Future Agropreneur Employability Readiness in Evolving Market: A Grounded Theory Approach

Mohd Fauzi Kamarudin*, *Muhammad* Ridzuan Noorzelan, and *Nor* Ratna Masrom

Faculty of Technology Management and Technopreneur, Universiti Teknikal Malaysia Melaka (UTeM), Malaysia

Abstract. In the evolution of the Fourth Industrial Revolution (4IR), ensuring agropreneur readiness becomes crucial for navigating the dynamic agricultural market. It utilized the Constructivist Grounded Theory, in-depth semi-structured interviews and Focus Group Discussions (FGDs) were conducted with a diverse sample of agricultural experts, industry leaders, and agropreneurs. This study aims to identify and understand the essential skills needed by agropreneurs to thrive in the 4IR era and excel in a disruptive, rapidly changing market influenced by artificial intelligence, big data analytics, and automation. The findings underscore the importance of a growth mindset, endurance, perseverance, problem-solving, agility, technical knowledge, and creativity in adapting to and capitalizing on emerging technologies. This research contributes to the literature by providing nuanced insights into the valued competencies crucial for agropreneur readiness in the context of 4IR, offering a comprehensive understanding of agropreneur readiness in this evolving agricultural landscape.

1 Introduction

The Fourth Industrial Revolution (4IR) has ushered in profound shifts in how industries operate, marked by disruptive technological changes, evolving business models, and organizational restructuring [58] This era of digitalization presents unique opportunities for young individuals entering the workforce to contribute innovatively and create value on a global scale. Nevertheless, the rapid pace of technological progress within 4IR brings forth challenges for aspiring young professionals, necessitating their ability to adapt and acquire the essential skills required to excel in this dynamic environment [38] As such, exploring and understanding the readiness of youth becomes crucial in preparing the next generation for success in the context of 4IR.

The transition to 4IR has created a demand for professionals with a specific set of competencies and skills [22]. This shift has also led to the creation of new job opportunities and the need for a combination of technological and human skills [18]. However, there is a gap between the skills needed in the 4IR and those possessed by information professionals [2]. This highlights the need for a rethinking of the roles and skills of information professionals in

* Corresponding author: mohdfauzi@utem.edu.my

this new era. The traditional education system may not adequately equip the youth with the dynamic skills required to navigate this technologically driven job landscape [22].

Agropreneurship, the entrepreneurial approach to agriculture, has gained significant attention as a means to enhance agricultural productivity, sustainability, and economic viability. In recent years, the integration of digital technologies and innovative practices, characteristic of the Fourth Industrial Revolution (IR4.0), has revolutionized agropreneurship. Technologies such as the Internet of Things (IoT), artificial intelligence (AI), and big data analytics are transforming traditional farming practices, enabling precision agriculture, improving resource management, and increasing crop yields [32]. The adoption of these technologies helps agropreneurs optimize inputs, monitor crop health in real-time, and make data-driven decisions that enhance productivity and sustainability [66].

The dynamic landscape of IR4.0 also demands that agropreneurs develop a diverse set of skills to effectively leverage these technologies. Essential competencies include technical knowledge of advanced agricultural technologies, problem-solving skills, and an entrepreneurial mindset that embraces innovation and adaptability. Furthermore, resilience and agility are crucial as agropreneurs navigate the uncertainties and challenges associated with technological disruptions and market fluctuations [51]. Educational institutions and training programs must therefore prioritize equipping young agropreneurs with these skills, ensuring they are prepared to capitalize on the opportunities presented by IR4.0. The synergy between technological advancements and skilled agropreneurs can drive the agricultural sector towards greater efficiency, sustainability, and global competitiveness [52].

The importance of education and skills development in creating high-tech agropreneurs is further highlighted by [49] who emphasize the necessity of integrating advanced technological training into agricultural education. Their research advocates comprehensive educational programs that focus on developing technical skills and innovative thinking, enabling young agropreneurs to harness the potential of emerging technologies. Similarly, [14] explore the successful transfer of smart agriculture technology from the Malaysian Agricultural Research and Development Institute (MARDI) to young agropreneurs, particularly through initiatives like AgroCube, which focuses on high-value vegetable production. These efforts demonstrate the critical role of technology transfer and practical training in enhancing the capabilities of agropreneurs. By embracing such educational and technological advancements, agropreneurs are better positioned to achieve sustainable growth and increased productivity in the evolving agricultural landscape shaped by IR4.0.

