

Cooperative Human Resources Challenges In The Society 5.0 Era

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Abstract. The challenges faced by cooperative Human Resources (HR) in the era of Society 5.0 are becoming increasingly complex because they require the integration of digital technology with human needs, forcing cooperatives to not only focus on technological progress alone but also on developing their human resources. This research aims to understand in-depth and provide solutions to the challenges faced by cooperative HR. This study uses a qualitative approach with a systematic literature review method and is searched comprehensively using relevant keywords in searches through various online databases. The literature selection process was carried out by considering the reputation of the journal and the recency of the publication (last 5 years) and analyzed in depth using the content analysis method. The conclusion from the research findings is that the challenges for cooperative human resources in the era of society 5.0 are: adaptation to digital technology 5.0 era, cultural transformation, development of new skills, retaining members, collaboration and partnerships the 5.0 era

Keywords: Human Resources, Cooperatives, Society 5.0

BACKGROUND

Cooperatives have an important role in society and the economy, especially in the context of people's economic empowerment and sustainable development (Bharti 2021; Guttman 2021). The Society 5.0 era is also known as "Society 5.0" which brings ideas about how digital technology can be used by society to achieve great developments in various areas of life to improve welfare and create a better life for everyone (Coelho et al., 2022) (Alves et al 2023). In the Society 5.0 era, the challenges faced by cooperative Human Resources (HR) are becoming increasingly complex because they require the integration of digital technology with human needs, forcing cooperatives to not only focus on technological progress alone but also on developing human resources in line with changing times (Bühler, Nübel, et al. 2023; Bakhri et al. 2023; Gao et al. 2024).

A theory that is suitable for studying the challenges of cooperative human resources (HR) in the Society 5.0 era is the organizational evolution theory. Organizational evolution theory

refers to the concept that organizations experience change and development over time in response to changes in the external and internal (Zheng et al 2009; Baum and Singh 2023). In the context of this research, cooperatives as organizations are faced with new challenges due to the shift to Society 5.0 which demands the integration of digital technology with human needs. Linkage to Organizational Evolution involves understanding how cooperatives adapt their organizational structures, management strategies, and HR processes to adapt to the changing business environment in Society 5.0.

Several previous studies have examined human resources in cooperatives such as research (Jabbouri et al. 2023; Kaluge 2023; Pandey 2024) explained that the most important obstacle in cooperatives is the lack of information related to the low digital literacy of the cooperative concerned. (Bühler, et al. 2023; Wahyuningtyas, et al 2023; Chen, et al. 2023) also, his research explained that the development of digital capabilities and government support in overcoming the challenges of cultural transformation and adaptation to digital technology in cooperatives in the Society 5.0 era. Meanwhile (Mujiyanti, 2023) provides an answer from research results that the challenges of cooperatives highlight several main problems such as human resources, capital, member awareness, community perception, and competition. Proposed solutions include improving member training, capital management, transparency, and overcoming negative perceptions. (Yang & Gan, 2020) have explained that flexibility in human resource management not only helps cooperatives in planning and implementing strategies flexibly but also strengthens the cooperative's ability to survive and develop in a dynamic market. Apart from that (Samad & Rambey, 2023) research findings show that the development of cooperatives still needs to be improved in planning and funding so that they can become stronger, also explaining that in the industrial environment cooperatives need to have business intelligence to evaluate high technological progress in exchanging knowledge related to product design and innovation, as well as information from suppliers and customer behaviour.

Previous researchers have studied various challenges faced by cooperatives, such as low digital literacy, human resource problems, capital management, public perception, and intense competition. However, in the context of the Society 5.0 era, where digital technology is increasingly influencing all aspects of life, the novelty of this research lies in a comprehensive approach to understanding and handling the challenges faced by cooperatives in the Society 5.0 era. This research aims to understand in-depth and provide solutions to the challenges faced by cooperatives in facing cultural changes and adapting to digital technology in the Society 5.0

era so that they can help cooperatives optimize their potential in facing the demands of the new era and ensure sustainability and growing competitiveness.

