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Course for learning and development managers about learning experience design  
and product management

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November, 2022



BUSINESS  
SCHOOL

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# 1. Abstract

The consultancy agency executed the project for a corporate university in a group of companies that requested to develop L&D managers and e-learning specialists' new skills: learning experience design, product management, and communication. The goal was to conduct and implement a program for learning and development managers and e-learning managers within the company and support transformation towards learner-centricity, a data-driven approach, and increasing the effectiveness of blended learning programs and their time to market. During project implementation, preliminary study, program design, and implementation took place. The course was conducted in a project-based approach, including mentoring intervention, and covered all important topics for modern L&D managers. As a result, 83% of participants achieved learning outcomes of the program, developed new competencies, implemented new training programs within the company, received a process map and instruments for learning program design and implementation, and solve their individual requests. Also, there was a positive evaluation of the program by participants and clients, which was measured using the final questionnaire.

Keywords: Learning and Development, Blended Learning, Learning Experience Design, Project-Based Learning.

# 1. Sumário

A consultora executou o projeto para uma universidade corporativa em um grupo de empresas que solicitou desenvolver novas competências dos seus gestores de T&D e especialistas em e-learning, nomeadamente em: design de experiência de aprendizagem, gestão de produtos e comunicação. O objetivo foi conduzir e implementar um programa para gestores de aprendizagem e desenvolvimento e gestores de e-learning dentro da empresa e apoiar a transformação para o foco no formando, uma abordagem orientada para dados e focada no aumento da eficácia dos programas de aprendizagem mista e o seu tempo de lançamento no mercado. Durante a implementação do projeto, ocorreu o estudo preliminar, o desenho do programa e a sua implementação. O curso foi conduzido através de uma abordagem baseada em projetos, incluindo o uso de mentoria, e cobriu todos os tópicos importantes para gestores de T&D modernos. Como resultado, 83% dos participantes alcançaram os resultados de aprendizagem do programa, desenvolveram novas competências, implementaram novos programas de treino dentro da empresa, receberam um mapa de processos e instrumentos para o desenho e implementação do programa de aprendizagem e resolveram as suas solicitações individuais. Além disso, houve uma avaliação positiva do programa por parte dos participantes e clientes, que foi medida por meio do questionário final.

Palavras-chave: Aprendizagem e Desenvolvimento, Blended Learning, Learning Experience Design, Project-Based Learning.

## 2. Executive summary

The project we executed with the consultancy agency for a corporate university in a group of companies in the fall, winter, and spring of 2021-2022. The group of companies brings together several companies from different industries: metallurgy and minerals, power plant engineering, gold mining, woodworking, tourism, wholefood e-commerce, banking, high-tech venture capital, media, advertising, and telecommunications. Each company has its L&D department without a unified structure. The consultancy agency focuses on the educational market and works with corporate universities, universities and schools, and the edtech segment.

The group of companies requested to develop L&D managers and e-learning specialists' new skills: learning experience design, product management, and communication. The project's goal was to conduct and implement a program for learning and development managers and e-learning managers within the company.

This program was supposed to support transformation within L&D departments towards learner-centricity, a data-driven approach, and increasing effectiveness of learning programs and their time to market.

Most of the group presented and implemented their new or redesigned programs. Also, most of the group demonstrated their knowledge and skills acquisition in the workplace. All participants received and implemented a process map and instruments for learning program design and implementation. Also, everyone within the team could talk using the same concepts and ideas. Lots of individual requests were solved through one-to-one consultations with mentors. Finally, this project formed a community and launched best practices and expertise sharing among colleagues. Skills and knowledge development showed 85% of the group. CR (rate return) value and the percentage of participants' projects implemented during the course were also 85%. NPS value was 83%. CSI (Course Satisfaction Index) was 82%. The average evaluation rate of the content was 86%, of the mentors' team 89%, and of the experts' team - 79%.

The project took eight months, from the first request to the last meeting, and was assessed as successful and effective. The consulting agency helped close the skill gaps and implemented new approaches within the group of companies.

## 3. Literature review

### 3.1. Learning and development specialists' roles

Learning and development professionals are integral members of an organization's human resources and workforce departments. They develop training programs based on the organization's needs in collaboration with managers, executives, and other staff members. They are responsible for identifying training gaps and developing programs to fill those gaps. They also train the trainers within the organization to ensure that everyone can be an effective trainer and mentor to other employees. Other duties include developing learning strategies, designing curriculums, evaluating the effectiveness of training programs, selecting and implementing new technologies that can improve learning programs, conducting employee surveys to measure the impact of training on performance, and coordinating training and development activities

Professionals in learning and development can play many different roles within an organization. They may work full-time in a corporate setting or may split their time between multiple employers as a contractor or consultants. We will use the conceptual framework for learning and development strategic and operational roles in organizations. (Garavan et. al., 2019)

1. The first role - is a **strategic business partner**. Strategic business partners are responsible for developing and implementing effective organizational strategies that support business goals and enhance talent development efforts. In medium-sized, they are responsible for various operational HR-related domains, with L&D as one significant area of responsibility. The role was more strategic in large organizations, particularly, and dedicated more time to learning and development.
2. The role of **L&D managers** also involves managing the L&D function, providing L&D solutions, and developing the expertise of L&D practitioners.
3. **Learning and development specialists** as the third strategic role. This role focuses on traditional classroom-based L&D intervention. This role is aimed at building the capabilities and competencies of employees, and L&D practitioners will train and develop a wide array of employees.
4. **L&D strategist** is a fourth role. They focus especially on strategic L&D issues and leveraging employee intangibles, competencies, and capabilities. They invest considerable



time and effort into developing a learning culture to ensure employees are aligned with the strategic goals of the organization.

5. The fifth strategic L&D role is the **manager of learning projects**. This is a high-level strategic role focused on transformational change within highly dynamic environments. L&D specialists work across the organisation and with stakeholders external to the organisation on projects that have strong learning and change focus.

Those are strategic roles of L&D, but there are also operational roles:

1. **Production trainer**, mostly in manufacturing environments. They deliver specific training to employees on tasks they need to do their jobs effectively and correctly, including safety training.
2. **Technical trainers** with expertise train customers and clients in the use of technical equipment.
3. **Instructional designer**, designing eLearning, blended learning, and classroom-based solutions in specialist areas.
4. **Learning technology and media specialist**. The growing use of technology-based learning methods and mobile learning has led to the emergence of this specialist role in large international organizations.
5. **L&D administrator** that works on the administration of L&D activities.

There is no standard set of roles for every company, but every organization will have at least some of them in place to support its strategy. When implementing a new strategy, it is necessary to review existing roles and decide which are obsolete and should be replaced by new roles and which are useful.

### 3.2. Important functions of modern L&D specialists

Changing workplace perspective also creates challenges for L&D specialists. Six aspects are considered critical for L&D function nowadays (Pollock et al., 2015)

1. As a result of the learning intervention, it is essential to **define clearly and unambiguously what the business expects** to happen. The business needs to align employees' personal capabilities and competencies with the needs of the organization's strategic direction, mission, values, and culture. This requires a competency framework that maps current

capabilities to future goals as well as individual development plans to ensure that employees have the necessary skills and knowledge needed to achieve goals in the future.

2. The most effective learning and development organizations **design the entire experience, not just an event**. This means that they view the entire process of learning as one whole that includes every aspect of it: how learners perceive the event, how they approach it, how they interact with it, how they react to it, and how the event affects them in the long run. It includes things such as whether the event is delivered in a way that makes the audience comfortable or is confronting; whether the content is relevant and interesting to the audience; and whether the content is presented in a style that keeps the audience involved. Learners' total experience must be optimized, not just what happens during instruction but live, virtual or on-the-job.
3. In effective learning organizations, learning is delivered in a way that **enables its application**. In other words, selected learning strategies should bridge the gap between learning and doing by beginning with the end in mind - what participants are supposed to do differently and better.
4. The learning professionals need to take a leadership role in improving the **learning transfer** process. Several factors define the transfer climate, and determine the results that training will ultimately yield.
5. Leading organizations work with L&D leaders to create a learning culture in which everyone understands their responsibility to support learning during and after instruction is provided. By reallocating some of their learning resources from pure instruction to **performance support**. Leading organizations are able to make measurable improvements in the transfer of knowledge from training to the workplace. When an employee encounters a new situation on the job that requires new skills or behaviors, the resource should be able to help the employee quickly find the information they need, when they need it.
6. In order to justify the investment in learning and development, L&D professionals should demonstrate that the learning is having a positive impact on performance, not only on how much they are learning. For continuous improvement to take place, L&D professionals need to **document results** in ways that guide future investments.

### 3.3. Blended learning

There are different challenges L&D specialists face after COVID-19, but one of the serious ones is the implementation of blended learning. From the perspective of the learner in the physical world, many face-to-face courses have been canceled, and many corporate trainers have returned to their jobs and have to deliver training remotely through webinars, phone calls, video calls, or, online sessions.

Blended Learning is an effective combination of different modes of delivery, models of teaching, and styles of learning which are exercised in an interactively meaningful learning environment. (Dziuban et al., 2013). Blended Learning can be defined as the organic integration of face-to-face and online learning approaches and technologies that have been carefully selected and are complementary to each other (Graham, 2006).

The key components of blended learning are (Dziuban et al., 2013):

- Learning environment
- Media
- Instructional component

L&D specialists face a current challenge of blended learning implementation in companies: technical, instructional, and organisational.