A range of studies underscore the critical importance of preparing youth for the 4IR job market. [62,4], both emphasize the need for educational institutions to integrate 4IR knowledge and skills into their curricula, with a particular focus on technology and soft skills. [61] further highlights the importance of generic skills and personal attributes, such as communication, creativity, and adaptability, in the context of the 4IR job market.

The readiness of youth in the 4IR is a critical issue, with a focus on the development of employability skills. [61,45] both emphasize the importance of these skills, with [61] highlighting the need for meta-competence and multi-skills, and [45] discussing the need for a shift in the STEM curriculum to align with the demands of the 4IR economy. These studies collectively highlight the importance of youth readiness in the IR4.0 era.

1.1 Literature Review

The Fourth Industrial Revolution (4IR) has reshaped the job market, introducing a demand for skills beyond traditional academic qualifications [46]. However, a skills gap persists between students and employer requirements, necessitating universities to foster a diverse skill set, encompassing information technology, knowledge, and soft skills [31]. Collaboration between educational institutions and entrepreneurs is crucial for enhancing youth readiness through

skill development [8]. The 4IR job market requires a combination of digital skills, impactful technology usage, an entrepreneurial mindset, and a blend of technical and soft skills [55]. This shift in the contemporary job market, influenced by 4IR forces, underscores the need for a comprehensive understanding of skills demanded [50]. The impact of 4IR on the labor market necessitates a reevaluation of skills and competencies, bridging the gap between technological advancements and human capabilities for employability in the 21st century [50, 2, 18].

A growing body of literature emphasizes the essential skills required for youth engagement in agropreneurship within the context of the Fourth Industrial Revolution (IR4.0). Continuous learning and innovation are also crucial for remaining competitive and responsive to market dynamics [39]. [47] highlighted the significance of innovativeness and resourcefulness in the future of agropreneurship. Their study, which explores the concept of entrepreneurial identity in youth agripreneur programs, emphasizes that young agropreneurs must develop a strong sense of identity that is rooted in innovative thinking and the ability to effectively utilize available resources. Innovativeness is crucial as it allows agropreneurs to develop new methods and products that can meet the challenges of modern agriculture, particularly in an era where technological advancements rapidly change the landscape. Resourcefulness, on the other hand, enables agropreneurs to optimize the use of available resources, ensuring sustainability and efficiency in their operations.

Furthermore, [47] argue that fostering these qualities in youth agripreneur programs can significantly enhance the capability of future agropreneurs to adapt to the demands of the 4IR. They stress that educational and training programs should focus not only on technical skills but also on cultivating an innovative mindset and resourceful approach among young agropreneurs. By doing so, these programs can prepare agropreneurs to better navigate the complexities of modern agricultural markets and leverage new technologies for sustainable growth and development. This approach aligns with the broader goal of developing a resilient and adaptable agricultural sector capable of thriving in the 4IR era. Integrating these skills into educational curricula and training programs is essential to empower youth for success in agropreneurship amidst the transformative forces of IR4.0.

Growth Mindset: A growth mindset, characterized by the belief that abilities can be developed, is crucial for fostering adaptability and learning orientation in the context of the 4IR job market [69]. It is also important for employability, as it helps individuals see opportunities in setbacks and their own growth and development [5]. However, the impact of a growth mindset on STEM achievement, especially for underrepresented students, is influenced by the educator's understanding of learning theories [10].

Endurance and Perseverance: Endurance and perseverance are crucial components of a resilient mindset, particularly in the context of the 4IR job market [20, 68, 56, 37]. These qualities enable individuals to withstand pressure, maintain functioning, and adapt to challenges [20, 68]. In the entrepreneurial context, they are linked to career success and resilience (Salisu et al., 2020). Resilience, in turn, is associated with positive work outcomes, including job engagement and enhanced leadership capability [68]. Strategies for building resilience include aligning work with personal values and setting goals [37]. These findings underscore the importance of endurance and perseverance in navigating the challenges of the 4IR job market.

Agility: Agility is a crucial skill in the rapidly changing job market of Industry 4.0, enabling individuals and organizations to adapt to new technologies and market demands [42]. The rapidly changing job market of Industry 4.0 requires individuals to possess career agility, which is facilitated by technological adaptivity, agile learning, and career navigation [13]. This adaptability is crucial for employees to meet the demands of the digital era [61].

