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Sharing and connecting information in the context of the Covid-19 pandemic and training skills for employees to meet the needs of businesses in digital transformation

1. Introduction

Firstly, the issue of sharing and connecting information between universities and businesses in the context of the Covid19 pandemic:

The connection of information between universities and businesses is understood as transactions between universities and businesses that derive from the interests of both parties. This partnership and harnessing its value can help the school solve financial difficulties, help businesses gain or maintain competitive advantages in the context of a dynamic and growing market. There is a strong shift towards developing the digital economy to take advantage of the digital resources from the 4.0 technology revolution. This is specifically analyzed in the studies of Carayol, N. (2003); Gibb, A. and Hannon, P. (2006); Razvan, Z. and Dainora, G. (2009). These studies all confirm that the sharing and connection of information

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between universities with the role of training workers and employers stems from the benefits between the parties involved. Through that partnership, universities will take advantage of financial investments, practical tools, and internship locations for students. This also helps businesses have more opportunities to use labor resources with professional knowledge and skills. Training a workforce with good professional knowledge will help students after graduation to be able to operate and participate better in production and business activities at enterprises. Through the cooperation in sharing and connecting information between universities and businesses, it also helps universities to absorb opinions from businesses to change and adjust training programs. make it suitable for the actual development of society. The connection of information between the university and the enterprise, whether in the form of direct or indirect interaction, individual or organizational nature, is aimed at mutual support and interaction for the purpose of cooperation in research. Through the connection of information between schools and businesses, it will contribute to the commercialization of research results, helping to improve training content and programs, towards maintaining lifelong learning of learners. Also, support training efforts to improve the quality of education and organizational governance.

The building of a linkage model between universities and enterprises comes from the reality of objective needs, universities have a particularly important role in training high-quality workers for enterprises (Trinh Thi Hoa Mai, 2008). For businesses, when linking with universities, businesses will provide data for training institutions to understand human resource needs. The connection of information between schools and businesses also helps businesses to have direct contact with many students, having conditions to monitor and evaluate their working style as well as their knowledge and capacity. Through an information connection channel between schools and businesses, businesses can recruit suitable workers to meet the requirements of job positions (Nguyen Dinh Luan, 2015). Through the training link between schools and businesses, two-way information will help universities and businesses understand each other. In which, universities will play the role of the main responsible place in training skilled workers. Universities will innovate in content, teaching methods, and improve training quality. The enterprise will play the role of receiving and using trained labor products.

On a worldwide scale, every country is facing enormous challenges to respond to the demands of a globalized, highly internationalized, and unprecedentedly dynamic market of the digital economy. The playing field of the flat world has

opened up for all countries, so besides opportunities, countries all face great challenges that need the right labor to master and operate.

Secondly, the issue of training skills for employees to meet the needs of businesses in digital transformation:

The issue of labor training to meet the needs of the labor market in the period of digital transformation is also posing necessary requirements for universities. In particular, in the context of digital transformation, the training of employees with full background knowledge, specialized skills, professional skills, teamwork skills, adapting to the context of digital transformation and development. business is the appropriate and inevitable direction. However, the ability to adapt to the change of the technology environment, practical skills and awareness and working style of learners after graduation have not been highly appreciated by enterprises. This is one of the barriers that make businesses afraid and uncertain about the quality of workers trained at universities (Hung.N.Q., Hang.N.T., & Minh N.D, 2021). In order to well solve the problem of finding outputs for university graduates in the current digital transformation period, it is necessary to associate training activities with practical requirements at enterprises. Well aware of the changing working environment in enterprises today, Ruth Helyer (2011) said that, in addition to knowledge learned in books, practical experience and experience at closed enterprises important role for graduates. Therefore, in addition to the core knowledge of professional training, schools need to equip learners with practical knowledge so that they can adapt to the actual working environment at enterprises (Hang et al., NT, 2021a).