THEORETICAL STUDY

Organizational Evolution Theory

Organizational Evolution Theory provides an explanation of how organizations change and adapt continuously to ensure their survival in a dynamic environment (Romanelli, 1991). This theory describes how organizations experience different stages of development, from the initial stages of founding to the stages of maturity and possible revival. Organizational Evolution Theory can be used to explain how cooperatives change and adapt to changes in the external environment, such as advances in digital technology and shifts in societal values. Cooperative organizations may change their human resource (HR) management structures, strategies, and processes to meet the demands of the times (He et al. 2020; Veile, Schmidt, and Voigt 2022).

Based on research on cooperatives in the Society 5.0 era, Organizational Evolution Theory can be used to explain how cooperatives change and adapt to changes in the external environment, such as advances in digital technology and shifts in societal values. Cooperative organizations need to change their human resource (HR) management structures, strategies and processes to meet new demands. For example, cooperatives may need to change their organizational structure to be more flexible and responsive to change, adopt new strategies to leverage digital technology in their operations, and update HR processes to develop new skills required in the Society 5.0 era.

Socio-Technical Systems Theory

Socio-Technical Systems Theory discusses the interaction between technical systems (technology) and social systems (humans) in organizations. This theory recognizes that organizational performance is not only influenced by technology, but also by complex interactions between technology, organizational structure, culture, and the individuals who work in it (Appelbaum, 1997). The main concept of Socio-Technical Systems Theory is that an effective work system requires a good balance between technical elements (such as technology, procedures, and tools) and social elements (such as inter-individual relationships, organizational culture, and communication structures). In other words, changes in one aspect (either technical or social) can affect the entire work system. In the context of research on cooperatives in the Society 5.0 era, Socio-Technical Systems Theory can help to understand how cooperatives can integrate digital technology with the needs and social dynamics that

exist within them. This theory encourages holistic and integrated change in organizations, where human resource (HR) development and technology implementation can be seen as part of a larger work system.

RESEARCH METHODS

This research uses a qualitative approach with a systematic literature review method to explore the challenges faced in cooperative human resource (HR) management in the Society 5.0 era. The library method is a data collection technique commonly used in social research to investigate information from various literary sources over time, also known as a literature review (Dunne, 2011). A systematic literature review involves a structured literature search of various online databases such as Google Scholar, ScienceDirect, and Emerald Insight using keywords such as "Cooperative Human Resources Challenges 5.0", "Cooperative HR", and other relevant keyword combinations. The literature review process begins with the identification of relevant high-quality literature with selection criteria that include journal reputation and recency of publication (within the last 5 years). The selected literature was then analyzed in depth using the content analysis method, where HR challenges identified from the literature were grouped into certain themes. These themes are analyzed further to understand in-depth and provide solutions to the challenges faced by cooperatives in facing cultural changes and adapting to digital technology in the Society 5 era.

RESULTS AND DISCUSSION

Research Result

Various factors that cause HR challenges are identified and analyzed to provide a comprehensive understanding. Table 1 of the research results presents the main findings that help map the complex dynamics of HR challenges in the Society 5.0 era."

Table 1. Cooperative HR Challenges in the Society 5.0 Era

Number	Cooperative HR Challenges in the Society 5.0 era	Supporting literature/research	Description
1	Adaptation to Digital Technology in the Era of Society 5.0.	<ul style="list-style-type: none"> ▪ (Vlasenko & Budnik, 2020) ▪ (Munz & Doluschitz, 2021) ▪ (Tavares et al., 2022) ▪ (Kader, 2022) ▪ (Yunindanova, 2022) ▪ (Wahyuningtyas et al., 2023) ▪ (Panggabean & Ali, 2023) ▪ (Bühler, Calzada, et al., 2023) 	Cooperatives must adopt digital technology such as management information systems, e-commerce and social media to increase efficiency and reach a wider market. Cooperative human resources need to be equipped with information technology skills and the ability to adapt to technological changes.

