

Conceptualising Entrepreneurial Orientation and Professionalism of Human Resource for Business Sustainability in the Digital Era

Muliati Usman^{1*}, Hamdi Harmen¹ and Raida Fuadi²

¹Management Department, Faculty of Economics and Business, Syiah Kuala University, Darussalam, Banda Aceh, Indonesia

²Accounting Department, Faculty of Economics and Business, Syiah Kuala University, Darussalam, Banda Aceh, Indonesia

Received 8th January 2023, Revised 16 January 2023, Accepted 1st February 2023

ABSTRACT

Business model innovation has provided a new space for the dynamic development of networks driven by the evolution of digital technology as a modern approach to the realisation of business sustainability (BS). Specifically, in modern business, technology supports the new digital economy, which places increasing demands on human intelligence. However, BS should be seen in the context of efforts to build competitive advantage by using an ethical approach to support innovative solutions that have a positive impact on society. The achievement is not only the result of careful analysis but also 'responsibility'. Consequently, in the digital era, professionalism is not only in terms of knowledge or skills related to technology adoption; professional ethical standards determine BS. Therefore, the purpose of this study is to explore the extent to which EO (EO), through its components, formulates BS in the digital era through the role of professionalism in human resource as a mediator. A literature review method was applied in this study to provide a new model for the issue discussed. This study implies that EO encourages businessmen to become successful entrepreneurs in establishing BS in the digital era, mediated by the professionalism of human resource. Finally, this study provides a new approach to business problems as a strategy for anticipating the current dynamic environment. Besides, this study presents literature on the concepts of EO and BS for preparing professional human resource in the business sector to face the high competition in the digital era.

Keywords: Business Sustainability, Entrepreneurial Orientation, Professionalism

1. INTRODUCTION

The successful practice of business model innovation has provided new space for organisational development by considering that the world's collapsing activities have been characterised by the ability of organisations to overcome the slowdown in rapid changes to the adoption of new technologies and reconfiguration of global supply chains (He & Ortiz, 2021). The dynamic development of the network is driven by the evolution of digital technology which continues to move rapidly and encourages the establishment of innovative business models. Indeed, the main topic of modern approaches to business model design is business sustainability (BS). The digital economy business model is based on assumptions about contemporary trends, such as the sharing economy, network economy, Big Data, and circular economy, apart from being based on Information Technology (IT) applications, it is also based on different rules from the traditional approach to neoclassical economics. The adoption of these solutions means that these solutions are increasingly being adopted in business practices which consequently undermines the existing business model order.

*Corresponding Author: muliatiusman@yahoo.com

Digital economy trends influence changes in perception and understanding of the essence of the modern world and approach to social, ecological, and economic aspects (Jabłoński, 2018). The technologies underpinning the new digital economy according to their importance and in order of maturity include: (1) advanced robotics and factory automation (sometimes referred to as advanced manufacturing); (2) new data sources of mobile and ubiquitous Internet connectivity (sometimes referred to as the Internet of things); (3) cloud computing; (4) big data analytics and (5) artificial intelligence (AI). The transformative potential of the New Digital Economy can only be realised if and when these elements become mature, better integrated, more interoperable, and widely used. This can't possibly be a simple, even, undeniable, or fast process. Social and technical factors, such as data security risks or backlash across digital divides, can slow or even thwart the development of the New Digital Economy (Jablonski, 2018).

Indeed, under the extensive pressure of normal market competition, frequent technological changes, and extreme exogenous shocks, business actors are facing tough challenges today. How to withstand intermittent crises and respond to normal risks through increased resilience is an important question that needs to be investigated. New technologies will thus increasingly displace physical and low-skilled work, and the new jobs that emerge will increasingly demand human intelligence. One thing that is worrying, the research findings prove that job positions being replaced by intelligent industrial implementations, namely AI. Thus, with the loss of old job positions and the need for new, qualified staff, demands from employers for higher levels of training are increasing (Grenčíková, et al., 2021).

While, previous studies found that one strategy to cope with the business competition in the digital era refers to the strategic posture of entrepreneurship that characterises the behaviour in which entrepreneur engages to find and exploit entrepreneurial opportunities (e.g. Lumpkin & Dess, 1996; Xia et al., 2022; Baldegger et al., 2020; Baldegger, et al., 2021; Hervé et al., 2020; Ipsmiller et al., 2022; Upadhyay et al., 2022; Fan et al., 2021; Mostafa et al., 2005; Gupta et al., 2016). They proved that entrepreneurial orientation (EO) increases the role of business actors in the digital era significantly associated with the degree of digitalisation. Behavioural tendencies with high EO are more committed to digitalisation and have better performance than low EO. The more individual is entrepreneurial-oriented, the more he or she tends to implement digital technology. A tendency toward EO activities has an important role in understanding reactions to new technologies in a predetermined context. As a result, it is now believed that individuals or business actors who behave entrepreneurially will be more likely to have the ability to manage the business effectively (Bolton & Lane, 2012).

It is clear, the concept of EO is appropriate to be implemented by businessmen for anticipating digital business development. Business actors who adhere to the EO concept are individuals who will be able to survive the business competition in the digital era due to they have strong business character as unique and non-substitutable resources. However, there is still debate among experts on the most important EO components, whether starting from innovativeness, proactiveness, and lastly risk-taking. Therefore, some experts suggest further exploring the components of EO so that one definite result can be achieved (e.g. Anderson et al., 2015; Naldi et al., 2007; Douglas & Shepherd, 2002). Indeed, three characteristics of EO are integrated and mutually support each other as revealed by some experts (e.g. Miller 1983; Covin & Slevin, 1989; Dai et al., 2014; Aloulou, & Fayolle, 2005).

Further, a rapidly changing business environment has been drastically challenged by unprecedented events and has become crucial to its capacity to adapt and bounce back in a sustainable fashion (He & Ortiz, 2021). By utilising the concept of EO, business actors will format BS. They are business actors that are ready to face various changes and challenges in the high competition in the digital era by engaging components of EO i.e. innovative, proactive, and risk-taking in achieving competitive advantage for BS. As revealed by many previous studies, EO has a significant effect on many aspects of business activities such as business performance

(Meekaewkunchorn et al., 2021; McKenny et al., 2018; Fadda, 2018; Criado-Gomis et al., 2018; Venter, 2014; Wiklund, 1999), and specifically for the BS (e.g. Mohamad & Chin, 2019; Criado-Gomis et al., 2017; Vătămănescu, 2017; DiVito & Bohnsack, 2017). On the other words, integration between EO and BS cannot be separated from each other to boost BS. Nevertheless, there are very few studies that explore the extent of the role of EO in formulating their BS strategy (Aloulou, & Fayolle, 2005).

Moreover, for BS, Masa'deh et al. (2018) suggested that businessmen can focus on using more strategic alternatives to improve performance and increase competitiveness over time. The business world may face increasingly fierce competition and a dynamic environment that can lead them to respond by adjusting their strategies and adopting different strategic orientations that can help improve performance. Business activity in the digital era requires professional business actors who have a strong business character. Thus, it is necessary to handle the digital business in a professional manner to gain BS. Indeed, only professional businessmen can support the process of formulating BS. In carrying out their roles, business actors through EO will be able to encourage BS with the help of the professional role of a business actor. This is of course the right method for businessmen to sustain BS in the future. Of course, for business actors, professional development refers to the competence or skills for digital technology while still considering the professional code of ethics of a business actor. As experts say, professionalism can be measured by the required competencies possessed by an individual, both in the form of knowledge or skills and also the ability to implement professional ethical standards (Minnameier, 2014).