- **Technical challenges** are not about getting technology to work on networks, but rather about ensuring the success of the program by utilizing and supporting appropriate technologies. An example could be the digital literacy of participants.
- Management may agree that blended learning is the right direction for training initiatives, but they fail to recognize that it is a complex process that extends beyond individual courses. **Organisational challenges** can include redefining the facilitator's role or managing and monitoring participant progress.
- Often, when learning technologies are introduced, more attention is paid to technology implementation, while the content design is left with too little time and budget to succeed. Some examples of **instructional design challenges** include coordinating all elements of a blended course or matching the best delivery medium to the course objectives

While this may seem to be an inconvenience to some, blended learning gives the opportunity to use online learning technology as a cost-effective and flexible tool to provide the necessary

training and support for employees. This can also be used for employees who are unable to attend company premises because of lockdown measures physically.

Blended learning involves active learning, where students are put in situations that require them to read, speak, listen and think. Blended learning combines online and face-to-face classroom components, and allows students to learn and access material in a variety of modes. A blended learning approach adds a human touch to the teaching, enhances individualization, personalization, and relevance, and lets the instructor tailor learning content to the unique needs of different audience segments.

### 3.4. Learning experience design

One of the initial requests of the company was to switch from the instructional design approach toward learning experience design (LXD). The use of user-centered design and user experience methods in learning design is increasing, which signals a shift in the field of learning design and technology towards more human-centered approaches to creating digital environments for learning.

With human-centered approaches to learning design, learners are provided with easy-to-use digital learning tools that help them achieve their learning goals. Rather than creating and delivering educational and training materials, learning design starts to use a more human-centered approach. A crucial part of this shift is the move from designing formal courses and learning to design learning experiences. Formal courseware is no longer the primary focus for learning technologies; rather, today's focus is on creating adaptive learning experiences that are accessible anytime and anywhere. Users' needs are also increasingly being taken into account in the design of learning environments and tools. A growing body of evidence shows that when people participate in well-designed experiences, they learn more effectively than when provided with traditional training solutions.

In LXD, design practices from other fields, like architecture, product design, and software design, are integrated into instruction and learning. The goal is to create compelling experiences that engage the learner and promote a more meaningful learning experience. Cross-disciplinary, multi-disciplinary, interdisciplinary, and transdisciplinary are all terms used to describe LXD. The core features are (Schmidt, et al., 2021):

1. **Human-centric.** LXD focuses centrally on human experience from the perspective of the learner, as well as other learning technology users (e.g., teacher, LMS administrator). In

order for learning technology to be effective, it should support and enhance learner activities, make learning easier for learners, facilitate collaborative work and social interaction, motivate learners, be easy to use and intuitive, and so on.

2. **Theoretically grounded.** LXD is largely inspired and guided by theoretical perspectives that have found resonance in the field. For example, cognitive psychology and its principles, theories of motivation and engagement, social constructivism, sociocultural theory, and social interaction theory.
3. **Informed by user experience design methods (UXD).** Adapted and extended UXD methods are used in LXD to make them more appropriate and effective within the context of learning design. UX is a multidisciplinary field concerned with the understanding of user needs and the creation of user-friendly products and systems. UX is grounded in the study of cognitive science as well as psychology and human-computer interaction.
4. **Socio-culturally sensitive.** LXD seeks to promote an empathetic understanding of the learner and their socio-cultural context. Studies have demonstrated that the most effective way to foster empathy is for people to understand the point of view of others. Empathy fosters people's ability to put themselves in someone else's shoes and understand the situation from their point of view.

For intervention, we designed a course with a project-based approach. We aimed to promote social and collaborative skills through the creation of engaging scenarios where students learn to solve social problems while developing key competencies such as teamwork, problem solving, and communication.

### 3.5. Project-based learning

An active, student-centered form of instruction, project-based learning (PBL) emphasizes autonomy, constructive investigation, goal-setting, collaboration, communication, and reflection within a real-world context (Kokotsaki et al., 2016). The process involves students working in teams to investigate and respond to an authentic question or problem and then presenting their findings to the class. Effective implementation of project-based learning can foster the development of key 21st-century skills: creativity, critical thinking, collaboration, and communication.

Digital technology, high-quality group processes, and teachers' ability to scaffold and support students' learning effectively. Course participants have to perform tasks in which they apply new knowledge and skills in practice while gaining feedback along the way. Students use digital tools to collect and analyze data to identify the causes of problems and then propose solutions to those problems. Well-aligned assessment and didactic instruction have been identified as facilitating factors in PBL implementation. Early assessment of student's progress allows teachers to tailor their teaching to address specific student needs or difficulties in a timely manner and thus improve student learning effectiveness.

The role of instructors in PBL are guidance, technical support, administrative and communication (Cakiroglu et. al., 2019).

- Guidance instructor is an expert or mentor who helps students to develop the necessary skills to succeed in the course and achieve learning outcomes. He supports students in learning how to learn both how to acquire new knowledge and how to organize and apply that knowledge to real-world situations-and she provides students with guidance and feedback on their progress. At the same time, he is a teacher-facilitator of the learning process.
- Administrative role is to support the management of course activities and the exchange of information between teachers and students on the course platform.
- Technical support role includes handling technical issues and providing support to course participants on technical issues.
- Instructor-communicators are mentors who help and guide students in face-to-face situations in the physical space of the classroom and/or online in the virtual space of the course environment. They provide students with guidance and support in collaborative tasks.

## 4. Conceptual frameworks

For the intervention we used three main frameworks.

First, we use **learning experience design methods** for creating programs. That means, that the program we created for L&D professionals was:

- Human-centric. The program was tailored to the needs and level of every participant during the course. There was space for discussion and sharing knowledge among the participants.
- Theoretically grounded. We were based on social constructivism methods and approach modern teaching and mentoring methods, and adult learning theory principles.
- Informed by user experience design methods (UXD). We used different user-experience methods such as an empathy map, interviews, focus groups, and student journey mapping to design a program.
- Socio-culturally sensitive. We research and integrate different socio-cultural contexts of participants and relied on collaborative and community learning.

Secondly, we used a **project-based approach** as the main method of the program. The roles of instructors in our program were:

- Experts, who create video and text lessons and gave main theoretical concepts during the program.
- Mentors, who provided support during the learning process and facilitated group work sessions. Also, they provide one-to-one consulting and feedback on participants' projects.
- Technical and administrative support.

Thirdly, we created a **competency model for L&D specialists** in this company. It included four layers of competencies.

- Product design and management (team management, workflow and main stages of product design, UX methods, program testing, data analysis, metrics and KSA, etc.).
- Learning experience design (goal and learning outcomes setting, choosing teaching and learning methods, assessment design, knowledge of learning theories, etc, motivational and engagement theories.).
- Content and media design (working with content text and video, copywriting, and internal marketing of the programs).
- Soft skills (communication, collaboration, creativity).

## 5. Context

We executed the project with the consultancy agency for a corporate university in a group of companies in the fall, winter, and spring of 2021-2022.

The client company is a private business group founded in 1993 with a diversified portfolio of assets. The company's core market areas are currently: metallurgy and minerals, power plant engineering, gold mining, woodworking, tourism, wholefood e-commerce, banking, high-tech venture capital, media, advertising, and telecommunications. The client company strives to create a positive business environment by implementing best practices. These practices have been proven over decades of experience managing companies that are recognized as leaders in their industry.

There was no united structure of corporate university within the group of companies. Some L&D departments were modern and followed modern trends in the field, others were at the beginning stage of launching a corporate university. The experience of L&D professionals and the goals of the function was different too.

The consulting agency is a small-sized company focusing on learning experience design and corporate learning and having three main business areas:

- community of L&D specialists and educators aiming at research and development of new practices in teaching and learning
- platform with courses about learning experience design, innovations in education, corporate learning environment, etc.
- consulting for corporate universities, universities, and schools.

The initial requests of the client's company were to develop their L&D managers in the following areas:

- Methods and instruments for creating blended learning,
- Product management and user experience approach in L&D,
- Platforms and tools that can help them create and deliver blended programs,
- Communication with stakeholders and managing expectation,
- A link between learning outcomes and business results,
- Reducing time-to-market of training programs and setting realistic deadlines,
- The shift in the position of L&D manager from executor to a business partner for a stakeholder,



- Quality content design,
- Networking and experience sharing in the L&D teams, even in different companies,
- Support in implementing participant's projects.

The project's goal was to conduct and implement a program for learning and development managers and e-learning managers. As part of this program, L&D departments were supposed to be transformed towards learner-centricity, a data-driven approach, and increasing the effectiveness of learning programs.

## 6. Intervention design

### 6.1. Main steps

We proposed to divide an intervention into four steps.

1. Research. Assessment of the needs within the company and identification of development needs for a group of employees in the company, which would constitute the target audience for the intervention program (participants).
2. Program design and preparation for intervention. Development of the program – including a selection of tools, formats, modes of delivery, and criteria for evaluation and monitoring of the program. Implementation of the program included delivering the program to the participants and monitoring and evaluating the results achieved as a result of the intervention program.
3. Implementation of the course. Delivery learning content and mentoring sessions, collecting participants's feedback and its analysis in case of some improvements were needed to install during the course.
4. Results analysis. Present results and recommendations for further improvement to the relevant managers and the company's L&D heads.