The training of high-quality workers to meet the development of enterprises is an adaptation trend that is the top priority of large corporations today. In the context of high quality labor being scarce and fierce competition of competitors in the market, it is difficult for enterprises to find the desired personnel. With the development of the current digital economy, corporations must be flexible and creative in recruitment, and at the same time must promote the development of existing labor capacity. In some developed countries such as the United States, although businesses are also very flexible and creative in recruiting, they sometimes face difficulties. For example, AT&T Corporation of America launched the Workforce2020 (WF2020) initiative to upskill about 100,000 of its 240,000 employees. But after a while, AT&T also discovered that among these 100,000 people are now working in jobs that 10 years from now will become obsolete. Therefore, to always meet the requirements of the job, businesses need to have a strategy of recruiting and fostering workers combined with training at universities (Hang, N.T, 2021b).

Third, the issue of linkage between universities and enterprises:

In the United States, Procter & Gamble (P&G) has implemented a "community sourcing" model. Through the Connect & Develop program, we aim to build a network of partners (including inventors, scientists, individual investors, small and medium-sized companies, large corporations) around the world. This work is also about implementing initiatives through P&G's business system. In 2014, P&G Group connected 9,000 scientists to jointly solve the problems proposed by P&G (European Parliament, 2016). In fact, the "crowdsourcing" model is also deployed by many large corporations such as Google, Microsoft, Toyota, and General Electrics as a method of recruiting high-quality workers. Or the online "Gig Economy" model of Uber, Lyft (transportation), Freelancer, Upwork (business services), Heal, Pager (medical health care) is also proving its effectiveness (Thao, LP). & Linh, HT, 2021).

Digital transformation is an inevitable development trend in the current context. Promoting and taking advantage of workers trained from universities or building a training roadmap, improving the qualifications and skills of employees is necessary for businesses. For successful digital transformation, Vietnamese businesses need to have a policy to focus on attracting talents from universities. At the same time, businesses need to work closely with universities to train workers to meet the necessary knowledge, skills and requirements of digital transformation.

In the context of digital transformation, it is necessary for businesses to have information about labor training at universities. This will help businesses identify a qualified, trained workforce from the professions that they need to develop their industries. To realize the importance of connecting and sharing information in the context of the Covid19 pandemic, it is necessary to select a number of businesses to survey. Usually, the minimum sample size chosen to be used for EFA model analysis is 50, preferably 100 or more. This is determined by the formula:

N = 5 * number of measurement variables participating in EFA (1)

Therefore, the research needs to select enterprises to conduct the survey (Hung.N.Q., Hang.N.T., & Minh N.D, 2021).

2. Literature Review

Sharing and connecting information through university-business cooperation:

The cooperation of businesses with universities will create opportunities for businesses to have access to the most up-to-date and modern research results. At

the same time, businesses can implement research results from universities into practice through cooperation agreements with universities.

Researching on the relationship between enterprises and universities, Etzkowitz (1993) and Etzkowitz, Leydesdorff (1995) have introduced the "Tripartite" Model. This model is transformed from the relationship between Enterprise - State in the industrial society to the relationship between university - enterprise and the state in the knowledge society. In essence, this linkage model aims to create digital citizens for the production, transfer and application of knowledge in practice. Since then, it has emphasized the pioneering role of universities in developing research and creativity capacity in order to develop the knowledge economy.

First of all, Le Duc Tho (2018), Nguyen Thu Thuy, Bui Thi Kim Phuc (2017) all agreed and generalized the problem of communication between enterprises and universities, including the following basic forms of cooperation: Cooperation in research; Commercialization of research results; Promote student mobility; Promote the movement and circulation of lecturers; Developing and implementing training programs; Lifelong learning; Support start-up activities; Participate in school administration. Universities cooperate with businesses to help students experience to learn practical knowledge through internships at enterprises, business visits, practice experiments at enterprises.

