

# Using Personas in Human Capital Management: A Novel Concept Affected by Legal, Ethical and Technological Considerations

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**Abstract:** Nowadays, Human Capital Management (HCM) is seen as a service whose consumers are current and potential future employees. Some trends pushing the HCM operations to new approaches are the rise of individualization and flexible work as well as the changing expectations and values that new generations X and Y bring to the way people management is evolving. Companies need new tools and approaches along the lifecycle of their employee relations – from applicant pool construction and maintenance to recruitment and training. In SME companies the management is likely to address HCM needs on a very individual level. However, larger companies need to categorize their human capital into certain entities to mass-customize their HCM services. This paper explores the proponents and challenges in the usability of the Persona concept for HCM. Persona is a service design approach widely applied in marketing, and a few research papers have argued that personas may have a role in improved people-oriented HCM. Personas – as commonly used in the sphere of marketing – aim to create a limited set of archetypes that differ from each other. Whereas the traditional customer and employee clustering methods leaned heavily on demographics (age, experience, job title, etc.), the persona concept adds psychographic elements like values, and social engagement to form the basis of service development and delivery. The contents of personas are often a mix of real-life data-backed facts of people existing and some imaginary attributes. Different personas will likely request different services to feel fully motivated and supported. This paper studies the awareness of personas among HCM experts across industries and countries as well as the ideas for personas in HCM by marketing professional more used with the use of personas in their profession. The qualitative study based on twelve semi-structured individual interviews was conducted in November-December 2022. The results indicate that the HCM community knows about the persona concept and early adoptions or plans for implementation are ongoing. However, the current usage of personas is mainly focused on employer branding and recruitment (the most marketing-type of HCM actions), and only in a few cases does the usage cover the spectrum of internal HCM processes. The study also revealed some limitations for HCM that are not present in the marketing field. Demands for transparency, equality, data privacy, and personal integrity set challenges in clustering the workforce. The novel technical solutions such as Artificial Intelligence (AI) in persona creation offer efficiency and a deeper analytical foundation in persona development but also bring in new questions of transparency and ethicality of their use. The results indicate the further need for research on best practices of creating and using Personas in a way that ethically and legally serves the interests of both the company and the employee.

**Keywords:** Human capital, Persona, People clustering, Employer branding, HRM/HCM services, AI

## 1. Introduction

The umbrella term of HCM within an organization covers the human side of the organization, like skills, intelligence, and expertise (Hossain and Roy, 2016) that are needed for current and future business success. HCM is a key process in Knowledge Management (KM) since a company can be seen as a collection of legal and administrative contracts (Butler, 1988) that can only cover a part of what the company knows and is capable of. Well-planned and well-implemented HCM processes can significantly improve an organization's results, extend its goals, and increase its competitiveness (Karahoca, 2008). In recent times, HCM processes have had to adapt to megatrends such as globalization, which has increased the need for flexibility, the shift towards online environments, and the entrance of a new generation into the workforce. These factors contribute to the need to re-examine and re-evaluate traditional practices and approaches in Human Resource Management (HRM) and HCM (Rodriguez and Fernandez, 2017). Organizations are thus in need of new tools for developing and improving their HCM services to respond and adapt to the abovementioned transformations. HCM is pressured to be more individual and personalized in its approach to employees (Averbook, 2022). One proposed way is that companies can individualize their policies and services through employee clustering to serve employees better (Sitaram, 2021). Available employee clustering methods are numerous, but this research focuses on the concept of employee persona. The persona concept represents a clustering and visualization method originating from the sphere of user-centered service design. Alan Cooper created the persona concept in the 1990s as a goal-directed design tool (Cooper, 1998). According to Blomkvist (2002), the persona is a model initially used in

product design. This tool is used to represent archetypical users instead of average users. The persona captures users' features such as behaviors, needs, and motives, and combines them into a single individual representative.

Lately, the concept of persona has attracted a growing interest among HCM practitioners who aim to enhance their recruitment, employee well-being, and training processes. However, the implementation of personas has had minimal research-based backing. Via Google Scholar (in September 2024) the authors were able to identify within the last five years a mere 8 articles and book chapters that discussed the phenomena of employee personas. At the same timespan number of papers on personas in the marketing sphere was close to 150. Simultaneously, HRM practitioners and non-academic sources/websites of HRM service firms are numerous. For example, there is guidance on how to create impactful personas (Aihr, 2024) as well as instructions on how to use personas in the recruitment function of HRM (Personatalent, n.d.) The underlying reasons for usage vs. non-usage of personas in HCM and the role and impact of technology on persona creation and use form a research gap that this study set to fill. The papers that link the persona concept to KM are rare (4 papers in the last 15 years) and would need an update due to changing regulations affecting HRM and the new technologies used in persona creation and usage.