As a result, current business operations emphasising the use of digital applications and automation creates various challenges for digital business development (Alias, 2021). The use of technology has had an impact on various aspects of business activities in today's modern era. Various terms have been used to describe business activities using the internet or through electronic means. However, in modern business conditions, professionalism is very important. An 'amateur' will not succeed in identifying and satisfying a discriminatory business. Achievements are the result not only of careful analysis but of 'responsibility'. The business person today has to do more than just meet his or her buyers' expectations that his product or service will perform as promised, they also have to convince them that they are doing these things in 'good faith' to benefit of customer as well as his business. Realising this, the centrality of service in this business activity links marketing closely with professionalism. Thus, the great pressure from consumers' that marketing must be really professional, and sensitive to consumer need (Schaefer, 1984). However, for current today, the professionalism of business actors still needs to be questioned. Evidence shows that unprofessional behaviour by businessmen is still visible. For instance, based on the report of the United Nations Development Program (UNDP) in 2019:

- Since 2011, UNDP has reported the results of cases of standard violations conducted by vendors.
- Furthermore, in 2019 the Vendor Review Committee (VRC) received a report on 30 investigative from the UN Office of Legal Affairs (OLA). Then, the VRC reviewed and decided to close 28 cases in 2019 (9 from 2019 and 19 from 2018) which resulted in the banning of 48 vendors and individuals as well as 3 letters of condemnation.
- In addition, in 2019, 12 vendors suspended their cases temporarily, while waiting for the completion of the investigation or final action from the VRC.
- In another case, there is a conflict of interest in a business that is very inconsistent with professional ethical standards. Staff at the UNDP in Human Resources Department is involved in a conflict of interest by taking benefit of his position to promote the interests of his family member's company in the UNDP procurement process by (i) facilitating the company's registration as a vendor (ii) seeking business opportunities for it.

Furthermore, Organisation for Economic Cooperation and Development (OECD) also highlight this important issue. In the report of OECD in 2018, it concerns on actions or behaviour of businessmen in relation to BS that is considered detrimental. A company's relationship with an adverse impact (i.e. whether it was caused or contributed to by the company or whether it is directly related to a business relationship) is considered an important consideration because it determines how a company should respond to an impact it is responsible for providing or cooperating with make improvements as shown in Figure 1.

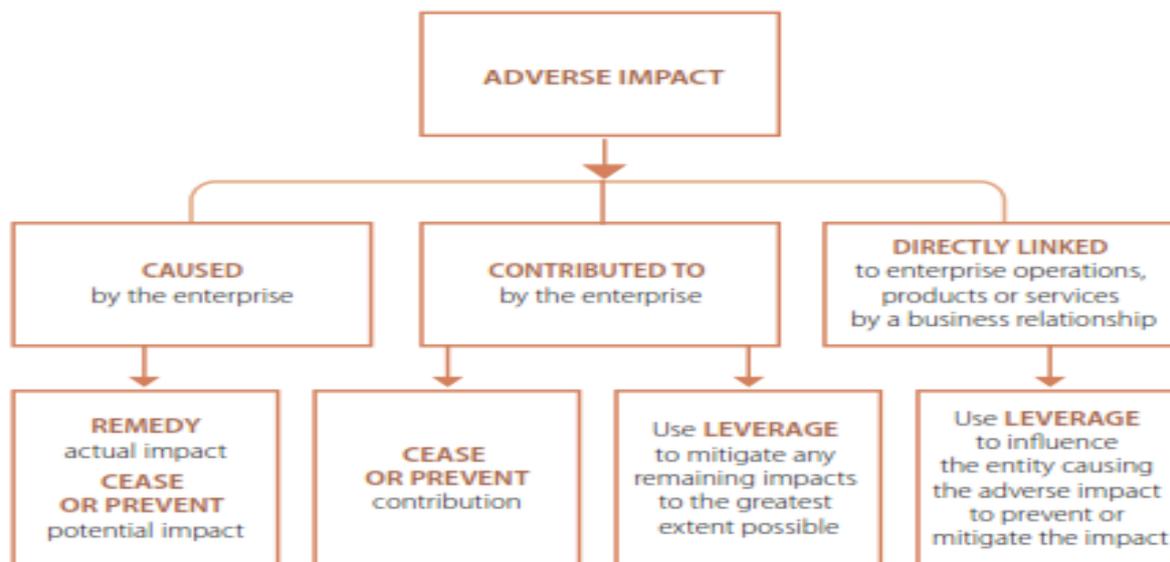


Figure 1. Addressing Adverse Impacts of Business (Source: OECD, 2018)

There is a need for professional development of businessman since they are resource of business activity. As a consequence, negative behaviour will present bad impact on individual and also for the organisation in order to achieve BS. Thereby, as suggested by some researchers (e.g. Minnameier, 2014; Evetts, 2014; Emanuel, 2015), the professional development of HR as a business actor should be focused on 2 aspects i.e. human intellectual on new technology adoption and engagement in ethical standards in order to format BS. If the composition of the two aspects is not considered, there is concern that business actors will emerge who have technological skills and knowledge, but their behaviour will harm the economy, which of course threatens BS as a result of unprofessional behaviour. Furthermore, there are many studies that examine the significant effect of professionals of human resources with various aspects in business activities (e.g Hsien-Yu & Chia-Yang, 2020; Hsien-Yu, 2020; Sabuhari et al., 2020; Iqbal, & Trevisan, 2022). However, to the best known of this study, there is no research that uses the professionalism of human resources as a mediator on the relationship between EO and BS. Then, this becomes a gap to conduct a research an in-depth literature review of the relationship between these aspects. Therefore, this study attempts to explore the extent to which and how EO through its components formulates BS in order to face high business competition in the digital era through the role of the human resource professional as a mediator model.

2. LITERATURE REVIEW

2.1 Conceptualisation of Business Sustainability (BS)

Sustainability has become a buzzword to be discussed for both present and future generations since it seems to promise a world with better environmental and social systems along with economic growth. However, in the literature, there is a lot of confusion with the use of the term sustainability. The term sustainability is used with different meanings and in different situations.

Nevertheless, there is an increasing awareness among businesses about the need to adopt the concept of sustainability in their products, services, and processes throughout the organisation due to market pressures (Eswarlal, & Vallesi, 2014). Indeed, BS is a multifaceted concept and with different perspectives that emerge and can be achieved through a concentrated effort and process (Sambhanthan et al., 2017).

In this term, Jabłoński (2018) postulated, BS should be seen in the context of efforts to build competitive advantage by using an ethical approach to market play, supporting innovative solutions that have a positive impact on society, create social value and social benefits. The concept of BS uses a standardised approach based on classical economics design innovative business models in the Internet environment that will put the company in a monopoly position or domination position. Business models are often related and are based on a comprehensive data platform This central position allows these companies to reap the benefits of high margins. But lately, this approach has been heavily criticised. Further, there are several main challenges developed in order to create a sustainable business model, including:

1. Triple bottom line - Creation of mutual benefits, social benefits as well as the environment along with balance is a challenge to move towards a Sustainable Business Model.
2. Mindset - rule of the business rules, guidelines, behavioural norms and performance metrics prevail in the mind-set of firms and inhibit the introduction of new business models.
3. Resources - Reluctance to allocate resources towards innovation and reconfiguration of business model resources and processes for new business models.
4. Technological innovation - Integrating technological innovation, such as clean technology, with creating a business model innovation that is multidimensional and complex.
5. External relations - Engaging in extensive interactions with external stakeholders and businesses within the environment requires extra effort.
6. Business modeling methods and tools - Existing business modeling methods and tools.

The concept of sustainability, which has been extensively explored in science in recent years, plays an important role in shaping and customizing innovative business models. Related to the concept of sustainability, a key role is played by a longer perspective in studying business, which in a special context, namely the dynamic development of new technologies has created new challenges, be it positive or negative perceptions of digital platforms by society. Based on the assumptions of this concept, when viewed ideologically refers to a macroeconomic approach, a narrow trend emerges that focuses on building theory and application solutions called sustainability which is a model to keep business people from having a specific attitude towards management business (Jabłoński, 2018). Thus, the output of BS provides benefits for both the organisation and the environment (Sambhanthan et al., 2017). What needs to be emphasised is that well-defined production methods, architectural strategies, and organisational commitment to technical support are very important to ensure BS (Sambhanthan et al., 2017).

To find out more about the concept of BS, this study will explore the opinion of Sambhanthan et al. (2017). This expert claims BS is a multifaceted term with three main themes that are structured throughout the concept. The classification of conceptual elements has been carried out based on test questions which are used as benchmarks to classify these elements into three groups which will lead to the formation of new definitions. The dimensions in which the three themes are defined include:

1. Why business continuity?
2. How can BS be achieved?
3. Where will he or she lead the business?

The questions above will answer three dimensions of clear definition as follows:

1. First, the reasons for a business to be sustainable are covered in the first question that which would include the goal-oriented aspect of the definition of good. In fact, related to the underlying motivational theme of the organisation in relation to achieving sustainability (i.e, organisational requirements).
2. Second, is a way for businesses to achieve sustainability covered in the second question which covers the underlying processes, systems, methodologies, and architectures that enable sustainability in business.
3. Third, the end result of business continuity.

