



**EVOLUTION OF THE SOFTWARE PRODUCT MANAGER ROLE: TRAINER
PERSPECTIVES ON ROLE CHANGES**

Lappeenranta–Lahti University of Technology LUT

Master's Program in Software Business and Product Management, Master of science in
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ABSTRACT

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Evolution of the Software Product Manager role: Trainer Perspectives on Role Changes

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The role of PMs (Product Manager) has undergone significant changes over the years, influenced by evolving market dynamics, technological advancements, and shifting business strategies. This thesis aims to explore these changes from the unique perspective of product manager trainers. By interviewing seasoned trainers who have extensive experience in educating PMs, this study seeks to uncover how the role has adapted to new methodologies, such as agile practices, and increased customer-centric approaches.

Key findings reveal that the role of PMs has shifted from a predominantly technical focus to a more strategic and cross-functional one. Trainers highlighted the increasing importance of soft skills, such as communication and leadership, alongside traditional technical competencies. The adoption of agile methodologies has further redefined the PM role, emphasizing iterative development, customer collaboration, and adaptability.

This thesis contributes to the existing literature by providing a detailed account of the evolution of product management from the perspective of those who train the practitioners. The insights gathered offer valuable guidance for organizations in redefining and supporting the PM role to better align with contemporary business needs.

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Tuotepäälliköiden rooli on kokenut merkittäviä muutoksia vuosien varrella, näihin ovat vaikuttaneet kehittyvät markkinadynamiikat, teknologiset edistysaskeleet ja muuttuvat liiketoimintastrategiat. Tämä opinnäytetyö pyrkii tutkimaan näitä muutoksia tuotepäälliköiden kouluttajien ainutlaatuisesta näkökulmasta. Haastattelemme kokeneita kouluttajia, joilla on laaja kokemus tuotepäälliköiden kouluttamisesta, tämä tutkimus pyrkii selvittämään, miten rooli on sopeutunut uusiin menetelmiin, kuten ketteriin käytäntöihin, ja asiakaskeskeisempään lähestymistapaan.

Tutkimuksen keskeiset havainnot paljastavat, että tuotepäälliköiden rooli on siirtynyt pääasiassa teknisestä painotuksesta strategisempaan ja poikkitoiminnallisempaan suuntaan. Kouluttajat korostivat pehmeiden taitojen, kuten viestinnän ja johtajuuden, kasvavaa merkitystä perinteisten teknisten taitojen rinnalla. Ketterien menetelmien omaksuminen on uudelleen määritellyt tuotepäällikön roolia, painottaen iteratiivista kehitystä, asiakasyhteistyötä ja sopeutumiskykyä.

Tämä opinnäytetyö täydentää olemassa olevaa kirjallisuutta tarjoamalla selvityksen tuotepäälliköiden roolin kehityksestä niiden näkökulmasta, jotka kouluttavat ammattilaisia. Kerätyt havainnot tarjoavat arvokasta ohjausta organisaatioille tuotepäälliköiden roolin uudelleen määrittelemiseksi ja tukemiseksi, jotta se paremmin vastaisi nykyaikaisen liiketoiminnan tarpeita.

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ABBREVIATIONS

PM	Product Manager
NATO	The North Atlantic Treaty Organization
IID	Iterative and Incremental Development
SPM	Software Product Management
SCM	Software Configuration Management
CEO	Chief Executive Officer
PMBOK	Project Management Body of Knowledge
PO	Product Owner
ISPMA	International Software Product Management Association
SAFe	Scaled Agile Framework
AI	Artificial Intelligence

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1 Introduction

The role of a product manager (PM) is pivotal in the lifecycle of a product, bridging the gap between engineering, design, marketing, and sales to ensure the product meets market demands and achieves business goals. This thesis explores the evolution of the product manager's role over the years, examining how changing market dynamics and technological advancements have influenced this evolution. Understanding these changes is crucial in today's fast-paced business environment, where adaptability and strategic management are key to maintaining competitive advantage. This study aims to shed light on the current state of product management and provide insights for organizations to better define and support this role.

Previous research has extensively documented the core responsibilities and skills required of product managers, highlighting their critical function in product development and market success. Studies have shown that effective product management leads to better alignment between product offerings and customer needs, resulting in improved business performance. Additionally, research has emphasized the importance of cross-functional collaboration and strategic vision in the PM role, identifying key competencies that drive successful product outcomes. Such findings have been made already in the 1992 by Dorothy Leonard-Barton [1].

However, much of the existing literature has not fully explored how the role of product managers has transformed in response to modern challenges such as digital transformation, agile methodologies, and increasing customer-centric approaches. There is a gap in understanding how these factors have reshaped the expectations and day-to-day activities of product managers. This thesis addresses this gap by investigating whether and how the role has evolved, considering both historical perspectives and current trends.

1.1 Research objective and question

This is a qualitative explorative study that aims to answer our research question: Has the role of product managers evolved over time and possibly how? We seek to answer this question by interviewing professionals who train product managers. This is done because we believe

that the trainers have the latest knowledge about trends and methods that product managers use and are better suited to answer our questions since people who work as product managers could have biased opinions from the companies they work for, and their methods used are affected greatly by the companies also.

We aim to interview people who have years of experience from being a trainer so they can better answer questions about changes. In the interviews, we aim to obtain information about how the trainers train their customers and whether have they seen any changes in the field. From this collected data we then try to identify similarities and differences between our responses. From this, we then hope we can show if there have been some changes in the role of product managers and possibly what has changed if we find changes.

1.2 Structure of the document

This study starts with this introduction chapter which contains a short introduction to the subject, our research objectives, questions, and the structure of the document part. After the introduction, we have a literature review part where we get to know previous studies about our subject and also cover topics that affect it. In the third chapter, we will present our research methods, showcase how our interviews are planned, how we end up selecting our participants, demographic information about our participants, and lastly how we analyzed our collected data. The fourth chapter is where we present our results from the interviews under the categories that we had in those interviews. In the fifth chapter, we will discuss these results and possible reasons behind them in more detail, this will again be done in subsections that are the categories from that interview. In this chapter, we will also discuss some of our general observations from this study, the limitations of this study, and finally present some possible future research directions. Our last chapter is left for the conclusion portion of this study where we shortly summarize our key findings and other key aspects of this study.

2 Literature review

The NATO Software Engineering Conference, convened in Garmisch, Germany, in 1968, marked a pivotal moment in the field of software development. The conference aimed to address the challenges posed by the increasing complexity of software systems and the need for structured approaches to their design, construction, and maintenance. During this event, the term "software engineering" was introduced to encapsulate the systematic application of engineering principles to software development [2]. After this conference, a variety of new software engineering techniques and methods are introduced which then create the basis for today's software engineering [3]. One of these newly introduced software engineering techniques was the waterfall model which was created from engineering process models used in large military processes. This model became very popular and in some cases is even still used, but already when the model was created Royce recognized this model had its problems because it did not handle changes after initial planning very well. [4] Experts in the field quickly realized that developing software in increments could fix some of the waterfall model's problems, offering feedback earlier in the development process. Many projects and experts have used these methods from as early as 1957 but the first publication that clearly described classic IID (Iterative and Incremental Development) was done by Basili and Turner in 1975 [5]. The main point of IID is to start with a simple implementation of the software requirements and iteratively enhance the software until the full system is implemented, each iteration adds new design modifications and functional capabilities [6].