To fill the identified research gap research questions set for this study are:

*RQ1: What is the current level of awareness and actual usage of the persona concept among HCM professionals?*

*RQ2: Which issues support and which ones challenge (set limitations to) the usage of personas in HCM?*

*RQ3: In what HRM/HCM processes personas can be used and what is the reasoning for their usage?*

*RQ4: What is the role (supporting or restricting) of technology in the creation and usage of personas?*

By answering the research questions the authors aimed to test the perceived viability of the persona concept amongst a heterogeneous sample of HRM/Marketing professionals. Later on, a study with the same research questions could then be replicated with homogeneous samples to get more industry-specificity.

This research paper consists of five components. Firstly, the authors provide an overview and examination of the existing research on the key concepts mentioned in the literature review. Secondly, the authors delve into employee clustering, its rationale, and the persona concept. In section three, the authors explain the research methodology they used, and in section four, they present the empirical findings. The fifth section highlights the main conclusions and discussion.

## **2. Literature Review**

### **2.1 Employee Clustering**

Multiple trends affecting HCM in organizations challenge companies to reconfigure their operations in HCM. Such drivers of change include changing demographics, generational differences, digitalization, flexibility, individualism, and a skills shortage (Farndale *et al.*, 2022).

Flexible Work Arrangements (FWA) have been a popular topic both in professional and academic discussions related to human capital management for most of the 2000s (Allen *et al.*, 2013). They help employees balance their work with non-work responsibilities, by allowing flexibility in terms of when and where the work is done (Rau and Hyland, 2002). Since Generation Z entered the job market and the COVID-19 pandemic led to a shift to remote working, FWA has become a critical element in finding, attracting, motivating, and retaining current and future talent (Hill *et al.*, 2008).

There has been a recent trend towards FWA, which has coincided with a rise in individualism in both the workplace and society. Linthorst and DeWaal (2020) note that in response to this trend, organizations need to focus on providing individual attention to employees and clients, as this has become a key performance indicator that requires close monitoring. To meet these demands, corporate training and mentoring approaches have become more personalized to match employees' career ambitions (Linthorst and DeWaal, 2020). This individualistic view has also impacted reward systems, performance evaluations, and talent management practices. However, instead of implementing fully individual solutions, companies are modularizing and standardizing some components to gain efficiency in their processes (Skjevdal and Idsoe, 2005).

The difference between Generation Z (Gen Z) and Y has been a topic of active research in recent years due to the entry of Gen Z into the workforce. This has brought change and challenges to the labor market. Although different sources define generation timeframes differently, it is often considered that people born in 1980–1994

belong to Generation Y and people born after 1995 belong to Generation Z. According to Pinto *et al.* (2015), the increasing number of elderly people and the entry of a new generation into the workforce are significantly affecting human resource and HCM practices. As each generation has distinct needs, characteristics, motivations, and expectations, a tailored approach is required for effectively managing them. The research conducted by Urick, Hollensbe, and Fairhurst in 2017 states that Generation Z tends to use technology more, which can create difficulties within multi-generational teams. Novotna (2019) further explains that Generation Z is the first generation to be fully interconnected, as they have been utilizing the internet and digital tools their entire lives.

Generation Z exhibits a strong inclination towards continuous learning, training on-site, remote work, adaptability, and a well-defined work-life balance. They are seeking transformations in their job responsibilities, tasks, and educational pursuits. In contrast to the previous generation, Gen Z's career trajectory is not straightforward, as they tend to switch employers frequently and may even alter their career paths entirely (Klein, 2020). Employers nowadays need to adjust their operations to meet the demands of a new generation, while also creating processes that suit both Gen Z and Gen Y. This requires more personalized approaches. According to Sitaram's research (2021), clustering techniques can help organizations develop such tailored strategies.

Clustering is a statistical method of placing units under study (in this case: people) into categories based on a set of shared variables (Cornish, 2007). For example, customer clustering (more often referred to as segmentation) has long been widely deployed in the marketing field to improve customer experiences, customer satisfaction, and customer closeness and increase customer loyalty over time. The clustering approach started with demographic variables of age, level of income, geographical location, etc. The marketing discipline has lately proceeded to cover sociographic and psychographic attributes such as the values, needs, and wants of the individuals belonging to clusters, thus making it possible to approach the different clusters with mass-tailored differentiated offerings. The clustering approach can be and has been applied also in HRM development since employees are nowadays seen as active customers of services offered by the HCM function in organizations (Sitaram, 2021). Organizations can use clustering algorithms to group employees based on shared characteristics. This enables them to make informed decisions regarding recruitment and retention, training, employee engagement, workforce diversity, and performance management. Several clustering algorithms can be used, such as K-means, Fuzzy c-means, or self-organizing maps (SOMs). These algorithms consume large amounts of data to divide individuals into smaller groups based on shared characteristics. According to Fan (2021), the K-means clustering algorithm can be used, for example, to improve the employee performance evaluation process. Fernandes *et al.* (2017) found through a case study that employees can be grouped into clusters using multivariate clustering analysis.