2	Cultural Transformation	<ul style="list-style-type: none"> ▪ (Smaldino, 2019) ▪ (Sehlin et al., 2019) ▪ (Apicella & Silk, 2019) ▪ (Huda et al., 2019) ▪ (Ajates, 2020b) ▪ (Pansera & Rizzi, 2020) ▪ (Ajates, 2020a) ▪ (Imaz & Eizagirre, 2020) ▪ (Prinos, 2021) ▪ (Novkovic, 2022) 	Cultural transformation is a change in perspective, behaviour and values in a group or organization. It involves a fundamental shift in ways of thinking and acting, often to adapt to a changing environment or achieve new goals.
3	Development of New Skills Era 5.0	<ul style="list-style-type: none"> ▪ (Yang & Gan, 2020) ▪ (Wahyuningtyas et al., 2023) ▪ (De Prins et al., 2020) ▪ (Basterretxea et al., 2019) ▪ (Ade Octaviany et al., 2022) ▪ (Ernanda Manurung et al., 2023) ▪ (Rusman et al., 2023) 	Cooperative human resources are necessary develop soft skills, independent learning ability, creativity, innovation and ability to use software/technology.
4	Maintaining Cooperative Members	<ul style="list-style-type: none"> ▪ (Yanbykh et al., 2019) ▪ (Nelson et al., 2019) ▪ (Mitzinneck & Besharov, 2019) ▪ (Siregar, 2020) ▪ (Özgül et al., 2020) ▪ (Bretos et al., 2020) ▪ (Slade Shantz et al., 2020) ▪ (Pratiwi & Yusuf, 2021) ▪ (Yusnaldi et al., 2022) 	Cooperative HR requires innovative marketing and service strategies to maintain the member base and increase the added value they offer.
5	Collaboration and Partnership	<ul style="list-style-type: none"> ▪ (Bustinza et al., 2019) ▪ (Yang & Gan, 2020) ▪ (Kader, 2022) ▪ (Enjelina & Mayarni, 2022) ▪ (Khasanah et al., 2022) ▪ (Herab et al., 2023) ▪ (Wahyuningtyas et al., 2023) ▪ (Chowdhury et al., 2023) ▪ (Wardhani et al., 2023) ▪ (Rismayani, 2024) 	Cooperatives need to build networks and strategic partnerships with other parties such as companies, government or educational institutions to increase competitiveness and develop human resources.

Source: Table processed in 2024

Based on the research results, the image compiled provides a comprehensive picture of the complexity of the challenges faced by cooperative human resources (HR) in the Society 5.0 era. Figure 1 identifies the main factors influencing these challenges, highlighting the impact of digital technology integration on cooperatives and emphasizing the need for the development of human skills that meet today's demands.



Source: researcher (2024)

Figure 1. 5 Point challenges of human resources in cooperatives in the era of society 5.0

Adaptation to Digital Technology in the Era of Society 5.0.

Adaptation to Digital Technology in the era of Society 5.0 is one of the main challenges faced by cooperative Human Resources (HR) (Vlasenko and Budnik 2020; Munz and Doluschitz 2021; Tavares et al 2022; Kader 2022; Yunindanova 2022; Wahyuningtyas et al. 2023; Pangabebean and Ali 2023; Bühler, Calzada, et al. 2023). Cooperative human resources need to have the ability to use and master various digital tools that are relevant to cooperative needs such as management software applications, e-commerce platforms, data analysis systems and cloud-based technology (Mu, Zheng, and Sun 2021; Rahmanto 2021; Rachman et al. 2020; Ciruela-Lorenzo et al. 2020). Digital tools can increase cooperative operational efficiency by automating information that can be accessed quickly and easily by cooperative human resources. Digital tools also enable cooperative HR to collect, analyze and understand data better. With proper data analysis, cooperatives can identify market trends, consumer behaviour patterns, and business opportunities that can be utilized to improve cooperative performance and provide added value to cooperative members.

Technology continues to develop rapidly, cooperative human resources must have the ability to continue learning and adapting to technological changes. They need to have a proactive attitude towards new learning and the flexibility to change the way they work according to current technological developments. Cooperative human resources must be able to use data effectively to inform strategic decision-making (Ajates 2020; Mi et al. 2021). In

addition, you need to have data analysis skills to identify trends, patterns and opportunities that can improve cooperative performance and innovation. Mastering relevant digital tools can be one of the factors that differentiate cooperatives from their competitors, allowing them to be more responsive to market changes and better meet the expectations of cooperative members (Agustian et al. 2023; Wahyuningtyas et al. 2023).