2.1 Agile manifesto

After the introduction of IID, one of the next revolutions in how to manage development was the Agile Manifesto. The Agile Manifesto was founded in response to the frustrations and limitations experienced by software development practitioners with traditional, plan-driven methodologies. In the late 1990s and early 2000s, software projects often suffered from lengthy development cycles, rigid processes, and a lack of responsiveness to changing requirements. The Agile Manifesto was then founded in February of 2001. It was a meeting where seventeen software developers gathered to talk about a more lightweight way of

developing. This meeting was held at a ski resort in Utah and later became known as the Agile Alliance. Out of this meeting, the Agile Manifesto was born. [7] The agile manifesto outlines a set of guiding principles for software development, empathizing values such as individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan [8]. Our study's findings support this, with trainers highlighting the increased understanding and implementation of agile principles among modern product managers.

The publication of the Agile Manifesto marked a significant shift in software development philosophy, promoting iterative and incremental approaches that prioritize flexibility, adaptability, and customer satisfaction. Since its inception, the Agile Manifesto has had a profound impact not only on software development but also on various industries and domains, shaping how teams collaborate, deliver value, and respond to changing requirements and environments. The Agile Manifesto has also laid the groundwork for numerous frameworks and methodologies that guide project management and execution in various industries. As organizations continue to embrace Agile principles, the impact of the Agile Manifesto on framework development and work practices will only continue to grow.

2.2 Product management

After taking a look at the history of software development let's get a little bit closer to our main subject and start inspecting how product management has come to be. Hyrynsalmi, Suominen, and Seppänen conducted a study about Software Product Management Research in 2021 where they declare as follows:

While the research of an academic discipline of SPM started to emerge as yearly as 1990s, the most impactful works have been published during 2006 2007.[9]

Later they state that after these years the amount of SPM (Software Product Management) articles published yearly has stabilized and now, we have over a decade of active research from the field, and we can consider at least from the time perspective SPM matured. For these reasons, we will inspect some of the definitions for SPM from these years.

In the year of 1998, Tapani Kilpi published a paper where he declared how a method known as SPM can help companies manage both new and old products [10]. In his paper's introduction part, he goes on to explain how SPM is strongly based on the ideas of SCM (Software Configuration Management) but also offers solutions that better fit this new trend of the software industry becoming a product business.

Christof Ebert defined product management in his study from 2006 as follows:

Product management is the discipline and role, which governs a product (or solution or service) from its inception to the market/customer delivery in order to generate biggest possible value to the business.[11]

Later Samuel Fricker highlights how this definition encompasses three important sides of product management: governance of software, coverage of the full software lifecycle, and business value generation [12]. The multifaceted nature of this role is reflected in our study's findings, where trainers emphasized the need for PMs to possess a blend of technical knowledge, strategic vision, and market understanding.

To gain sight of what SPM is today we studied the Software Product Management book by Kittlaus this second edition was published in 2022, in the SPM today and tomorrow subsection 7.3 SPM in Different Business Scenarios the book covers responses to a survey where respondents were

Asked to name the most important SPM activities to manage a product properly. They mentioned: market analysis, requirements management, communication with stakeholders, customer analysis, roadmapping, orchestration, product life cycle management, product strategy, prioritization, vision, product planning, and product analysis.[13]

From this, we can recognize the activities that are needed in effective product management in today's business landscape.

2.3 Product manager

Big part of the product management is the person who is commonly being accountable for it, this being the product manager. The earliest signs of product management are from times way before agile methodologies were implemented in software development. In 1931 Procter and Gamble laid down the concept of brand men, this was a role where the focus

was to ensure the economic success of a specific brand or product [14]. The role of a product manager is often described as a mini-CEO [15], meaning that the product manager is someone who unites technical and business perspectives on the managed product. This said in practice the roles and responsibilities of a product manager vary greatly between organizations [16].

With the rise of personal computers and the internet during the 1980s and 1990s software development became increasingly complex. As competition grew fiercer, companies realized the need for dedicated individuals to bridge the gap between engineering teams and business stakeholders. This led to the emergence of product managers within software companies, these product managers were tasked with understanding market needs, defining requirements, and driving product strategy [17]. This historical progression mirrors the findings in our study, where trainers noted the expansion of PM roles to include strategic oversight and cross-functional collaboration.

Springer and Miler conducted a study in 2018 where one of their research objectives was to create an archetype of a modern Software Product Manager. This was done by interviewing 10 experts to identify personas for archetype of a software product manager. Validation of this data was done by these and five additional experts. They made a table from their results that contain attributes and descriptions of these attributes for the archetype of a software product manager. The table of their findings can be found underneath from the Table 1.[18]

Table 1. Archetype of a software product manager [18]

Attribute	Description
Objectives	Achieving goals by implementing the product strategy and consistent product vision.
Responsibilities	Defining goals, proposing solutions, prioritizing projects or tasks, user research, analysis of requirements, market analysis, stakeholder management, cooperation with the development team.
Main competences	Soft skills: communication, negotiations, teamwork, decision-making, curiosity of the world, open-mindedness, assertiveness, understanding of human behavior, inquisitiveness, networking, leadership predispositions, consistency and perseverance. Hard skills: ability to understand the problem domain, data analysis and synthesis, knowledge of business analysis and project management, interface prototyping, willingness to learn.
Cooperation with other teams	Cooperate with all product stakeholders and development team.
Techniques	Techniques that support: verifying a product vision and strategy, product delivery, user research.
Tools	Tools that support: task and backlog management, data analysis, user research, documentation, prototyping, remote cooperation.

This definition is something that we can use as a base for our views on what software product managers are like today.