**In the research phase**, the consulting team interviewed leaders of L&D departments to focus their inquiry and set program goals and success metrics. It took several meetings. Also, interviews were conducted with potential course participants and business leaders (internal clients) to define:

- The target audience of the course and their needs.
- What is missing in the process of creating learning programs?
- What is missing in communication between L&D managers and business leaders requesting learning programs?

The primary metrics consulting team targeted were:

- Skills and knowledge development, measured with formative and summative assessments and final projects presentation.

- Percentage of participants' projects implemented during the course and their launch in the second quarter of 2022 of the total number of projects at the beginning of the course. The target value was 70%.
- NPS - network promotion score. The target value was 70%.
- CSI (Course Satisfaction Index). The target value was 70%.
- CR (rate return). The target value was 70%.

During the **program design and preparation phase**, the consulting agency found a team of **experts and mentors** to develop the course syllabus and content. The agency develops a 4-months online program with a project-based approach. Participants were supposed to work on their real learning programs. By the end of the course, they made a presentation with a new course concept and content they had created. To achieve it, L&D managers had:

- Online learning text lessons and videos with the essential concepts and questions.
- Two online sessions per week with experts and mentors.
- Several one-to-one meetings with their mentors.
- Mentors provide comprehensive feedback on each stage of their project development.
- Support of their managers and peers.

There were four experts, three mentors, one instructional designer, and one administrator from the agency's side.

**During the implementation phase**, the agency ran and managed the course. It had a series of meetings with leaders of L&D departments to synchronize, provide feedback, discuss problems, and find solutions for them. Within the agency, there were weekly meetings with experts and mentors to check the group dynamic and learners' academic progress. Also, feedback from learners was collected weekly and discussed with the group or their managers.

Several changes in the syllabus and content of the program were implemented based on learners' requests. Data related to the goals set before was collected in the analyses phase. The consulting team presented and discussed the results with leaders of L&D groups.

## 6.2. Calendar plan

Calendar plan of the intervention is presented in the following chart.

Month	November				December				January				February				March				April				May	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Research																										
	Research design			x																						
	Interviews					x																				
	Analysis					x																				
Course design																										
	Goals and learning outcomes						x																			
	Methods and formats						x																			
	Syllabus design						x																			
	Assessment design									x																
	Platforms and other technical solutions									x																
	Mentors and experts									x	x	x														
	Content design									x	x															

Implementation of the course																					
Week 1							x														
Week 2								x													
Week 3									x												
Week 4										x											
Break											x	x									
Week 5													x								
Week 6														x							
Week 7															x						
Week 8																				x	
Results analysis																				x	x

Table 6.2. Calendar plan of the intervention.

# 7. Implementation

## 7.1. Research stage

To focus their inquiry and set program goals and success metrics, the consulting team interviewed leaders of L&D departments in the research phase.

The research goals were:

- Define the target audience of the course, their typical behavior and work tasks, and the most critical problems the participants face in their job tasks.
- Build their knowledge and skills map: what they already know, what they lack, and what they need to know in order to perform their current tasks and challenges.
- Identify the initial process of designing training programs in different companies in the group of companies. Identify strengths and weaknesses of the company's existing training practices and initiatives and identify areas of opportunity for improving training effectiveness at individual and organisation levels.
- Understand the needs and knowledge gaps of L&D managers: what they need to know and be able to do to perform their jobs better, how to improve their competencies, and discover their expectations towards learning.

The research was made by the learning experience designer in a consulting agency. The in-depth interview was conducted with six L&D managers and their team leads. All interviews were made online via Zoom and lasted around one hour.

### **Main findings**

Employees of the L&D team are responsible for developing training programs. Several have experience coaching and training employees, some assess employee competencies, and some are in charge of training programs. The roles were defined:

- instructional designer
- product owner
- automation of HR processes
- assessment of cross-functional divisions and HR-services
- organization of training on labor protection and occupational safety

- development of e-learning programs with experts
- development of leaders.

The main difficulties they face performing work tasks:

1. There appears to be a lack of partnership between the stakeholders and the L&D team because the stakeholders have taken a too direct approach toward the L&D team. Stakeholders have little understanding of the learning processes; thus, they sometimes overestimate their employees' skills and competencies.
2. Problems with interacting with subject matter experts. Sometimes it is necessary to involve internal experts in the design of a program or to guide them. However, it is unclear how to influence them, manage their motivation, and achieve the correct result on time. There are times when external expertise is needed, but this is not always successful. Management support is lacking in some cases.
3. Program design and delivery deadlines are very tight. For example, a week to develop the concept of the program, 2-3 months to develop and create two modules of video content of about 3 hours each.
4. L&D managers are not familiar with the basics of instructional design and product management. It takes a lot of time and effort to develop the logic of the narrative as well as the structure of the educational program.

What L&D managers want to learn?

1. Communication with the stakeholders:
  - a. Find a learning solution that meets stakeholders' needs
  - b. Managing expectations, goals, and learning outcomes
  - c. Aligning business objectives with learning outcomes
  - d. Providing the stakeholder with the results of research and data analysis. If necessary, convince them to adjust the training objectives
2. Search and use of data already available in the company
3. Work with metrics and data analytics
4. Goal and learning outcomes setting, linking it with assessment design
5. Conducting qualitative and quantitative research

6. Communication with experts
  - a. Increasing the involvement of experts in the process and motivating them to participate in it
  - b. Briefing of experts: what to do, in what format, and in what time frame
7. Structuring the course logic
8. Using tools to engage students in online learning
9. Conducting an evaluation of the content and choosing a format for it.

The average workflow of creating learning programs was analyzed by interviewing L&D managers. Usually, they take the following steps:

1. A request for training comes from a business learner (stakeholder). He describes the problem, formulates goals and objectives, and indicates experts who can help collect content for the program.
2. An L&D manager researches the problem and context, refines the goals and educational outcomes of the training, connects it to the business request, communicates with experts, develops a high-level concept, and sketches the structure and logic of the program.
3. This concept is discussed with the stakeholder and corrected, if necessary.
4. An L&D manager goes into program development. Often, an external provider is involved in the development of the program, responsible for the direct work with the content, its packaging and technical solutions. He also offers creative solutions for presenting content.
5. As soon as the program has been prepared, it is evaluated by the L&D managers and presented to a stakeholder for their approval.
6. A stakeholder provides feedback on the changes that should be made based on their feedback.
7. Program testing (pilot launch) takes place during pre-launch events - preview sessions or focus groups with a small group of participants before the launch to a large audience.
8. Feedback is collected and analyzed to improve the program before its launch to the entire audience. Launch of the project to the whole audience takes place after final corrections.
9. The final presentation of the program and its adjustment, if required. The program is usually launched after the final presentation to the stakeholders; however, it is sometimes found immediately after corrections are made.



10. Launching the program in the public domain and making it available to the public.  
Depending on the project's complexity, this can take from two weeks to two months.
11. Collecting feedback and final report. A final report is generated and presented to a stakeholder with recommendations based on the findings and problems identified during the implementation process.

We defined what is missing in this process. There is no discussion of how training can become a solution for the stakeholder's request. Most likely, this is because the employee of the training team lacks perseverance in communicating his position and the company's cultural characteristics. Many learning programs are not always grounded in metrics and KSAs (only 2 out of 7 people spoke about metrics in their learning programs). In some cases, a lack of understanding of how to formulate metrics can result in the inability to measure a change in the qualitative characteristics of leaders, for example.

As a rule, the research phase is poorly presented, either because there is no time left for them or because the company's corporate culture accepts the customer's position as a guide to action when conducting the research. Motivational design and engagement tools are not used, nor are UX tools. It is not possible to determine how (and whether) the training contributed to the resolution of the tasks set and the improvement of the business performance of the company as a whole.

This research defines the course's target audience, socio-cultural context, knowledge, and skill gaps. Also, we determined the average process of program design and understood their needs and expectations. Based on these findings, we developed a list of recommendations for improving the process, and set the program goals.

## **7.2. Program design stage**

After research and finding analysis, we started to work on program design. We had six meetings with a client team. During the meetings, we discussed program goals and the content of the training and created its outline, as well as the materials needed during the training process (the participant's manual). In cooperation with the client, we agreed on what should be covered in the course: what topics, how many hours should be dedicated to each topic, and what the main learning

points would be for each topic; we also selected the most suitable tools to support the training and set the criteria for evaluating the results achieved as a result of the training program.

1. Goals, business metrics, and learning outcomes set. Based on the initial analysis of the results, we identified business needs and key performance indicators for this program, using data from the company's management information systems and L&D management systems (LMS).
2. Methods and formats choosing. Based on the results of the survey we conducted with the target audience, we chose the main approach of the course and formats of online content.
3. Summative and formative assessment design. Summative assessments were done at the beginning and at the end of the program to assess the level of knowledge and competence of each participant before and after the training period. Formative assessments were conducted during individual mentoring sessions as well as at the training events themselves to monitor the effectiveness of the training and the level of knowledge acquired for each topic by the participants.
4. Methods and format choosing. Based on the results of the survey we conducted with the target audience, we chose the main approach of the course and formats of online content.
5. Syllabus development. Based on the list of topics developed, we created the syllabus – a schedule of the topics and their content based on the objectives of the training program and learning methods to be used.
6. Mentors and experts choosing and briefing. After setting the scope of the training course, we set the number of mentors who would meet with the participants in the mentoring sessions and coaching calls to be conducted before the beginning of the course. Mentors and experts were chosen based on their professional expertise and their familiarity with the subject matter.
7. Content design: video, text lessons, and online sessions. Content for the online course was created in cooperation with our learning experience designers – we provided them with the outlines of the planned content and defined the content for each lesson according to the learning outcomes set at the beginning of the project.
8. Platforms and technical solutions preparation: online tools and LMS and other platforms we used. Also, we conducted e-mail newsletters and notification messages to the participants before and after the course to inform them about registration deadlines, starting

dates of the course, and the available communication channels with other participants of the course to ask questions or ask for help during the course.