In practice, the cooperation between businesses and universities to conduct research and transfer technology is usually conducted through four basic forms, including research support, research cooperation, transfer knowledge and technology transfer. In terms of research support, businesses often invest finance and means for universities to carry out research. Research cooperation is a form of cooperation between universities and businesses to solve agreed problems and use research facilities to develop the capacity of both sides. The form of knowledge transfer is done through cooperation in training and exchange between individual researchers and enterprises. Technology transfer is a form of cooperation to transfer research from universities into the process of applying, developing and commercializing products. At the same time, participate in the new production process at the enterprises with which they cooperate (Santoro, 2000).

Vu Tien Dung (2016) stated that, through connecting with schools, businesses can train to strengthen their professional competencies, improve as well as develop professional ethics, and labor discipline. At the same time, it will help create an industrial style for learners, in line with the operating characteristics of the business. In the training connection channel between schools and businesses,

the school plays the role of the main unit responsible for training. The school will implement the content, teaching program, quality of training, and grant diplomas to the trained. Enterprises play the role of coordinating, supporting and responsible for organizing, managing and serving the training process and employing trained employees.

Hung.N.Q., Hang.N.T., & Minh N.D (2021) emphasized, the digital economy needs digital businesses and the participation of digital citizens to develop digital businesses. Therefore, the cooperation relationship between schools and businesses is increasingly improved, and training activities at universities are also adjusted to meet labor needs in the digital transformation period. Enterprises have now participated in guiding and teaching a number of practical-related modules to equip learners with new knowledge. Enterprises also have activities to support the school in training, such as providing practical equipment, experiments, accepting students for internships, consulting on adjusting training programs to suit practical conditions. This is an effective link to help universities have more resources to improve training quality. The output products of universities will better meet the increasing requirements of the labor market in the current digital transformation context.

The sharing and connection of information between universities and home employers is an inevitable need. Digital transformation and the process of deep international integration are taking place more and more excitingly, competition is inevitable among organizations and businesses in order to improve quality, enhance competitiveness, towards the development sustainable development (Cuesta, C., Ruesta, M., Tuesta, D., & Urbiola, P., 2015). In every period, education and training have always played an important and decisive role in the development of each country. The school's mission is to be a place to train, provide qualified labor, meet the needs of high-quality labor for the economy - society, the country and the world (Galazova, SS, & Magomaeva, LR. , 2019).

Skills training for employees to meet business needs in digital transformation:

Nguyen Thi Hang (2021b) emphasized that, in the current practical context, the problem of employment and unemployment is a common phenomenon, because the labor source cannot meet the requirements of society and businesses. The trend of employment in the labor market has changed markedly, with robots gradually replacing ordinary human jobs. Jobs in fields such as labor and production can be replaced by robots. Therefore, the problem for universities is that human resource training orientation must meet the industry requirements of Industry 4.0, access to new technologies and new professions. The research emphasizes that, in the context of the strong development of the fourth industrial

revolution, the most competitive advantage is the advantage of high-quality labor. Therefore, it is important to develop a strategy for human development and strongly innovate education to equip learners with knowledge, promote creativity and skills and vision in the digital age. Universities need to clearly define the goal of training high-quality workers, understanding basic and modern knowledge about the context of digital transformation, development goals of the digital economy and digital businesses. Therefore, students after graduation need to have foundational knowledge and skills in applying digital approaches and tools in the management of business organizations; have English ability and proficient skills with computer software to work effectively in the global environment and the context of the industrial revolution 4.0 (Hung.N.Q., Hang.N.T., & Minh N.D., 2021).

Following are the studies related to the skills required of employees to meet the digital transformation needs of enterprises:

Forsyth, J. and Cowap, L. (2017) emphasize, professional skills and practical knowledge play an important role in meeting the requirements of employers. Therefore, the integration of theory and practice teaching play an important role. Agreeing with this author, Bloom (1982) also affirmed, occupational skills have a positive influence on the recruitment needs of enterprises (extracted from the study on the three-factor theoretical model ASK, Bloom, 1982).