2.4 Product owners and managers

While inspecting the role of a product manager it is beneficial to consider the role of a product owner also since in many implementations of these roles there are many overlaps on responsibilities and other aspects of these roles. For these reasons in this subsection, we will take a look about this subject. A paper published in 2023 by Toikkanen, Hyrynsalmi, and Paasivaara studied how the role of a product owner relates to the role of a software product manager. In this study, they interviewed 16 experienced PO (Product Owner) and Agile practitioners. From this study, they found out that it is hard to say what responsibilities belong to PM and PO since that varies greatly between the methods and companies. In the summarization part of their results, they summarize the matter as follows:

According to the Scrum Guide, the PO is held accountable for maximizing the value of the product. The guide defines the internal responsibilities within the development team, but it does not aim to explain what POs should do to maximize value. Nevertheless, it is a product leadership role that shares many similarities with the role of a Product Manager. The ISPMA SPM framework outlines the activities typically carried out by Product Managers. The organizations represented by the interviewed POs are widely different from each other. In some organizations, POs fulfill the role of a Product Manager as defined by the ISPMA SPM framework. In other organizations, POs focus purely on the development activities of the framework.[19]

In this study, they have used a Scrum Guide [20] as a base definition for the role of a PO and the ISPMA (International Software Product Management Association) SPM framework [21] as a base definition for PM. In practice however, we can see based on this study that the roles usually do not follow these definitions and are a mixture of something else. Because there are a multitude of ways that these roles are implemented in practice it is really hard to give a universal truth about the differences of these roles. In practice, the implementations usually overlap between the definitions of these roles and differ from company to company. This is later supported by the data collected in the interviews where our interviewees mentioned that in many cases the difference between these roles is not clear.

3 Research Method

This study was initiated in February 2024 with the objective of finding out if the role of product managers has changed over the years. After some time, we selected interviews as a data collection method for this study. The objective of these interviews was to explore if interviewees have experienced changes in the product manager role. Since the data collection was done by interviews the research methods for this study were selected to be exploratory and therefore qualitative, and we followed the principles of grounded theory which will be gone through more specifically in the 3.4 Analysis part. The scope of our research question is relatively broad. Our assumption was that the role had evolved over the years, but it was unclear how it had evolved.

3.1 Interview planning

Interviews were conducted following a semi-structured approach over a structured approach. This decision was made since we did not have a clear idea what the interviewees would answer and thus making a predefined set of answers could distort the data and leave some perspectives unnoticed, because of these reasons we felt that closed questions would not work for us. Open-ended questions allow respondents to frame their answers in their own words making the data they share richer in a qualitative sense. While open-ended questions produce richer data than closed questions the drawback is that the data produced may be difficult to code and analyze [22]. The interviewer aims to ask the questions in the same way every time and not to guide the answers in any direction.

Interview questions were made in a way that they would start from questions that are easier to answer and move forward to questions that maybe do not have as clear answers as the ones before. Questions are grouped into five categories which then have more detailed questions that aim to cover the category. The first category aims to gather relevant demographic information about the responder. The second part of the interview covers how they arrange their training. The following part covers responders' experiences with product managers. The last part covers possible changes in the role of the product manager. A list of the interview questions can be found in Appendix 1.

Interviews were conducted in April 2024. These interviews were all held using Microsoft Teams videoconferencing, the interviewer had a camera always on but using a camera was optional for responders. Participants had an option to hold these interviews either in Finnish or English, but since all participants spoke fluent Finnish, all interviews ended up being held in Finnish. All interviews were recorded so that data could be later collected from the verbal communication from the interview, video was not processed as data during this study. Recording of these interviews was done by the tool offered by Microsoft Teams.

3.2 Selection of participants

The first idea for indicating if the role of a product manager had changed over the years was to compare frameworks that product managers use in their work. From these frameworks, we would then look up the change history and see all the changes and additions during the years. Upon closer inspection, it proved hard to choose frameworks that would be commonly used since the role is so broad that most frameworks just cover some areas of the role's responsibilities. It proved difficult to also find any public information about all the changes to these frameworks through the years. For these reasons, we drifted towards interviews as a method for data collection.

When we had decided that the data was to be collected from interviews our first idea was to interview experienced product managers. People who had worked in this role for years could provide us with examples and information about all the things that had changed over the years. But when we thought more about this, we realized that while some of these changes in the role might be because the role has changed most of these changes would come from different aspects like for example the whole company evolving and changing the way they do everyday business.

So instead of interviewing product managers, we thought that we could interview the people who train them. This should be a great way of getting data from the changes over the years since the trainers should have the latest information and approach to the way they train product managers. So, if the trainer has years of experience in the training they should have an understanding of the possible evolution of the role.

Product manager trainers for this study's interviews were mostly found on the internet when looking for people and companies that offer training for product managers. Some of the people were recommended by people who had participated in their training or recommended by colleagues. We decided to interview only one person per company so that the data we collected would present as much variety as possible. This was seen as an important step since the number of people interviewed would be pretty small, so we did not want to overpopulate the data by overrepresenting any company. By selecting participants this way, we got a great variety among our participants despite the pretty small sample size.

3.3 Demographic Information

In Table 2 we have descriptions of interviewees' educational background, work history leading to the training of product managers, and years of experience in the training role. Further information about the interviewees is not disclosed to respect and guarantee their anonymity.

Table 2. Summary of our interviewee's demographic information

What is your educational background?	What is your work history and the career path to the trainee of product managers?	How many years of experience you have in this role?
Master of Science in Industrial Engineering and Management	Worked as a project manager, product manager, and product owner, then transitioned into the training field.	7 years
Master of Philosophy, majoring in Physics	Started as a developer, from there moved to head of product development unit, and from there moved to training side.	15 years
Master of Philosophy in Analytical Chemistry	From coder to service manager, then to project manager, and from there moved to training side.	10 years
Geomatics Engineer	Worked as a coder, product manager, and technology director before transitioning to the training field.	15 years
Master of Science in Mechanical Engineering	Transitioned from a product specialist to a product manager, then moved into training, and now holds the position of Product Management Director.	11 years

Among our participants we have two Master of Science from Industrial Engineering, and Management and Mechanical Engineering, we also have two Masters of Philosophy from Physics and Analytical Chemistry, and finally, we have a degree in Geomatics Engineering. This shows a clear pattern of higher education among our participants, what is interesting here is that no one has an education that is directly related to the field they are now working on. As for previous work history, all of our participants have relevant experience in positions that support their work as trainers. Experience in roles directly or indirectly related to the role to be trained is therefore clearly represented. All of our interviewees have multiple years of experience from training and are therefore very capable of answering questions about the changes during the years. All of our responders were from Finland and gender diversions among our participants were four men and one woman. From this point forward we will present our interviewees by alphabetical codes from A to E, to guarantee the anonymity of their responses. These are also in randomized order and do not correlate with Table 2.

3.4 Analysis

For analyzing purposes, it was decided that it would be wise to transcribe the recorded interviews to text. This was done by hand since most of the easily found tools fit for the job were behind a paywall and transcribing the data manually also helped with getting more familiar with the collected data. Transcribing was done by following the idea of naturalized transcription, where the idea is to follow the conventions of written language while ignoring some characteristics of spoken language, like grammatical errors, pauses, and repetition [23]. Some interviews also contained some irrelevant parts for this study, mostly after the more official part some more casual conversations were not transcribed. After all the relevant parts of these interviews were transcribed, all the data was moved to Microsoft Excel where it was easily accessible for further purposes. Qualitative data analysis was done by using a combination of Microsoft's tools Word and Excel and Miro by RealtimeBoard. Word was used to handle individual interviews, Excel was used to access the data as a whole, and finally analyzing and visualizing the data was done in Miro.

