# Course Description E-Entrepreneurship

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# The Big Idea and Intended Learning Outcomes

This course will depict information and knowledge and the possibilities in running a business in the digital environment whether the business is digital or traditional. In this course, eEntrepreneurship would be segregated in two parts, which would commence jointly. One part will provide information about running a business in the digital market as we know today. Another part will give an apprehension of the challenges in promoting products and services through information infrastructures.

Today's complex and dynamic market is forcing companies to use the advantages of the Web more than ever. The involvement contains both, Web 1.0 and Web 2.0 (today mostly known as social media). Companies are involved in digital activities to a greater extent in elevating products. Online marketing, online recruiting, and social media management gave a fecund field for boosting products, services, and an enterprise image. Traditional marketing emerges with digital marketing and has been becoming a new notion, best described as "Tradigital Marketing" (Armano, 2010). The boundaries between B2B and B2C disappear more and more, as the digital environment disperses throughout the world rapidly, also providing easier (i.e. live up to the usability and mobile internet) and faster (i.e. broadband internet) access to the Internet. Unlike earlier times, when it was necessary and obvious for B2C companies to analyze, monitor and

research all kind of activities regarding their products and targeted groups, now B2B companies had to change their execution in analyzing, monitoring and researching Web activities and social media in order to maintain, increment and amend their market share. B2B or B2C, producers and consumers and all stakeholders are parts of Web regarding both digital and classical business. Therefore, an enterprise cannot afford to decide whether it should or should not engage in Web activities no matter what kind of branch they belong to. Taking advantages from given possibilities of the Web will be a significant aspect of the course eEntrepreneurship.

On the other hand, there is a significant difference between digital products and services and traditional goods. Not only their nature of one is being substantial and the other containing just numbers, but also the mode of distribution and marketing. Information market is an entirely new challenge for companies who market information as either product or service. In this part, the students will learn to understand the information as economical commodities.

# Starting and Running a Business in the Information Economy

# Introduction

First segment of the course will explain the competitiveness of present companies by dealing with the digital world or in term of net economy or information economics. Habituating given possibilities of Web has gained fundamental importance to companies in all branches. The Web has changed spectacularly the cognition of consumers and also companies. It is absolutely necessary for enterprises to adapt these changes and to use the vantages of the Web to be profitable and successful in their individual purpose. The students will have to ascertain how information materials can be handled and differed from classic materials.

# Web 1.0 versus Web 2.0

Web 1.0 and Web 2.0 will be differentiated and described in this course. Web 1.0 will be depicted as a form of the Web, where companies transpose their publicity from analog to digital world by building web sites, posting ads on online shops, and publishing online press releases. The Web 1.0 is still an essence for companies, even the new opportunities of social media seem to be promising such as Blog, Facebook and Twitter Marketing.

Also the usage of the Web provides a huge variety of opportunities for companies, especially for information retrieval. As most of the services are provided free of charge, Web information retrieval can be used within all internal processes of a company. In addition, the usage of social media is best described as online marketing, yet at the same time, the utilization of the Web 1.0 is still essential to sustain overall business processes.

# Formation of an Enterprise

Formation of an enterprise can be processed in less than 2 hours utilizing the Web compared to the business environment before the mid 90s. Whether it is a Limited Liability Corporation such as Ltd. or another legal form, the Web information infrastructures allow entrepreneurs to start a brand new company by simply using online services.

Regarding the availability of information and legal issues, the Web has become the peerless source in accumulating the necessary knowledge for starting a new business, no matter which branch. Consultancy processes can be managed through the Web and knowledge can be gained by demanding specific questions. This part will explain what kind of information is needed and how the Web can assist in retrieving or collecting necessary information.

# Formation of an Information Economy Enterprise

What are the aspects that differ from a company which offers traditional goods to an enterprise that offers only information? A company selling information products must face more complications in the economy of information technology. Having knowledge regarding information economics is mandatory while introducing the products. The questions which must arise in mind are: "what can I offer, that is within the interest of the market?", "what is the added-value of my product?", and "which targeted group has a need for my product"? The differences between the "real economy" and "net economy" will be explicated in this part of the course such as:

- Target Groups in the Information Economy
- Transparency and Obscurity of Information Products
- Advertisement of Information Products
- Communication Controlling
- Sales Channels
- Human Resources
- Digital Information Services

# Principles of Information and Information Economics

This part of the course will depict the principles of the Information Economy based on the research given by Stock & Linde (2011). According to Stock & Linde, the information market is all sorts of data which is distributed through digital networks, including software and of content such as blogs, films, games, articles and patents (Stock & Linde, 2011). The course will devote a view of information materials and also will explicate the differences between digital and classical goods. This part of the course comprises lectures discussing about information markets, information as a network good, network effects and network values, and digital rights management (DRM).

