

## Программа учебной дисциплины «Продакт-менеджмент»

Утверждена  
Академическим советом ООП  
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Автор	Фоменков Д.А.
Число кредитов	6
Контактная работа (час.)	60
Самостоятельная работа (час.)	168
Курс	1
Формат изучения дисциплины	Без использования онлайн курса

### I. ЦЕЛЬ, РЕЗУЛЬТАТЫ ОСВОЕНИЯ ДИСЦИПЛИНЫ И ПРЕРЕКВИЗИТЫ

Целью освоения дисциплины «Продакт-менеджмент» являются формирование компетенций, необходимых для успешной карьеры на позиции продакт-менеджера. Содержание курса разрабатывалось с учетом профессиональной аккредитации New Product Development Professional (NPDP) Certification, что дает возможность студентам проходить тестирование на получение сертификата PDMA без дополнительной подготовки.

В результате освоения дисциплины студент должен:

#### **знать:**

- основные подходы к разработке новых продуктов и условия их успешной реализации;
- источники получения рыночной информации для всего процесса управления продуктом;
- Agile принципы разработки новых продуктов;
- ключевые компоненты бизнес-модели и ценностного предложения.

#### **уметь:**

- генерировать идеи для новых продуктов, используя различные методы и источники, включая Gartner Hyper Cycle, эмпатическое проектирование, дизайн-мышление и др.;
- оценивать привлекательность идей для новых продуктов;
- использовать количественные и качественные методы исследования для целей управления продуктом;
- проектировать процесс разработки нового продукта;
- прогнозировать продажи для целей финансового планирования;
- выстраивать командную работу для реализации проектов по разработке новых продуктов;

#### **владеть:**

- навыками коммуникаций для транслирования ценностного предложения всем стейкхолдерам процесса;
- навыками обработки и интерпретации результатов маркетинговых исследований;
- навыками построения системы продакт-менеджмента в компании;
- навыками количественного анализа для модификации существующих продуктов.

Изучение дисциплины «Продакт-менеджмент» базируется на знаниях по следующим направлениям:

- Основы маркетинга

Для освоения учебной дисциплины студенты должны владеть следующими знаниями и компетенциями:

- знать основные концепции маркетинга;
- обладать навыками работы с количественной и качественной информацией.

## **II. СОДЕРЖАНИЕ УЧЕБНОЙ ДИСЦИПЛИНЫ**

### **Topic 1. Product Manager as a Position in a Company: Responsibilities and Qualifications.**

Functions of product manager. Product manager archetypes. Project managers and program managers. Archetypes of product managers: technologist, generalist, business-oriented. Product managers in different companies. Transitioning to product manager from different fields. Right experience for product manager. How to prepare resume.

### **Topic 2 Product Management Life Cycle Model and Product Master Plan**

General product management life cycle model: discovery and innovation, new product planning phases, new product introduction phases (execution), post-launch product management. The basic construction of the product master plan: product and product line business documents, strategic plans, business cases, product requirements documents (PRDs), product roadmaps, product launch plans, marketing plans created for the product, product discontinuation plans, functional support plans (FSPs), marketing FSP, product development FSP, finance FSP, sales FSP, supply chain FSP, customer service FSP, legal and regulatory FSP, operations FSP.

### **Topic 3 Ideation as a Starting Point of All Product Development Models.**

Idea capture and handling system. Main sources of new product ideas. Voice-of-customer methods: ethnographic research, customer visit teams, customer focus groups, lead user (innovative user) analysis, the customer or user designs, customer brainstorming and inverse brainstorming, customer advisory board or panel, community of enthusiasts. Strategic methods for generating ideas: disruptions in market, core competencies assessment, peripheral vision, competitive analysis. Open innovation methods: partners and vendors, accessing the external technical community, scanning small businesses and business start-ups, external product designs, external submission of ideas, external idea contest. Technology development and fundamental research. Patent mapping. Invention factories and skunkworks. The role of mental preparation. How management can encourage idea generation. Idea-generating techniques. Brainstorming. Nominal group technique. TRIZ. Catchball. Gamestorming.

### **Topic 4 Market Analytics and Voice-of-Customer for Product Manager**

Information customers cannot provide. Information customers can provide. Techniques for deeply understanding customer needs. Qualitative methods for deeper understanding: ethnography, netnography, site visits and individual interviews, lead users, customer toolkits, real-time market validation. The market analytics process. Types of customer data. Market analytics tool: segmentation, data mining, perceptual mapping, needs ranking, concept testing, conjoint analysis. Web-based market analytics.