Qualitative analysis was guided by the principles of grounded theory. Grounded theory is designed to develop theory inductively from data. This method is particularly useful for exploring processes, actions, and interactions, making it suitable for studying the evolving

role of product managers. Grounded theory emphasizes the importance of collecting data without preconceived hypotheses, allowing themes and theories to emerge naturally from the data [24]. Our accurate transcriptions were crucial to ensure that our data is faithfully represented and allows us to do detailed analysis. The analysis began with initial coding, where transcripts were examined line by line to identify significant words, phrases, and concepts. This process, described by Charmaz [25] as the first step in grounded theory analysis, involved breaking down the data into discrete parts and closely examining them for meaning. Following initial coding, focused coding was used to synthesize and explain larger segments of data. This step involved sorting, synthesizing, and organizing the most significant codes into categories. According to Corbin and Strauss [26], focused coding is crucial for developing the core categories that form the basis of the emerging theory. After this Axial coding was employed to reassemble the data fractured during initial and focused coding. This step involved linking categories and subcategories to form a coherent narrative about the evolution of the product manager role. Axial coding helps in understanding the relationships between categories and developing a more integrated understanding of the data[24]. This data collection and analysis continued until theoretical saturation was achieved, meaning no new significant themes or categories emerged from the data. Achieving theoretical saturation ensures the robustness of the developed theory and is a fundamental principle of grounded theory research [24]. Finally, to enhance the validity and reliability of the study, we cross-verified the data from interviews with literature on the literature review portion to ensure consistency and validity, in a process called triangulation.

4 Results

In this section results of the analysis will be presented. Discussion and interpretation will be left for the Chapter 5 Discussion. All the questions from the interviews were divided into 5 categories the first one was about the interviewee and the rest were targeted to discovering the main theme. The first category was already gone through in the 3.3 Demographic information part and the rest of the categories are gone through here as sub-parts for this chapter. In these sub-parts, we will go through the recognized uniting themes for answers and highlight some parts that did not make it a bigger theme in our tables. In these tables, we have the recognized uniting themes from our interviewee's responses and what responses correspond to that theme. Bigger tables where we have also the summarization of our interviewee's responses can be found in the appendix as well as a list of all the interview questions.

4.1 Training arrangements

In this category we aimed to understand how our interviewees arrange their training, has there been any changes in their arrangements or attendees of these trainings and finally we were interested in what they thought were their trainings advantages when compared to others. By delving into these aspects, we aimed to gain valuable insights into the evolution of training practices, as well as to identify key factors that drive success in the training initiatives implemented by our interviewees.

We found out that the most common training method was through company-mandated sessions, many aspects of this kind of training were customizable as the customer wanted. Some of these customizations could have been on themes of the training or on how the training was arranged, maybe locally at the office or as an online training. All of our interviewees offered this kind of training. Another common way of training people was the open course model, implementations of this model differed as some arranged these trainings locally or online as a lecture type of training or even as a web-based course. This type of training was offered by four out of five of our responders, and even the B responder had previously offered this type of training but ended it in recent years.

A common theme of what had changed in these training sessions was that the attendees nowadays had a better basic understanding of agile principles, this was highlighted by A and E responders, for example responder A said, “One change is that trainees have a better basic understanding about agile methodologies”. Another unified topic among our interviewees B and D was the recognition of more participants outside the traditional software field. Many attendees were from companies that were not recognized as software firms, but the software had grown into such a big part of their original product that nowadays they also needed this type of training. Responder C mentioned in their response that in these trainings among their attendees was a clear increase in internationalization, this did not get recognized in Table 3 as other interviewees did not share this in their responses.

As for competitor advantages for training, two themes raised up experience and customization. The experience was shared as an advantage by A, C, D, and E respondents, and for them, this meant that the trainers are both experienced as educators but also have experience from the substance they are training, responder D highlighted in their answer “trainers’ firsthand experience in product management”. Customization was mentioned by three of our responders B, D, and E, they highlighted the ability to customize the training for customers' specific needs. The themes that were only recognized in individual answers were: locality in response D, offering of more rare certifications in response A, and clear education bath from basics to more advanced understanding in response E.

Table 3. Summary of responses to training arrangements questions

Theme	Responses
Company training	A, B, C, D & E
Open Training	A, C, D & E
Better understanding about agile	A & E
More nontraditional participants	B & D
Experience	A, C, D & E
Customisation	B, D & E

4.2 Training materials

In this part of the study, our objective is to gain a comprehensive understanding of the various types of materials that our trainers utilize during their training sessions. Additionally, we aim to investigate how these training materials have evolved over the years, examining any significant changes or improvements that have been made.

Four of our responders (A, C, D, and E) said that their material is either straight or at least taken effects from frameworks and literature. In some cases, it was easy to say that these materials are following a specific framework like Scrum or SAFE but in others, it was more of a collection of good practices from here and there. Another common theme here was training based on own experiences, this theme also was in four of our responders' responses (B, C, D, and E). This meant in most cases that the training included examples and practices that had been proven effective through their own experiences, as responder B highlighted in their response "The training material consists of self-developed frameworks based on methods that have been experienced to work effectively in practice".

When it came to the changes in materials during the years, A, C, D, and E interviewees responded that the materials have not actually been changing but some additions to it have been made, this was highlighted for example in responder C's answer "The content has not changed much, but its visual appeal and new good ideas are added". These additions were also pretty small and did not happen that often. The thing that had been changing according to responders A, D, and E was the teaching methods. Teaching methods had been changing over the years as our trainers gained experience as educators and the teaching methods were clearly drifting toward a more active teaching model.

Table 4. Summary of responses to training materials questions

Theme	Responses
Materials from frameworks and literature	A, C, D & E
Materials based on own experiences	B, C, D & E
Materials haven't really changed but additions are made	A, C, D & E
Teaching methods have changed	A, D & E

4.3 Experiences with product managers

In this part of the interview, our objective is to gain a thorough understanding of the key characteristics and skills that are essential for a successful product manager. Additionally, we are interested in uncovering recurring themes and common struggles that product managers often encounter in their roles. By exploring these areas, we hope to identify both the strengths that contribute to their success and the obstacles that may hinder their performance, providing a well-rounded perspective on what it takes to excel in this critical position.

When asked about the most important characteristics of good product managers we got a lot of diversity among our answers. The most common themes were prioritization recognized by A, B, and C responders, and communication skills highlighted in responses A, C, and E. Both of these were seen as an important characteristic since nowadays this role needs to communicate with multiple different stakeholders and prioritize a multitude of things to be effective in the everyday working environment, this was highlighted for example in response A "know how to prioritize, and positively engage and motivate the team working around the product". In addition to these, there were two more themes recognized in two of the answers these being the ability to create value in responses A and E, and understanding customers and/or markets in responses B and D. These themes focus on the aspect the product managers

must direct the product in a direction that is productive and effective to justify the existence of that product.