Empirical studies of the authors Carter, S. and Yeo & A.C.-M. (2017) for students of the Faculty of Accounting, Finance and Business at HEI University (Malaysia) said that awareness of the knowledge, skills and competencies needed to practice as a marketer plays an important role. The knowledge, skill and competency requirements by student learning level and practitioner experience may vary by type of training (Hang, N.T., et al., 2021c). Research suggests curriculum development should be geared towards addressing both the capabilities and requirements of employers. At the same time, it is necessary to develop professional skills, especially the need to conduct interdisciplinary cooperation and the teaching and learning of basic concepts in student education to meet the requirements of the labor market. The studies by Hang, N.T., Huan, N.V. (2020); Hang, N.T., et al. (2021a); Hang, N.T. (2021c) all said that communication skills have a positive influence on the recruitment needs of enterprises.

At banks today, Fintech technology is being applied more and more deeply (Pawadi, A.B., 2018). Therefore, employees need to be equipped with basic technological knowledge to operate the systems at the bank. Universities need to train vocational knowledge, invest in new technologies in teaching and practical experiments to develop career-adaptive skills for learners to

meet the increasing requirements of the market. It is important for learners to actively participate in group activities. Because teamwork skills have a positive influence on the recruitment needs of enterprises (Tuan.TM, Hung.NQ & Hang. NT, 2021).

In the context of current global integration, besides equipping career skills, communication skills, teamwork skills, learners need to know how to make plans. Planning skills help them after graduating and working in enterprises, they will increase their self-discipline and independence at work. Planning skills have a positive effect on recruitment needs of enterprises (Hang, N.T., 2021c; Leesa Wheelahan, 2012; Edward. F. & Crawle, 2009).

The above studies have generalized the theories and practices of cooperation between universities and enterprises in solving human resource problems. At the same time, studies have shown forms of cooperation to promote the association between universities and businesses. Digital transformation and the fourth industrial revolution have been taking place rapidly and strongly, making a profound impact on all areas of social life. Therefore, it is necessary to exploit the model of linkage and cooperation between educational institutions and businesses in depth, not at the current immediate benefits. Universities need to equip learners with a variety of thinking and career skills in addition to specialized knowledge about training professions (Hang, NT, et al., 2021b). In the digital era , higher education will have to make profound changes from the educational environment, the role of teachers and learners to teaching methods. To meet the increasing requirements and demands of the labor market, it is necessary to raise awareness and renew thinking about higher education development. Universities need to innovate programs and training methods in the direction of CDIO: idea generation (Conceive), Design (Design), Implementation (Implement) and Operation (Operate) of products and services. The system is complex, with added value, in a modern environment, working in groups, aiming at training to meet the needs of businesses and employers.

Vietnam is in the process of transformation and deeper integration into the world economy. Therefore, Vietnamese labor still has the characteristics of a market with many weaknesses. That is: laborers mainly work in the agricultural sector, with low productivity and low quality of labor resources. Moreover, the context of the Covid-19 pandemic leads to a rather large unemployment rate in Vietnam. The highest unemployment rate belongs to the group of workers with a college degree (3.19%), followed by the group with a university degree (2.61%). Meanwhile, businesses are seriously lacking high-quality labor resources. This

is because universities and enterprises do not have information about each other (Nguyen Thi Hang et al., 2021). To meet the job requirements in a digital society and digital economy of Vietnam now and in the future, the inevitable requirement is to strengthen cooperation between universities and businesses. Vietnamese universities need to equip learners with necessary skills that businesses need to participate in business development. In order to meet the needs of human resource development of the society, linking higher education institutions with enterprises is one of the key issues in order to innovate and improve the quality of higher education.

3. Research Methodology

The article researches on sharing and connecting information in the context of the Covid-19 pandemic and skills training for staff at universities to meet the needs of digital businesses. Specifically, the article focuses on clarifying two issues:

- the sharing and connection of information between universities and businesses,
- necessary skills that learners need to accumulate when studying at university to meet the requirements of digital businesses. The article aims to clarify the following research questions: What skills do learners need to accumulate during their university studies to meet employment positions at enterprises after graduation? What methods do universities apply to connect with businesses? What skills are trained by students to meet the recruitment needs of enterprises?

To achieve the above results and answer the research questions, the article uses the following methods.