However, some forces and trends are counteractive to the individualizations and clustering of human capital. These forces can be divided into ethical, (data) privacy, and legal matters. Generally, the concept of ethics can be understood by, for instance, how Cornock and Johns (1995) define its contents: acting with fairness, decisions on what is right and wrong, practices, and rules that stress responsible conduct between individuals and stakeholder groups. Ekuma and Akobo (2015) claim that "the ethics of HRM while sharing many features with general organizational ethics, must at least be relatively unique in several respects". In the sphere of HCM, various ethical dilemmas are present. HCM endeavors of clustering can cause misrepresentation and collusion, data misuse, manipulation and coercion, value and goal conflict, and technical ineptness. (Ekuma and Smith, 2012; Wooten, 2001). On the legal front, the frameworks and risks that set limits to the usability of some principles and techniques of modern employee clustering approaches, such as employee personas, are an inadvertent violation of Title VII of the U.S. Civil Rights Act, the Equal Employment Opportunities Act, the Americans for Disabilities Act (ADA), European Union regulations such as the Employment Equality Framework Directive (Hamilton and Sodeman, 2020). The European Union's General Data Protection Rights directive (EU GDPR) and the national legislation following the spirit and content of the directive also impact how deeply and widely organizations can use novel data-based approaches and techniques. In addition, there are non-legal guidelines and standards of sound and fair HCM operations, such as ISO Standard 30408:2016 on Human Governance (International Standardization Organization, 2016), as well as the more commercial approaches of Investors in People-analysis and Great Place to Work At-framework. These frameworks stress the engagement of all members of the working community, fairness, and trust (between the employees as well as between employees and management) that the novel approaches may hurt, especially in case if not managed and communicated correctly. In summary, ethical, legal, and privacy concerns require companies to treat all members of their workforce with fairness and equity. This also applies to HCM actions, where employees have

the right to know what data is being collected about their behavior and performance, who has access to this data, how it is being used, and for what purpose. Additionally, employees have the right to request that any personal data not necessary to their employer be permanently deleted. These demands address a value liminal to modern HCM fairness: transparency. It is important to understand that HCM equity and equality are not the same things. According to Rodriguez and Morrison (2019), equity refers to implementing policies and practices that enable opportunities for success for everyone. For equality, treating every individual the same way despite the individual or group-based specific needs would suffice. To be equitable, organizations need to treat individuals according to their specific needs, and to offer multiple opportunities for successful work and career (Rodriguez and Morrison, 2019).

## 2.2 The Persona Concept

Personas are a concept deriving from marketing discipline but have been increasingly used in generic design thinking processes, resulting in new ways of operating from educational systems (Siricharoen, 2021) to cybersecurity systems (Almahri, Bell, and Arzoky, 2019) and sustainable development (Carey *et al.*, 2019).

According to Haak (2017), the concept of a user persona, traditionally used in marketing, has also been actively spreading to HCM. Employee personas are designed to capture the essential characteristics of groups of employees with common characteristics. Personas are then depicted as fictional figures, which contain characteristics from demographics to psychographics as well as skills and competencies. For some companies, the goal of inclusion of personas in their HCM design may be developing a new talent acquisition initiative and, for some – strengthening the employer brand (McLeod, 2022).

Employee persona creation methodology depends on the end goals and available resources. Some methods of persona creation include clear research-type activities conducting surveys, interviews, or holding focus group interviews. Triangulation in persona-creation by combining data collection methods, for example holding focus groups/interviews supplemented by a survey, is likely to lead to better applicability of the employee personas (Brennan, 2017). According to Ditton, Swinbourne, and Myers (2022), there is an opportunity and tendency towards data- and system-driven persona development. Manual persona development can be time and resource-demanding and it can be biased by the personal views and expectations of the people responsible for persona creation (*ibid.*). Typically, in a human-machine interaction, the semi-automated persona approach is based on manual prompts, guidance, and data filters entered by a human. With the intrusion of increased data analytics in HCM, the persona concept can be fully automated using algorithms and big data analytics, if the suitable data set is technically and ethically available. Jansen, Jung, and Salminen (2021) claim that Automated Persona Generation (APG) allows combining big data and persona concepts, creating a multi-layered cast of personas that can enrich the result compared to traditional data collection such as surveys or interviews. APG systems have the potential to identify underlying behavioral patterns of employees and associate them with respective demo- and psychographic groups. Such solutions open new opportunities for the usage of personas in HCM decision-making.

