Syllabus
Course Program

Business modeling and projecting

Specialty
D3 – Management

Institute
Institute of Education and Science in Economics, Management and International Business

Specialization
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Department
Department of Management (204)

Educational program
Business administration (in English)

Course type
Mandatory

Level of education
First (bachelor's level)

Form of study
Full-time

Semester
6

Language of instruction
English

Lecturers and course developers



Olena Prokhorenko

Olena.Prokhorenko@khpi.edu.ua
PhD in Economic Sciences, Associate Professor, Professor of Department of Management

Authored and co-authored over 70 scientific and methodological publications. Senior lecturer of courses "Strategic Change Management", "Self-Management", "Business Diagnostics"

More about the lecturer on the department's website
https://web.kpi.kharkov.ua/mto/about/staff/prokhorenko-2/

General information

Summary

The aim of the course is to develop modern economic thinking regarding the concept, essence and characteristics of a company's business model, the features of forming different types of models according to a set of factors, as well as indicators for assessing business performance.

Course objectives and goals

The goal of the course is to reveal the theoretical and methodological foundations and practical tools of business modelling as the basis of effective business development. The main emphasis in the formation of the content of the course is made on highlighting the components of business models as well as aspects of actual issues of business development such as digitalization, globalization and sustainability.
The course tasks are following:
- research of theories and approaches to business modelling;
- mastering the methods of value identification and consistensy with organizational capacities;
- familiarization with the mechanisms of resours supplement as well as assessment of model's effectiveness;
- mastering modern directions of business development

Format of classes

Lectures, practical classes (seminars), consultations, self-study. Final control in the form of an exam

Competencies

SC02. The ability to analyze the results of organization activity, to compare them with the factors of the external and internal environment.
SC03. The ability to identify prospects of organization development.
SC04. The ability to determine the functional areas of the organization and the relationships between them.
SC08. The ability to plan the organization's activity and to manage the time.
SC16. The ability to generate business ideas, to justify the feasibility and form of their implementation as well as to present them to stakeholders

Learning outcomes

LO 04. To show skills of identification of problems and justification of management decisions.
LO 07. To show skills of organizational planning.
LO 09. To plan and to organize an operational activities, to manage the business entity resources effectively.
LO18. To be able to plan business activities and substantiate project proposals

Student workload

The total volume of the course is 180 hours (6 ECTS credits): Lectures - 30 hours, Workshops - 30 hours, self-study - 120 hours.

Course prerequisites

The prerequisites for this course are knowledge and practical skills, obtained on courses Fundamentals of Management, Marketing, Enterprise Economics, Finance of Enterprises, Riskology

Features of the course, teaching and learning methods, and technologies

Presentations, discussions, workshops, case-based learning, individual and teamwork, research work, preparation the individual task (course work) on the base of independent research. Study materials are available to students through OneDrive, Teams

Program of the course

Academic classes

Lectures

Topics of the lectures	Hours
Topic 1. The essence of a business model and approaches to its formation 1. Development of views and approaches to the process of strategic management of a company. 2. Definition and functions of a company's business model 3. Evolution of business models. 4. Types and patterns of business models	4
Topic 2. Canvas 1. Business model components 2. The 9 Building Blocks 3.The Business Model Canvas	2
Topic 3. Value proposition as the main element of a business model 1. Concept of "value proposition" 2. Canvas Customer Profile	4

3. Value Map 4. Fit between the Customer Profile and Value Map.	
Topic 4. Resource provision 1. Strategic resources of the company's business model 2 Intellectual capital 3 Types of resource effects 4 Key competencies	4
Topic 5. Cost structure and Revenue Streams 1. Cost structure 2. Revenue Streams design	4
Topic 6. Business model Design 1. Customer Insights 2 Ideation 3 Visual Thinking 4. Prototyping 5. Storytelling 6 Scenarios	4
Topic 7. Life cycle and business model assessment 1. Business life cycle and the functioning business model 2. Transformation of the company's business model 3. Business model valuation.	4
Topic 8. Organizing for Sustainability. New BM approaches. 1. The Triple Transition: Climate, Energy, and Circularity 2. A New Model for Organizing Multiple Value Creation 3. Alternative Business Model Templates	4
Total hours	**30**

Workshops

Topics for workshops/seminars	Hours	Weighting coefficients *a*
1.Topic 1. 1 Business modelling and business planning 1. The key elements of business model (brain storm and discussion) 2. The key elements of business plan (brain storm and discussion) Demonstration on Padlet.	2	0,075
2.Topic 1.2 Business model patterns 1. Case study "Amcor" 2. Student's reports "Business model patterns examples"	2	0,075
3.Topic 2. 1 Business model components identification 1. Workshop Assemble the business model puzzle and guess the company. Discussion	2	0,075
4.Topic 2.2. Canvas drowing 1. Case study. Canvas drowing. " Discussion	2	0,075
5.Topic 3.1 Customer Profile 1. Workshop "Assess Your Value Proposition Design Skills" 2. Case study. Customer job, customer pain, customer gain	2	0,075
6.Topic 3.2. Value Map 1. Case study. Products and Services, Pain Relievers , Gain Creators 2. Workshop "Fit values"	2	0,075