### **Topic 5 Design Thinking in Product Management**

What “design thinking” is. How to apply design thinking in organization. “Design thinking” and the “knowledge funnel”. “Analytical thinking” and “intuitive thinking”. “Abductive logic” and “logical leaps of the mind.” Characteristics of exploration and exploitation. Stanford’s design thinking approach.

### **Topic 6 Stage-gate model to design new product development process.**

An overview of Stage-Gate system: discovery, scoping, build the business case, development, testing and validation, go to launch, launch, post-launch review. Types of products which

Stage-Gate system can handle. The Structure of the Stage-Gate system. What Stage-Gate is not. Agile Stage-Gate: hybrid model. Stage-Gate for "open innovation". Automated Stage-Gate systems. Common errors in designing a next-generation stage-gate system.

### Topic 8 Finance and Forecasting for the Product Manager

Financial planning for product managers. Creating business cases for product investments. Testing planning assumptions using sensitivity analysis. Product cost models: standard costing, target costing, activity-based costing. Establishing pricing models. Preparing product budgets. Maturity assessment. Forecasts during the new product development process. Forecasting techniques: jury of executive opinion, scenario analysis, Delphi method, decision trees, assumption-based modeling, trend line analysis, moving average, exponential smoothing techniques, looks-like analysis (analogous forecasting), diffusion models, autoregressive moving average (ARMA) /autoregressive integrated moving average (ARIMA) models, linear regression, nonlinear regression, logistic regression, event modeling, expert systems, neural networks, simulation, concept testing, product use testing, market testing, pre-market testing.

### III. ОЦЕНИВАНИЕ

$$O_{\text{накопленная}} = 0,3 \times O_{\text{дз}} + 0,7 \times O_{\text{аудиторная}}$$

$$O_{\text{итоговая}} = 0,6 \times O_{\text{накопленная}} + 0,4 \times O_{\text{экзамен}}$$

где O - оценка

Все оценки по 10-ти балльной шкале. Все оценки округляются арифметическим способом.

### IV. ПРИМЕРЫ ОЦЕНОЧНЫХ СРЕДСТВ

#### Оценочные средства для текущего контроля студента

Домашнее задание

Please pick up one technology from Gartner Hype Cycle. Then they develop five product ideas based on chosen technology. Students must prove the existence of opportunity for developed ideas.



Source: Gartner (August 2016)

Please answer the following questions:

1. Why do you think there is an opportunity on the market for your idea?
2. Please, evaluate technological feasibility of your idea.
3. Who is your target audience?
4. What benefits do you offer to your target audience?
5. What is your value proposition?

### **Оценочные средства для промежуточной аттестации**

#### **Экзаменационные вопросы**

1. List main responsibilities of product managers.
2. Explain the market-based view and the resource-based view on new product development.
3. What are the main models of innovation process?
4. What is the Stage-Gate System? Describe the general flow of the typical Stage-Gate System.
5. Explain Scrum approach to new product development.
6. How Kanban ideas might be used in product management.
7. Explain main principles of lean startup methodology.
8. What are the elements of a promising business idea?
9. Ways of presenting business idea.
10. Idea Capture and Handling System. The Sources of ideas.
11. What is the Tyranny of Served Markets? (from reading)
12. Explain TRIZ (from reading)
13. What are the main techniques for ideation stage?
14. Methods of functional analysis.
15. What is the customer-led business? (from article)
16. What marketing tools does customer-led business use? (from article)
17. Why is the value of traditional market research tools limited when it comes to developing innovative products or services?
18. What is the market-oriented business? (from article)
19. What marketing tools do market-oriented business use? (from article)
20. What is customer insight and its role in product development?
21. What are the main characteristics of Russian context which might constrain or facilitate innovation activities?
22. How marketing research techniques must be matched to the type of innovation to ensure greater success and insight?
23. What is concept testing and how it is used by high-tech marketers?
24. What is conjoint analysis, and how high-tech marketers can use it to refine the product development process?
25. What is customer visit program?
26. What is empathic design?
27. Who are lead users?
28. Explain house of quality tool (from reading).
29. What factors influence a customer's potential adoption of an innovation?
30. What are categories of adopters and their characteristics? What are the appropriate marketing strategies for each of the categories?
31. What is the chasm? What are the key decisions a company must make to cross the chasm?
32. How does segmentation depend on degree of innovativeness?
33. What is a technology map?
34. What is the "make-versus-buy" decision in technology management?
35. Describe what-to-sell continuum.
36. What factors affect a firm's decision about what to sell?