While, Sambhanthan et al. (2017), argued that BS can be achieved through efforts concentrated on: 1. core competence, 2. effective production, 3. capitalising on opportunities, 4. exploring suitable and sustainable revenue models, 5. focus on economic performance, 6. manage risk, 7. pursue the right customer groups, 8. support ecological sustainability in existing infrastructure processes and systems, 9. conservation of resources using technology, 10. business growth, 11. improvement of health and safety, 12. reduction impact of environmental 13. increase value production 14. reward employees for their performance, and 15. Maintain long-term support for performance organisation. Further, Sambhanthan et al. (2017) suggested three main dimensions of BS:

1. First, the business objective or orientation phase is an observable term in the definition. In fact, business continuity is debatable whether it is a goal or a business stage that a business wants to aspire to.
2. Second, mechanisms of business process whose process dimensions are well-known and whose entire definition talks about the mechanism of processes through which business continuity can be achieved.
3. Third, BS can be said as a strategic transformation approach and is an approach through which strategic business transformation can be carried out.

Nevertheless, He and Ortiz (2021) claimed that there are several important features: 1) The goal of continuous business innovation is to strive to optimise the business model and thereby ensure sustainable development. 2) The continuous business innovation approach is the activity of adding, updating, or reconfiguring business elements and resources. 3) Stakeholders of sustainable business innovation are multi-stakeholders. 4) The process of continuous business innovation is an endless and iterative process. Therefore, He and Ortiz (2021) defined sustainable business model innovation as conceptualising a business model that operates through a self-optimising and iterative process in order to maximise benefits and competitive advantage. Furthermore, continuous business model innovation can create new business models, update existing business models, or reconfigure and integrate multiple business models.

When identified further, the concept of BS is currently very appropriate to implement and is a trend because according to the demands of the times in the digital era. We will concern on the concept of sustainable business innovation model proposed by He and Ortiz (2021). The business model need not be completely tailored to the customer, their views should be integrated into the innovation and evaluation process. The success of business model innovation depends on companies having a deep understanding of their customers, such as their environment, daily habits, concerns, and desires. To do that, the organisation needs to know who its customers are. However, academics have found it difficult to accurately define the concept of sustainable business innovation.

Meanwhile, He and Ortiz (2021) emphasised, innovation in the development of sustainable business models has become a hot topic but is affected by a high failure rate due to the lack of

reliable and efficient methods. Carayannis et al. (2015) argued, a predetermined framework makes it possible to define Business Model Innovation (BMI) as an evolution or revolution of an existing business model. In other words, if one or more aspects of the business model are denoted in a changing framework, it is possible to talk about developing or innovating a business model. In addition, innovation can also be driven by a transformation in various aspects of business models that relate and interact with each other. However, there are several experts (e.g. Jabłoński, 2018; Westman et al., 2019; Evans et al., 2017), stated that there is still no clear identification of the appropriate BS model to be applied in business activities. In addition, the topic of business continuity models is rarely researched.

Furthermore, experts have different concepts of BS, for example, Jabłoński (2018) presented the concept of migrating values to sustainable business models in the digital economy which claims that the business environment is defined as a place where it is possible to find a large number of companies operating in the digital economy digital and meet the criteria for sustainability. Existing concepts related to BS function within the network paradigm framework, where the differentiating factor is cooperation and competition, disrupting existing business models, creating opportunities to develop new and innovative solutions in the business field. While the dynamics and the impact of new business models is to produce changes in individual industries and sectors of the economy. Thus, the business model can survive by striving to achieve sustainability, and is considered as a determining factor of the features regarding the investment attractiveness of the business model. Attribute sustainability is a key value of the modern business model, which influences both business and society an ecosystem where value is the balance between effort and result. When, the value is positive (that is, the perceived effort is less than the perceived result), the value is created. As for the difficulty with grades is intangible because the value depends on the value ecosystem and their perception of value.

In this term, according to Duggad (2017), value is fundamental, that is what we are looking for (value is there whether we are aware of it or not); value is what is good (or meritorious), useful, important or valuable . Value migration has three stages:

Stages 1: Value Inflow - In this phase a company or industry captures value from other industries or companies because superior value proposition. The market share and profit margins of a company or industry are growing.

Stages 2: Value Stability - In this phase a competitive balance is formed and the growth rate is moderate.

Stage 3: Value Outflow - In this phase the value starts to shift to the company or industry that meets growing customer base. In this phase, market share decreases, margins contract and growth stops.

Further, Stubb & Coocklin (2008) clarified that the model of BS is one of the ideals of an organisation that adheres to the concept of sustainability. That BS model is not absolute or prescriptive. BS will continue to improve as we understand further how the company operationalises sustainability. Specifically, this study attempts to identify an exploration of various business sustainability models or concepts that can be applied by entrepreneurs or business people as shown in table 1.

Table 1 Compet/Model of Sustainability Business Model (SBM)

Authors	Concept/Model	Scope
Jabłoński, 2018	Value Migration Model	Value migration from the New Connect market business models operating in the digital economy
He and Ortiz, 2021; Carayannis et al., 2015; Boons et al., 2013; Evans et al., 2017;	Sustainable Business Model Innovation	The conceptualisation of a business model operating as a holistic framework to envision and implement sustainable innovations.
Westman et al., 2019; Ajmal et al., 2018; Sahebalzamani & Bertella, 2018.	Conceptualising businesses as Sustainability contains environmental, economic, and social aspects.	A quality of society that encourages durable circumstances for human well-being, particularly for susceptible persons or groups
Blinova et al., 2022; Schaltegger et al., 2019	Corporate Sustainability Concept	Corporate Sustainability in the Context of Sustainable Development
Eswarlal & Vallesi, 2014	Metaphorical Concept	The concept of sustainability in business from a systems perspective that proposes four stages of BS, namely, designable, feasible, endurable, and responsible.

This study identified that as with the business model, the concept of Business Model Innovation literature is not well developed (Carayannis et al., 2015). When there are some business concepts previously offered only refers to 3 concepts, namely sustainable business model innovation and environmental, economic, and social aspects, then this study found a new concept offered by experts namely the metaphorical concept (Eswarlala & Valessi, 2014), then there is a new concept, namely corporate sustainability and the value migration model (Jablonski, 2018). In the table there are additional aspects, namely the value migration model and metaphorical aspect. The various models put forward by experts that stand out is the concept of sustainable business model innovation which has been widely adopted by two articles (He & Ortiz, 2021; Carayannis et al., 2015).

The concept of business models and accordingly business model innovation has its foundation in corporate practice, strategic management, and industrial economics (Carayannis et al., 2015). Therefore, He and Ortiz (2021) define business sustainable model innovation as the conceptualisation of a business model operating via self-optimising and iterative processes in order to maximise benefits and competitive advantage. On the other hand, as suggested by Westman et al. (2019), sustainability actions by businessmen can be understood by viewing these firms as social actors - organisations that are shaped by individual values, internal and external interpersonal relationships, and are embedded in a social environment. social and environmental measures undertaken by individual businesses are shaped by the social-historical development of a particular area, such as the existence of comradery, formal channels for engagement of local firms (e.g., business improvement associations), presence of other groups that engage firms in social programs, and the positive effects that emerge from the combinations of these elements.

2.2 Conceptualisation of Professionalism of Human Resource

Professions are identified as works or activities that engage in a set of standards that must be met by members of a given profession. These standards do not only apply to certain types of expert knowledge expected of professionals but also in relation to ethical standards with respect to the use of this knowledge of an expert. However, aside from a possible failure to comply with these requirements, professionals, like other people, do not usually act according to any one guideline. Their actions are directed according to different situational (Minnameier, 2014). In assessing the

success rate of competence mastery by an entrepreneur as a human resource of business, the following professional competency assessment model is presented. The model designed by Miller (1990) as shown in Figure 2 is visualised in the form of an architecture which consists of 4 levels that show an increase in competence.