Technical Skills: Literature consistently underscores the importance of technical skills in the 4IR era, with a focus on competencies such as coding, data analytics, and advanced

technology utilization [30,16,67,28]. These skills are crucial for the future workforce, particularly in the manufacturing industry, where a combination of classic machines and IT knowledge is required [67]. The need for innovation, creativity, ICT and Big Data knowledge, and communication skills is also highlighted [16]. However, there is a gap between the current level of knowledge and the required technical competencies, indicating a need for curriculum updates and training programs [28].

Creativity: The Fourth Industrial Revolution (4IR) is reshaping industries, making creativity a crucial aspect of youth readiness [8]. However, there is a gap between students' understanding of employability skills and the skills demanded by the labor market [46]. The 4IR is also driving the need for reskilling in the workforce [54]. In this context, fostering a creative environment is essential, with goal orientation playing a significant role in enhancing innovation performance [70].

While existing literature acknowledges the broad challenges in youth readiness for the agropreneurial landscape, there is a noticeable gap in comprehensive understanding and integrating the identified skills, namely entrepreneurial mindset, resilience and adaptability, agricultural expertise, technical skills relevant to modern farming practices, and continuous learning and innovation. A holistic exploration of these skills within the context of youth readiness in agropreneurship remains a critical area that requires further investigation. Closing this gap is essential for informing educational policies, training programs, and career guidance initiatives tailored to prepare the youth for success in the ever-evolving field of agricultural entrepreneurship.

2 Research method

This research on youth readiness in the 4IR job market utilizes Constructivist Grounded Theory (CGT), a qualitative approach developed by Charmaz. The use of Constructivist Grounded Theory (CGT) in qualitative research has been explored in various fields, including social science, urban planning, and policy analysis ([26]. This approach, developed by Kathy Charmaz, emphasizes the interpretive aspects of data collection and the construction of theories based on participants' experiences. In the context of youth readiness in the 4IR job market, CGT can provide a rich understanding of the experiences and feelings of young people as they prepare for employment in this rapidly changing landscape. This aligns with the need for a more nuanced understanding of employability traits, particularly in STEM fields [6].

The process involves data collection through interviews, observations, and document analysis, followed by open coding to identify initial concepts. Memoing captures reflections, theoretical sampling refines the emerging theory, and constant comparison refines categories, leading to theoretical saturation. The study employs open, axial, and selective coding methodologies for data analysis. [53] utilized these coding techniques to identify the dimensions and components of research development among faculty members. In-depth semi-structured interviews were conducted with 11 participants, including agricultural experts, industry leaders, and agropreneurs.

In the data analysis process, each recorded interview was transcribed verbatim, capturing everything said. We then sorted through these transcripts to identify important themes using coding, involving open, axial, and selective methods. This coding process is a critical aspect of qualitative research, as demonstrated by Holohan and Sarhan (2020) in the context of strategic alignment. It involves breaking down data into smaller parts, connecting them into larger themes, and focusing on the most significant ones [48].

