysis as a basis for campaign development

Designing an effective advertising pitch for the client

Team meetings with the professor to go over the situation analysis

Due: Client Strategy Meeting

Week Seven

Midterm Exam

Week Eight

Creative Strategy Development

Developing goals and objectives for social media and mobile strategies

Planning integrated campaigns aimed at specific goals and objectives

Creating appropriate messages to enhance brand image

Weeks Nine

Media Planning, Buying and Implementation

Determining the appropriate media mix for the brand including social and mobile media

Integrating strategies for digital with a brand's goals and strategies

Budget for creative and media placements to execute strategies

Week Ten

Creative Strategy Execution in Media

Effective targeting of media vehicles for strategy execution

Matching creative strategy to media

Integrating campaigns across platforms and agency players

Week Eleven

Strategic Campaign Evaluation and Metrics

Using tools to evaluate the success of a strategy that integrates social and mobile media

Metrics associated with social media and mobile strategies and how they differ from traditional means of evaluating campaigns

Quantitative assessment of ROI for social and mobile strategies

Week Twelve

Agency Pitches in Class

Present to students in class for review and improvement

Develop appropriate strategies to improve the pitch to the client

Week Thirteen

Client Presentations

Present creative and media strategy to the client

Respond to feedback and review and refine strategies

Week Fourteen

Final Exam

IS676/MAR 648 - Foundations of Social and Mobile Technologies

Pace University

Level: Graduate

Prerequisites: None

Programs: MS Information Systems, MBA Information Systems, MS in Social Media and Mobile

Marketing¹

Instructor: Dr. Catherine Dwyer, Department of Information Technology

Course Description:

This course will explore the technical foundations of social and mobile technologies, and consider their impact on digital marketing, as well as other business contexts. The potential for social and mobile technology to serve as a new profit center for firms will be explored. Student assignments will involve the hands on use and application of social and mobile technologies. Students will also learn how to create a simple mobile application for the iPhone, Android, or other relevant platforms. The final group project will consist of a social/mobile marketing project for a specific company or product.

Course Objectives:

At the end of the course students will be able to:

- Describe the technical foundations of social and mobile technologies
- Create a simple mobile application
- Compare social and mobile technologies and analyze their relevance to a specific marketing objective
- Understand the structure of search engines and search engine optimization
- Explain how data about consumers is gathered and used to predict purchasing behavior
- Develop a marketing plan for a specific product or company that employs the use of social and mobile technologies
- Analyze and examine the privacy implications of social technologies and digital marketing

Course Topics:

- The development of social and mobile technologies and their impact on the Internet and broader culture
- Specific functionality of social technologies, such as Wikis, blogs, social networks, microblogging (Twitter), and crowdsourcing (Yelp)
- Search engine fundamentals and search engine optimization

¹ Working title for MS Marketing graduate program under development

- Measuring Web activity and Web analytics
- Fundamentals of mobile technologies
- Location based services
- Development of mobile apps
- Privacy and security issues with social and mobile technologies
- Best practices for social and mobile digital marketing
- The potential of mobile and social technologies to serve as profit centers for firms

Required Texts:

The Social Media Bible: Tactics, Tools, and Strategies, by Lon Safko, Extreme Digital Marketing, 2011

Mobile Design and Development: Practical Concepts and Techniques for Creating Mobile Sites and Web Apps, by Brian Fling, O'Reilly Publications, 2009.

Grading:

| Assignments | 20% |
|---------------------|-----|
| Course Project | 25% |
| Class Participation | 10% |
| Midterm Exam | 20% |
| Final Exam | 25% |

Class Schedule:

| Week | Topic |
|------|---|
| 1 | Introduction to Social and Mobile Technologies |
| 2 | Social collaborative tools and environments: blogs, wikis, |
| | social networks |
| 3 | Internet culture: Memes and 'viral' Web events |
| 4 | Search as a social activity: the structure of the Google search |
| | rankings and search engine optimization techniques |
| 5 | Behavioral targeting: predicting consumer behavior based |
| | on Web analytics |
| 6 | Privacy and Security in Digital Environments - Protecting |
| | consumer data, Regulations in digital media, Disclosure and |
| | opt in requirements, Third party arrangements and |
| | advertising networks |
| 7 | Midterm |
| 8 | Technology for Mobile Communications – cell network |
| | technologies, functionalities and constraints |
| 9 | Mobile application development |
| | Digital requirements for mobile media |
| | Location based services |
| 10 | The merging of social and mobile and its implications for |
| | digital marketing |
| 11 | Case study: best practices for social and mobile marketing |
| 12 | Social as a business model: Facebook, Twitter, Yelp, and |
| | Groupon |

| 13 | Group project presentations |
|----|-----------------------------|
| 14 | Final exam |