In the part where we asked about things that product managers might struggle with, we did not get a theme that would be shared in more than one answer. In our gathered answers our interviewees highlighted things like: difficulty in understanding product strategy in response D, lack of prioritization tools in response C, transition from project to product thinking in response E, lack of effectively managing different aspects in response B, and truly iterative and agile way of doing things in response A. From these answers, it was hard to draw a common theme as they all answered the question from different points of view.

Table 5. Summary of responses to experiences with product managers' questions

Theme	Responses
Prioritization	A, B, & C
Communication	A, C & E
Ability to create value	A & E
Understanding customer/market	B & D

4.4 Changes in the role of a product manager during the years

This is the part where we shift our focus towards the possible changes the role of a product manager could have gone through during the years. We drive to understand if evolving business and technology landscapes have affected the role, whether are there new tools used, skills required, or methodologies applied. Do globalized markets or remote working trends shape the way of working and finally can our interviewees identify any upcoming trends that would shape the role of a product manager?

There is an overflowing supply of different types of tools to use nowadays so it is critical to recognize the effective ones to use that support productive and effective ways of working, according to A, B, D, and E responders. Knowing the customers raised as a uniting theme in responses B, C, and E. This was reasoned as today's markets are so broad and there are a ton of competitors it is crucial to understand what your customers need to be able to offer that to them. Maximizing your product's value was recognized in responses C and E, and was

seen as important to know how to produce maximal value with minimal effort, like responder C said in their response “Decisions now prioritize maximizing value with minimal effort”. Interviewees C and E saw service design as something that is getting more popular in product management nowadays making it more efficient and offering a way to guide decisions. In response C two more individual themes came up, more daring experimentation, and sustainable development.

All of our responders mentioned in their responses how it is crucial for product managers to communicate well with a multitude of different parties, especially when working in a remote work setting. Our interviewees thought that remote work needs even better communication skills from product managers since it is more restricted than face-to-face meetings and can leave individuals more alone with their daily tasks and this of course should be avoided. Four of our interviewees A, B, C, and D highlighted the need for being able to quickly adjust to changes in today's quickly evolving and changing environment. This need for quick adaptability also renders long-term plans that are too specific more precarious than before, as responder B highlighted in their response “The pace of market changes necessitates agile adaptation, rendering long-term plans increasingly precarious “.

When we asked our interviewees about possible future trends that would shape the role of product managers, they all agreed that AI is something that will shape the role in the future. They all saw AI as something that when properly implemented can significantly increase efficiency and productivity, for example responder D put it the following way “Looking ahead, the integration of artificial intelligence holds some promise for further enhancing productivity and streamlining workflows in the future”. Three of our responders B, C, and E also highlighted that when our working environment grows even more complicated good communication will grow to be even more precious.

Table 6. Summary of responses to changes in the role of a product manager during the year's questions

Theme	Responses
Recognize the effective tools to use	A, B, D & E
Understanding customers	B, C & E
Maximizing value	C & E
Service Desing	C & E
Has to be able to adjust quickly to changes	A, B, C & D
Need for good and versatile communication, especially when working remotely	A, B, C, D & E
AI is emerging trend	A, B, C, D & E
As the landscape grows more complicated communication grows even more precious	B, C & E

5 Discussion

In this section, we will discuss the results presented in the previous section. We will address all the categories presented in the results section, make some general observations, address the limitations of this study, and finally present some potential directions for future research.

5.1 Training arrangements discussion

Our interviewee's training methods were very similar all arranged so-called company training and only one did not offer also open courses for anybody to attend. The reasons behind all of them offering company training seem quite clear since that's the place where most of the money is made with maybe a little less effort than these open courses, this is also backed up by the Leonard-Barton's study [1] where they suggest that company-mandated training sessions align with strategic business goals and facilitate collaboration. For a company training course, you only need to sell it to one person in the company, but you need to market and sell open courses for each individual participant and that could be a lot more work on the marketing side of the business. Our only responder who did not organize open training had dropped it for this exact reason they did not see it as a worthwhile investment for all the time needed. Pretty much the only diversity in this part of the interview came from one of our responders whose company also offered a web course as a training solution.

In the part where we tried to recognize if there is something that has changed in these trainings, we did not get as unified answers as we did for the first part. Two themes were raised in Table 3, a better understanding of agile and more nontraditional participants, as agile manifesto was founded in 2001 [7] it is understandable that it has gained wider audience and is better understood nowadays. For a better understanding of agile principles our responder's idea of why they understand it better now than before was a bit different. Another one had noticed that nowadays people attending the courses might already have some knowledge about the subject and they are also quicker learners when basic things are taught, while another one of our responders saw an increase in people on more advanced courses. Views on more participants from the nontraditional software field were unified both

responders recognized that there is an increase in companies attending training whose product is only partially software based but the software part of the product had grown so much that they need to start understanding that side of their business also. Internationalization was highlighted as a change in one of our responder's answer but that did not get recognition from other responders. In other responses it either did not get mentioned or the responder thought that there had not been a significant change.

When we asked our interviewees about their competitive advantages, we got pretty unified answers most of them highlighted experience and customization as advantages. Experience for our responders meant however little different things. For some it meant that the trainer is experienced as a trainer and for others it meant that the trainers are also experienced in the field that they are training for and can therefore provide examples and their experiences from the field to the new trainees. Customization was seen as an ability to modify the aspects of training for what the customer wanted, these could have been for example modifications to training arrangements or training materials and goals. Customization was also seen as an ability to offer a modified learning path for customers and not just one course-long training. Locality over foreign competitors and marketing were also highlighted in a single response. Reasons for why these came up only on one response could just be that others did not think that question from as broad perspective and could have also highlighted these if asked directly about them.

5.2 Training materials discussion

When we asked our interviewees about what their training materials were based on, we got pretty unified responses. Most materials were a combination of impacts from frameworks, literature, and own experiences and it was quite hard to specify from where exactly some ideas or methods might originally be. Exceptions to these were trainings that were targeted to gain a specific certificate then it was easy to say that the training material came from the organization offering this certification or at least the material was heavily impacted by that organization and maybe some practical examples from own experiences were added. Another exception was one of our interviewees whose company had created their own framework that they used in their training, and this framework was created from their own experiences on what worked when they themselves were product managers.

Experiences on how the materials have changed during the years were also pretty similar among our responders. Most of them thought that the material itself had not changed that much during the years some additions have been made but the core itself has been the same for years already. The thing that according to most of our responders is changing is the teaching methods. This was almost even expected as the responsibilities of a product manager have not really changed in literature or frameworks during the years, but we constantly learn more effective ways of teaching people, so the teaching methods are evolving. Nowadays especially active teaching methods are something that are on the rise and are also implemented in these new training approaches.