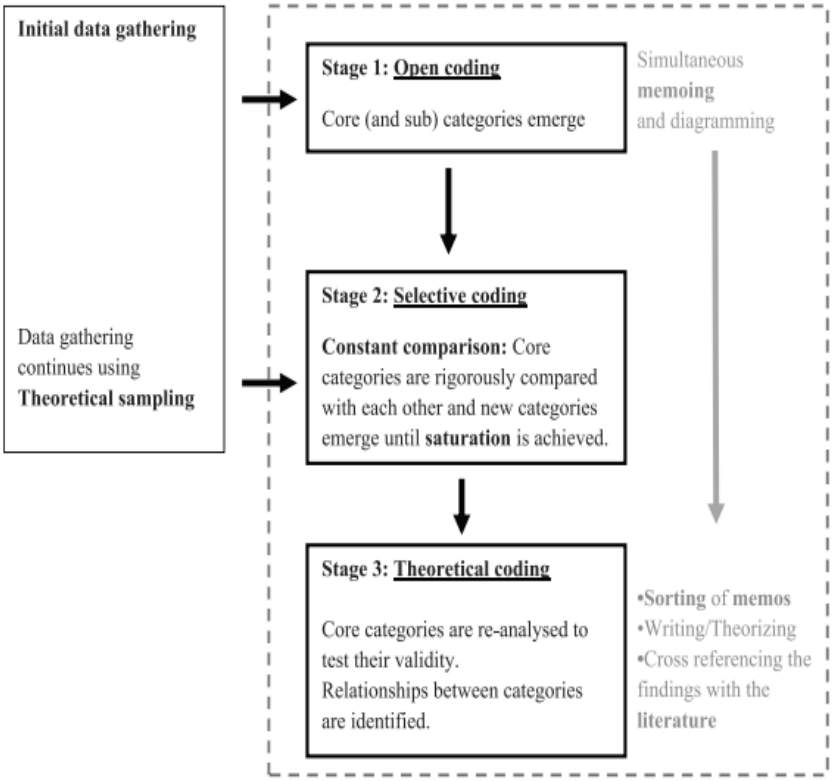

Fig. 1. Constructivist Grounded Theory Framework, [3]

3 Results and discussion

In the evolving landscape of the Fourth Industrial Revolution (IR4.0), the job market is characterized by rapid technological advancements and shifting economic dynamics that demand a reevaluation of essential skills and competencies. This section delves into how young individuals can harness and refine these competencies to thrive in such a transformative era. The discussion aligns with the broader themes by highlighting the pivotal role of adaptive skills like growth mindset, emotional intelligence, and problem-solving. By exploring these attributes, we aim to provide insights into how the youth can navigate the complexities of IR4.0, fostering resilience and innovation in the face of technological disruption and uncertainty.

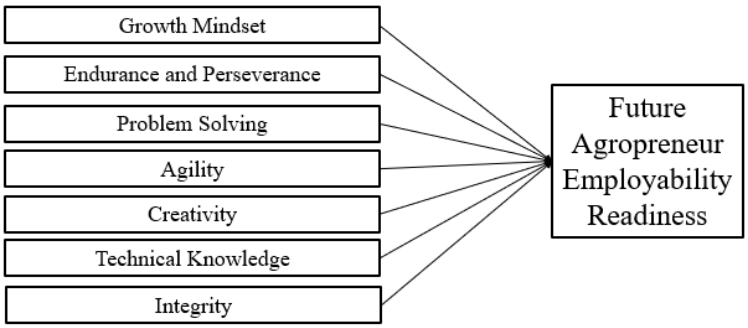

Fig. 2. Youth Employability Readiness Framework

3.1 Growth Mindset

A growth mindset is an essential element for young individuals navigating the challenges of employability in the context of 4IR. It goes beyond the pursuit of innovation in their professional journeys, fostering a proactive attitude and an openness to diverse approaches.

> *"Firstly, is the attitude for a growth mindset. That's the main and most important. So, when they have a growth mindset, they will naturally need to know on their own. That they have the thirst to learn.*" [Adam: P1, IndustryLeader, 2023]

> *"Having a growth mindset in entrepreneurship is paramount. Entrepreneurs need to think beyond the immediate venture."* [Jack: P11, Entrepreneur, 2023]

> *"Just to add a point to the growth mindset is proactiveness. For example, things that 1 plus 1 becomes 3, maybe 1 plus 1 can become 4. So basically, proactive and in one method, it does not only consist of one absolute method to solve.*" [Leo: P2, Industry Leader, 2023]

The findings emphasize the importance of a growth mindset for youth readiness, aligning with previous studies that highlight its role in continuous learning and proactive personal and professional development (Williams et al., 2020). As noted by Herbert et al. (2020), this mindset is crucial in the dynamic job market, where adaptability and innovative thinking are essential for success.

Additionally, the linkage between a growth mindset, adaptive career progress, and the influential role of educator support in enhancing career adaptability and work volition, as highlighted by Kenny et al. (2022), solidifies the importance of cultivating this mindset for youth navigating the evolving landscape.

3.2 Endurance and Perseverance

Endurance and perseverance are crucial for young individuals navigating employability challenges in the fast-paced and unpredictable landscape of the Fourth Industrial Revolution (4IR). These qualities, combined with emotional intelligence, contribute to mental preparedness and adaptability, enhancing employability in the 4IR job market.