According to McLeod (2022), the persona method is a useful tool for talent acquisition and employer branding. With persona-based thinking, organizations can better attract suitable candidates to apply for open vacancies. The selection process of new employees is improved by identifying attractive talents' key drivers, motivations, needs, and expectations of the workplace. Zhao *et al.* (2018) state that employee personas can be used in various HCM sub-processes such as recruitment, training, performance appraisal, and employee engagement. According to Brennan (2017), organizations can gain multiple benefits from the deployment of the persona approach. These potential benefits include a wider and deeper understanding of the current human resource capital; an understanding of employee experiences and expectations in various HRM processes like onboarding, and performance reviews leading to effective and impactful employee management; enhanced communication with stakeholders; identification of and current and upcoming HCM challenges across the organizational layers; more attractive employer image for potential future candidates to open vacancies and building an enhanced employer brand across HRM functions and to; reduce personal biases in recruitment (*ibid.*).

## 2.3 Summary of the Knowledge Base

Based on the existing literature, it is evident that employee clustering is establishing its role in HCM due to the changing work environments, evolving FWA, generational shifts, digitalization, and globalization. FWA and individualized approach in HR play a bigger role than ever, especially in attracting and retaining young talents. With the new generation entering the workforce, the need for a more personalized approach and flexibility is evident and supported by scientific literature. The persona concept that originated in marketing is getting

actively adopted in HCM and shows potential to answer to the emerging needs. Using the persona concept in HCM can positively affect and develop several HCM practices such as talent management, employer branding, and talent retention.

The literature outlines that the persona approach has several ethical and legal limitations. For example, the General Data Protection Regulation (GDPR) can severely restrict the persona method usage and lead to the model being too generic and inconclusive. When using the persona concept, professionals have to carefully consider the end goals and desired outcomes to collect the right data. Transparency and privacy have to be taken into account.

### 3. Methodology

This study is exploratory by nature, indicating that its primary purpose is to explore the research questions and identify the current situation of the topic, which is an understudied and thus only partially known phenomenon. Exploratory research does not imply any final solutions to the problem (Saunders *et al.*, 2012). The primary data was collected in the form of twelve semi-structured individual interviews among marketing professionals (seasoned users of the persona concept) and HCM professionals (the early or future users of the persona concept in the HR sphere). Semi-structured interviews are often used in qualitative research and allow discussion to evolve during the interview while following the structure (Magaldi and Berler, 2020).

Candidates for interviews were chosen from the authors' professional network via LinkedIn invitations. Thus, the sampling method was a combination of purposeful and convenience sampling. The invitations were sent to the network and individuals who accepted the invitation were scheduled for the interview. Each potential interviewee contacted accepted to join, but 2 out of 12 were not able to find time for the interview in the time window specified for the data collection, so they provided their answers to interview questions in writing via e-mail. To increase validity, the authors selected candidates from different fields of industry, different-sized companies, and different positions. Interviewing experts from the marketing field was important as the Persona concept was created in the marketing industry for marketing purposes, and interviewing HRM experts was important to see if and how it is applied there (description) and how the marketing people see that the concept could be used in HCM (ideation). Interviewing individuals from both startups and big corporations was important for authors to gain valuable insights into how the persona concept is approached in different business environments, let alone cultures. In addition, the work experience and the age of candidates varied a lot. Table 1 below gives an overview of the informants based on their field of expertise, the size of their company in terms of personnel number, and their current country of residence. However, in numerous cases, the companies had international scope of action, so no further analysis was conducted using the country of residence as a variable. The interview outline was designed and sent to all interviewees in advance. The interviews were conducted as face-to-face or online interviews lasting from 25 to 45 minutes. The authors recorded interviews with the interviewees' consent and transcribed them verbatim. The data was then subjected to thematic content analysis looking for patterns arising from the dataset as well as areas with a lot of discrepancies of the views that are typical when new approaches are discussed. The interview structure was created based on the findings of the literature review, and revised after the first two interviews as the researchers gained new insights into issues that matter on the practitioner level.

Analysis of the data gathered happened via theme-based pattern recognition. Under the concept of the Themes, the researchers created a vocabulary. For example, under the theme of "DEI= Diversity, Equality, and Inclusion", keywords like "heterogeneity", "minorities", "equity", and "discrimination" were used to identify the themes. The themes of relevance were then recognized from the transcriptions of the interviews based on the vocabulary used.

**Table 1: Background of informants**

Field of expertise	The size of the company in terms of the personnel number	Country
HRM	500+	Canada
HRM	500+	Finland
HRM	20-49	Finland
Marketing	100-250	Netherlands
Marketing	11-50	Finland

Field of expertise	The size of the company in terms of the personnel number	Country
HRM	500+	Finland
HRM	251-500	Germany
Marketing	500+	Finland
HRM	500+	Finland
Marketing	500+	Finland
HRM	500+	Finland
HRM	500+	Finland

#### 4. Results

The results of the interviews confirmed that all participants are aware of the persona concept and the majority are applying it to their day-to-day or strategic operations. The results confirm the existence of the increasing need for a more individualized approach in organizations and their HCM. More flexibility is expected from employers as the workforce is looking for more personalized solutions that would fit their values and goals more precisely. Many informants outlined the importance of sensitivity to cultural differences even in one country reflecting the differences in business cultures and job role differences impacting the prevalence of the effect of this trend. Results indicate a need for relevant actions aiming at retainment, organizational culture development, and flexible work arrangements. Most informants in the HCM field confirmed that flexibility and individual arrangements are what matters to their employees. More and more employees choose jobs that can offer flexibility, the possibility of remote work, work-life balance, and other benefits. Employees more often appreciate the culture of individual arrangements and expect to be given the freedom to impact their locations and working schedules.