5.3 Experiences with product managers discussion

When we tried to collect some key characteristics of a good product manager we got a lot of diversity from our responders. On themes that were raised in Table 5 either two or three of our responders shared that value of a good product manager in their response. Diversity in these responses could come from the fact that as the role of a product manager varies greatly from company to company so does the key skills and characteristics to be effective in that role. Some generalizations can however be made and that is what we see among the answers.

Our responders had all pretty different views on the things that product managers might usually struggle with. This is not that surprising as the question is really broad and in short answers where we specify only one or two points of struggle it is understandable if any of these views do not align with others. We need to also remember that responders sharing different views on the struggle points does not mean that they do not agree with the things that other interviewees highlighted, it simply means that we got some variation on these answers. It is also still possible that some aspects of these answers could be something that the interviewees would not agree on if asked directly about.

5.4 Changes in the role of a product manager during the years discussion

We asked our interviewees how the evolving landscape of business and technology influenced the role of product managers, including changes in used tools, required skills, methodologies, and decision-making processes. From these answers we collected the

following uniting themes: recognize the effective tools to use, understand customers, maximize value, and service design. Recognizing the effective tools to use comes down to finding the right tools for the job. Nowadays there are a multitude of tools to use for even really specific jobs. Understanding which of these tools actually makes our working more effective is really important as some of the tools are too complex to use and contain useless features and information and other tools can be already a little outdated and do not support the newer ways of working. For example, some of the tools still used might have been created with a mindset that these will help to organize project work and now when working with products and not projects there might be some collisions and features that are missing, for example lifecycle management. Understanding customers was seen as something that is needed from product managers in today's evolving and highly competitive landscape. This helps product managers to direct the product in a direction where we gain value and meet the expectations set by our customers. While highlighting customer understanding effective communication with all stakeholders was also mentioned, it was also noted that the number of stakeholders today has increased. Maximizing product value is a pretty natural guideline for product managers but our interviewees highlighted it here as they saw that in today's dynamic landscape, it is crucial to recognize how to maximize your product's value with minimal effort, to maintain your competitive edge, this ideology was also shared by Ebert in his study [27]. This is pretty understandable as nowadays there is a lot more competition in the markets and to maintain your position you need to continuously keep on improving. Service design was highlighted as a method that is now more used and utilized than before. This seems like a smart direction to take product management as service design can provide us with information that would otherwise be hard to gain and can assist us in making informed decisions about the product. Some themes that arose in individual answers were: the need for prioritization tools. shift from extensive pre-planning to more daring experimentation, and sustainable development.

Our interviewees in their answers agreed on two themes about how global market dynamics and remote work trends impacted the challenges and opportunities faced by product managers, these were: having to be able to quickly adjust to changes, and the need for good and versatile communication especially in remote work settings. The ability to quickly adapt to changes came from the understanding that nowadays the environment where we work changes and evolves at such speed that we must always be ready for change. This also means that long-term planning nowadays is really hard if the plan is too specific. The need for good

and versatile communication was seen as a must for good product managers since that ensures that we can work effectively towards the right target. Nowadays the number of stakeholders affecting these decisions is vast and to be sure that we are going in the right direction we need to communicate with all of them. In these answers, the remote aspect was also highlighted in a way that while communicating in a remote setting it is even more important to possess good communication skills as misunderstandings are more common when not meeting face to face, and motivating and solving more complex problems grows more difficult. The themes that arose in individual answers were: a more data-driven approach to decision-making, solutions nowadays are really complex with legal compliances and cybersecurity, and friction between project and product approaches inside companies.

When we asked our interviewees about future trends that they believe will shape the role of a product manager in the future we got two clear themes from them: AI and communication. AI was something that all of our interviewees agreed on being something that will definitely shape the role in the near future. Our interviewees saw AI as something that is already affecting the ways product managers work but they believed that the effects will only grow during the following years as the ways of using AI mature and become more capable. Communication was once again highlighted here during our interviews. Communication was seen as a really important aspect of product management already, but some of our interviewees believed that it would grow out to be even more important as the landscape grows more complicated and stakeholder management becomes more complicated. Individuals also highlighted these themes in their responses: a more streamlined product management structure where a single person carries more responsibility to avoid role overlaps and enhance efficiency, sustainable development, scalability, and portfolio management.

5.5 General observations

Something that we were reminded of during our interviews was the fact that it is not that easy to isolate the role of a product manager from example product owner role, because implementations of these two roles can vary greatly between companies and there can be responsibilities that overlap between these roles. This is also noted example in the study by

Maglyas et al [16]. So, when we are talking about product managers, we must remember that there are many variations of this role in the industry.

Another notice from the interviews is that asking these open-ended questions allows us to get answers from perspectives and themes that we could not think of ourselves, but it also means that we might not get as many matching opinions as the interviewees actually possess. This is because we do not try to match their answers with each other and do not follow up with questions that ask if they share opinions with the previous interviewee. This might then lead to situations that the interviewee might have an opinion about something but does not remember to highlight that perspective in their answer or mention a subject that they would if asked directly about it.

5.6 Limitations of the study

As this study was exploratory it does not aim at providing conclusive results but providing us directions to carry on. One limitation of this study is that all the responders were selected by the author and not by some statistical method. Therefore, it is possible that this collected sample size does not truthfully represent the trainers of product managers. Also, there is a risk of internal validity among our responders, but we consider this as a minor risk since all of them are experienced experts in their field.

The number of interviews held also presents a possible risk where if we had interviewed more people we could have gained totally new themes from those answers. This would have made it so that we have much more repetition in our answers also. We tried to deal with this limitation by picking our interviewees in a way that they all are from different companies and their trainings differ from one another, to promote more diversity in our responses.

All of our interviewees were Finnish and that might be a limitation in a bigger perspective. Some of the ways of doing things and how we see changes could be similar because of our nationality and the nation where our interviewees are working. Some diversity for this offers the fact that most of this training is held in English or at least there is a capability to hold these in English despite these being in Finland. Also, the nature of this field is quite global and methods and ideas are shared on the internet where it is accessible wherever you live.

5.7 Future research

This thesis contributes to the existing literature by providing a detailed account of the evolution of product management role from the perspective of those who train the practitioners. The insights gathered offer valuable guidance for organizations in redefining and supporting the PM role to better align with contemporary business needs.

As for future research, this study sparked a thought for two different pathways that I found interesting. The first one would be to study how product management is actually done in different companies, are there differences in product management if the company is a huge global company or and startup that is just starting to get a hang of things? How do these and other different companies view product management and managers and what is their practical implementation of it? It would also be interesting to study how they share responsibilities, are there product owners and managers, do they only use one of these roles or do they have a more unique combination of roles who manage their product?