> *"To a certain extent, endure scolding, maybe in terms of endurance and perseverance. They cannot go too fast but slowly. They cannot emo too fast, and they must have emotional qualities too."* [David: P3, IndustryLeader, 2023]

> *"So, everyone's emotion is unstable, angry, scared, given the constraint of time, especially during festive seasons. Our entrepreneurs really need to have emotional intelligence.*" [Emily: P5, SeniorExecutive, 2023]

> *"To grow, you must endure scolding, must have endurance. They must be mentally ready and able to work under pressure. A little bit of resilience, endurance, discipline, and stamina. When you start to be an entrepreneur, you remove your safety net and step outside of your comfort zone. Because if you're not strong enough, you cannot go for it."* [Tony: P13, Entrepreneur, 2023]

> *"I think they need to have high emotional quality in my opinion. Meaning that they have a high emotional quality as everything has been dictated by robots and where there is the human. It is more on emotional intelligence."* [John: P15, GovernmentA, 2023]

The findings from previous studies emphasize the crucial role of emotional intelligence in job performance and success in the era of advanced technology. Research by [60,12,9,58]

consistently indicates that employees with high emotional intelligence excel in job performance, contribute significantly to organizational profits, and demonstrate innovative work behavior, especially in sectors like healthcare. The service industry places a premium on emotional and artificial intelligence as key drivers of employee performance [68]. These insights underscore the critical importance of emotional intelligence for young individuals entering the workforce, highlighting its role as a vital skill for enhancing youth readiness in the evolving market [60,12].

3.3 Problem Solving

Problem-solving skills are foundational for young individuals navigating the complexities of employability in the context of 4IR. The ability to address issues creatively and passionately is crucial for them, transforming them from mere problem identifiers to dedicated problem solvers. In 4IR, where innovation is key, young individuals need to approach problem-solving with enthusiasm, seeking opportunities and creating solutions that contribute to their readiness and success in the evolving job market.

> *"Problem-solving skills. That is the most fundamental. They do not want to upgrade themselves, everyday work 9 to 6, work then go home, there is no point."* [Emily: P5, SeniorExecutive, 2023]

> *"In business, we are always looking out for new opportunities. For me, it is about solving people's problems. From the problem, it will give us the opportunity."* [Tony: P13, Entrepreneur, 2023]

> *"Because you want to find people's problems, you create the problem. It is not about problem solvers anymore. It is about passionate problem solvers. Passionate problem solver is to solve, not to find problems. It is not problem maker but problem solver."* [Luke: P6, SeniorExecutive, 2023]

The findings resonate with previous studies, emphasizing the evolving job market's need for a proactive approach to self-improvement and problem-solving, as highlighted by [50]. This aligns with the overarching importance of twenty-first-century skills for employability, transcending traditional qualifications and experience, as noted by [38]. The relevance of problem-solving skills takes on a specific focus in the realm of environmental problem-solving, where cultivating a mindset of courage, enthusiasm, and commitment becomes crucial.

3.4 Agility

Agility is crucial for young individuals in the 4IR landscape, requiring swift adaptation to changes in technology, market expectations, and industry trends. It goes beyond multitasking, encompassing quick learning, adaptability to diverse scenarios, and confidence in navigating the fast-paced 4IR environment, enabling effective responses to challenges and seizing opportunities.

> *"Agility, I think. Agility number one. It is not about how they can multitask. They can go for different angles, but they are quick learners at the same time."* [Luke: P6, SeniorExecutive, 2023]

> *"For me, I think they need to be fast working and fast to adapt. They do not know what the expectation of the industry is, sometimes they are afraid. So, when they are afraid, they do not have the confidence. Technology is fast and rapid."* [David: P3, IndustryLeader, 2023]

> *"The criteria that you can adapt with the environment you are currently in is also important. Not only adapt with fellow peers but also adapt with technology. Because moving forward we are going into a computerized era."* [Felix: P16, GovernmentB, 2023]

The findings align with previous studies that consistently stress the importance of agility for enhancing youth readiness. [50] highlights the specific skills and competencies demanded by the current job market, while [17] defines agility as pivotal for navigating the dynamic job landscape, emphasizing responsiveness to change. Additionally, [15] both emphasize the significance of agility in the context of digitalization. [15] notes its increasing popularity and potential future implications, while [19] delves into how agile companies can effectively respond to emerging digital opportunities. Collectively, these studies reinforce the importance of agility for youth in navigating the 4IR job market.