7.Topic 4. Resource provision 1. Workshop "Find the investment" 2. Resource types	2	0,075
8.Topic 5. Cost structure and revenue stream. 1. Case study "Amcor" (2)	2	0,075
9.Topics 1-5 Summary Intermediate 1. Selection of a research object for a coursework. Presentation of research objects by students. 2. Check-up (control work)	2	-
10.Topic 6.1 Business model Design. 1. Workshop&Case study	2	0,05
11.Topic 6.3 Business model Design. Business processes. Fundamentals of Business-process management (BPM). Workshop&Case study	2	0,07
12.Topic 7.1. Company Life cycle 1.Workshop LC determination	2	0,07
13.Topic 7.2. Business model assessment 1. Workshop "KPI depot"	2	0,07
14.Topic 8.1 Organizing for Sustainability. New BM approaches 1.Case-study Susutainable business models	2	0,07
15.Topic 8.2. Organizing for Sustainability. New BM approaches 1.Workshop "Make it sustainable"	2	0,07
Total hours	**30**	$\sum_{i=1}^{n} a_i = 1$

Laboratory classes

no laboratory classes

Control works

Students are offered 2 questionnaires of 20 test questions per each, randomly generated from the proposed list. Each question contains only one correct answer.

Topics for control works	Weighting coefficients *b*
Quiz 1	0,5
Quiz 2	0,5
Total	$\sum_{i=1}^{m} b_i = 1$

Self-study

Self-study includes
- processing of materials provided in lectures (30 hours),
- preparation for practical classes (30 hours),
- completion of an individual task (course project) (40 hours)
- preparation and completion of tests (10 hours)
- preparation for the final assessment (10 hours)

Individual assignment

An individual assignment must be fulfilled by the student on the example of any company. The main purpose is to describe the company's current business model and propose, evaluate it and suggest improvement measures. The task should be based on the theoretical approaches discussed in the lectures and contain references to literary sources. A list of literary sources should be given at the end of the paper. At the same time, the text of the task should not contain theoretical provisions, but only the results of the author's ideas and developments. Total volume of course paper is no more than 25 pages of standard typewritten author text. The coursework must be formatted as a text file (Word or PDF) and presented at the defense (the presentation can be up to 6 posters).

Content of individual assignment

Section 1. General characteristics of the organization The general characteristics of the organization include the name of the organization, the form of ownership, the main types of activities and the main characteristics of the current activity: the number and composition of personnel, the dynamics of the sale of goods/services, income and results of financial activity, etc. It is worth citing only the main indicators that allow you to form an idea about the scope of the organization's activities. The volume of this section should not exceed 3 pages.
Section 2. BM Canvas completion In this section, it's required to complete (or to describe) an existing business model using the CANVAS methodology. It's necessary to provide a schematic representation and describe in detail each of the BM elements. It is also necessary to determine what type of BM pattern the company uses. The volume of this section should be up to 10 pages.
Section 3. Business model assessment In this section, it is necessary to assess the current business model for compliance with the organization's life cycle, modern market and societal requirements. To do this, it is necessary to conduct an analysis of the market and organizational environment. The volume of this section has to be up to 6 pages.
Section 4. BM Improvements Propose improvements to the current business model based on the findings of the previous section. Identify what exactly needs to be changed/added/removed from the model elements or its pattern. The volume of this section should be no more than 5 pages.
Total hours **40**

Non-formal education

Non-formal education includes professional courses/training, civic education, online education, professional internships, etc. The recognition of learning outcomes acquired in non-formal education applies to both mandatory and elective academic courses/educational components. The elements of non-formal education recommended in the syllabus can be recognized through a simplified procedure without additional validation of the results (without creation of a subject committee).

Recommended training courses, internships

1. Mastering business models: how to design and assess winning business models (Strategyzer): https://www.strategyzer.com/training-programs/mastering-business-models-how-to-design-and-assess-winning-business-models. Obtaining the certificate allows full recognition of the course with the highest score
2. Business Model Canvas: A Tool for Entrepreneurs and Innovators (Project-Centered Course). https://www.coursera.org/learn/business-model-canvas/home/
To receive a final score, an individual assignment is required
3. Innovating with the Business Model Canvas. https://www.coursera.org/learn/uva-darden-innovation-business-model-canvas
To receive a final score, an individual assignment is required
4. Business Model Canvas https://www.coursera.org/projects/business-model-canva