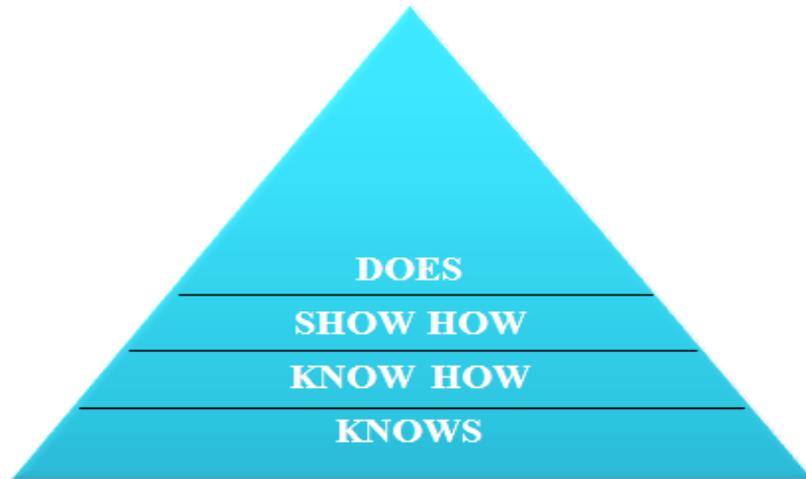


Figure 2. A Simplified Model for Assessing Professional Competence by Miller's Pyramids

As shown in Figure 2, the first basic level: (knows): connecting with factual knowledge. Second level (know how): know how to apply that knowledge. The third level: shows how and the fourth level relates to "does", which is related to performance in everyday professional practice. Thus, to assess the competency of business actor, it is necessary to consider all aspects. Whether the entrepreneur is capable to master the knowledge or skills needed to carry out the profession as an entrepreneur. So, when business actor is able to pass the first stage, it must also consider whether the business actor is able to find solutions that can be provided in dealing with various business practices through the knowledge that has been acquired. In the next stage, business actors must be able to demonstrate how they implement the concepts of knowledge and skills that they have acquired in various business practices. The last stage refers to the application that is expected to be carried out in accordance with the knowledge base obtained. When a businessman can master all the levels in the model that has been described, then it can be said that her or she is a professional businessman and has been able to carry out professional development as an accomplished business actor.

Indeed, the impetus for a change that always demands business innovation is the main reason why efforts are needed to develop business people professionally so that it is hoped that these business people must have the required competencies, namely new knowledge and skills while still paying attention to moral principles as capital to master sharper business environment. For instance, Havnes and Smeby (2014) claimed, professional development as an ongoing aspect of a professional career that originates from the professional education path, but with that professional career accelerates, then takes a new direction or reaches another level when an individual enters the professional. practice. Therefore, it is necessary to carry out professional development related to the need for new knowledge and skills that will renew what has been obtained so far. These requirements or criteria are related to environmental changes that are so dynamic that of course demand increased professionalisation.

Likewise, Losey et al. (2005) argued, business actor as human resource professionals are identically involved with a body of knowledge, a set of standards, and operational norms. Therefore, when an entrepreneur is required to be professional then he must have superior

ability in his or her business activities. Professional competence is based on general theoretical knowledge, but in professional practice it is also necessary to consider following up in a professional context, under certain conditions and often associated with the context as a unique individual (Havnes and Smeby, 2014). Thus, the concept of developing the entrepreneur profession is directed at the professionalism of human resources as human beings or business actors who can integrate general knowledge and the role of a unique individual with high morals or ethics in seizing opportunities that are able to respond to challenges the ever-changing era in carrying out work. It is synonymous with glorious achievements or excelling in business activities in order to achieve competitive advantage.

2.3 Conceptualisation of Entrepreneurial Orientation (EO)

To anticipate current business trends, EO concept is needed in order to survive in the competitive business world (Bhattacharrya, 2006). Kraus et al. (2019) claimed, EO can refer to the company or individual level. Lumpkin & Dess (2002) claimed, EO is a means to respond to environmental changes. Therefore, EO is able to cope with a rapidly changing environment to become more dynamic and adaptive (Yang et al., 2010). EO gives importance to personality and entrepreneurial characteristics that are important mechanisms for reflecting management organisational competence (Rattanawong & Suwanno, 2014). Further, EO is defined as the methods, practices, and decision-making styles used to act entrepreneurially. These include processes such as experimenting with promising new technologies, being willing to seize new product market opportunities, and being inclined to undertake risky ventures (Lumpkin & Dess, 1996). Therefore, EO is assumed to be the ability to influence innovation performance (Yang et al., 2010; Martin & Perez, 2020).

Even though entrepreneurial behaviour is always identified with constant uncertainty about the results to be achieved, whether to get adverse results or unexpected consequences such as turmoil, failure, loss of resources, or wastage of time which can result in losses and decreased performance (Covin et al., 2020). However, Covin et al. (2020) highlighted the importance of entrepreneurial efforts by teams on workplace performance. Based on the results of his study, it showed that managers must choose employees who tend to be entrepreneurial which can be reflected in their behaviour which is an approval of innovativeness, proactiveness and risk taking behaviour. In addition, an important thing that can be done by organisations to develop employee tendencies towards EO is through employee selection, development of an organisational environment that supports entrepreneurial initiatives.

Specifically, there are various kinds of concepts proposed by experts related to the dimensions or components of EO. For example, there are 5 dimensions of EO proposed by researchers (e.g. Lumpkin & Des, 1996; Marten et al., 2018; McKenny et al., 2018) i.e. innovativeness, risk-taking, proactiveness, autonomy, and aggressive competitiveness. Whereas, Fadda (2018) used innovation, autonomy, and proactivity. However, in general, the concept of EO is adopted by experts (e.g. Covin et al., 2020; Santos et al., 2020; Meekaewkunchorn et al., 2021; Popov et al., 2019; Lomberg et al., 2017; Gupta et al., 2016; Martins & Perez, 2020; Parveen et al., 2016; Lumpkin & Des, 2001; Martin & Perez, 2020) is divided into 3 parts of behaviour or character, namely:

- **Innovativeness**

As a tendency towards innovation and is defined as a certain readiness of the organisation to engage in and support experimentation with new ideas and creative approaches that can result in new technological products, services or processes (Lumpkin & Dess, 1996). Furthermore, innovativeness tends to be creative, experimentation, and the introduction of new products and services, thus deviating from established practices so far (Lumpkin & Dess, 1996; Hormiga et al., 2013). Of course, innovativeness requires organisational support to renew, innovate and seek new opportunities which involves a tendency to

engage in creativity and experimentation carried out through research and development (R&D) (Miller, 1983; Rauch et al., 2009).

- **Proactiveness**

As a tendency for aggressive behaviour in an effort to seize opportunities characterised by anticipating future demands, needs, and changes. As such, proactive refers to opportunity seeking, forward-looking behaviour that incorporates actions based on future needs and trends thereby creating profits and seeking to seek leadership positions in the market (Hansen et al., 2011; Lumpkin & Des, 1996). Proactivity is characterised as an organisation's tendency to be ahead of the competition, for example when launching a new product, technology or service rather than being a follower who only follows market initiatives (Miller, 1983).

- **Risk Taking**

As the act of taking risks that refers to the tendency to engage in high-risk activities with high chances of returns, as well as in daring actions in uncertain environments that have uncertain outcomes or benefits (Covin & Slevin, 1989; Hansen et al., 2011). The risk-taking dimension is very close to innovation in that it involves bold acts of venturing into the unknown or commitment of significant resources to uncertain ventures in the hope of obtaining high returns (financial or opportunity) (Lumpkin & Dess, 1996; Rauch et al., 2009).

Furthermore, in supporting business progress, EO can be implemented and embedded both individually and organisationally. Therefore, there are various arguments why the EO construct can be transferred and applied at the individual level (Popov et al., 2019). Covin et al. (2020) argued, as stated that according to the traditional view that EO is only defined and operationalised as a phenomenon at the organisational level. However, recent studies extend the EO construct from the organisational level to the individual level. In its application, the theory used to explain this condition is how the team can take advantage of the EO of each member as an individual so that it will form EO at the organisational level through the team.