3.5 Technical Knowledge

Technical knowledge is fundamental for young individuals in the complex landscape of 4IR, requiring a profound understanding of cutting-edge technologies and the ability to effectively manage and lead. While soft skills like management and leadership are crucial, technical skills serve as the foundational base, empowering young individuals to comprehend, adapt, and leverage technology intricacies, enhancing readiness and competitiveness in the 4IR job market.

> "*Being an entrepreneur, you not only need to understand the technology and the terms, but you also need to know how to run a company*." [Tony: P13, Entrepreneur, 2023]

> "*Speaking from my company point of view, technical is the base. It is very fundamental. Everything that stated before does not replace, it is on top of technical. It takes time to master certain things. It takes time and it is not that they already know everything when they come in.*" [Owen: P7, SeniorExecutive, 2023]

> "*So, as I mentioned earlier, most of the programs at this company are more focusing on soft skills such as management and leadership. When it comes to technical programs, they will leave it to the freedom of all of us because it is more based on the nature of their jobs. For Pharma all the pharmaceuticals only and then properties. It is all of them to arrange the technical programs.*" [Mia: P9, SeniorExecutive, 2023]

> "*For me, technical skills are transferable, interchangeable. It is also something that if you cannot do it, you need to find someone that can do it.*" [Luke: P6 SeniorExecutive, 2023]

The findings align with previous studies, underscoring the importance of a balanced combination of technical and soft skills to enhance youth [29]. Highlighting the significance of technical competence, including digital literacy and technology management, resonates with insights provided by [29]. Similarly, [11] emphasize the indispensability of soft skills, encompassing problem-solving, communication, teamwork, ethical perspective, emotional intelligence, and creative thinking. However, a notable gap exists between the skills possessed particularly in communication with diverse groups. These collective findings highlight the necessity for a comprehensive approach to skill development, integrating both technical proficiency and soft skills, to address the diverse demands of the evolving job market [29].

3.6 Creativity

Creativity is crucial for young individuals in 4IR, going beyond conventional problem-solving to generate innovative ideas and propose creative solutions. It plays a pivotal role in

overcoming challenges and finding alternative ways to drive career growth, enhancing employability and adaptability in the evolving job market.

"Under creativity, you can branch out a lot more." [Lucy, SeniorExecutive, 2023]

"So how if we say in terms of creativity, with the limitation of the budget, with the limitation, we cannot do much. To ensure that although we have challenges to do this, it did not stop us. Things must work and move forward, so what would be the other way that we can actually do it? Rather than wait, we take action." [Mia: P9, SeniorExecutive, 2023]

"Yes, creativity, in terms of proposals or innovative ideas presented to the top leaders, can pave the way to further business growth." [Alice: P14, SeniorExecutive, 2023]

The findings echo previous studies, emphasizing the significance of creativity in fostering resourcefulness, resilience, and innovative solutions crucial for youth readiness. [63] stresses the importance of integrating creativity into vocational guidance within career counseling, recognizing its role in preparing youth for the dynamic job market. [40] explores the relationship between employee characteristics, workplace conditions, and management practices, highlighting their influence on supporting creativity and overall performance. [43] underscores the imperative of creativity in education to equip students for the evolving labor market. Empirical evidence from [44] further reinforces the impact of generic skills, particularly creativity and proactiveness, on cultivating innovative behavior and facilitating opportunity recognition in youth.

3.7 Integrity

Integrity plays a foundational role in shaping the readiness of youth in the dynamic job market. For young individuals, embodying integrity means cultivating a strong moral character, ethical decision-making, and a commitment to honesty and reliability.

"*So, if you do not have integrity in you, you will abuse freedom. Because we do not limit that we must work here, and we must only work here. But without integrity, you will be slacking off. You can go anywhere*." [Lucy : SeniorExecutive, 2023]

"*How come do you expect people to have integrity in working? For me, when working, I only look into these 3 criteria. First, hardworking, then do not slack off and come to work. For me that is enough. Because different sectors have different needs."* [Jack : Entrepreneur, 2023]

"*Yes, I do agree that integrity is important. It is because dealing with money, dealing with the public, dealing with people, you must have integrity. Also dealing with power or anything that is mostly related to politicians if your business has a relation to it. It must have integrity."* [Felix : GovernmentB, 2023]

Previous research highlighted the need for youth integrity, emphasizing its crucial role as individuals, especially the youth, navigate the landscape of employability [7]. The absence of integrity, as indicated by [24], can lead to the misuse of freedom and the potential to slack off, hindering professional growth. In various sectors with diverse needs, highlighted by [36], the importance of hard work and commitment becomes a common thread. Moreover, [57] emphasizes that a lack of integrity not only affects individual work ethics but can also impact dealings involving money, the public, and people in general.