Methods of collecting and analyzing documents: The author collects and evaluates domestic and foreign documents on the cooperation between universities and enterprises. Access to knowledge about the context of digital transformation in economic development. From there, analyzing human resource requirements requires cohesion between universities and businesses in human resource training.

Theoretical research methods: Used to exploit scientific information in research works on the connection between enterprises and universities. This cooperation relationship aims to train workers to fill job positions at domestic and foreign enterprises.

Methods of analysis and synthesis: analyzing and synthesizing data sources through documents of domestic and foreign research projects related to

information sharing and connection in the context of the Covid-19 pandemic. Contents related to the issue of human resource training to meet the labor market needs of enterprises in the digital transformation period.

In addition, to complete the research content, the article uses qualitative research methods combined with quantitative research. Those applied are: the reliability coefficient Cronbach Alpha test, EFA analysis, and CFA.

4. Main Results

4.1. Content to share and connect information between universities and businesses

Research by Thao, L.P & Linh, H.T., (2021); Nguyen Thi Hang et al., (2021) emphasized that strengthening cooperation between universities and enterprises is a top priority in Vietnam's human resource training strategy in the current period. The types of connections that are noticed during this period include: cooperation in research, commercialization of research results, academic exchange and admission of students for internships, cooperation in research, send lecturers to learn practical experience at enterprises, invite enterprises to participate in teaching at universities, enterprises coordinate with universities in formulating and implementing training programs.

Based on the researches of Carter, S. and Yeo & AC-M (2017) and Tuan.TM, Hung.NQ & Hang.NT (2021), the author believes that for universities it is necessary to strengthen the connection with businesses so that after graduation, students will have more knowledge and understanding about businesses.

Stemming from objective reality, currently the unemployment rate for graduates has become a big problem of society. The problem of unemployment is a national problem that does not only occur in periods of economic crisis and the current Covid-19 pandemic. Because most graduates do not meet the requirements of employers. The reason is that they lack practical knowledge and professional skills. Therefore, the first thing to do in the connection between schools and businesses is that businesses create conditions for students to practice and create exchange opportunities so that they can experience a lot of practical knowledge. Universities need to strengthen coordination with human resources departments of companies and enterprises to create favorable conditions for students to practice, learn through internships, internships, and part-time jobs, training opportunities, and other job opportunities right before and after graduation. Moreover, the knowledge that students learn at school

often lacks practical elements due to the lack of practical capacity of weak lecturers. Therefore, universities need to plan to send lecturers to enterprises to build relationships, share views and grasp reality.

In order to keep pace with the practical knowledge of society, universities need to improve the quality of training and help students adapt well to the requirements of the labor market. Therefore, universities need to encourage the participation of the business community in developing and updating training programs, through opinion forms, discussions and information exchange for universities. Learn to make the appropriate adjustments. On the other hand, universities need to invite experts working in enterprises to take up teaching jobs in schools, or act as speakers in lectures to share practical experiences to provide knowledge for students.

In order to provide practical support in research at universities in terms of funding as well as support for machinery, equipment, technology, and raw materials, cooperation between universities and enterprises is required. This is the highest form of cooperation between schools and businesses. In this form, enterprises and schools can jointly conduct joint and cooperative projects. Universities can seek this partnership by proactively introducing research programs to businesses that can directly benefit businesses. On the enterprise side, they can also directly order universities to conduct research that interests them, to solve specific technical and professional problems that businesses are facing.

In addition, in developed countries, the link between universities and businesses is also reflected in the commercialization of research results (Forsyth, J. and Cowap, L., 2017). This includes both technology transfer and commercialization of research results. Identifying forms of university-enterprise connection helps guide universities and businesses to develop appropriate linkage strategies. That contributes to improving their capacity and goals in each specific period, which is to enhance development, contributing to creating a high workforce to meet the development of the business.

4.2. Research results on the ability of learners to meet the necessary skills for employers

The trend of national digital transformation and the development of the industrial revolution 4.0 is taking place strongly in many aspects. Therefore, universities must be very flexible in changing training programs, objectives and methods to suit the trends of society and the requirements of employers.