EO at the organisational level refers to the processes that encompass the methods, practices, and decision-making styles that enhance a company's approach to business. At the individual level, EO is assessed using the individual EO scale (Bolton & Lane, 2012), which consists of three dimensions: risk-taking, innovation, and proactivity (Popov et al., 2019). However, when viewed in general, the components are not too different between organisational or individual levels. Experts who have conducted previous research on EO at the individual level also use the same dimensions as those used by experts who examine EO at the organisational level (e.g. Santoso et al., 2020; Popov et al., 2019, Covin et al., 2020). These experts used innovativeness, proactiveness and risk-taking as dimensions to scaling EO by the individual.

In terms of effect, Lomberg et al. (2017) confirmed that innovativeness, proactivity, and risk taking are parts or dimensions that can be attributed to having unique effects. There are different patterns developed by companies that have an impact on their performance. Managers should develop EO dimension profiles that fit their industry. For example, companies in a growing but stable industry tend to perform well when they emphasise autonomy and competitive aggressiveness and focus less on innovation, proactivity, and risk taking because these dimensions or approaches will not lead to high performance in an industry that is not focused on innovation (McKenny et al., 2018).

Further, previous studies revealed that individual characteristics have implications for the implementation of EO by individuals. Several researchers (Gupta et al., 2016; Martins & Perez, 2020; Parveen et al., 2016) have proven that innovative, proactive, and risk-taking behaviours increase the ambitious EO's spirit in doing business. Meanwhile, the results of another study by Rüscher et al. (2019) proved that hospital managers who are in a highly stressed and competitive

environment mostly have a high EO orientation. High standards of medical and nursing services based on the latest technology are considered important to increase organisational profits. Likewise, the research conducted by Mostafa et al. (2005), proved that owners/managers with a high EO are innovative, proactive, and dare to take risks so that they are more likely to take advantage of opportunities made possible by digital technology in achieving competitive advantage.

2.4 Entrepreneurial Orientation and Professionalism of Human Resource for Business Sustainability in the Digital Era

Sustainability should be seen as a context of building competitive advantage by taking an ethical approach to the market and supporting innovative solutions that have a positive impact on society, create social value and social benefits. The standard approach based on classical economics is to design innovative business models in the digital environment that will give companies a position of monopoly or dominance. Often related business models are based on a comprehensive data platform (Jabłoński, 2018). Entrepreneurs in the digital era have changed business systems from conventional systems to a business system that concentrates on modern marketing that focuses on market players by adopting digital technology that has been used as a tool to increase business effectiveness (Mostafa et al., 2005).

It is proposed that individuals or companies with high EO will be able to survive in the face of dynamic changes in the current modern era which is full of the use of technology in the digital era. EO plays an important role in human resource professionalism in the digital era that can change the mindset or character of an individual to become a human resource professional. For example, research by Gupta et al. (2016) revealed that the tendency of employees towards EO activities is an important factor in understanding reactions to new technologies in a predetermined context. Molotkova et al. (2019), claimed that in conditions of digitalisation, the role of soft skills such as critical thinking, cognitive flexibility, complex problem-solving, learning ability, interaction skills, and willingness to share knowledge is becoming increasingly important. Thus, EO is used as a concept that encourages human resource to become individuals who have a critical mindset in anticipating competition in the digital era. Niemand et al. (2021), found a relationship between EO and technological change. EO has a positive effect on “the process of sharing business information, maintaining business relationships, and conducting business transactions via the internet”. Tactics and strategies characterised by EO are at the forefront of the competition to achieve superior performance in digitisation.

Therefore, EO are more likely to see new digital opportunities and better assess the risks associated with those (digital) opportunities. While, the results of a study by Gupta et al. (2016) found that from a psychological perspective, individuals who adhere to the concept of EO are individuals who are more enthusiastic and easier to master new technologies. Further, the results of the study by Rüscher et al. (2019), EO appears to have an effect on strategic decisions triggered by a competitive environment. It revealed that EO may mediate the effects of regulations and choices strategies made within the organisation. Another study by Chatterjee et al. (2020) and Mazurchenko & Maršíková (2019) revealed the relationship between ICT adoption intentions and EO. The findings from this survey show that the power of digital transformation is just beginning to emerge. Similarly, research by Gupta et al. (2016) also found EO by individuals to play a major role in the adaptation of new technologies. The results of the study offer strong support for the contingent influence of individual-level EOs in understanding reactions to the use of new technologies.

As a result, it is now believed that individuals or businessmen who behave in EO will tend to have the ability to manage the business professionally (Bolton & Lane, 2012). Gupta et al. (2016), asserted, EO increases the likelihood that a person will be inclined to use new technologies and facilitates ongoing engagement with new and unfamiliar systems. Enterprising individuals who

are open to creative ideas and willing to take risks in pursuing them will have fewer cognitive and interpersonal barriers to overcome in using new technologies. Specifically, the impact of each component of EO provides benefit for the performance of the business (Adebayo, 2015). Kreiser & Davis (2010) argued the combination or impact of each construct of EO for individuals, namely innovativeness, proactiveness, and risk taking has an influence on individual professionalism. However, the debate about the most important components of EO is still a puzzle.

Ritala et al. (2021), argued that in the context of transformational strategies such as digitalisation, EO is very important to be implemented as a special strategy that is able to encourage critical behaviour toward the use of digital technology. Thus, the entrepreneurial landscape is changing from traditional entrepreneurship to almost entirely technology-based entrepreneurship otherwise known as “technopreneurship”. Therefore, technopreneurs are those who combine computers, information, communication, and technology (ICT) with business, and significantly contribute to the transformation into a knowledge-based economy (Alias, 2021). In other words, the concept of EO will encourage individuals to be able to become professional human resources in managing the business through the technological capabilities required in the digital era for achieving BS. Thus, businessmen in the digital era need to develop their professionalism so that they can compete in digital business in the digital era. An entrepreneur who has determined the EO is allegedly able to identify market opportunities and explore through the available resources (Filser et al., 2014). Thus, market orientation, technology orientation, and EO will improve performance and innovative solutions (Masa'deh et al., 2018; Bel et al., 2006).

Further, in the digital era, business activities have shifted from traditional business models to modern systems that utilise technology with various digital technology. It takes a special strategy or approach for business activities to survive and outperform competitors in the digital era. Lumpkin & Dess (1996) argued that the strategy to win the business competition in the digital era is to increase the professionalism of the human resources of businessmen. The development of HR professionalism needs to be directed to a concept to answer challenges in the digital era, which refers to an entrepreneurial strategy posture that characterises behaviour in which a manager or business actor is involved in finding and taking advantage of entrepreneurial opportunities.

However, the professionalism of businessmen in the digital era is attached to technological capabilities and also professional ethics to achieve BS. In this case, Gladilina (2019) emphasises the need to create its own strategy for the provision of highly professional human resources in the context of digitalisation in the context of human resource empowerment, namely through the development of creative thinking. Creative thinking, as one of the leading digital competencies, contributes to the solution of the problem of saturation of the labor market with specialists ready to tackle the task of creating a new technological base for the development of the economy, social sphere, etc. procurement specialists built on creative thinking help complete daily professional tasks. Havnes & Smeby (2014) claimed that professional competence is based on general theoretical knowledge. However, when it comes to professional practice, it needs to be acted upon in a professional context i.e. under specific conditions and often in relation to a unique individual role. However, the professionalism of a businessman in the digital era is inseparable from the ability to adopt technology effectively in order to be able to achieve a competitive advantage in today's business world. Littlejohn et al. (2012) argued, digital competence is needed by professionals who do not have these abilities. Here, our framework relates to the growing literature (Westman et al., 2019). Indeed, as stated by Minnameier (2014), the professional context of human resource for business cannot be separated from ethical or moral issues to avoid issues of business ethics that are increasingly prevalent today.

Based on the results of a study of the previous studies on the topics that have been put forward, it was found that the EO and the professionalism of human resources have a great contribution to the achievement of BS in the digital era. However, according to Jabłoński (2018), it is very rare

for studies that discuss BS studies to focus on digital concepts. In addition, studies that examine the relationship between EO and BS by using human resource professionalism as a mediator have never existed. Therefore, this study makes a new contribution to future research since it is a study that has never been investigated before.