37. The simultaneous presence of market uncertainty, technological uncertainty, and competitive volatility characterizes most high-tech environments. Explain.
38. What are the factors giving rise to technological uncertainty?
39. What is a technology life cycle?
40. Explain the following types of innovations: incremental versus breakthrough, product versus process, sustaining versus disruptive, organizational innovations.
41. What is the contingency theory of high-technology marketing? What marketing tools are appropriately used for incremental innovations?
42. What marketing tools are appropriately used for breakthrough (radical) innovations?
43. Peripheral Vision as an Idea Source (from reading)
44. Does high-tech marketing need to be different from marketing of traditional products? Why?
45. What is Gartner Hype Cycle and how it can be used by marketers?
46. Explain technologies presented on Gartner Hype Cycle (from your list)
47. Compare Yo-Mobile and Tesla product development process (from reading)

## V. РЕСУРСЫ

### 5.1 Основная литература

1. Steinhardt, Gabriel. The Product Manager's Toolkit®: Methodologies, Processes, and Tasks in Technology Product Management [Электронный ресурс] / Gabriel Steinhardt; DB Springer Books. - 2<sup>nd</sup> ed. – Berlin: Springer International Publishing, 2017. - Режим доступа: <https://link.springer.com/book/10.1007/978-3-319-49998-7>. - Загл. с экрана.

### 5.2 Дополнительная литература

1. Barkley, Bruce T. Project Management in New Product Development [Электронный ресурс] / Bruce T. Barkley; DB Books24x7. - McGraw-Hill. 2008. – 397 p. - Режим доступа: <https://library.books24x7.com/toc.aspx?bookid=23646>. – Загл. с экрана.
2. Innovation and Product Management: A Holistic and Practical Approach to Uncertainty Reduction [Электронный ресурс]/ Kurt Gaubinger, Michael Rabl, Scott Swan, Thomas Werani; DB Springer Books. – New York: Springer-Verlag, 2015. - Режим доступа: <https://link.springer.com/book/10.1007/978-3-642-54376-0>. - Загл. с экрана.
3. Grieves, M. Product Lifecycle Management: Driving The Next Generation Of Lean Thinking [Электронный ресурс]/ Michael Grieves; DB Books24x7. McGraw-Hill. 2006. - Режим доступа: <https://library.books24x7.com/toc.aspx?bookid=11962>. - Загл. с экрана.
4. Stark, J. Product Lifecycle Management: 21<sup>st</sup> Century Paradigm for Product Realisation [Электронный ресурс] / John Stark; DB Springer Books. – London: Springer-Verlag Limited, 2011. - Режим доступа: <https://link.springer.com/book/10.1007/978-0-85729-546-0>. - Загл. с экрана.
5. Schiel, James. The ScrumMaster Study Guide [Электронный ресурс] / James Schiel; DB Books24x7. - Auerbach Publications, 2012. – 237 p. - Режим доступа: <https://library.books24x7.com/toc.aspx?bookid=47196>. - Загл. с экрана.
6. Handbook of New Product Development Management [Электронный ресурс] / edited by Christoph Loch, Stylianos Kavadias; БД ebrary. – Routledge, 2007. – 559 p. – ISBN 9780750685528. – Режим доступа: <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/reader.action?docID=319177>. – Загл. с экрана.

### 5.3 Программное обеспечение

№ п/п	Наименование	Условия доступа
1.	Microsoft Windows 8.1 Professional RUS	<i>Из внутренней сети университета (договор)</i>
2.	Microsoft Office Professional Plus 2013	<i>Из внутренней сети университета (договор)</i>
3.	R (Rstudio)	<i>Свободное лицензионное соглашение</i>

### 5.4 Профессиональные базы данных, информационные справочные системы, интернет-ресурсы (электронные образовательные ресурсы)

№ п/п	Наименование	Условия доступа
	<b><i>Профессиональные базы данных, информационно-справочные системы</i></b>	
	Электронные образовательные ресурсы	<i>Договор на использование электронных баз данных/по подключению и обеспечению доступа к базам данных</i>
	<b><i>Интернет-ресурсы (электронные образовательные ресурсы)</i></b>	

### 5.5 Материально-техническое обеспечение дисциплины

Учебные аудитории для лекционных занятий по дисциплине обеспечивают использование и демонстрацию тематических иллюстраций, соответствующих программе дисциплины в составе:

- ПЭВМ с доступом в Интернет (операционная система, офисные программы, антивирусные программы);
- мультимедийный проектор с дистанционным управлением;
- возможность подключения к сети Интернет и доступ к электронной информационно-образовательной среде НИУ ВШЭ через Интернет.