### **7.2.1. Goals and learning outcomes**

First of all, we identified business metrics that we can measure to analyze the effectiveness of the program in order to prove their worth to our client's senior management. Our research showed that our target audience was very concerned about the lack of knowledge and skills in their business area. They expected to gain new knowledge and best practices from the course to apply it to their daily work tasks. They also hoped to improve their professional relationships with their colleagues from other business units.

Metrics of success should be related to business goals, which we established together with the client:

- Increasing the effectiveness of training: increasing the speed of closing gaps in competencies
- Reducing the cost of developing programs by 10-30%
- Reducing T2M (time to market)
- Increase in the share of mixed programs among general programs

Unfortunately, because the client did not measure or collect this data before, and it was almost impossible to find it, we decided to focus on more specific product metrics. We recommended that they begin collecting this data so that, in the future, they can measure the effectiveness of other L&D interventions.

Business metrics are used to evaluate the impact on business results of training programs: for example, higher sales as a result of improved knowledge and skills or improved employee retention as a result of the enhanced corporate culture.

Product metrics show the effectiveness of training programs for their participants: for example, the number of participants' projects implemented by the end of the course, the percentage of participants who passed an assessment test. Product metrics are used to compare one training program with another and evaluate the impact of one activity on the achievement of certain business goals.

Product metrics of our course	Definition	Target value
NPS	Loyalty Index is used to measure the learner's loyalty and ability to recommend the course – the higher the index, the more he found the course effective	70% and above
CR	Conversion Rate is the number of participants the successfully finish a course and all assessments and project tasks.	70% and above
CSI	Course Satisfaction Index is used to measure participants' satisfaction – the higher the index, the higher the degree of satisfaction.	70% and above
Number of programs participants implement after course	Percentage of projects implemented during the course and their launch in the second quarter of 2022, of the total number of projects at the beginning of the course	70% and above
NPS of programs of participants		70% and above

Table 7.2.1.1. Business metrics and goals of the project.

After primary research of the problem, we offered the program for L&D managers with the following learning outcomes: knowledge, professional skills, and soft skills

Knowledge	Tasks and professional skills	Soft skills
<p>1. The process of briefing stakeholder</p> <p>2. The procedure for conducting and the content of the initial session with the stakeholder</p> <p>3. Business tasks in which training is effective.</p> <p>4. Metrics (business, product, learning)</p> <p>5. Research Design</p> <p>6. Conducting qualitative and quantitative research</p>	<p>1. Script the initial session with the stakeholder</p> <p>2. Prepare study design:</p> <ul style="list-style-type: none"> <li>- Set research goals</li> <li>- Plan interviews with stakeholders</li> <li>- Select research methods</li> <li>- Collect a portrait of a course participant</li> <li>- Plan interviews with course participants</li> </ul> <p>3. Do a research</p> <p>4. Formulate business goals, draw up a hierarchy of metrics and select the desired values for them</p> <p>5. Analyze the results of the study and formulate conclusions about how they affect the design of the program</p> <p>6. Conduct an audit of business goals, stakeholder's expectations and research results and draw a conclusion about the effectiveness of training</p>	<p>1. Ability to be persistent in communication with the stakeholder</p> <p>2. Critical thinking</p> <p>3. The ability to express a reasoned "no" when training is ineffective for solving a problem</p> <p>4. Business communication</p>

<ol style="list-style-type: none"> <li>1. The structure of the team involved in program design and the roles of participants</li> <li>2. The stages of program design</li> <li>3. Budgeting</li> </ol>	<ol style="list-style-type: none"> <li>1. Draw up an approximate budget for the development of an learning product</li> <li>2. Prepare a plan and budget for the development of an learning product</li> <li>3. Properly distribute tasks within the team involved in program design</li> </ol>	<ol style="list-style-type: none"> <li>1. Effective communication</li> <li>2. Team management</li> <li>3. Building partnerships</li> </ol>
<ol style="list-style-type: none"> <li>1. Goals and learning outcomes (Bloom's pyramid, Marzano, SOLO)</li> <li>2. Learning models</li> <li>3. Tools for working with subject matter experts</li> <li>4. Online content formats</li> </ol>	<ol style="list-style-type: none"> <li>1. Work with taxonomies</li> <li>2. Work with a competency map</li> <li>3. Define learning results in relation to metrics</li> <li>4. Choose a learning model</li> <li>5. Build a top-level course architecture</li> </ol>	<ol style="list-style-type: none"> <li>1. Goal setting</li> <li>2. Ability to learn</li> <li>3. Systems thinking</li> </ol>
<ol style="list-style-type: none"> <li>1. Syllabus plan</li> <li>2. Types and methods of assessment</li> <li>3. Structuring the concept</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop a syllabus on the chosen course model</li> <li>2. Choose the correct assessment method based on learning results</li> <li>3. Prepare a meeting plan with the stakeholder</li> <li>4. Present the concept and negotiate it with the stakeholder</li> </ol>	<ol style="list-style-type: none"> <li>1. Presentation skills</li> <li>2. The ability to highlight the main thing</li> <li>3. Planning</li> </ol>
<ol style="list-style-type: none"> <li>1. Tools and strategies to motivate students</li> <li>2. Student engagement techniques</li> </ol>	<ol style="list-style-type: none"> <li>1. Define motivational strategies in the program</li> <li>2. Determine the creative concept of the program</li> </ol>	<ol style="list-style-type: none"> <li>1. Creative thinking</li> <li>2. Motivation</li> </ol>

3. Creative techniques		
1. Content formats 2. Tools for working with program materials: simplification, reduction, practicality	1. Content design 2. Planning online and offline sessions	1. Ability to prioritize main things 2. Analytical thinking
1. Student journey map of a learning product 2. Testing learning programs 3. Preparation of a plan for improvements and program updates 4. Development of a promotion plan and promotional materials for the program within the company	1. Compose student journey map learning program 2. Correct the program based on the compiled student journey map 3. Determine the procedure for testing the program, 4. Define a plan for promotion and internal communication about the program within the company	
	1. Prepare the project for final presentation 2. Defence of the project 3. Use best practices within the company	1. Presentation skills 2. Critical thinking

Table 7.2.1.2. Learning outcomes of the course.

### 7.2.2. Methods and formats

Based on interviews and program goals, we choose project-based learning as the main approach of the course. The reasons were as follows:

- This type of learning would help our target audience achieve better learning outcomes it allowed everyone to apply their knowledge to their daily activities

- It allowed us to evaluate learners' competencies while they work on real projects
- It allowed participants to share their experiences with others

During the course, participants worked individually on their real project - they had to design or redesign a training course. The training lasts eight weeks and combines theoretical materials, participation in practical sessions, and individual work on a project.

During the course, there was a two-week break that was provided to the participants in order to restore strength, complete assignments, and have individual consultations with the teachers during this period. For maximum results, the project that the participant will design must meet at least one of the following parameters:

- The participant has an offline training program that he wants to transfer to a blended format
- The participant has a blended program that he wants to improve or redesign
- The design of the program has already been started, but it is clear in terms of content and subject matter experts.

There were two project presentations within the course - in the middle (for a formative assessment) and in the end. For content delivery, we choose text lessons and video tutorials with a duration of fewer than 15 minutes each to help participants watch at any time they need.

### **7.2.3. Summative and formative assessment and feedback**

Summative and formative assessment and feedback are crucial parts of project-based interventions. Every week, the participants receive an individual assessment and evaluation of their work from a mentor - he evaluates the project and gives recommendations for improvements. When a participant completes the project, he receives a summative evaluation from the mentor and made a final presentation in front of the L&D team.

To help mentors provide quality feedback, we created a rubric for assessment in the form of a matrix. It is a tool used to interpret and grade learners' work against criteria and standards. The matrix had criteria and levels, so mentors could assess a project and give L&D managers clear instructions, on what to improve. In addition, they could give feedback and advice in a free form directly to a learner. Also, we developed a detailed guide for mentors on how to give effective feedback and evaluations. Mentors could either give direct feedback from their mentor profile or discuss and evaluate each project within a group at the end of the week - this allowed for greater



discussion and less stress for the mentor. All outcomes were recorded in a Google spreadsheet by a mentor.

An example of assessment rubrics for one topic is presented in the table.