3. METHODOLOGY

This study applied a literature review method in order to answer the gap and then provide a new approach to the issue discussed. According to the expert, literature review is a form of research that is the potential for developing contributions both theoretical and practical contributions (Synder, 2019). Thereby, the literature review has implications as a foundation to resolve gaps and uncover areas needed for further research (Webster & Watson, 2002). Based on the result of some previous studies and using the theory based on Resource Based-View (RBV) by Barney (1991), this study develops the concept for literature review in order to fill the gap. This theory suggests employing different, unique, and non-substitutable resources efficiently and effectively for BS. Therefore, EO and the professionalism of human resources are the main resources that can be used to boost BS in the digital era. From this starting point, this study presents a literature review based on these research questions:

- To what extent and how the concept of EO can be used to boost BS in the digital era
- To what extent and how EO concept can be used to boost the professionalism of human resource in the digital era
- To what extent and how professionalism of human resources can be used to boost BS in the digital era
- To what extent and how professionalism of human resource can be used to mediate the relationship between EO and boost BS in the digital era

Based on these research questions, this study develops a model as a conceptual framework to guide future research by providing theoretical explanations, previous empirical findings, and also practical examples related to the relationship between EO and BS through the role of professional human resource as a mediator as shown in Figure 3.

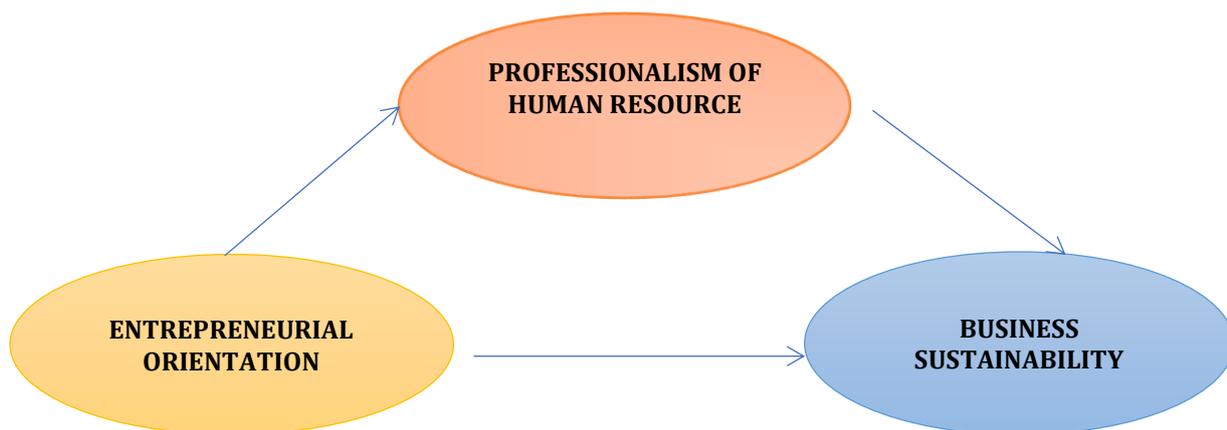


Figure 3. Model of The Relationship EO, BS, and Professional Human Resource

Further, there are many sources of information used to support this study such as publications in the SCOPUS, ProQuest, UNDP report, OECD report, and other sources. There are 90 articles, most of which are ranged from 2018-2022. To get a literature review of the previous research, this study adopts phase as suggested by Mayring (2003) that can be divided into 4 steps:

1. Material collection stage: The materials to be collected are determined according to the needs and then restrictions or material selection are carried out restricted.
2. Descriptive analysis stage: assessing the formal aspects of the material, assessing, for example, the number of publications per year and providing background for further theoretical analysis.
3. Perform category selection: namely on the structural and analytic dimensions related to the selected category, which will be applied to the collected material so as to form the main topic of the analysis.
4. Conduct material evaluation: various materials are analyzed according to structural dimensions. This should allow the identification of relevant issues as well as the interpretation of the results.

Thereby, firstly, this study collected and eliminated all of the sources of the information and then assessed formal aspects of the materials used. Further, his study categorised dimensions of the subject or topic into 4 groups according to relevant issues. Thus, in order to identify the source of information, there is some key word used to detect the source of information i.e. EO, BS, professionalism of human resource, and digital era.

4. CONCLUSION, IMPLICATION AND LIMITATION

The use of technology in today's modern era has had a significant impact on various aspects of business. In this era, business activities have shifted to the technology adoption that is implemented through digital business using. It takes the right strategy for digital business activities to be able to survive and outperform competitors in the digital era. To anticipate the increasingly high competition in the digital era, the business must be managed professionally. Therefore, businessmen in the digital era are required to develop professionalism in anticipating high business competition to achieve competitive advantages for BS. Further, business actors must have a strong business character to survive and gain a competitive advantage. In this case, the concept of EO that emphasises innovative, proactive, and risk taking behaviour is the appropriate strategy that can be used in anticipating increasingly sharp digital competition.

Businessmen who do not have EO behaviour will not be able to advance in anticipating digital competition. The EO character will encourage the businessman to become a successful professional entrepreneur in the digital era. Based on the phenomena that have been stated previously and are also various facts from previous studies, it shows the contingent influence of EO in understanding reactions to the use of new technology that is a demand in the digital era. Therefore, it is necessary to develop the professionalism of businessmen in the digital era through the concept of EO so that they are able to respond to the development of the current digital era that is oriented to digital business. Especially, risk taking is absolutely owned by business actor in the digital era. Business actor who don't dare to take risks will not be able to progress better than those who are ready for all challenges but still with full calculation. Further, this study provides implications both practical and theoretical.

Next, this study suggests refocusing on the issue of professionalism of human resource, bearing in mind that this study has so far been ignored by researchers considering that the criteria for professionalism are a determining factor in BS. Of course, it must be considered that professional human resource is not only abilities or skills but also those who are able to meet professional ethical standards. Therefore, these two aspects are very important to note. Without good ethics, even a person with a high EO will face problems in carrying out his profession. Because of that ethics concerns morals which of course need to be fostered with good values. If a unique resource has a positive value, of course it will also encourage the birth of positive results not only for himself as an individual but also for many people. Therefore, in order to achieve BS, EO is not

enough. Human resource professionals demand that superior business actors master all the required criteria. Ethics and morals are aspects that really need to be fostered for a business actor, in addition to technological capabilities so that ultimately, they will be able to sustain business continuity in the digital era.

For the implication, this study presents new insights on the businessmen that EO through its component i.e. innovativeness, proactiveness, and risk taking is the main component that must be possessed when they want to be successful in doing business in the digital era in achieving BS by mastering technology and also follow ethical standard. Furthermore, this study also provides knowledge of the literature with a concentration on the concept of EO, and professional human resource as a strategy for preparing BS in the digital era.

In term of limitation, this study also has limitations since this it is in the context of literature review. Therefore, it is suggested to the next researcher to do empirical study using the model that has been presented, namely by using human resource professionalism as a mediator in the relationship between so that it can be known directly to what extent the roles of the aspects studied in this study EO and BS in the digital era.

REFERENCES

- Adebayo, P. O. (2015). Impact of Social Media On Students' Entrepreneurial Orientation: A Study of Selected Institutions in Nigeria. *Journal of the International Association of Advanced Technology and Science*, 1(12), 1-13.
- Ajmal, M. M., Khan, M., Hussain, M., & Helo, P. (2018). Conceptualising and Incorporating Social Sustainability in The Business World. *International Journal of Sustainable Development & World Ecology*, 25(4), 327-339.
- Alias, N. E. (2021). The Influence of Computer and Internet Self-Efficacy on Individual Entrepreneurial Orientation: An Empirical study among Bumiputra University Students in Malaysia. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 2760-2770.
- Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualising Entrepreneurial Orientation. *Strategic Management Journal*, 36(10), 1579-1596.
- Aloulou, W., & Fayolle, A. (2005). A Conceptual Approach of Entrepreneurial Orientation Within Small Business Context. *Journal of Enterprising Culture*, 13(01), 21-45.
- Baldegger, R., Caon, M., & Sadiku, K. (2020). Correlation Between Entrepreneurial Orientation and Implementation of AI in Human Resources Management. *Technology Innovation Management Review*, 10(4).
- Baldegger, R., Wild, P., & Schueffel, P. (2021). The Effects of Entrepreneurial Orientation in a Digital and International Setting. In *Entrepreneurial Orientation: Epistemological, Theoretical, and Empirical Perspectives*. Emerald Publishing Limited.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Bell, B. S., Lee, S. W., & Yeung, S. K. (2006). The Impact of e-HR on Professional Competence In HRM: Implications for the Development of HR Professionals. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 45(3), 295-308.
- Bhattacharyya, S. (2006). Entrepreneurship and Innovation: How Leadership Style Makes the Difference? *Vikalpa*, 31(1), 107-116.
- Blinova, E., Ponomarenko, T., & Knysh, V. (2022). Analyzing the Concept of Corporate Sustainability in the Context of Sustainable Business Development in the Mining Sector with Elements of Circular Economy. *Sustainability*, 14(13), 8163.
- Boons, F., Montalvo, C., Quist, J., & Wagner, M. (2013). Sustainable Innovation, Business Models and Economic Performance: An overview. *Journal of Cleaner Production*, 45, 1-8.