Some informants noted that younger employees (Gen Z) have different career and work expectations than their older colleagues. While the research did not focus on the exploration of the generational differences in expectations, numerous informants touched upon this topic pointing out that Gen Z's way of work and occupational expectations differ drastically from the previous generations. Informants highlight that when creating personas in multigenerational companies, it is important to account for Gen Z differences and expectations.

As was presented in the literature review, the user persona concept can be perceived as a marketing tool reflecting its origin in the marketing and user experience fields. Based on the data from the marketing professionals in the sample of the study, they have been actively using the user persona method to segment and identify their potential customers and their needs when designing new products and/or services. One informant noted that the user persona concept allows them to customize the communication approach and thus expand their customer base and better retain the existing accounts. Results indicate that before informants embark on the journey of using the persona concept it is necessary to understand the goal and objectives of the endeavour. Some HCM experts pointed out that their current roles are interconnected with the marketing function of the company, for example, when recruiting talent. Below, Table 2 presents some of the quotes from informants and themes that emerged from the data.

As depicted in Table 2 below the themes that emerged were: clustering as a wider concept = usage of persona-type clustering without calling the outcome personas (using both demographic and psychographic factors when bundling the target audiences); the power shift in people management (emphasized need for a more personal and value-containing approach to employee relations, especially for Generation Z); current usage of personas is service design (in recruitment and marketing/sales efforts).

**Table 2: Interview excerpts on awareness and use of Personas**

The Excerpts	Theme	Profile of interviewee (HCM/Marketing)
"We have in HRM some "people baskets" based on roles and context (which operations/business processes person resides). Personas were brought in for succession planning and talent reviews."	Clustering as a wider concept	HCM

The Excerpts	Theme	Profile of interviewee (HCM/Marketing)
<b>“I have not used the Persona as such, but Role/Type (or identity)/Potential clustering =&gt; impacted in career path design + used when planning recruitment”</b>	Clustering as a wider concept	HCM
<b>“Even before personas, we categorized our teams to get a better understanding. We used mapping and used categories.”</b>	Clustering as a wider concept	HCM
<b>“We use the expression of “ideal candidate” in recruitment, the essence is the same but no trendy name”</b>	Clustering as a wider concept	HCM
<b>“Our product managers have used personas in designing new products and features that better fulfil customer needs”</b>	Clustering as a wider concept	HCM
<b>“Generation Z is completely different from others, so the persona thinking can be beneficial.”</b>	Power shift in people management	Marketing
<b>“There’s a big employee power now, and they need more autonomy, they want more flexibility, but at the same time, we see the rising need for support, for counselling, and we want to do things in an equal and ethical way.”</b>	Power shift in people management	HCM
<b>“Companies are still (in recruitment) operating with the old mindset where they think they make a choice and look for skills. Recruiters today make the choice and are looking for a company culture they empathize with. I was headhunted to my present job and was told I would “make a fit”.</b>	Power shift in people management	Marketing
<b>“Individualization is rising, but equity should be the goal. Equality means offering everyone the same. Equity means treating every similar case the same way. And cases do differ.”</b>	Power shift in people management	HCM
<b>“When working in industry, we created personas also for our competition. Now in education, we have used student personas when designing educational offerings. Personas can be product and/or customer and/or company personas”, for example, what is the persona of a company where a “student persona” is aiming to join =&gt; career crafting.”</b>	Personas for service design	Marketing
<b>In my previous job the managers placed their people into baskets based on Cultural Fit/Skill Fit/Growth fit”, used in salary management and growth planning”</b>	Clustering as a wider concept	Marketing
<b>“We use this concept although we call it employee types. It helps to identify employees’ needs and expectations”</b>	Clustering as a wider concept	HCM
<b>“We use in B-to-B LinkedIn marketing – personas are manager/decision-makers whose interests you can use as a filter in your targeting, for example, we do a selection of 100 companies, segmented first by industry but then by personas”</b>	Personas for service design	Marketing