<b>Criteria</b>	<b>Level indicator 2</b>	<b>Level indicator 1</b>	<b>Level indicator 0</b>
Learning outcomes			
Correct formulation of learning outcomes	Correct wording of learning outcomes: - verb - performance criterion - terms	Learning outcomes are not fully formulated. for example, not in verbs or they do not have conditions and performance criteria	Learning outcomes are not formulated
Combining learning outcomes into a single system (taxonomy)	A taxonomy is selected that matches the goals of the program (Bloom, Solo, Marzano, KSA) or tasks are designed and after that - taxonomy	Taxonomy selected but does not quite correctly or fully reflect the hierarchy of learning outcomes.	No taxonomy selected
Compliance of program goals with the research findings	Learning outcomes are consistent with program objectives and take into account research findings	Learning outcomes partially correspond to the goals of the program and only partially take into account the findings of the study	The research findings are not taken into account

Compliance of program goals with the business goals and stakeholders request	Learning outcomes take into account the goals of the stakeholder completely. The customer can understand whether his goals were achieved as a result of the program or not.	Learning outcomes do not fully take into account the goals of the stakeholder.	Learning outcomes do not take into account the goals of the stakeholder.
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Table 7.2.3. Example of assessment rubrics for formative assessment.

#### 7.2.4. Syllabus design

The syllabus for the course, which consisted of eight weeks, was developed on the basis of the learning goals, methods, and funding opportunities of the project, and each week was dedicated to a specific topic and task related to the project.

During the course, participants had the same structure of the week. On Monday, they received a newsletter with text lessons, video tutorials, session recordings, and weekly project assignments. It took around 1 hour to read and watch all lessons. On Tuesday, they had two-hour online sessions where they worked with experts and mentors in mini-groups on implementing new concepts and materials on their projects. Within a week, they had individual project work, and usually, it took 2-4 hours. On the next Monday, they had to send project assignments to their mentor and receive feedback in two days. Also, each learner had 2-3 individual mentor sessions.

#### 7.2.5. Platforms and other technical solutions

The main communication was in WhatsApp chat. On Fridays, the coordinator published the next week's schedule, and send reminders on session days. Chat was also a space for communication, questions and initiatives withing the group.

During the online sessions we use: Zoom and Miro. Zoom - for voice and video calls. Miro - screen sharing for presentations and presentations.

Lessons and important course information we posted in **Notion**. Notion - a platform for sharing and storing notes, files, and ideas between team members. Content of the course were shared with the whole group via link in the chat channel.

In order to upload and share project tasks, we used Google Docs. We created a template where participants could fill in the details of their project tasks, and mentors provided feedback on it.

In addition, we used a internal companie's newsletters where we posted information about the course and invited people to join it.

#### **7.2.6. Mentors and experts**

Mentors were L&D managers with some experience, coaching, and facilitation skills. They were chosen according to their professional background, experience in the field, and some personal preferences of program managers. Each participant was assigned one mentor and they changed every two weeks.

Their tasks were:

- Facilitate online meetings when the big group (20 participants) was divided into 3-4 small groups to work on their tasks. Demonstrate and lead practices such as brainstorming, mind mapping, collaborative writing, and others during online learning sessions.
- Provide relevant and meaningful feedback on their projects on a weekly basis and help the participants identify weaknesses and improve them.
- Motivate and engage participants because the course was intense and difficult at times.
- Explain the purpose of each learning module and mentor materials
- Set up communications in the group chat with participants to discuss difficulties and challenges with the course content and schedule.
- Individual consultations to clarify issues and connect participants with relevant resources and networks outside the organization.

We had a weekly meeting with all mentors to discuss mentoring and learning process and feedback collected from the client and participants. At the end of the course, the coordinator wrote an evaluation report about each participant, and mentors provides their feedback about the participants too.

Experts had more experience working in a field and teaching experience than mentors, and they had to cover the same roles as mentors - facilitate online meetings, demonstrate and lead

practices during online learning sessions, provide feedback on projects on a weekly basis and help participants identify weaknesses and improve them. Also, they made tailored presentations for different topics during the course as an introduction to a new subject matter expert. They teach the basics of a subject or skill using real-life examples and case studies of organizations that were able to implement innovative solutions successfully. Working with our learning experience designer, they conducted lessons, tools, and articles that should be in the course.

### **7.2.7. Content design**

After we agreed with the client about the course syllabus, topics, project tasks, and experts, the learning experience designer started to create content for the course. It took one month to create 19 lessons and prepare 14 online sessions.

The learning experience designer:

- Set goals with a subject matter expert on the lesson or online session and ask about the main concepts in a lesson and the resources to create it. For a lot of lessons, we already had learning materials, but we needed to adjust them according to the learning goals.
- Prepared a draft of a lesson and showed it to an SME to approve or correct. After that, he approved the draft and published it on the online platform.
- Designed all the supportive material for the course: templates for a project working, final toolkit, assessment grid, presentation, and a Miro board.
- Conducted questionnaires for feedback collection. Those surveys among participants in various groups to evaluate their satisfaction with the course and obtain additional data on their needs and preferences regarding the format of future courses.

## 7.3. Implementation of the course

### 7.3.1. Week 1

Topic of the week	Lesson's topic	Format	Project task
Product management: initiation	Understanding of a request from the business. Session script of the meeting with a stakeholder	Text or video lesson	1. Study design prepared: - Set goals for research - Schedule interviews with stakeholders and other stakeholders
	Research of the target audience of the program: stages and UX methods	Text or video lesson	
	Goals and metrics: business, product and learning outcomes	Text or video lesson	
	Learning program components and design stages	Text or video lesson	2. Research started
	Research design	Online session	3. Business goals are formulated, a hierarchy of metrics and the desired values are selected for each metric
	Communication with a stakeholder	Online session	4. The results of the study are analyzed and conclusions are formulated on how they affect the design of the program

Table 7.3.1. Design of the week 1 of the course for Learning and Development specialists

During the first week, L&D managers started to work on their projects with an interview with stakeholders of the program and target audience research.

We started by discussing what kind of goals L&D can help to achieve business and which not. Business goals that learning can help to achieve are: achieving strategic goals, closing skills gaps or the need for reprofiling, maintaining quality standards, reducing costs, stimulating innovation,

develop corporate culture. Examples of business goals that are hard to achieve with training are incorrect hiring, lack of tools to complete the task, fuzzy standards and requirements for the role, lack of clear feedback on the workplace, management problems, and mess in business processes.

To help learners to prepare for the first meeting with a stakeholder, the algorithm of the first meeting was given to them.

1. Goal setting - tell a stakeholder why you need this interview, and ensure that he understands the goals of the meeting.
2. Summarize what you understood from the stakeholder's questionnaire. Check if you understand each other equally.
3. Main questions

Questions about the **context** of the program:

- Who are the main stakeholders and target audience of the course? Who decides and agrees on the intermediate and final results of the work?
- What is the most convenient way to keep in touch to resolve current and operational issues?
- How ready is the stakeholders to take part in the process, hold individual meetings, give feedback, and discuss what works and what does not?
- What other stakeholders are there in this situation on which the achievement of learning goals depends?
- How does the customer understand that there is a problem? What exactly points to it?
- What indicators indicate the presence of a problem?
- What have you already tried to do besides training to solve this problem?
- What do you not like about the actions taken?
- What are the restrictions? (terms, budget, etc.)

Questions about the purpose of the training:

- What business needs will be satisfied as a result of the training?
- What are the business benefits of training?
- What is the difference between the current situation and the one after the training?

Questions about the **target audience**:

- Who is the target audience?
- What could be the desired behavior of the target audience after graduation?

Questions about **learning outcomes**:

- What are the criteria for the success of the training program?
- What needs to happen for learning to be successful?

Questions about **measuring** learning outcomes:

- What indicators will confirm that the goals have been achieved?
- How do we ensure that training brings results, and where do we get this data from?
- Who will notice these changes?
- How do we collect information?

Questions about **learning support**:

- What will managers have to do to ensure that the behavior of employees after training remains at the desired level?
  - What should change in the environment around employees so that changes in the behavior of employees do not come to naught after a while?
4. Plan further steps, agree on the date of the next session, and specify the procedure for interaction and contacts of experts and managers of employees who will be trained to organize a qualitative study.
  5. The next step is to summarize the timing (how long it will take you to prepare this or that block) and make sure that the customer understands the negative consequences of delayed feedback.
  6. Agree on issues related to edits
    - How many times the customer can come up with edits within the agreed budget,
    - The need for an additional budget, which may be required for making changes above the agreed amount,
    - According to what criteria you are ready to accept changes from the customer, and according to which you are not (in particular, the design, the format of the program, the distribution of formats within the program - usually they are not the area of influence of the customer)
  7. Compile a resume based on the meeting results and send it to the customer by mail, thanking them for their time.

Also, we gave a checklist of the first meeting with a stakeholder and recommendations about how to improve communication with him.

According to the study design that L&D managers should conduct on the first week, they have to come up with the tasks of learning design for their subsequent individual work with mentors. We have recommended that they consider interviews with stakeholders, leaders, and employees as their first step in developing programs. We used the design thinking model and their UX methods.

A study design had the following steps:

1. Formulating intention and goals.
2. Creating a student portrait (empathy map or persona).
3. Defining the main hypothesis for the study.
4. Selection of research methods (in-depth interview, focus group, shadowing, etc.)
5. Creating an interview plan

As a result of the study, participants had to analyze it. First, they had to group the responses received into thematic blocks to make them easier to analyze. Secondly, they went back to the original target audience description and refine it. Also, they had to consider how the study findings will impact course design. Finally, they had to create a Point of View (point of view on the problem) on which they will rely:

We want to help.... (to whom?),  
to solve a problem or a task .... (what?),  
with the help of .... (tool or method)

According to research and stakeholder interviews, participants set goals and metrics for the program. They used a Plan-Do-Check-Act algorithm (PDCA), which is the simplest algorithm for managing the process and achieving goals. The management cycle starts with planning. Plan - setting goals and processes necessary to achieve the goals, as well as planning work to achieve the goals of the process. Do – execution of scheduled work. Check - a collection of data and control of the result based on key performance indicators obtained during the process implementation, identification and analysis of deviations, establishing the causes of deviations. Act - taking measures to eliminate the causes of deviations from the planned result, changes in planning, and resource allocation.