To receive a final score, an individual assignment is required
5. Business models in strategic management https://www.open.edu/openlearn/money-business/business-models-strategic-management/content-section-0?active-tab=description-tab
To receive a final score, an individual assignment is required

Literature, training materials, and information resources

Main literature

1. Osterwalder, A., & Pigneur, Y. (2014). Business model generation. Jakarta: Elex Media Komputindo.
2. Gassmann, O., & Frankenberger, K. (2014). The business model navigator ePub eBook: The business model navigator: 55 models that will revolutionise your business. Pearson UK.
3. Jonker, J., & Faber, N. (2021). Organizing for sustainability: a guide to developing new business models (p. 242). Springer Nature.
4. Awan, U., & Sroufe, R. (2022). Sustainability in the circular economy: insights and dynamics of designing circular business models. Applied Sciences, 12(3), 1521.
5. Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2015). Value proposition design: How to create products and services customers want. John Wiley & Sons..
6. Bunarto, A. (2021). Mind Map Value Proposition Design.

Additional materials

1. Gasparin, M., Green, W., Lilley, S., Quinn, M., Saren, M., & Schinckus, C. (2021). Business as unusual: A business model for social innovation. Journal of Business Research, 125, 698-709.
2. Broccardo, L., Zicari, A., Jabeen, F., & Bhatti, Z. A. (2023). How digitalization supports a sustainable business model: A literature review. Technological Forecasting and Social Change, 187, 122146.
3. Snihur, Y., & Markman, G. (2023). Business model research: Past, present, and future. Journal of Management Studies, 60(8), e1-e14.
4. Прохоренко О. В., Комаровський Д. Є. Бізнес-моделювання волонтерської діяльності // Міжнародний науковий журнал "Інтернаука". Серія: "Економічні науки". - 2024. - №1. https://doi.org/10.25313/2520-2294-2024-1-9595
5. Г. О. Швиданенко Формування бізнес-моделі підприємства : навч. посіб. [Електронний ресурс] / Г. О. Швиданенко, Н. В. Ревуцька. — К. : КНЕУ, 2013. — 423, [1] с.
6. Управління формуванням бізнес-моделі підприємства/ Т. Остапчук, Г. Ткачук, В. Виговський, О. Кушніренко. Житомир: Державний університет "Житомирська політехніка" - 2020. - 267 с.

Information resources

1. https://www.management.com.ua/
2. https://www.indeed.com/
3. https://www.liveplan.com/
4. https://kpidepot.com/

Grading system

The final grade for the educational component is determined by the lecturer and is based on topics, types of activities, etc., in accordance with the syllabus. It is an integrated assessment of the results of all types of student learning activities. The final grade should reflect all the grades for the different parts of the educational process, taking into account their weighting coefficients k:

Continuous assessment (during workshops) k_1	Control works, k_2	Individual assignment, k_3	Final assessment k_4
0,2	0,2	0,5	0,1

The sum of the coefficients must be equal to one: $k_1 + k_2 + k_3 + k_4 = 1$. The weighting coefficients for the final assessment are decided by the course developer.

The final grade is calculated using the following formula:

$$G = C \cdot k_1 + K \cdot k_2 + I \cdot k_3 + E \cdot k_4$$

where: C – weighted average score for the continuous assessment
I – individual assignment grade
K – weighted average score for the control works
E – final assessment (exam) grade

$$C = \frac{C_1 \cdot a_1 + C_2 \cdot a_2 + \ldots + C_n \cdot a_n}{\sum_{i=1}^{n} a_i}$$

where: a_i - weighting coefficient for each workshop.

$$K = \frac{K_1 \cdot b_1 + K_2 \cdot b_2 + \ldots + K_m \cdot b_m}{\sum_{i=1}^{m} b_i}$$

where: b_i - weighting coefficient for each control work.

The assessments for each component (C, K, I, etc.) are based on a 100-point scale in line with the provisions of the "Criteria and System for Assessing Knowledge and Skills, and Rating of Higher Education Students" of the National Technical University "Kharkiv Polytechnic Institute."

The final grade is finalized as the calculated value of G, rounded up to the nearest integer.

Grading scale

Total points	National	ECTS
90–100	Excellent	A
82–89	Good	B
75–81	Good	C
64–74	Satisfactory	D
60–63	Satisfactory	E
35–59	Unsatisfactory (requires additional learning)	FX
1–34	Unsatisfactory (requires repetition of the course)	F

Norms of academic integrity and course policy

Students must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI": to demonstrate discipline, good manners, kindness, honesty, and responsibility. Conflict situations should be openly discussed in academic groups with a lecturer, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.
Regulatory and legal documents related to the implementation of the principles of academic integrity at NTU "KhPI" are available on the website: http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/

Approval

Approved by 30.08.2025  Head of the department
Nataliia SHMATKO

30.08.2025  Guarantor of the educational program
Olena PROKHORENKO