

Business Models for Internet Based E-Commerce

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Introduction

The meteoric growth of Internet based E-commerce at the turn of the last century is truly baffling. During the last one decade, this market space has grown in several directions. In its first generation, it saw the emergence of portals and search engines. However, in due course more and more organisations began to cater to the Business to Customer (**B2C**) market. In the last two years, there is significant growth in the Business to Business (**B2B**) segment. As several organisations began to operate in the Internet market space, they innovated unique propositions to create value in the process. These were either not found or difficult to replicate in the traditional brick and mortar operation.

This course will help the students understand these unique propositions in a unified framework. The framework is collectively referred to as "Business Models". An Internet based business has several dimensions:

- *the technology aspect* primarily comprising of telecommunication, networking and other infrastructure issues
- *the software domain* that includes programming languages, web page design, customer interface and transactions management, security and privacy management, and large scale data mining
- *the management aspect* that deals with the business strategies for value creation, growth and customer development and retention
- *the statutory and legal dimension* that addresses various cyber laws dealing with security, crimes etc. and government policies for nurturing the Internet based E-commerce

This course is *not designed* for addressing all these issues. The course is primarily focused on the third aspect and to a limited extent on the last one. Hence, knowledge of software and technology issues and programming skills is not expected. However, a preliminary knowledge of the history of the Internet and a basic skill to author a "no frills" html document is assumed. Moreover, the course will encourage the students to develop a basic understanding of these issues in an overall framework of Internet based E-commerce. The students are expected to familiarise themselves with some facts about the history of the Internet before they come for the first session of the course. It is recommended that the students visit the web sites indicated under session 1 of the course outline.

Course objectives

The objectives of the courses may briefly be stated as follows:

- ✓ provide a unified framework for a Business Model for Internet based E-commerce
- ✓ explore the theoretical basis for the constituents of a Business Model

- ✓ highlight the strategic issues an Internet based E-commerce organisation faces in designing an appropriate business model
- ✓ sensitise the students to the statutory and legal issues related to E-commerce

Students involvement

The course delivery will incorporate several features of the electronic market place. Most part of the course material, discussion notes and other reference material will be delivered over the net. The students are expected to participate in a variety of unconventional ways. During several sessions, a group of students will be required to visit a list of web sites and make an html document of their analysis as well as a short presentation in the class. The html document will have to be uploaded into the course directory **the day before** the presentation schedule with an e-mail notification to the class. The students are encouraged to provide hyper-links to other web based documents and sites that they visit and refer in support of their analysis. Each group will be expected to make one such presentation. The presentation can include power point slides, actual visits to web sites and any other appropriate means.

The students will also be expected to work on a dot com project as part of the course. At the beginning of the course, students will be asked to submit a one page business idea that they want to spin off as a dot com business. Once the projects are approved, they will be working on the business idea and develop the business model as the course proceeds. This will give them an opportunity to focus their understanding and apply the concepts to a problem on hand. The groups will make a presentation of the dot com project during the last week of the course.

Much of the success of Internet based E-commerce is attributed to free flow information over the net. Honouring intellectual property rights is not only desirable but also central to success of Internet based E-commerce. The students are expected to adhere to these standards while they prepare their presentations and reports. Accurate and complete details of the source of information **must** be provided. The students are encouraged to visit <http://ecommerce.vanderbilt.edu/papers.html> for alternative style guides for project report preparation.

The students are expected to skim through the assigned reading materials before each session of the class. No efforts will be made to go through each of them in greater detail in the class.

Reading Materials

There are no prescribed textbooks for the course. Most of the reading materials required for the course will be uploaded in the course directory. The students are expected to download a copy of the material into their own directory for reference. However, the following books will be of use for portions of the course:

Hagel III, J. Rayport, J.F. (1998). Net Gain, Harvard Business School Press, Boston, MA, USA.

Kalakota, R. and Whinston, A.B. (1997). A managerial handbook for E-commerce. John Wiley & Sons, New York, NY.

Whinston, A.B. and Choi. (1998). The economics of E-commerce. Mac Millan.

Rose, F. (1999). The Economics, Concept, and Design of Information Intermediaries: A theoretic approach. Physica-Verlag.

Chesher, M. and Kaura, R. (1998). Electronics Commerce and Business Communications. Springer

Consult with the library for the availability of these books. Some of them would have been moved to the reserved shelf. There is no dearth of popular articles on E-business matters. In fact plenty of them are available on-line and you can get lost in no time if you ever venture into these. However, it may be a good idea to visit *regularly* some of the following web-sites for a recent update on the events related to E-business* :

www.zdnet.com

www.hotwired.com

www.firstmonday.com

www.emarket.com

www.ee-online.com

<http://jemc.huji.ac.il>

www.commercenet.com

www.electronicmarkets.com

www.indialine.com

<http://asia.internet.com>

Course Directory & Bulletin Board

Paper based communication will be heavily discouraged in the course. All the course material and lecture notes will be delivered through the designated course directory. The students are also expected to make all their submissions in soft form in designated directories. The enrolled students will get appropriate rights to access these directories.