Participants choose business metrics for the project, which show how successful the educational product is commercially. Product metrics also indicate how successfully the team fulfills the product promises given to the user. Learning goals show how a student learns, and



metrics reflect how well the product team teaches, how favorable the conditions are for the user, and how comfortable it is for them to learn.

After the first week, participants had to start working on their tasks individually: talking to stakeholders and training experts, looking for materials on the Internet, interviewing learners, developing an empathy map or a student portrait, defining the central hypothesis of the study, selecting research methods for conducting studies.

### 7.3.2. Week 2

<b>Topic of the week</b>	<b>Lesson's topic</b>	<b>Format</b>	<b>Project task</b>
Product management: process and people	The structure of the product development team: roles, activities, key functions.	Text or video lesson	1. Analysis of the program implementation: approximate budget, development period, 2. The team needed to develop the program is determined 3. Work plan created 4. Potential risks identified
	Product design: stages and activities, interaction with the stakeholder	Text or video lesson	
	Budget calculation	Text or video lesson	
	Stages of product design	Online session	
	Working with team and external providers	Online session	

Table 7.3.2. Design of the week 2 of the course for Learning and Development specialists

During the second week of the course, participants continued to work on the project plan and assemble the project team.

We recommended a versatile algorithm for learning experience design based on the ADDIE model and design thinking techniques.

1. Analysis

a. Goal setting

- i. Understand the goals and objectives
- ii. Understand metrics

b. Study

- i. Understand the student, their learning characteristics, and their context

2. Design and Development

a. Designing a curriculum

- i. Find SME
- ii. Design content
- iii. Design learning outcomes
- iv. Select training strategies for learning outcomes and assessment methods
- v. Check for constructive alignment

b. Designing the learning experience:

- i. Visualize educational strategies
- ii. Evaluate cognitive load, motivation and engagement
- iii. Design the educational environment

c. Development of methodological materials:

- i. Presentations, scripts, videos, etc.

3. Implementation

- a. Run the program, testing it first

4. Evaluation

a. Evaluate the program in progress:

- i. Using techniques of formative and summative assessment
- ii. By using research interventions

b. Evaluate the program as a result:

- i. Achievement indicators

c. Evaluate the program through time:

- i. Achievement long-term effect

Participants had to plan their program design and calculate an estimated program delivery time. Another task was to assemble a team for their project according to the following roles in program design: a subject matter expert, an instructional designer, an internal communication manager (for the program PR), a producer, and learning support.

Also, they had to summarise possible items of expenditure and calculate the cost of creating a training product: conducting research, involvement of an external expert, involvement of an external provider to develop the entire course or its elements, the attraction of freelancers (subject to the development of the course on their own), content production, video production, design, course testing, the introduction of the course into the distance learning system, payment for the work of team members in creating a training product.

### 7.3.3. Week 3

<b>Topic of the week</b>	<b>Lesson's topic</b>	<b>Format</b>	<b>Project task</b>
Learning experience design: goals and methods	Goals and learning outcomes	Text or video lesson	1. A taxonomy or competencies has been selected that describes the learning outcomes of the program
	Learning Models	Text or video lesson	2. Learning outcomes results are determined in relation to the described metrics. It was chosen which learning outcomes will be processed online and which offline.
	Online content formats	Text or video lesson	3. The main approach of the course is determined (task-oriented model, experiential learning, or traditional models)
	Building a system of learning outcomes in relation to business metrics	Online session	4. Based on the course model, topics of the course are chosen
	Learning models and choice of formats	Online session	

Table 7.3.3. Design of the week 3 of the course for Learning and Development specialists

During the third week participants had to work on learning goals and strategies of their future program.

According to learning goals, we recommended they choose one of the taxonomies of learning outcomes and implement it for their programs: Bloom's taxonomy, which is the easiest one, and Marzano's taxonomy, that suitable for adult programs, because the is a metacognitive level, and SOLO taxonomy, which is the best one to use in task-oriented learning programs.

Also, participants chose the main approach of the program from the following ones: error-based and success-based learning, project-based learning, problem-based learning, challenge-based learning, phenomenal-based learning, and art-based learning methods.

For choosing formats of a program, we recommended to participants a list of possible online and offline forms of training: lecture and video lecture, interview, webinar or stream, screencast, Khan Academy style, scribing or animation video, podcasts, audiobook, audioguide, text lesson, long read, infographic, mindmap, presentation and SCORM courses, interactive video, simulation, game, AR and VR simulation. For each method, we added examples, tools and programs that can be used for content creation, advantages, and disadvantages of the method in terms of cognitive load and learning effect.

#### 7.3.4. Week 4

<b>Topic of the week</b>	<b>Lesson's topic</b>	<b>Format</b>	<b>Project task</b>
Learning experience design: syllabus and SME	Working with subject matter experts	Text or video lesson	1. Selected formats for the blended program (online and offline) 2. A syllabus and schedule has been formed
	Assessment (formative, summative, diagnostic)	Text or video lesson	

	Presentation of the course concept for the stakeholder	Text or video lesson	3. The tools and formats of summative and formative assessment in the program are defined
	Working with SME to create a syllabus. Assessment design	Online session	4. A plan for a meeting with the stakeholder on the presentation of the project concept was formed
	Building long-term relationships with stakeholders	Online session	5. As a result of the meeting, changes were made to the concept of the program, if necessary

Table 7.3.4. Design of the week 4 of the course for Learning and Development specialists

During this week, participants continued to work on the learning strategy of their projects. They had to choose assessment methods and create a course topic plan and syllabus with subject matter experts.

There are different roles of subject matter experts and different involvement in program design.

1. Curator of the program

- a. Designs the program together with the methodologist or independently.
- b. Recruits teachers, determines educational outcomes, teaching methods, assessment formats, etc.

As a rule, curators are strong professionals in their field and have fairly large teaching experience. These are the people who create the top-level concept of the educational program, determine the roles in the educational process, educational outcomes, learning format, and assessment format, and are responsible for the result of the program.

2. Teacher

- a. Designs a lesson on a specific lesson, given by the curator or instructional designer.

3. Navigator

- a. Helps to orient in an unfamiliar topic at the beginning of program design.
- b. Creates longreads, assignments, or other learning materials but does not teach himself.
- c. Helps to map the graduate's competencies to prioritize the skills needed to be mastered.

- d. Involved in the development of materials but not in the delivery of the course.
4. Learning support
    - a. Accompanies training (mentoring, tutoring, coaching, facilitation, etc.)

An important step in the interaction between the program designer and subject matter expert is to create a program syllabus adjusted for the goals of the stakeholder and students. There are different ways to approach building content.

- Chronological, according to periods, for example, from the Ancient World to the present
- Problematic approach, in which several topics are built around one problem)
- From the whole to the particular (the whole system -> its parts)
- From the particular to the whole (parts of the system -> the whole system)
- From known to new (starting point > what students know)
- From new to known (starting point > unknown)
- Levels of taxonomy (cognitive or psychomotor levels, for example, according to Bloom's Pyramid)
- Progressively from one part to another (from simple to complex)
- From general to specific (difference after studying the basic material)

We gave a few recommendations to support the motivation of experts involved in creating an educational product: identify the potential interest of an expert in working on an educational product. share feedback from users with an expert. If the expert is not a teacher, he most likely does not have access to students and their emotions (thanks, enthusiasm, etc.). Learn to guide the dialogue with an expert gently so that he will not suffer much in the process.

To choose assessment techniques, participants had to determine what they evaluate and return to learning goals, choose a purpose of assessment (formative or summative), determine who evaluates the results of the assessment (teachers, experts, peers, learners by themselves), choose the type of assessment (essay, computer simulations, portfolio and artifacts, situational or knowledge tests, behavior monitoring, interview on competencies or other). Also, they had to conduct rubrics for assessment - a system of criteria, skill levels, and weight, and determine how they will give feedback to learners.

### 7.3.5. Break, and intermediate results analysis

After four weeks of the program, we analyzed feedback from participants, their performance, and attendance. The feedback form sent after every week consisted of the following questions:

- Evaluate the content (session materials and longreads) this week of the course
- What do you like about the course materials? What causes resistance?
- How far has your project progressed? What do you like about project work? What causes resistance?
- If you are not on time or have difficulties in working on a project, what kind of support from the course organizers can help you?
- If there is anything you would like to add, please post it here.

Most of the participants noted improvements in their knowledge of eLearning development practices and the practical skills for using the methods and tools described during the program. Also, participants told us that program materials and online sessions were structured and accessible, and nothing causes resistance. The attendance was good. Around 80% of learners attended all online sessions.