Results propose that the persona concept has multiple advantages and areas of applicability within HCM. It allows HRM professionals to relate to and communicate with groups of employees in a more personal and emotional/value-based way, creating personalized approaches and supporting more individual career paths. The concept is relatively simple to grasp, easy to use, and scalable. Personas are also applicable in the analysis of potential recruits and can assist in recruitment decision-making. However, the results also underline several disadvantages of the concept. The concept might be misleading if oversimplified or too generic, meaning, not able to draw interest towards differences in personas created. Over time, the use of just a few and constant personas can lead to more homogenous and one-minded personnel, thus ignoring the opportunities to change and renew. Persona creation and maintenance may require data analytics and AI skills, as well as it can be expensive and time-consuming. Another disadvantage is that it creates an unwanted possibility of comparing employees with each other, which can lead to missing out on their unique strengths and abilities. Also, it might be too restrictive and limited due to GDPR. When Personas are created systematically, especially in a large organization, they should be rule-based/algorithm-based and work based on data of existing successful employees (to train others to reach the same potential or to recruit new ones who would be likely to succeed). However, based on EU GDPR organizations have limitations on how to store and use such information about their employees. According to the regulation, sensitive data is a set of special categories that should be handled

with extra security. These special categories are ethnic or racial origin; political opinions; cultural or social identity; philosophical or religious beliefs. (GDPR, 2023). On the other hand, leaving these debatable “soft issues” out of the personas would reduce the personas back to skill/competence listings, and thus offer no added value to earlier HCM practices.

To sum up, employee personas can be used as a supportive tool in decision-making but cannot be the only source of information. As depicted in Table 3, themes that emerged when discussing the factors that support and, on the contrary, hinder the usage of personas were: the need for trust and transparency (+ legal compliance) in HCM operations (if people working in an organization do not know why and how the personas are created, there may occur resistance); the policies on DEI (diversity, equality, and inclusion) have made companies very sensitive to processes and frameworks that reinforce biases and create sensations of exclusion; Employer branding that is not touching the current workforce (in another way that that the personas may be created for the archetypes of the existing employee cadre) but is used to communicate company’s values and *modus operandi* to customers and future employees is a process that seems to welcome persona approach, and; is welcomed if it adds clarity and simplicity in seeing the target audience clustered under personas. If it adds a new layer to the existing clustering systems, the persona approach is not welcomed.

**Table 3: Interview excerpts on the themes of Persona applicability/non-applicability to HCM**

Excerpt	Theme	Profile of interviewee (HCM/Marketing)
“There are tight frames in HRM that cannot be individualized (data and privacy principles, code of conduct) but also flexible frames (training, mentoring) where customizing is possible”	Trust and Transparency	HCM
“If I were to propose this at my SME company, I feel like it would get rejected because people don’t want to be put in a box in a small company”	Trust and Transparency	Marketing
“The job matrix that we use must be backed up by data, and qualitative analysis is crucial for the explanation and to avoid employee frustration.”	Trust and Transparency	HCM
“Persona benefits would be the availability of a tool for HR to be able to relate to groups of employees on a more personal/emotional level and create more personalized development paths and career opportunities. But there are potential disadvantages of a more homogenous and one-minded workforce if hiring practices start to follow only the developed personas and try to make employees fit into certain “boxes”	DEI = Diversity, Equality, Inclusion	Marketing
“We are strong on DEI policies (race, gender, LGBT, disabilities), so we need to think about what it means to present ourselves, personas can make people feel excluded if they do not match the persona. Also, psychographic issues like interests can be more typical, for example, to a certain age or gender, so the persona may be restrictive”	DEI = Diversity, Equality, Inclusion	Marketing
“If personas were used by the HRM, as a worker I would ask why they are created and how they are going to be used. It may affect the psychological safety within the personnel.”	DEI= Diversity, Equality, Inclusion	Marketing
“When we made 4 different personas in our project, we decided to make them gender-free”	DEI= Diversity, Equality, Inclusion	Marketing
“Trying to make employees fit into certain “boxes” is a big disadvantage for the persona concept”	DEI= Diversity, Equality, Inclusion	Marketing
We have a new person in HRM responsible for employee experience and employment marketing for I am doing applicant pool creation and recruitment activities using personas.	Employer Branding	HCM
“Personas would work in recruitment: Marketing is about finding new accounts, and HRM is about keeping people and giving them equal access to HRM services. So, recruitment is more marketing-type action as it is about getting new people in.”	Employer Branding	Marketing
“Personas are good if they add clarity and give practical support to our leaders and supervisors vs. sounding like a new HR theory and/or adding yet another layer = complexity”	Complexity vs. Simplicity of HCM approaches	HCM



Excerpt	Theme	Profile of interviewee (HCM/Marketing)
<b>“Personas are a limited approach, not very accurate and there is the danger in relying too much on potentially inaccurate models. We use already segmentation based on behavioural characteristics, the benefits customers are seeking from product consumption as well as psycho- and demographics”</b>	Complexity vs. Simplicity of HCM approaches	Marketing

The talent acquisition activity can be perceived as a marketing process within the field of HCM since it requires effective and suitable marketing efforts when working on targeting, message creation, and choice of media when advertising the position. Results also show that certain methods of current employee segmentation are actively used. The variables used in segmentation are employee types, roles, needs, skills, etc. Informants pointed out that employee personas allow the company to identify what matters (values, preferences) to their employees. For personas to work and add value to the business, they must be concrete and simple enough to be understood and emphasized by employees and management. Simultaneously, they should not be oversimplified or too generic, so that they add value.