Another interesting future research could be to study how new technology has affected product managers' everyday work and how quickly product managers adopt new technologies in their work. For example how fast do product managers implement AI in their work and how do they use it? This could be done by choosing a couple of product managers in different companies and from different backgrounds and see how they work for a day or couple and then compare these results.

6 Conclusions

The objective of this study was to answer our research question about whether the role of product managers has evolved and if possible try to figure out how. This was done by interviewing five experienced professionals who train product managers. Our interview was created around four categories that aimed to gather data about how the trainings are held, what is used as training material, how our trainers see product managers, and what has changed for product managers during the years. While analysing the data we followed the methods of a thematic analysis.

In the results and discussion part, we handle more thoroughly all the aspects of our findings about the interviews, but here in the conclusions part we raise some of the more impactful findings from our interviews.

From our interviews, we found out that the theory of what a product manager is and what product managers should do is something that has not really changed that much over the years. But despite the theory remaining largely unchanged the way of doing things at a practical level is and has largely changed. These changes include new tools that have been implemented in the ways of working but also new methods that are used in everyday basics. Also, the ideology behind how the product should be managed is something that has largely changed and we are clearly moving from short-lived product thinking towards more sustainable and long-driven product thinking.

In these interviews, we also came across the fact that nowadays product management is really complex since we have tons of things to consider when working with different products and also a multitude of stakeholders with whom we need to communicate, so we have the information needed to make informed decisions. Product nowadays being this complicated means that for product managers advanced technical knowhow is not as important as the ability to organize and control all the aspects of that product. This means that they need to be these specialists who do not necessarily know all the details of more specific subjects but need to know enough to understand and to be able to guide the product in the right direction with the help of a team that has this deeper understanding about the specific fields. Also, the ability to manage all the stakeholders is crucial for successful product managers nowadays.

Something that our interviewees highlighted pretty much in all the parts of the interview was that product managers nowadays need to be really good at communicating in different situations and with all kinds of people. As product management has taken directions toward a model where decisions are made with corresponding stakeholders and parties it is needed from product managers efficiently and effectively to communicate with everybody. These communication skills are even more important when we work in a remote setting where motivating is harder, misunderstandings are more common, and transferring tacit knowledge is hard. These things being said for a successful product manager good communication skills can be seen as a cornerstone of their skillset.

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Appendix 1. Interview questions

Check-in (approximately 5 minutes)

- Introduction to the study
- Motivation
- Anonymity and confidentiality

The background of the interviewee (approximately 5 minutes)

- What is your educational background?
- What is your work history and the career path to a trainee of product managers?
- How many years of experience do you have in this role?

Training (approximately 5 minutes)

- Who are you usually training?
- Have there been changes in the people who you usually train?
position/companies/nationality/etc
- What are the competitive advantages of your training in comparison to others?

Training materials (approximately 5 minutes)

- Do you train product managers following a specific framework, book, methodology, publication, or something else that you see as essential for the training?
- How has the program/syllabus/scope of your training changed over time?

Experiences (approximately 5 minutes)

- What would you consider the most important skills in the Product Manager role?
- Would you like to bring up any challenges that you have experienced while training Product Managers?

Changes (approximately 20 minutes)

- How has technology impacted the role of product managers? Are there specific tools or methodologies that have become essential or obsolete?
- Have you noticed any changes in the skill set or qualities that organizations are looking for in product managers today compared to in the past?

- Can you identify any key trends or shifts in the responsibilities of product managers?
- Have there been any shifts in the way product managers prioritize and make decisions, for example with customer feedback or market data?
- How has the globalization of markets and the rise of remote work impacted the role of product managers, if at all?
- In your opinion, what are some of the most significant challenges facing product managers today compared to in the past?
- In your experience, how has the role of a product manager evolved over the years? What are some of the most significant changes you've observed?
- Are there any emerging trends or developments that you believe will continue to shape the role of product managers in the coming years?

Check-out (approximately 5 minutes)

- Is there anything that you would like to add?
- The next steps in the study

Total length of the interview: approximately 55 minutes

Appendix 2. Summary of responses for each category

How do you usually arrange your training, have there been changes in arrangements or attendees and what are your advantages when compared to others who provide training?

Responses (from a to e)	Themes	Corresponding responses
Most training sessions are organized for companies that order them for their own staff. There are also open classes locally and online. One change is that trainees have a better basic understanding of agile metrologies. Experienced and certified trainer and a wide offering of training for various certifications are some of our advantages.	Company training Open training	A, B, C, D & E A, C, D & E
Training sessions are organized for companies that order them for their own employees. Previously there were also open training sessions that anyone could attend, a clear increase in public sector companies who take part in training and also in companies whose product is only partially software-based. Competition advantage is the ability to customize the training to fulfill the specific needs of a customer.	A better understanding of agile	A & E
There are open courses that anyone can attend, tailored training sessions for companies, and web courses. Internationalization has been significant among the trainees in past years. One of our advantages is that while our training aims for certification it also provides practical examples and experiences from the field.	More nontraditional participants	B & D
Most of the training is specialized for companies from their order but there are also some open courses that anyone can attend. Significant increase in people applying for training from outside the traditional software industry, as many of their products have also highly become software-oriented. Some of our advantages are locality over foreign competitors, trainers' firsthand experience in product management, personalized training, and marketing.	Experience Customization	A, C, D & E B, D & E
Training is usually either targeted to a specific firm and their staff or open courses where everybody can join. The trained personnel are now slightly more competent, which is reflected in the fact that instead of basic courses, there are now more participants in advanced courses. In addition to standalone courses, can offer a clear learning path that starts from the basics and progresses towards a deeper understanding of the subject. Moreover,		

instructors are experienced professionals who have also worked in the field, not just educators.		
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What is your training material based on and how has the material changed over the years?

Responses (from a to e)	Themes	Corresponding responses
The training material is based on either scrum.org's or Scrum Alliance's materials, depending on the training. The training materials are continuously updated by the scrum organizations regarding how the subject is taught, but the subject matter itself doesn't change at the same pace.	Materials from frameworks and literature	A, C, D & E
The training material consists of self-developed frameworks based on methods that have been experienced to work effectively in practice. More material has been added, and it is continuously updated as needed.	Materials based on own experiences	B, C, D & E
The training material is based on the Scrum Guide and SAFe but also includes practices proven effective through experience. The content hasn't changed much, but its visual appeal and new good ideas have been added.	Materials haven't really changed but additions have been made	A, C, D & E
The material is a mixture of personal experiences and influences from literature and frameworks. The material has remained largely similar in its main aspects, but the approaches to the subject and the personalized aspects of each training change significantly.	Teaching methods have changed	A, D & E
Courses aimed at obtaining certifications are largely based on the training materials provided for those certifications, while other trainings are a combination of data gathered from literature and personal experiences. Content-wise, there hasn't been much change over the years, but pedagogically, there has been a lot of development. Recently, the trend has been towards a more active teaching model.		