On the other hand, they faced difficulties with working on their projects. We noticed it while calculating how many people send project tasks to mentors. Participants described their difficulties as "The difficulties lie in the lack of time, including the SME with whom I work, as part of the development of the program.", "Project work requires constant involvement, it is difficult to switch from work tasks.", "A fairly intense workload, sometimes you have to attend a working meeting and training at the same time.", "This week, especially in the first lesson - a lot of information. I lose faith that I can implement the acquired knowledge in my program in an adequate time frame. And if it is obvious that everything cannot be taken into account, maybe I want to talk a little more about prioritization and what to focus efforts on in a limited time."

We decided to analyze those problems in a meeting with participants and adjust a course to help them finish their projects. During the meeting, we prioritize the main problems and agreed on solutions.

#### 1. High intensity of the program

It took a lot of work for participants to attend all sessions and finish project tasks. We asked mentors to help participants with time management by setting deadlines for tasks and arranging meetings between mentors and mentees. Also, on individual consultations,

mentors helped with the prioritization of tasks. We left one session per week with a duration of three hours instead of two sessions with a duration of two hours. Also, we made two weeks break in the middle instead of one week and give additional 3 weeks to finish their projects.

## 2. Tasks overlapping

For some participants, program design was not the main work priority, so they needed more time to work on their projects. We asked Heads of L&D departments and stakeholders to prioritize their workload to help them finish the course successfully. Also, we decided to make an intermediate project presentation to create a sense of urgency and increase the importance of the project work.

Those changes were implemented right before the intermediate break.

### 7.3.6. Week 5

<b>Topic of the week</b>	<b>Lesson's topic</b>	<b>Format</b>	<b>Project task</b>
Learning experience design: motivation and engagement	Motivational program design	Text or video lesson	1. Motivational strategies for the program have been identified 2. Defined the creative concept of the program and how it affects all levels of content development 3. Creative and motivational concept agreed with the stakeholder 4. Student journey map of the training program was compiled, and the program was adjusted based on it
	Customer journey map tool in learning experience design	Text or video lesson	
	Tools and strategies for motivating and engaging students	Online session	
	Creative concept of the program	Online session	

Table 7.3.6. Design of the week 5 of the course for Learning and Development specialists



By this week, all participants presented their projects on the stage they stopped, and received feedback from teachers and peers. Most of them had their first meeting with mentors, where they analyzed their progress with projects and their plans for the future. In the interactive sessions with teachers, we discussed projects in detail - from the development process to the final results. We noticed that some groups created good prototypes, and some did not manage to do that yet.

During the fifth week, we introduced instruments and tools that could help participants engage, motivate and improve the learning experience in their projects. Participants should draw a student journey map of their educational product to identify their main users: the persona, the problems they face, and the possible solution. Personas are fictional characters that serve as representatives of actual people. They are used to illustrate user needs in the product development process and help to build products for them. Another important tool was a concept map - a visual representation of the relations between concepts in an information system. It helped us understand the main ideas of the project better and determine the overall structure and logic of the educational product. We also showed the participants how to create a storyboard - a visualization tool that illustrates a sequence of learning activities they have in the program. It can help team members better understand the logic of a course and build it correctly.

Also, to add motivational and engagement tools, we introduced a Staged Self-Directed Model (SSDL) model. It helps to determine the types of stages learners go through during when learning process and introduces the four stages of competency and motivation: dependent, interested, involved, and self-directed. For each stage, there is a need for a special type of educator (expert, motivator, facilitator, consultant). Also, we introduced different motivational strategies that can be used in adult learning (Wladkowsky). For example, opportunities for multidimensional sharing, identifying learning goals, helping learners attribute success to capability, effort, and knowledge, relating learning to adult concerns, critical questions to stimulate engagement and challenge, self-assessment methods, scaffolding learning, humor, and many others. Also, participants worked on the creative concept of their projects in mini-groups in a brainstorming format.

### 7.3.7. Week 6

Topic of the week	Lesson's topic	Format	Project task
Content design: production	Creative formats of online content	Text or video lesson	1. The thematic plan and the content of each block in the program have been finalized
	Working with text and video lessons: simplification, reduction, practicality	Text or video lesson	2. A plan for one typical lesson was made and an example has been designed
	Content design 1	Online session	3. The plan of a typical lesson and the program plan are agreed with the stakeholder
	Content design 1	Online session	

Table 7.3.7. Design of the week 6 of the course for Learning and Development specialists

In the sixth week, participants started to work on the online content design.

First, they found unusual ways to deliver online content and recommended they use several principles:

- Vivid emotions help to better understand and remember the material.
- An unusual format can become a source of vivid emotions, which they can not only create by themselves own but also note on different projects.
- The found unusual solution can be analyzed, decomposed into components, and try "try on" to their program
- It is important to maintain the emotional balance of the educational program and not overload it with unusual formats, since additional energy is required to adapt and switch between them.

Also, participants started to work with online content: text, video, design, and production, and all lessons were revised by content, style, literacy, and structure. We discussed three often-used scenarios of lessons:

- History: chain of events, final (conclusion)
- Argumentation: thesis, set of arguments and counterarguments, conclusion
- Overview: list of options or categories

After this week, all participants started to create content for their courses: text, infographics, tests, quizzes, exercises, games, write scripts for videos, and then record them.

### 7.3.8. Week 7

Topic of the week	Lesson's topic	Format	Project task
Product management: initiation, implementation, testing, analysis	Training program test	Text or video lesson	1 The procedure for testing a new program, success metrics and an action plan in case of program refinement are determined 2. A plan for promotion and internal communication about the program is defined 3. Plan for promotion, testing and improvement agreed with the stakeholder
	Development of a promotion plan and promotional materials for the program	Text or video lesson	
	Implementation	Online session	
	Testing	Online session	

Table 7.3.8. Design of the week 7 of the course for Learning and Development specialists

On week seven, participants returned to product design and planned to test steps and internal promo of their project within the company.

For testing, we used design thinking principles. The sequence of steps may be as follows:

Defined MVP - minimum viable product - a model of your product that allows you to test the hypothesis. MVP is a prototype of the product designed to fulfill one primary function or goal without frills, it includes the basic elements of a product.

It determines what should be measured and tested. For example, methodology, demand, teachers, and content.

Conducting qualitative and quantitative indicators that should be measured at the beginning and at the end of the experiment. Quantitative indicators can be measured automatically with the help of statistics programs: click rate on a button or number of correct answers - are indicators of the number of active interactions with the product. Qualitative indicators - the percentage of positive answers on the questionnaire "how satisfied are you with the course?" - are indicators of user satisfaction and emotional reaction.

Measurement tools defining. For example, the methodology can be measured using feedback from students on how the program suited them to solving the problem. Content and teachers can be tested through trial webinars.

As a result of testing, it is necessary to analyze its results and draw a conclusion about whether it is possible to continue working with the program in its current form or whether it is necessary to make changes to it.

Also, one of the tasks of L&D managers who create educational products is to inform the target audience about the training opportunities in the company and specific learning products. This can be done using intra-corporate communication channels. The main channels for promoting educational solutions within the company are an internal social network, an internal corporate portal in Intranet, corporate mailing, and a corporate newspaper. For more creative solutions, they could use webinars to present educational products and a preview of the course materials.

### 7.3.9. Week 8

Topic of the week	Lesson's topic	Format	Project task
Project presentation	Project presentation	Online session	1. The final defense of the projects

Table 7.3.9. Design of the week 8 of the course for Learning and Development specialists

Before the last week and final project presentation, participants had two additional weeks to finalize their projects, receive detailed feedback from mentors and prepare presentations.

We have made a template presentation. Presentations took place in parallel in 3 groups, and each person had 20 minutes, including feedback. For the final presentation, we invited all

stakeholders and managers, so there were 41 people, including 20 participants. As a result, all participants and their managers were satisfied with the result of their project. They received positive feedback from their colleagues and the senior management of the company about the developed materials.

## 8. Results analysis

Most of the group demonstrated their knowledge and skills acquisition in the workplace and achieved the learning outcomes we set. Skills and knowledge development showed 85% of the group. It was measured by mentors with a summative assessment of participants' final projects. The participants demonstrated a positive impact on productivity through the acquired knowledge and skills in their workplace: they were developing new products and services and increasing employees satisfaction and retention. They also developed their leadership skills through peer coaching and mentoring sessions. Also, based on the survey, all participants agreed that they had learned new skills and developed their knowledge of the subject area through the project.

This case study illustrates that implementing tools using project-based learning in the workplace is not only possible but also very beneficial to the company and its employees because they implement acquire and implement new skills and knowledge with the strong support and scaffolding of mentors and experts.

CR (rate return) value and the percentage of participants' projects implemented during the course were 85%. Most of the group presented and implemented their new or redesigned programs. This was not only a great success for them but for the company as well because they started a new process of continuous improvement of processes within the company. Most of the projects were planned for implementation right after the course finished. We helped the participants to find opportunities for further implementation of their projects in the future – for example, by involving other colleagues in the company – or within other projects within the company – or in other organizations. So every participant was motivated to continue with their projects and improve their results because they knew they would be supported by us after the training had finished.

All participants received and implemented a process map and instruments for learning program design. These process maps included a list of key metrics for success that helped them determine the effectiveness of the implemented solution: the program goals, the learning activities, the methods and tools for conducting training, expected results, measurement methods, change management, and others. We conducted a handbook with all the main concepts and tools so they could return to it anytime. They could also contact the team at any time to ask for advice regarding problems they faced while implementing the changes within their organizations. The handbook

also contained various cases from different industries that could be analyzed for applying tools and concepts to different situations.