In the recent years, the need for information services has grown apace. The society is now denoted as information society, and information now a day can be found in everyday life. Information-as-a-Service (IaaS), Software-as-a-Service (SaaS), also known as data services, have been developing rapidly for last few years. Regarding Forrester Research, information services will grow its importance to organizations and consumers in all business areas (Yuhanna, 2010). But there is a difference between information which contains of only digital data such as 0 and 1, and information which is can be used to decide and act, such as knowledge. The difference between information and knowledge will also be explicated in this part of the course. The value of information, value-added chain of information products, demand for information and the

information as economics good will be the aspects of this part of the course. The main aspects are:

- New Economy and Information Markets
- Digital Information
- Knowledge Workers in the Knowledge Economy
- Mobile Commerce
- Economic Value of Information

# **Pricing of Information Goods**

There are two unlike information goods: information services and information products (Kuhlen, 1996, 83f). The technological potentials of digital goods will also be described by showing durable goods and consumer goods. Stock & Linde see the economic implication of the information in two aspects: the "direct significance expressed in numbers of employees or sales figures" and "the indirect significance" (Stock & Linde, 2011, 38). In order to empathize the principles of pricing of information, market failure for information goods will be depicted in this part of the course first: Because information goods have exceptional economics characteristics they can easily conduct to market failure.

Another facet is that an information good is only valuable to the consumer, when the information itself has experience and credence qualities (Stock & Linde, 2011, 33f). The economic specialness of information goods will be described in order to interpret the pricing challenge. The main aspects of the course will comprise:

- Market Failure of Information Goods
- Cost Structure of Information Markets
- Unit Costs and First-Copy-Cost Effects
- Network Effect Goods / Network Effects for Information Goods
- Fixed Cost Digression
- Information Asymmetries
- Contracting
- Information as a Public Good

# Brand Naming

According to Clifton and Ahmad, a brand is a name that is intrinsically striking and their role is to create an indelible impression (Clifton & Ahmad, 2009). Once a name for a company has been given and has been known in the market, it is quite difficult to alter it. The evolution of a company or product name is one of the most significant tasks before starting a business that entrepreneurs must execute. Surfing Web and a decent search can give the entrepreneur very important views of how other companies or contenders use brand names for their own purposes such as communication and image branding (Kollmann, T. et al., 2007, 351).

There are also other components that must be taken under consideration while choosing company and product names in the net economy. Domain names for the company's product brands should be available or at least be able to be secured at a low price. According to Kohli

and LaBahn (1997), following processes must be executed in order to prefer a name, which will be appropriate for a net economy business:

- Specify Objectives
- Creation of Candidate Names
- Evaluation of Candidate Names
- Choice of a Brand Name
- Trademark Registration

Required textbook:

Kollmann, T. et al. (2007): The Corporate Brand Naming Process in the Net Economy

# Copyright & Trademark

Founding a company mostly relates to creating products and services. Today's complex market structure needs some assurance of subsist and successful distribution of products. The main issue will evolve in our mind regarding to assure, that the fact of survival is marketing. Product's name along with other factors like logo, texts, slogans, concepts and patents etc. complete a good marketing if all these factors are harmonized attractively. Anyhow, especially while distributing information goods such as content or software, an intellectual property protection is also needed: "Intellectual property rights have a fundamental and catalyzing role in a knowledge economy" (Drahos, 2005, 140).

This segment of the course will discuss the prospect of researching patent and trademark using the Web. It is important to give attention that there are possibilities for a company to ensure and establish own registered and unregistered trademarks. Creating USPs by using domain names, trademarks, protection processes and concepts will be pursued in that course as well. Finally, copyright issues regarding information materials will be discussed in order to give an idea how copyright materials can be dealt and acquired through the Web. Copyright concepts such as GNU, Creative Commons and other license concepts will be introduced as well.