What are the key characteristics of a good product manager and what do product managers usually struggle with?

Responses (from a to e)	Themes	Corresponding responses
<p>Ability to recognize how we can generate value for the product, know how to prioritize, and positively engage and motivate the team working around the product. Development seems to be trending towards fully designing the user interface before any other development, and testing is also done as a single package, which slows down the entire development project. The challenge lies in teaching product managers a truly iterative and agile way of doing things.</p>	<p>Prioritization</p>	<p>A, B & C</p>
	<p>Communication</p>	<p>A, C & E</p>
	<p>Ability to create value</p>	<p>A & E</p>
<p>Prioritization in the short and long term, as well as understanding market and/or customer needs. At times, product managers may be somewhat disconnected from product development, resulting in a lack of smooth flow of information from customers and markets to product development. Additionally, the role is currently very broad, making it difficult to manage everything effectively.</p>	<p>Understanding customer/market</p>	<p>B & D</p>
<p>The ability to find practical and implementable solutions, service design skills, communication skills, and the ability to prioritize and make decisions. Introducing prioritization tools into practice has proven somewhat challenging in many cases.</p>		
<p>Product lifecycle management, understanding of business and markets, and the ability to see things from multiple perspectives. Product strategy has proven to be a challenging topic for many.</p>		
<p>Communication and facilitation skills, as well as an understanding of creating business value. Many struggle with transitioning from project thinking to product thinking and understanding customer needs.</p>		

How has the evolving landscape of business and technology influenced the role of product managers, including changes in used tools, required skills, methodologies, and decision-making processes? Additionally, how have global market dynamics and remote work trends impacted the challenges and opportunities faced by product managers, and what emerging trends do you foresee shaping the future of this role?

Responses (from a to e)	Themes	Corresponding responses
<p>Tools like Jira are commonly utilized, yet they often lack the agility required from a product manager's standpoint. However, platforms like Miro have emerged as effective in facilitating collaboration and sharing, particularly in remote work setups. There's a notable shift towards valuing experience in agile methodologies, emphasizing the importance of a cohesive product vision and holistic lifecycle management.</p> <p>Decision-making processes have evolved to rely more heavily on data-driven approaches, with methods like AB testing gaining prominence for prioritization. In remote work scenarios, product managers also shoulder the responsibility of inspiring and motivating their teams. As the pace of change accelerates, the ability to validate products quickly and adapt becomes increasingly crucial. This underscores the trend towards more sustainable, long-term product strategies over short-lived project-focused approaches.</p> <p>Moreover, there's a move towards streamlined product management structures, with a single individual often overseeing the entire process to enhance efficiency and avoid role overlaps. Artificial intelligence is poised to further enhance operational efficiency in product management.</p>	<p>Recognize the effective tools to use</p> <p>Understanding customers</p> <p>Maximizing value</p> <p>Service design</p> <p>Has to be able to adjust quickly to changes</p> <p>Need for good and versatile communication, especially when working remotely</p>	<p>A, B, D & E</p> <p>B, C & E</p> <p>C & E</p> <p>C & E</p> <p>A, B, C & D</p> <p>A, B, C, D & E</p>
<p>In today's dynamic business landscape, the role of product managers has been greatly influenced by the convergence of technology and evolving market demands. Utilizing various tools enables us to gain deeper insights into user behavior, facilitating continuous product improvement. The integration of artificial intelligence into our toolkit has notably enhanced operational efficiency. Additionally, tools for backlog management and roadmap planning have streamlined processes, amplifying productivity. Effective communication skills have emerged as a cornerstone requirement for product managers amidst this evolving landscape. The lack of a standardized approach in</p>	<p>AI is an emerging trend</p> <p>As the landscape grows more complicated communication grows even more precious</p>	<p>A, B, C, D & E</p> <p>B, C & E</p>

<p>decision-making processes often means that it comes down to the opinion of the person in charge when making decisions.</p>		
<p>There has been a shift from extensive pre-planning towards embracing more daring experimentation. Service design has become increasingly prevalent, and there's a growing emphasis on sustainable development. While in the past, a product manager might have primarily focused on marketing, today's role is far more multifaceted, with greater responsibility for product oversight. Decisions now prioritize maximizing value with minimal effort, necessitating a deep understanding of customer needs.</p> <p>The rise of remote work has introduced communication challenges, reducing the informal exchanges crucial for tacit knowledge transfer. Moreover, modern solutions must grapple with complexities such as legal compliance and cybersecurity, making adaptability and change more cumbersome.</p> <p>Practices have evolved to include rapid experiments and early feedback loops, with a greater number of stakeholders involved in decision-making. Looking ahead, there's a notable shift towards product-centric thinking, prioritizing value creation over feature proliferation. Sustainable development practices will continue to shape strategies, while the integration of artificial intelligence promises to further enhance efficiency as its implementation matures.</p>		
<p>Notably, some new collaboration tools have greatly enhanced remote work, a trend that has become increasingly prevalent. It's hard to say what companies are looking for from their product managers as the role of a product manager varies greatly between companies.</p> <p>Today, decision-making processes are heavily influenced by lean and agile methodologies, emphasizing rapid iteration and customer feedback. While the core responsibilities of product managers remain unchanged, the evolving nature of work, particularly in remote settings, underscores the importance of effective communication and stakeholder management and not just technical understanding.</p> <p>Despite these advancements, some traditional decision-making structures, particularly at higher levels, may still exhibit rigidity reminiscent of waterfall approaches. Looking ahead, the integration of artificial intelligence</p>		

<p>holds some promise for further enhancing productivity and streamlining workflows in the future.</p>		
<p>With a plethora of tool options available, it's crucial to discern the ones that facilitate efficient work, while phasing out outdated project management tools. Although the core definition of the role remains largely unchanged, there's a notable shift towards prioritizing effective communication with stakeholders and customers, as well as delivering tangible value to the product. Notably, the integration of service design has become more prevalent, and decision-making processes are increasingly collaborative, involving stakeholders at various stages.</p> <p>While remote work may have led to a slight decline in internal collaboration, it has also streamlined communication with external stakeholders, presenting a new avenue for engagement that must be acknowledged and leveraged. However, within organizations, there often exists a tension between traditional project-based methodologies and agile product thinking, highlighting the need for a clearer understanding of what truly drives value for the product.</p> <p>Looking ahead, emerging trends such as the integration of artificial intelligence will necessitate a learning curve for product managers to harness its potential effectively. Moreover, communication and collaboration skills will remain paramount, with an increased emphasis on scalability and portfolio management, particularly in larger organizations. The practical approach to decision-making will continue to evolve, with a stronger emphasis on collaborative processes and the incorporation of service design principles into product development strategies.</p>		