In the era of digitalization, it is natural that also HCM function in companies is also laden with information systems, HRIS (Human Resource Information Systems), These systems, when implemented fully, require all new elements of HRM to be includable (or linkable) to the existing HRIS solutions. Additionally, novel technologies such as Artificial Intelligence (AI) may raise issues of ethics and accountability. From the interviews, certain key themes on the relationships between Persona creation and usage with/without technology arose, as Table 4 highlights.

The key themes were: using technologies together with human judgment/finishing in persona creation, the need to integrate personas to existing HCIS (Human Capital Information Systems), and, increasingly, the potential to use AI in persona creation.

**Table 4: Interview excerpts and themes on the role of technology in Persona usage**

Excerpt	Theme	Profile of interviewee (HCM/Marketing)
<b>“In this case, technology is better (at making personas) than a person because we are all biased. Perhaps 80 % based on tech and the last 20 % based on human consideration”.</b>	Human-technology interaction	Marketing
<b>“Tech could do it; we try always use tech from CRM (HubSpot) =&gt; clustering based on the whole CRM dataset”</b>	Personas integrated into other systems	Marketing
<b>“The job matrix that we use must be backed up by data, and qualitative analysis is crucial for the explanation and to avoid employee frustration.”</b>	Human-technology interaction	HCM
<b>“HRM Personas in the company is a new issue, used for redesigning HR processes, simultaneously HRIS Success Factor system taken in use, personas embedded there”</b>	Personas integrated into other systems	HCM
<b>The job matrix (based on qualifications and skills) is used in the company and shared within the company. Transparent and visible to all. HR can guide how to move in the matrix and how to go to the next level etc. The matrix must be backed up by data, and qualitative analysis is crucial for the explanation and to avoid employee frustration.”</b>	Human-Technology interaction	HCM
<b>“Data used to build employee personas can be sourced, for example, from the company’s helpdesk inquiries (in quantity and quality). If no data is used in the creation of personas, they are harder to defend. But there is a limitation: Data is about history, whereas human capital development should be future-oriented.</b>	Personas integrated into other systems	Marketing
<b>“We used AI in the creation of personas and then reviewed them by 10+ expert interviews =&gt; data matched with real-life experience</b>	AI as a tool for persona creation + Human-technology interaction	Marketing

Excerpt	Theme	Profile of interviewee (HCM/Marketing)
“Should be data-supported, for example, usage of product patterns together with sales and CRM people’s gut feelings. When you have identified the pattern of behaviour with the customer, you can foresee what is coming up looking at the same personas with whom you have a longer connection”	Human-technology interaction	Marketing
“The persona concept can be used more in the volume approach, and with the use of AI can be used to select the applicable applicants but then the individualized approach is better to reach the final decisions.”	AI as a tool for persona creation + Human-technology interaction	HCM
“HR systems contain data on role descriptions and evaluations but often supervisors containing soft knowledge are used to place people into categories”	Human-technology interaction + Personas integrated into other systems	HCM

## 5. Conclusions and Discussion

This exploratory research on novel and understudied phenomena served largely as an introduction to the inclusion of the persona concept in the HCM field of research. It focused on the exploration of the awareness of the personas among HRM/HCM experts as well as their usability (or non-usability) in different HRM/HCM processes to reach research objectives, a secondary data-based knowledge database was created based on the existing research. Previous research has identified the need for a more personalized approach and recognized the use of the persona concept for employee clustering but research papers on the topic were just a few. The empirical part of the research that yielded primary data and the conclusion based on it are presented in the following sections.

### 5.1 Persona Concept Awareness Among HCM Professionals

The research indicated that among HRM/ HCM professionals there is more knowledge than actual usage of the persona concept. The sub-processes of HCM where the persona concept is deployed include employer branding, recruitment, HR initiatives, and training. While the use of personas is mainly perceived as human-driven, the actual clustering cannot be done without the help of technology, including artificial intelligence. Some organizations use software to cluster the data on their people and the potential future recruits. Based on the results, the persona concept has been used for a while in marketing, and now HR is catching up with the concept. Also, results demonstrate a need for a more individualized approach and flexibility as an overarching factor affecting HCM process design and implementation.

### 5.2 HCM Areas Potentially Impacted by Persona Concept

The sub-processes of HCM where the persona concept is currently used and where the usage potential was identified were processes that target people outside the company, such as recruitment, talent pool creation, and employer branding, and “soft” HCM processes such as development and training (vs. salary management) where bundling of people is needed for HCM efficiency and mutual benefit between the workers.