Solutions for cooperatives in adapting digital technology in the Society 5.0 era include important steps. First, increase members' digital literacy by providing training on applications and other digital tools. Second, cooperatives need to invest in digital infrastructure to ensure fast and stable access and the necessary hardware and software. Third, implementing an integrated management information system can help in managing member data, financial transactions and operational processes efficiently. Fourth, collaboration with external parties such as technology companies can help in utilizing existing solutions or developing special solutions. Fifth, encouraging digital innovation from members can improve services, operational efficiency and cooperative competitiveness. Sixth, data security must be a priority.

Cultural Transformation

Changes in values, beliefs, attitudes and behaviour are needed to adapt cooperatives to an environment that is increasingly digitally connected and innovation-oriented so that Cultural Transformation becomes one of the challenges faced by cooperative Human Resources (HR) in the Society 5.0 era (Smaldino 2019; Sehlin et al. 2019; Apicella and Silk 2019; Huda et al. 2019; Ajates 2020b; Pansera and Rizzi 2020; Ajates 2020a; Imaz and Eizagirre 2020; Prinos 2021; Novkovic 2022).

Cultural Transformation includes developing an organizational culture that encourages innovation and creativity. Cooperative human resources need to take risks, experiment, and create new solutions to solve complex problems facing cooperatives and their members (Sultana, 2020; Basterretxea, 2022). Cooperatives must become more flexible and adaptive to rapidly changing business environments (Limbach, 2023). HR needs to be ready to change the way they work, collaborate and communicate according to evolving needs, and not be afraid to abandon old practices that are no longer relevant. Cultural Transformation requires empowering employees to take initiative, contribute with new ideas, and share their knowledge and experiences openly (LaGree et al. 2023; Turyadi et al. 2023). Cooperative human resources must feel supported and empowered to take an active role in leading change and

creating added value for the cooperative. Cooperative leaders must be effective change agents in facilitating Cultural Transformation.

To face the challenges of cultural transformation, cooperatives can implement several strategic solutions. First, cooperatives need to start with awareness and commitment from all members and management to accept cultural change, which can be done through open and transparent communication about the new goals and values to be achieved. Second, cooperatives can organize employee training and development programs that focus on developing the interpersonal, problem-solving, teamwork and leadership skills needed in the new culture. Third, cooperatives need to create a work environment that supports cultural change, by facilitating collaboration, innovation and flexibility. Fourth, strong and committed leadership is essential to lead cultural change and be a role model for cooperative members. Fifth, cooperatives can implement reward and recognition systems that reinforce behaviour and values that are in line with the desired new culture.

Development of New Skills Era 5.0

The development of new skills is crucial for cooperative Human Resources (HR) in the Society 5.0 era. (Yang and Gan 2020; Wahyuningtyas et al. 2023; De Prins et al, 2020; Basterretxea et al, 2019; Ade Octaviany et al. 2022; Ernanda et al. 2023; Rusman et al. 2023). Rapid technological developments require human resources to master digital skills, such as mastery of software and digital platforms, as well as the ability to adapt to the latest technological developments. In addition, data analysis skills become key in business decision-making, with expanded abilities in collecting, analyzing, and interpreting data using analytical tools such as Excel, Python, or other platforms. In addition, creativity and innovation are very necessary in solving problems and creating new solutions in a dynamic business environment. The ability to learn independently is also important to continue improving skills, by actively seeking additional training through various means such as online courses, seminars or workshops. No less important is the development of soft skills, including communication skills, adaptability, collaboration, leadership and working in cross-functional teams.