Required textbook:

Stock & Linde, 2011, Information Markets: Chapter 5 "Information Law"

# Profitability

The complex market situation forces companies, especially startups, to identify and decrease their present and future cost operators. It became consequential for companies to give emphasis on reducing costs in all aspects of the business in order to be competitive. Traditional cost cutting strategies must be transferred or shifted to the possibilities of the Web. Entrepreneurs should have cognizance about the possibilities what the Web can provide. An entrepreneur therefore is not just obliged to act prolifically at all times, but also by proving profitability and reduce costs over the time. This part of the course will show methods of price comparison, employee selection and procurement, using the Web as a source. The topics will contain of

- eProcurement
- eCommerce
- eShops

- eMarketplace
- eCommunity
- eRecruiting

# Web Mining

One of the key factors of business is to meet the demands of the targeted group. Extensive market research is the only way to analyze and distinguish the targeted group. However, market research can be divided into several fields. Survey processes or acquiring research data are mostly the traditional ways of market research, but mostly used to accumulate or gather information about potential customers. But the Web offers new opportunities to retrieve information by Web Mining or mostly known as Social Media Research. Web Mining or Social Media Research can contain features of

- Product Monitoring
- Brand Image Analysis
- Enterprise Image Analysis
- Trend Scouting
- Target Group Monitoring
- Topic Monitoring
- Consumer Behavior Analysis
- Community and Opinion Leader Detection
- Fraud Detection

Required textbook:

Graubner-Müller (2011): Web Mining in Social Media (31-46, 56-70, 75-88)

# **Competitive Intelligence**

In todayís Web environment, it has become much easier for entrepreneurs to determine data from competitors without buying pricy market research reports. Companies disclose lots of information not only about their products and services but also about their strategies in the Web as well. At a glance, it seems to be a necessity to monitor and dissect that information from the competitor's web site itself. But the competitor's web site is not the only source for such information. Nowadays, most of the companies use the wide range of possibilities of the Web to put out information in order to elaborate and sustain their company's image and publicity of their products. These channels contain social media activities, which can be found in Blogs and self-made Bulletin Boards (forums), also in Twitter and Facebook Channels. In a wider range, not only consumers but also employees can unveil information on the Internet, which can be basically important for a contender to know. Depending on the branch, information can be imparted into specific knowledge, which can guide to an interpretation of the tactical and strategic intentions of a competitor (Graubner-M<sub>3</sub>ller, 2011, 21f). Following competitor information can therefore be in the concern of a company:

- Product and Service Portfolio and Pricing
- Social Media Activities and Strategies
- Business Strategies
- Communication Strategies

- Competitor Image
- Events and Conferences
- Technologies
- Distributors
- Stakeholders
- Topic Trends

To make this possible, a certain procedure must be formulated in order to maintain a continuing information retrieval. The process can also contain free online tools, which can be used to help the manual information broker to get his work done easier and faster and specially at low cost. In summary, to demonstrate a working and efficient competitive intelligence system, following interrogatives must be clarified:

- What kind of competitor information is needed, to help me in the decision making process?
- What tools or software can be used in due consideration of my cost cutting strategy?
- How can I rerun my process continually to make my competitive intelligence system more efficient?

Required tuition material:

- 1. Pacifici (2011): Competitive Intelligence A Selective Resource Guide
- 2. Pacifici (2007): Competitive Intelligence on a Shoestring
- 3. Pacifici & Cavallini (2006): Got Competitive Intelligence?

# Web Technologies

Today, it's just a matter of simple clicks to install Software-as-a-Service (SaaS), such as Wikis, Blogs, Content Management Systems (CMS), Customer Relationship Management Systems (CRMS) and more. Consequently SaaS deals all kind of business activities like billing, collaboration, document management, human resources, social networks and more (Open Crowd, 2010).

Companies are blessed by taking advantages of the opportunities of the Web, especially by using open source licensed information systems, also called Open SaaS (Osofsky, 2010). In this part of the course several SaaS and also Open Source software will be presented. The concept of Open Source licenses and the pros and cons of their commercial deployment will be introduced:

- Customer Relationship Management (CRM)
- Knowledge Management (KM)
- Document Management
- Social Networks
- Collaboration
- Content Management Systems (CMS)
- Enterprise Resource Planning (ERP)
- Project Management

Another aspect is the search for information and for this, an overview of the information retrieval possibilities in the Web has to be given. In this context, the surface Web and deep Web will be introduced to ensure that the students understand how to perform an effective search in the

Web in order to retrieve the necessary information for their business. Search tools such as online search engines and content aggregators will be presented.

# Required textbook:

Stock & Linde (2011): Chapter 10: "Search Tools and Content Aggregators" (251-257) and Chapter 11: "Web 2.0 Services" (271-275)

# Didactic Concept, Schedule, and Assignments

# Part 1: "Launch"

Class Lecture No. 1

- 1. There will be an introduction of the course, and the schedule of the whole course will be shown by the lecturer. The 2nd part of the course "Running a Business in the Information Economy" and "Running an Information Economy Business" will be shortly described and the big idea of the course will be clarified.
- 2. "Web 1.0 versus Web 2.0", "Formation of an Enterprise" and "Formation of an Information Economy Enterprise" will be explained.
- 3. Main topics of this class lecture are "Principles of Information and Information Economics" and "Pricing of Information Goods".
- 4. Brand Naming and "Copyright & Trademark" will be introduced as supplemental information but won't be the main aspects of the course.
- 5. The students will have to prepare a written paper.