- Bolton, D. L., & Lane, M. D. (2012). Individual Entrepreneurial Orientation: Development of a Measurement Instrument. *Education and Training, 54* (s) 2-3, 219-233.
- Carayannis, E. G., Sindakis, S., & Walter, C. (2015). Business Model Innovation as Lever of Organisational Sustainability. *The Journal of Technology Transfer, 40*(1), 85-104.
- Chatterjee, S., Gupta, S. D., & Upadhyay, P. (2020). Technology adoption and entrepreneurial orientation for rural women: Evidence from India. *Technological Forecasting and Social Change, 160*, 120236.
- Covin, J. G., & Slevin, D. P. (1989). Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal, 10*(1), 75-87.
- Covin, J. G., Rigtering, J. C., Hughes, M., Kraus, S., Cheng, C. F., & Bouncken, R. B. (2020). Individual and Team Entrepreneurial Orientation: Scale Development and Configurations for Success. *Journal of Business Research, 112*, 1-12.
- Criado-Gomis, A., Cervera-Taulet, A., & Iniesta-Bonillo, M. A. (2017). Sustainable Entrepreneurial Orientation: A Business Strategic Approach for Sustainable Development. *Sustainability, 9*(9), 1667.
- Criado-Gomis, A., Iniesta-Bonillo, M. Á., & Cervera-Taulet, A. (2018). Sustainable Entrepreneurial Orientation Within an Intrapreneurial Context: Effects on Business Performance. *International Entrepreneurship and Management Journal, 14*, 295-308.
- Dai, L., Maksimov, V., Gilbert, B. A., & Fernhaber, S. A. (2014). Entrepreneurial Orientation and International Scope: The Differential Roles of Innovativeness, Proactiveness, and Risk-taking. *Journal of Business Venturing, 29*(4), 511-524.
- DiVito, L., & Bohnsack, R. (2017). Entrepreneurial Orientation and Its Effect on Sustainability Decision Trade-Offs: The Case of Sustainable Fashion Firms. *Journal of Business Venturing, 32*(5), 569-587.
- Douglas, E. J., & Shepherd, D. A. (2002). Self-employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization. *Entrepreneurship Theory and Practice, 26*(3), 81-90.
- Duggad, G. (2017). Value Migration: Picking Winners in Disruptive Times. *Motilal Oswal: Mumbai, India*.
- Emanuel, E. J. (2015). Enhancing Professionalism Through Management. *JAMA, 313*(18), 1799-1800.
- Eswarlal, V. K., & Vallesi, M. (2014). Different Stages of Business Sustainability: A Visual Metaphor. *Management Research: The Journal of the Iberoamerican Academy of Management*.
- Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. *Business Strategy and the Environment, 26*(5), 597-608.
- Evetts, J. (2011). A New Professionalism? Challenges and Opportunities. *Current Sociology, 59*(4), 406-422.
- Evetts, J. (2014). The Concept of Professionalism: Professional Work, Professional Practice and Learning. In *International Handbook of Research in Professional and Practice-Based Learning* (pp. 29-56). Springer, Dordrecht.
- Fadda, N. (2018). The Effects of Entrepreneurial Orientation Dimensions on Performance in the Tourism Sector. *New England Journal of Entrepreneurship*.
- Fan, M., Qalati, S. A., Khan, M. A. S., Shah, S. M. M., Ramzan, M., & Khan, R. S. (2021). Effects of Entrepreneurial Orientation on Social Media Adoption and SME Performance: The Moderating Role of Innovation Capabilities. *PLoS ONE, 16*(4), e0247320.
- Filser, M., Eggers, F., Kraus, S., & Málovics, É. (2014). The Effect of Financial Resource Availability on Entrepreneurial Orientation, Customer Orientation and Firm Performance in an International Context: An Empirical Analysis from Austria and Hungary. *Journal for East European Management Studies, 7*-30.
- Gladilina, I. P. (2019). Creative Thinking and Development of Professionalism by Procurement Specialists in the Context of Digitalization. *Academic Journal of Interdisciplinary Studies, 8*(2), 219.

- Grenčíková, A., Kordoš, M., Bartek, J., & Berkovič, V. (2021). The Impact of the Industry 4.0 Concept on Slovak Business Sustainability within the Issue of the Pandemic Outbreak. *Sustainability*, 13(9), 4975.
- Gupta, V. K., Niranjana, S., Goktan, B. A., & Eriskon, J. (2016). Individual Entrepreneurial Orientation Role in Shaping Reactions to New Technologies. *The International Entrepreneurship and Management Journal*, 12(4), 935-961.
- Hansen, J. D., Deitz, G. D., Tokman, M., Marino, L. D., & Weaver, K. M. (2011). Cross-national Invariance of the Entrepreneurial Orientation Scale. *Journal of Business Venturing*, 26(1), 61-78.
- Havnes, A., & Smeby, J. C. (2014). Professional Development and the Profession. In *International Handbook of Research in Professional and Practice-Based Learning* (pp. 915-954). Springer, Dordrecht.
- He, J., & Ortiz, J. (2021). Sustainable Business Modeling: The Need for Innovative Design Thinking. *Journal of Cleaner Production*, 298, 126751.
- Hervé, A., Schmitt, C., & Baldegger, R. (2020). Digitalization, Entrepreneurial Orientation and Internationalization of Micro-, Small-And Medium-Sized Enterprises. *Technology Innovation Management Review*, 10(4).
- Hormiga, E., Hancock, C., & Valls-Pasola, J. (2013). The Relationship Between Employee Propensity to Innovate and Their Decision to Create a Company. *Management Decision*, 51(5), 938-953.
- Hsien-Yu, S. (2020). Human Resource Practitioner Professional Ability and Management System Construction, Achievement Motivation as Mediator.
- Hsien-Yu, S., & Chia-Yang, N. (2020). Professional Ability of Human Resource Practitioner and Management System Construction Under Mediation of Administrative Expert Role. *International Journal of Management*, 11(10).
- Ipsmiller, E., Dikova, D., & Brouthers, K. D. (2022). Digital Internationalization of Traditional Firms: Virtual Presence and Entrepreneurial Orientation. *Journal of International Management*, 28(4), 100940.
- Iqbal, A., & Trevisan, F. (2022). Assessment of The Role of Human Resources in the Mediation of Possible Divergences of Ideas Among Multigeneration (Baby Boomers, X, Y, and Z). *KINERJA*, 26(1), 98-124.
- Jabłoński, M. (2018). Value Migration to The Sustainable Business Models of Digital Economy Companies on the Capital Market. *Sustainability*, 10(9), 3113.
- Kreiser, P. M., & Davis, J. (2010). Entrepreneurial Orientation and Firm Performance: The Unique Impact of Innovativeness, Proactiveness, and Risk-Taking. *Journal of Small Business & Entrepreneurship*, 23(1), 39-51.
- Kraus, S., Breier, M., Jones, P., & Hughes, M. (2019). Individual Entrepreneurial Orientation and Intrapreneurship in the Public Sector. *The International Entrepreneurship and Management Journal*, 15(4), 1247-1268.
- Littlejohn, A., & Margaryan, A. (2014). Technology-Enhanced Professional Learning. In *International Handbook of Research in Professional and Practice-Based Learning* (pp. 1187-1212). Springer, Dordrecht.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Life Cycle. *Journal of Business Venturing*, 16(5), 429-451.
- Lumpkin, G. T. & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *Academy of Management Review*, 21(1), 135-172.
- Lumpkin, G. T., Droege, S. B., & Dess, G. G. (2002). E-commerce Strategies: Achieving Sustainable Competitive Advantage and Avoiding Pitfalls. *Organisational Dynamics*, 30(4), 325-340.
- Lomberg, C., Urbig, D., Stöckmann, C., Marino, L. D., & Dickson, P. H. (2017). Entrepreneurial Orientation: The Dimensions' Shared Effects in Explaining Firm Performance. *Entrepreneurship Theory and Practice*, 41(6), 973-998.
- Losey, M. R., Meisinger, S. R., & Ulrich, D. (2005). Reality, Impact, and Professionalism. *Human Resource*, 408. (Baruch)