Table 1. Themes And Keywords of Future Agropreneur Employability Readiness

Themes	Keywords
Growth Mindset	Proactive attitude, Openness to diverse approaches, Thirst for learning
Endurance and Perseverance	Emotional intelligence, Mental preparedness, Adaptability, Resilience
Problem Solving	Problem-solving skills, Creativity, Passionate problem solvers
Agility	Multitasking, Quick Learning, Adaptability to diverse scenarios
Technical Knowledge	Technical skills, Management, Interchangeable skills
Creativity	Creative solutions, Alternative approaches
Integrity	Do not abuse freedom, Do not slack off, Dealing with power

The entrepreneurial mindset and attitude refer to the specific mindset and disposition that business owners possess, characterized by qualities like zeal, tenacity, risk-taking, creativity, vision, adaptability, resilience, and self-discipline. This mindset is often defined as the ability to rapidly sense, act, and mobilize, even under uncertain conditions [35]. These characteristics influence how entrepreneurs approach problems, opportunities, and decision-making procedures. In addition to this mindset, entrepreneurs employ various cognitive abilities in their endeavors. These cognitive skills include problem-solving, which involves identifying and removing barriers in the entrepreneurial context, and critical thinking, which entails analyzing and evaluating data to make informed decisions. According to [27], cognitive skills encompass a diverse range of abilities and character traits, including critical thinking.

Entrepreneurial business and strategic thinking refer to the ability to recognize and seize opportunities, create strategic plans, and make sound business decisions. This requires understanding market trends, competitive dynamics, and customers' needs to develop successful business strategies that drive growth and success. [64] suggest that the framework for analyzing learning outcomes in entrepreneurship education includes marketing, resources, opportunity, interpersonal, learning, and strategic skills essential for the entrepreneurial process. Additionally, entrepreneur resource management skills involve effectively managing and allocating resources to support an entrepreneurial venture. This includes technical knowledge, understanding industry-specific technologies, tools, and processes, and resourcefulness, which involves developing innovative solutions using available resources. [1] note that in the era of IR4.0, crucial skills for hiring include digital literacy, project management, financial management, and technology-based skills. Moreover, a strong grasp of digital tools and platforms is increasingly important for entrepreneurs to enhance business operations and engage with customers in the digital age.

Fig. 3. Framework of IR4.0 Entrepreneurial Skill

4 Conclusion and recommendation

In conclusion, readiness for agropreneurship in the Fourth Industrial Revolution (4IR) era necessitates a comprehensive development of essential skills and attributes. A growth mindset, characterized by proactive attitudes and openness to diverse approaches, is crucial for young agropreneurs to thrive amidst the dynamic 4IR landscape. Endurance and perseverance, coupled with emotional intelligence, equip them to navigate the inherent challenges and uncertainties in the agricultural sector. Problem-solving skills, fueled by enthusiasm and creativity, empower them to identify opportunities and innovate solutions tailored to agricultural needs. Agility is paramount, enabling swift adaptation to technological advancements and market changes within the agri-business domain. Technical knowledge forms a critical foundation for effectively applying technology in agricultural practices, while fostering creativity facilitates continuous skill evolution in this disruptive era. Integrity, serving as the cornerstone of ethical conduct, ensures credibility and reliability in professional agropreneurial endeavors. This research underscores the necessity of cultivating these competencies for agropreneurial success in the 4IR era within agriculture. It emphasizes the imperative need for tailored educational policies, training programs, and career guidance initiatives specifically geared towards agropreneurial development. By nurturing these skills, we can empower the next generation of agropreneurs to excel in an evolving agricultural landscape driven by advanced technologies and innovative business models. Thus, ensuring youth are well-prepared to seize the opportunities presented by the Fourth Industrial Revolution and contribute significantly to sustainable agricultural development.

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