The bulletin board earmarked for the course will be used as the news group throughout the duration of the course. All routine communications with respect to the conduct of the course on a session-wise basis will be managed through the bulletin board. The students are expected to use the board as the mode of communication with the instructor as well as with one another.

Evaluation

The following is the evaluation plan for the course:

In class presentation	: 15 points
Dot com project	: 30 points
Quizzes	: 15 points
End Term examination	: 40 points

It is expected that the work load requirement for the group work will be commensurate to the weightage allotted to the component. Quizzes are normally not announced *apriori*.

* Some of the URLs in this write-up may be incorrect or outdated. These will be corrected at the time of the course offering.

Session-wise course outline

Module A. Introduction to Internet Based E-commerce

1. Introduction

Course Overview

The Internet Time Line

Introduction to electronic communication

Recommended web sites

- Visit www.ask.com and ask any question related to the Internet Economy. It will lead you to a host of Internet sites dealing with your question through a host of search engines. From there, it is up to you to find out what you want.
- Visit www.whatis.com. In the upper left-hand corner, click on Learning Paths. In the third column, under Telecommunications, click on the following links and review the definitions in the uppermost frame, one at a time:
 - Basic Network Concepts
 - Wires and Cables
 - Transmission Methods
 - Network Infrastructure
 - The Internet
- Visit www.isoc.org/internet/history. This site perhaps has the complete history and time line of Internet. You might like to bookmark this location and visit it over a period of time to get a detailed account of Internet history.

2. Electronic Communication as a Business Enabler - Evolution

Readings:

Chapter 4 of Chesher & Kaura

3. Facets of the Internet Economy

Readings:

Barua, A. Pinnell, J., Shutter, J. and Whinston, A.B. (1999). "Measuring Internet economy: An exploratory paper". Working paper series, University of Texas, Austin, July, 1999. <http://cism.bus.utexas.edu/works/articles/internet-economy.pdf>.

4. Transaction cost economics - Impact on Market Structure

Readings:

Bakos, J.Y. (1991). "A strategic analysis of electronic market places". MIS Quarterly, Vol. 15 (3), pp 295 - 310.

5. Theory of Information Economics - Relevance to Internet based E-commerce

Readings:

Evans, P.B. and Wurster, T.S. (1997). "Strategy and the New economics of Information". Harvard Business Review, Sep. - Oct., pp 71 - 82.

6. Business model for Internet based E-commerce: A framework

Readings:

Mahadevan, B. (2000). "Business Models for Internet based E-commerce: An anatomy". Working paper.

Timmers, P. (1998). "Business models for Electronic Markets". Electronic Markets, Vol. 8(2), pp 3 - 8.

Recommended web sites

www.rediff.com

www.compare.com

www.indiacar.com

www.amul.com

Module B. Components of the Business Model

7. The value of On-line communities

Recommended web sites

www.ethnicgrocer.com

www.orlando.com

www.zipahead.com

www.rediff.com, www.amazon.com

Readings:

Hagel III, J. (1999). "Net Gain: Expanding markets through virtual communities". Journal of Interactive Marketing, Vol. 13(2), pp 55 - 65.

8. Value proposition through market making process

Recommended web sites

www.carstreet.com, www.autobytel.com

www.webstore.com, www.beyond.com

www.fabmart.com, www.cductive.com

www.egurucool.com

Readings:

Sinha, A. "e-India inc's e-biz models" *Business Today* October 7, 1999. pp 59 – 71.

9. Agents and exploitation of Information Asymmetry

Readings:

Maes, P. (1999). "Smart Commerce: The Future of intelligent agents in Cyber space". *Journal of Interactive Marketing*, Vol. 10(3), pp 66 - 76.

10. Guest Lecture: The challenges of building an On-line community

11. Models for Informational products and services

Recommended web sites

www.bearstearns.com

www.gartner.com

www.proquest.com

www.sun.com, www.beyond.com

Readings:

Varian, H.R. (1995). "Pricing Information goods". Working paper, University of California, Berkeley, In proceedings of the research libraries group symposium on "Scholarship in the new information environment", Harvard Law School, May 2 - 3, 1995.

Varian, H.R. (1997). "Versioning information goods, Working paper, University of California, Berkeley.

12. Revenue streams through exploiting information asymmetry

Recommended web sites

www.priceline.com

www.ebay.com

www.ubid.com

13. Other revenue streams in Internet based E-commerce

Recommended web sites

www.netmarket.com

www.indiacar.com

www.ask.com, www.askallindia.com

14. Dis-intermediation of the supply chain

Recommended web sites

www.amul.com, www.landsend.com

www.dell.com

15. Role of Infomediaries & Meta-mediaries in Internet based E-commerce

Module C. Challenges for Internet Based Businesses

16. Internet Based E-commerce in India: Legal and Tax Implications

17. Managing the conflicts of interest

18 – 20. Marketing Paradigms in Internet based E-commerce

Module D. Conclusions

21. Presentation of Dot.com projects

22. Presentation of Dot.com projects