# Paper: Forming an Enterprise

The Students will have to create a road map containing the formation of an enterprise. The contents of the paper including the questions will be provided by the lecturer.

Textbook(s) and tuition materials will be presented and uploaded by the lecturer. Also a deadline for delivery of the paper will be set by the lecturer. The delivery of the paper should be done two weeks prior the online workshop, to assure that the lecturer gets adequate time for the feedback he is about to give the students during the Online Lecture No. 1. The paper should contain 10 Pages and a minimum of 5 pages.

Online Lecture No. 1

- 1. The students will receive feedback for their paper. Several pages of the paper will be presented by the lecturer as screenshots or similar. The lecturer will discuss the pros and cons of the ideas that were presented by the students (constructive and also critical feedback).
- 2. Feedback and questions from the students will be discussed and answered by the lecturer.

# Part 2: "Web Mining"

Class Lecture No. 2

- 1. The lecturer will answer questions, which have come up so far.
- 2. Topic "Profitability" and "Competitive Intelligence" will be introduced by the lecturer. The main part of the course will be "Web Mining".
- 3. A paper will be introduced containing the following procedure:

#### Paper: Web Mining

The students will have to create a report, which will contain a management summary regarding a certain problem, issue or question a specific company has. Different cases will be presented by the lecturer. The students can choose freely between those cases.

#### 1. Identification

The identification contains of indicating keywords. The students will gather the essential keywords regarding their case.

#### 2. Search Strings

The students will create a set of keywords using Boolean operators to be used in public search engines.

#### 3. Social Media Analysis

The data retrieved from the Web will be summarized into a report.

Several cases and examples of social media analysis reports will be supplied by the lecturer.

Textbook(s) and tuition materials will be demonstrated and uploaded by the lecturer. Also a deadline for delivery of the paper will be set by the lecturer. The delivery of the paper should be done two weeks before the online lecture at the most to insure that the lecturer can prepare himself for the feedback he is about to give the students during the Online Lecture No. 2. The paper should contain 10 Pages and a minimum of 5 pages.

# Online Lecture No. 2

The students will receive a feedback for their paper. They will be given the opportunity to rework their paper considering the new feedback given by the lecturer. This Online Lecture will be an

extended learning process for the students in order to complete the part of the course "Web Mining".

# Part 2: "Competitive Intelligence"

Class Lecture No. 3

- 1. The lecturer will answer questions, which have come up so far.
- 2. Topic "Competitive Intelligence" and "Web Technologies" will be introduced by the lecturer. "Competitive Intelligence" is the main part and idea, while "Web Technologies" will be a supplementary lecture for Competitive Intelligence.
- 3. A mandatory work will be introduced containing the following process:

# Paper: Competitive Intelligence Process

The students will have to develop a report, which will contain of 3 parts. In order to do this, the lecturer will present a case of a company which has a certain information good product or service. With the help of this case, the students will develop an own competitive intelligence process. The report will have to contain:

1. Overview of the information that is needed

Descriptive Part: the student will describe what kind of information is essential for the company (i.e. using bullet points) and describe why this kind of information is needed.

# 2. Tools

The student will do research by himself and figure out, what Web sources can be helpful to retrieve the requisite information. He will provide a list of Web sources and describe what information can be gained from those sources. The list should not be covering a large area of sources, but suffice the case at hand.

# 3. Process

The student will develop a process, which will help everybody in the company to understand what to do. The student will ascertain that anybody in the company can run the process himself without further deep explanation.

Example(s) of processes will be provided by the lecturer.

# Online Lecture No. 3

- 1. The students will receive a feedback about their paper.
- 2. Other possible processes and concepts will be introduced by the lecturer.
- 3. An online workshop will be introduced:

Online Workshop & Paper: Web Technologies

The lecturer will present several case studies, where the students will have to choose one of them to work on a solution. Every student will provide a solution of 1-3 pages regarding to the case. The solution must contain a proposal for action including which technologies the company should use in order to attain its goal. The case will be supplied by the lecturer. Also an example for a proposal for action will be supplied by the lecturer. There will be a deadline for the pages to be sent to the lecturer. There will be no feedback for this work.

# Examination

All papers are a part of the examination and will be contributed to the final grade as followed:

- 10%: Road Map Forming an Enterprise
- 40%: Web Mining
- 40%: Competitive Intelligence Process
- 10%: Web Technologies

The assignments and grades are subject to change by the actual course and its requirements.

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