### 5.3 Ethical and Legal Issues in Individualized/Clustered HCM

The promised better targeting of HCM efforts via clustering and individualization can also have some downsides. As the authors discussed in the earlier sections, clustering means limiting the number of HCM service options offered and obtained. This means that different individuals sharing the same job descriptions and organizational positions can be positioned in different clusters. This may spark questions on equality. In organizations, a sense of justice acts as the glue that holds the organization together and maintains teamwork (Cropanzano and Kacmar, 1995). If employees or employee groups feel they are underrepresented in the clusters, the social glue of the organization may suffer. In our empirical sample, in one case, the high status of DEI (Diversity, Equality, and Inclusion) policies of a large national banking corporation caused reservations for the use of personas – either the personas are so vague and short of detail that they do not carry much meaning or then they are detail-laden and thus exclusive for some. The personas can transmit unwanted feelings of gender, age, or race preferences of the management.

Especially in Europe, the GDPR sets high demands for data usage transparency. Especially the use of sensitive personal data is heavily regulated. An individual has a right to know what data of him/her as an employee are stored and where and by whom that data is or will be used. The individual has also the right to deny the usage of that data if not necessary for the other party to perform “normal” transactions. As an example, the employer

needs to know the social security number and bank account details for text and salary purposes. Does the same apply to the psychographics of the employee(s) used to create personas?

#### **5.4 Considerations on Technical Advances for Persona Creation**

Increasingly, persona creation is seen as an activity where AI can play a role. In theory, analytical AI can use rich (in mass and format) data to do the clustering. Based on the analysis, generative AI can create personas in text and images. Furthermore, in recruiting AI-powered systems can then search for people matching the persona(s) within the organization or outside of it to create a talent pool and to do headhunting. The challenge may be that the owner of the HCM process does not know the logic or the algorithm of the clustering and persona creation and is thus dependent on the proposal by a “black box”. Still, HCM is responsible for the outcome of the AI-powered analysis and creation, without being in full control. Also, the generic LLMs (Large Language Models) like ChatGPT or Google Gemini lack the specificity of HCM as a function with its unique characters. The foundation models targeted to support HCM specifically are still to be seen and tested for validity. Also, the overarching issue in all LLM or foundation model development is very crucial: What has been the training data of the model, is the data unbiased and fairly collected?

#### **5.5 Theoretical Contributions**

In managing their human capital, companies are struggling to find and keep employees, whose knowledge possessions accumulate to create the knowledge pool of the organization. Increasingly, tendencies such as company culture, employee well-being, and employee commitment have led companies to utilize “soft” variables to depict the types of employees they want to find and develop. These psychographic factors include issues like motivational sources, learning styles, knowledge dissemination skills, etc. By using personas companies can better manage the diverse workforce they employ and/or are searching for. Some examples of persona usage in KM are from a stream called user-centric knowledge management, for example, Project management case in which personas were developed to align project offerings with the needs of manufacturing SMEs, facilitating better communication and knowledge sharing among stakeholders (Chmielarz, 2022), Educational planning case (Huynh *et al.*, 2021) where personas were created to assist in the user-centric design of educational offering, and, Knowledge mapping case where the usage of personas aimed to tap into tacit knowledge within the organization (Mahamuni *et al.*, 2018). The new angles that this paper offers are linked to the constraints for persona making and usage: the legal and ethical considerations posed to persona creation and usage as well as the increasing role of AI and other emerging technologies in persona creation and maintenance.

#### **5.6 Research Limitations and Ideas for Further Research**

The research has certain limitations. Most interviews were conducted among companies with more than five hundred employees, and thus there was a separate job function for talent acquisition and/or talent management. In small firms, the resources may not be enough to take a novel approach. Also, in an SME company, the management may know and be able to act on a truly individual basis as they know each employee “by name and nature”, so there is no need to segment the existing personnel. However, even for them the employee branding and recruitment might be supported by the persona concept.

The validity of the results was affected by a small number of interviews, which was a purposeful choice due to the choice of exploratory approach and qualitative, interview-based method of primary data collection. Despite the limitations, the study provides the foundation for further research on this topic.

Further research is necessary to fully comprehend the real consequences of the concept and its efficient application in organizations. A larger dataset can enhance the accuracy of the outcomes and help authors delve deeper into the practical aspects of the persona concept. This can facilitate the identification of the process of persona development in HCM functions. Further work on the issue area could focus on the process development of personas and assessment of the pragmatic outcomes of such a process. Also, the impacts of personas on needs in ethics, trust, and transparency would make an important approach to study.

NOTE: This research paper is an extended version of a conference paper in ECKM (European Conference on Knowledge Management) 2023. The link to the original paper (Mikhlina and Saukkonen, 2023) is presented in the references.

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