CSI (Course Satisfaction Index) was 82%. It was higher than the company's expectations: the project achieved higher satisfaction rates than the organization's expectations, which was important for the management. NPS value was 83%. Almost all respondents confirmed that they would recommend the project to others: Through surveys, we found out that the participants valued the high level of flexibility offered during this course, the professionalism of mentors and experts, and the effectiveness of the tools and case studies given. Lots of individual requests were solved through one-to-one consultations with mentors. Mentors helped the participants develop a clear view of the tools available on the market and how to choose the right solutions for their organizations.

We have proved that training combined with effective coaching is the most effective way to improve a workplace environment, increase employee satisfaction and launch effective processes within the company.

Finally, this project formed a community and launched best practices and expertise sharing among colleagues. Many members of the L&D team are already implementing new solutions and experimenting with different technologies. They share their knowledge with colleagues in the company and help them develop their skills in solving business problems through technology. They help each other solve technical problems or answer their questions. Also, everyone within the team could talk using the same concepts and ideas. They managed to discuss similar issues and find a common language to work with the new solutions and with their colleagues from the partner companies.

Participants also evaluated the content of the course and mentor and expert team. The majority of them expressed their gratitude towards both the course and the mentor/expert team in the evaluation form. The average evaluation rate of the content was 86%, of the mentors' team 89%, and of the experts' team - 79%.

	Rate on a 10-point scale how useful the course was for you and met your expectations	On a scale of 1 to 10, how willing are you to recommend the course to your colleagues?	Evaluate course content, i.e. videos and other materials on the platform	Evaluate the work of course experts (interaction with them in sessions and consultations and the benefits of this interaction)	Evaluate the work of the course mentors (interaction with them in sessions and consultations and the benefits of this interaction)
Participant 1	9	9	9	6	10
Participant 2	9	10	8	7	9
Participant 3	7	8	9	7	10
Participant 4	8	7	8	8	8
Participant 5	8	10	8	8	10
Participant 6	7	6	8	5	7
Participant 7	10	10	9	10	10
Participant 8	6	5	10	9	8
Participant 9	10	9	9	9	10
Participant 10	7	9	10	8	10
Participant 11	8	10	8	10	10
Participant 12	10	10	9	10	10
Participant 13	9	9	9	9	9
Participant 14	8	4	7	7	6
Participant 15	7	8	9	6	8
Participant 16	9	9	9	7	8
Participant 17	7	6	7	8	8



Participant 18	9	10	9	7	9
Average	82%	83%	86%	78%	89%

Table 8.1. Summary of course evaluation by participants.

Participants left general comments and reviews about the course. Most of them were positive:

- "The program is ideal for product owners of learning products who want to systematize and deepen their knowledge in general about learning and development. I want to note separately the part of the program dedicated to the learning experience design of training programs. There are a lot of tools, frames, and practices - you will have the opportunity to "touch" each tool on your own and land on your product. From my point of view, the program is relevant for both B2B and B2C clients. Mentors deserve special words of gratitude. All of them are practitioners and just wonderful people. They were very helpful in the learning process."
- "Thank you! I sincerely think that the program is very useful and unique."
- "Time is an invaluable resource for business. That is why training programs must effectively use every minute of their participants. This does not mean that participants should not rest and reflect, but that each action in training should be filled with meaning and lead the participant to the planned result. The course shows how to do this - through its content and by example. On the course, I not only received a huge amount of unique materials that structurally formed the basis of my approach to program design but also in detail considered each stage, from preliminary research to evaluation of the final metrics of the program. Such a detailed approach allows you to independently find answers to any questions that arise while creating a new program."
- "Thank you for a very interesting and detailed course. He helped me rethink my approach to teaching and programming, which made my work more efficient."
- "THANKS! It was very interesting and exciting. I took interesting thoughts and examples not only from experts but also from fellow students."

Some of them gave us feedback for future improvement:

- "It is necessary to specify the requirements for the courses being developed within the program's framework. The pace of learning could be a little slower, for instance, once in two weeks. There were not enough tools for working with photo/video editors."

- "I want to participate in a group project with a large team, but the main thing is that the project is really necessary and beneficial."

A head of the L&D department also evaluated the work of the team. They said that the main goals were achieved, and now it is time to implement new knowledge and skills into the workplace. They valued the team's flexibility, readiness to change ineffective strategies and week-by-week checkpoints for collecting feedback. They also mentioned our availability and responsiveness: they could respond quickly to any request and resolve all issues quickly - no matter how difficult they were. This showed that we fully understood business needs and, therefore, we could provide effective solutions.

## 9. Future suggestions

There were several problems we identified by analyzing course results and participants' feedback. Firstly, we did not calculate cognitive load, and for some learners, it was too much information to integrate and implement in their projects. We should have tested all material beforehand to see which part should be revised or changed to reduce the amount of information and increase the level of understanding. We did not consider the learning curve of some learners who needed more time to complete the tasks within deadlines due to other commitments. This increased the workload for facilitators, who had to provide extra help all the time to keep all learners on track with the tasks. To solve this problem, we recommend adjusting the deadline for each task or asking for more time during the application process.

Secondly, it was difficult to shift the mindset of some participants towards being a partner with their stakeholders. It would be good to add next time reflection on it and add in the course some elements of the double-loop of learning model. For instance, after completing a task, learners were asked to give feedback on the task to their mentor. We recommend analyzing this feedback and comparing it with what was expected by the mentor at the beginning of the task: what was the gap? What did the mentor expect, and what did he get? This could help learners to understand the difference between their expectations and their reality and give them a chance to reflect on it and make conscious decisions in the future about what they need to learn and what skills they need to develop to be more effective.

Thirdly, because we expand the length of the course and gave them more time for project development, the involvement and motivation of some learners were decreased. For the future, we recommend dividing a course into 3-4 sprints with a break between so it will give learners time to rest and focus. To improve the course for future iterations, we also suggest adding motivational elements into it: reflection questions after tasks and projects so they will remind of their goals and encourage not to give up; examples of situations where problem-solving failed and how to avoid these mistakes; additional tasks with stronger impact on the results; videos related to how other product owners solved similar challenges.

Another problem we faced was the different levels of participants' knowledge and experience. We should have considered that for the different groups so that their learning paths would not be so close to each other and, at the same time, would not cause confusion and additional workload

for the mentors and the experts. Also, this problem could be addressed by primary assessment of learners and additional pre-course materials.

Based on course results and our assessment of the company's context, we develop recommendations for the client and the L&d team.

First of all, we suggested continuing community building and knowledge sharing within the L&D team. Some participants met each other for the first time in their life, and some of them got to know each other in their professional life. There is a real opportunity to use this opportunity to create a common culture of the L&D team with shared knowledge, experience, and best practices. The next steps we suggest are: developing a set of guidelines on how learning product managers can get involved in team projects; launching an internal conference or meeting to share the experience with other teams in different regions; organizing regular sessions where teams can discuss learning/training-related problems. We discussed several ways how to keep engaging team members even after the course finished: forming a group of alumni who stay connected after the course finished and creating a community blog where individuals share their experience in organizing similar events. To support the launch and evolution of this new role, we also recommended conducting a needs analysis within the company and then creating a roadmap with project milestones and activities for implementing a new role of a learning product manager. On the other hand, there we suggested integrating into external professional communities and searching for the best practices not only within the company but in the whole industry.

Secondly, we discover task overlapping and time management problems within the L&d team. To solve it, we recommend assessing the job design and tasks and KPI L&D managers should perform. It seems that there is no standard structure and goals. Also, they should be aligned with the business goals. During the course, we discovered that L&D managers have too much work: besides managing the learning process, they are expected to conduct regular workshops, review and develop training materials, and design programs. Some of them even perform consulting activities or provide training for other roles: project managers, designers, etc. We recommend assessing whether all these activities are necessary or can be delegated to less experienced specialists.

The third recommendation is to start data collecting and business metrics analysis, like time-to-market of the programs, average NPS and churn rate for the products, etc. This analysis would give a clear picture of the current situation of the L&D team's performance and help plan its further

development. The assessment conducted within this course clearly showed that the development of training processes should be done by special people with different skills and experience.

## 10. Conclusion and Limitations

As a study, this project had several limitations. There were a small number of participants in the course, which affected the statistical reliability of the results. Although we tried to provide as diverse a selection of candidates as possible, we still should have considered more parameters to determine the real needs of the customers. For example, age, gender, and level of education could have been taken into consideration. The course was conducted only in an online format. Therefore, it had limited opportunities for communication between participants. Key business results of the program were not measured because the client did not collect data before. It was difficult to determine the real impact of the course on the company's performance. However, we believe that it did have some positive impact: it created a community of L&D professionals sharing experiences; it enabled people to meet each other; it showed the management the value of learning as a strategic activity of the company; it helped the L&D team to work together more effectively and launch and redesign training programs.

Despite all these limitations, the study helped us to clearly understand the role of the learning product manager and identify some areas of improvement for the product and processes implemented within this company. The study was also useful for us because it allowed us to improve our working process and to understand better how to design an effective training course for our new target audience. The main concepts and approaches we implemented, like project-based learning, learning experience design, and product management, showed their effectiveness. We hope that this study will benefit our further work and we will have an opportunity to continue doing similar projects for our clients in the future.

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