To overcome challenges, cooperatives can implement several solutions. First, cooperatives need to start by identifying the new skills needed in the 5.0 era, both for existing jobs and to prepare members for future jobs. Second, cooperatives can provide employee training and development that includes these new skills, both through formal and informal training, as well as independent learning. Third, cooperatives need to create a work environment that supports continuous learning and innovation, by encouraging employees to

share knowledge and experience and take risks in new experiments. Fourth, cooperatives can utilize technology such as online learning platforms and virtual simulations to efficiently facilitate learning and development of new skills.

Maintaining Cooperative Members

Retaining cooperative members is a key challenge in maintaining the sustainability of cooperatives and ensuring their contribution to the growth and success of the organization (Yanbykh et al, 2019; Nelson et al. 2019; Mitzinneck and Besharov 2019; Siregar 2020; Özgül, Koçar, and Eryaşar 2020; Bretos et al, 2020; Slade Shantz et al. 2020; Pratiwi and Yusuf 2021; Yusnaldi et al, 2022). This challenge is closely related to the human resources (HR) aspect because cooperative members are an integral part of the workforce and leadership that influences the operational sustainability and growth of the cooperative. The discussion regarding retaining cooperative members includes several aspects. First, cooperatives need to understand and respond well to the needs and expectations of their members. This involves open and ongoing communication to understand members' needs and ensure that the cooperative's services and programs meet their expectations. Second, cooperatives need to create emotional ties and added value for their members, either through loyalty programs, economic benefits, or participation in organizational decision-making. Third, it is important to promote members' sense of ownership and involvement in cooperatives, both through education, training, and opportunities to actively participate in various cooperative activities.

Solutions to retain cooperative members can be directly related to human resource development. Through employee training and development that focuses on customer service by strengthening service quality and communication with its members. In addition, empowering members through active participation in the decision-making process and cooperative programs can also increase their sense of ownership and involvement in the organization. Thus, retaining cooperative members is an important part of the human resource management strategy in maintaining the sustainability and success of cooperatives in the Society 5.0 era.

Collaboration and Partnership

Collaboration and partnerships are important aspects of maintaining the sustainability and growth of cooperatives in the Society 5.0 era (Bustinza et al. 2019; Yang and Gan 2020; Kader 2022; Enjelina and Mayarni 2022; Khasanah et al. 2022; Herab et al. 2023; Wahyuningtyas et al. 2023; Chowdhury et al. 2023; Wardhani, 2023; Rismayani 2024). This challenge is closely related to human resource management (HR) because it requires effective collaboration between members, employees and external partners to achieve common goals.

The discussion regarding collaboration and partnerships covers several aspects. First, cooperatives need to develop strong collaboration networks with external parties, including other companies, financial institutions, government and local communities. This can be done through the formation of strategic partnerships, joint ventures, or collaboration in mutually beneficial projects. Second, it is important to build a collaborative culture within the cooperative itself, by encouraging open communication, knowledge sharing, and teamwork at all levels of the organization. Third, cooperatives need to utilize digital technology to facilitate collaboration and exchange of information between members, employees and external partners. Solutions to increase collaboration and partnerships in cooperatives can be related to human resource development. For example, through training employees in communication, negotiation, and conflict management skills, cooperatives can strengthen their ability to establish good relationships with external partners. Additionally, promoting an inclusive and collaborative work culture can help create an environment where members and employees feel supported to work together to achieve shared goals. Thus, collaboration and partnerships are an important part of the human resource management strategy in maintaining the sustainability and success of cooperatives in the Society 5.0 era.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions of this research outline several challenges faced by cooperative human resources (HR) in the Society 5.0 era. First, adapting digital technology is a primary need. Furthermore, cultural transformation is also an important focus. Developing new skills is essential amidst technological developments and dynamic market needs. In addition, maintaining cooperative members is also a key challenge. It is important to understand and respond to members' needs well, build emotional bonds, and provide added value to increase member loyalty and participation in cooperative activities. External and internal collaboration is also emphasized to build cooperative networks. Practical suggestions for overcoming these challenges include increasing digital literacy through training, investing in digital infrastructure, implementing integrated information systems, and organizing employee training and development programs that support the development of new skills.

THANK-YOU NOTE

Thank you to the chairman of Universitas Pepabri Makassar who has provided material assistance in preparing this scientific article.

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