- Martins, I., & Perez, J. P. (2020). Testing Mediating Effects of Individual Entrepreneurial Orientation on the Relation Between Close Environmental Factors and Entrepreneurial Intention. *International Journal of Entrepreneurial Behaviour & Research*, 26(4), 771-791.
- Martens, C. D. P., Machado, F. J., Martens, M. L., & de Freitas, H. M. R. (2018). Linking Entrepreneurial Orientation to Project Success. *International Journal of Project Management*, 36(2), 255-266.
- Masa'deh, R. E., Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The Associations Among Market Orientation, Technology Orientation, Entrepreneurial Orientation and Organisational Performance. *Benchmarking: An International Journal*, 25(8), 3117-3142.
- Mayring, P. (2003). *Qualitative Inhaltanalyse Grundlagen und Techniken (Qualitative Content Analysis)*, Beltz.
- Mazurchenko, A., & Maršíková, K. (2019). Digitally-powered Human Resource Management: Skills and Roles in the Digital Era. *Acta Informatica Pragensia*, 8(2), 72-87.
- McKenny, A. F., Short, J. C., Ketchen Jr, D. J., Payne, G. T., & Moss, T. W. (2018). Strategic Entrepreneurial Orientation: Configurations, Performance, And the Effects of Industry And Time. *Strategic Entrepreneurship Journal*, 12(4), 504-521.
- Meekaewkunchorn, N., Szczepańska-Woszczyzna, K., Muangmee, C., Kassakorn, N., & Khalid, B. (2021). Entrepreneurial Orientation and SME performance: The Mediating Role of Learning Orientation. *Economics & Sociology*, 14(2), 294-312.
- Miller, D. (1983). The Correlates of Entrepreneurship in Three Types of Firms. *Management Science*, 29(7), 770-791.
- Miller, G. E. (1990). The Assessment of Clinical Skills/Competence/Performance. *Academic Medicine*, 65(9), 63-67.
- Minnameier, G. (2014). Moral Aspects of Professions and Professional Practice. In *International Handbook of Research in Professional and Practice-Based Learning* (pp. 57-77). Springer, Dordrecht.
- Mohamad, M., & Chin, O. (2019). Business Networking and Sustainability of Small Rural Business: Mediating Effects of Entrepreneurial Orientation. *Management Science Letters*, 9(4), 595-606.
- Molotkova, N. V., Makeeva, M. N., & Khazanova, D. L. (2019). Digitalized Personnel Management. In V. Mantulenko (Eds.), *The European Proceedings of Social and Behavioural Sciences* (pp. 757-767). Samara: Future Academy. doi: 10.15405/epsbs.2019.03.75
- Mostafa, R. H., Wheeler, C., & Jones, M. V. (2005). Entrepreneurial Orientation, Commitment to the Internet and Export Performance in Small and Medium Sized Exporting Firms. *Journal of international Entrepreneurship*, 3(4), 291-302.
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial Orientation, Risk Taking, And Performance in Family Firms. *Family Business Review*, 20(1), 33-47.
- Niemand, T., Rigtering, J. C., Kallmünzer, A., Kraus, S., & Maalaoui, A. (2021). Digitalization in the Financial Industry: A Contingency Approach of Entrepreneurial Orientation and Strategic Vision on Digitalization. *European Management Journal*, 39(3), 317-326.
- OECD (2018), *OECD Due Diligence Guidance for Responsible Business Conduct*
- Parveen, F., Jaafar, N. I., & Ainin, S. (2016). Social Media's Impact on Organisational Performance and Entrepreneurial Orientation in Organisations. *Management Decision*.
- Popov, B., Varga, S., Jelić, D., & Dinić, B. (2019). Psychometric Evaluation of the Serbian Adaptation of the Individual Entrepreneurial Orientation Scale. *Education+ Training*.
- Rattanawong, W., & Suwanno, N. (2014). Antecedents and Consequences of Service Innovation: An Empirical Study of Touring Business in the Southern Part of Thailand. *Journal of Entrepreneurship and Business Innovation*, 1(1), 48-59.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.
- Ritala, P., Baiyere, A., Hughes, M., & Kraus, S. (2021). Digital Strategy Implementation: The Role of Individual Entrepreneurial Orientation and Relational Capital. *Technological Forecasting and Social Change*, 171, 120961.

- Rüsch, S., Wilkesmann, M., & Bastini, K. (2019). The Effects of Entrepreneurial Orientation on Strategy Choice and Management Control in Non-profit Organisations. *Problems and Perspectives in Management*, 17(3), 153.
- Sabuhari, R., Sudiro, A., Irawanto, D., & Rahayu, M. (2020). The Effects of Human Resource Flexibility, Employee Competency, Organisational Culture Adaptation and Job Satisfaction on Employee Performance. *Management Science Letters*, 10(8), 1775-1786.
- Sambhanthan, A., Potdar, V., & Chang, E. (2017). BS Conceptualisation. In *Applied Computing and Information Technology* (pp. 1-16). Springer, Cham.
- Santos, G., Marques, C. S., & Ferreira, J. J. (2020). Passion and Perseverance as Two New Dimensions of an Individual Entrepreneurial Orientation Scale. *Journal of Business Research*, 112, 190-199.
- Schaefer, T. E. (1984). Professionalism: Foundation for Business Ethics. *Journal of Business Ethics*, 3(4), 269-277.
- Schaltegger, S., Hörisch, J., & Freeman, R. E. (2019). Business Cases for Sustainability. *Organisation & Environment*, 32(3), 191-212.
- Stubbs, W., & Cocklin, C. (2008). Conceptualising a Sustainability Business Model. *Organisation & Environment*, 21(2), 103-127
- Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines. *Journal of Business Research*, 104, 333-339.
- United Nation Development Program (UNDP) (2019). Annual Report of the Administrator on Disciplinary Measures and Other Actions Taken in Response to Fraud, Corruption and Other Wrongdoing
- Upadhyay, N., Upadhyay, S., Al-Debei, M. M., Baabdullah, A. M., & Dwivedi, Y. K. (2022). The Influence of Digital Entrepreneurship and Entrepreneurial Orientation on Intention of Family Businesses to Adopt Artificial Intelligence: Examining the Mediating Role of Business Innovativeness. *International Journal of Entrepreneurial Behaviour & Research*, (ahead-of-print).
- Vătămănescu, E. M., Gazzola, P., Dincă, V. M., & Pezzetti, R. (2017). Mapping Entrepreneurs' Orientation Towards Sustainability in Interaction Versus Network Marketing Practices. *Sustainability*, 9(9), 1580.
- Venter, A. (2014). An Analysis of The Influence of Entrepreneurial Orientation on Business Success in Selected Small and Medium-Sized Enterprises (Doctoral dissertation).
- Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS quarterly*, xiii-xxiii.
- Wiklund, J. (1999). The Sustainability of the Entrepreneurial Orientation - Performance Relationship. *Entrepreneurship Theory and Practice*, 24(1), 37-48.
- Westman, L., Luederitz, C., Kundurpi, A., Mercado, A. J., Weber, O., & Burch, S. L. (2019). Conceptualising Businesses as Social Actors: A Framework for Understanding Sustainability Actions in Small and Medium Sized Enterprises. *Business Strategy and the Environment*, 28(2), 388-402.
- Xia, Q., Xie, Y., Hu, S., & Song, J. (2022). Exploring How Entrepreneurial Orientation Improve Firm Resilience in Digital Era: Findings from Sequential Mediation and FsQCA. *European Journal of Innovation Management*, (ahead-of-print).
- Yang, D., Lang, C., & Li, H. (2010). Ambidextrous Capabilities and Innovation Performance-The Moderating Effect of Entrepreneurial Orientation. In *E-Business and E-Government (ICEE), 2010 International Conference on* (1081-1083).