To meet the requirements of employers, learners need to meet the full range of skills.

To adapt to the strong development of electronic devices such as personal computers, smartphones, mobile phones, tablets and assistive devices to interact during the pandemic and context in digital transformation, the recruitment trend of enterprises will focus on the skills of learners.

In the context of businesses undergoing digital transformation today, businesses that always need workers must have the convergence of three factors: knowledge, skills and professional attitudes (professional ethics, discipline, etc.) law, responsibility). Although businesses need high-quality labor, many graduates do not meet the recruitment needs, especially skills.

Currently, over 30% of students and graduates are still not well equipped with expertise as well as soft skills and foreign language skills. This is the paradox that exists in the current state of the labor market. Therefore, learners in addition to the requirements of professional qualifications and degrees, employers tend to have skilled workers, foreign languages and a number of other skills. Models of necessary skills of workers to meet employment positions in enterprises include: (1) Occupational skills (Rothwell & Lindholm, 1999); (2) Communication skills (Bloom, 1982), (3) Teamwork skills (Bloom, 1982), (4) Planning skills (Wheelahan, 2009).

The study conducted a survey on 250 samples. The rate of answering the necessary skills that learners need to accumulate to meet the human resource requirements of the labor market in the digital transformation period for the occupational skill group is quite high.

Among the occupational skills that need to be accumulated for learners, the skills that are assessed as necessary to accumulate include: Problem solving skills; Ability to work with others; Task management, team leadership skills; Computer skills; Critical Thinking; Creative Skill; Information management and control skills. Among them, the majority of survey respondents highly appreciated the following skills (very necessary and necessary levels): Problem solving skills (Selected by 91,6% of survey respondents); Ability to work with others(Selected by 87,4% of survey respondents); Task management, team leadership skills (Selected by 86,3% of survey respondents); Computer skills (Selected by 82,8% of survey respondents).

With the rapid development of technology, simple tasks are increasingly automated. Therefore, in order to adapt to the labor market, learners need to be able to solve complex problems. It is the ability to find compelling solutions to real-world problems that require fresh, creative thinking that machines cannot

handle. This skill will help employees determine the company's strategy for many years to come, develop new products, propose creative communication campaigns to grow the business.

Creative skills are considered essential in today's context. Creativity skills help learners always explore and discover new aspects of problems, proactively solving problems more effectively. Thereby, helping learners develop themselves comprehensively through many extracurricular activities, activities integrated in the curriculum to be more successful in future work.

For some businesses operating in the field of personnel recruitment, it is necessary to have specific professional skills. Employees must understand the Labor Law, Social Insurance Law, Tax Law, Trade Union Law. For construction enterprises, construction engineers must have deep knowledge in the field of construction, be able to read and understand design drawings, work structures, make estimates, and make payments. For positions related to executive management (in the positions of director, deputy director, head/deputy department), employees must be able to lead and run the work and have Ability to work under pressure, strong negotiation and persuasion skills, and strong confidence in dealing with tasks.

Employers also emphasize communication skills to meet job requirements. Especially for the group of business - sales, employees need to have good communication skills, good consulting and persuasion, good foreign language communication.

Communication skills are quite necessary soft skills of employees to convince businesses to use and recruit workers. Learners need to be equipped with clear and polite communication skills. The right message needs to be conveyed in ways that people can understand and convince them. In which, the majority of survey participants highly appreciate the following skills (very necessary and necessary levels): Good counselling and persuasion (Selected by 97,8% of survey respondents), Good communication skills (Selected by 92,1% of survey respondents), Friendly Attitude (Selected by 90,1% of survey respondents), Always listen and get along (Selected by 86,4% of survey respondents).

Planning skill is one of the most important and necessary skills in work. That helps employees find a clear direction, thus achieving work results faster and more efficiently. In order to form planning skills, learners need to practice how to clearly define work goals, give appropriate action methods to work contents, form and organize organizational strategies for the organization, use appropriate resources. The right message needs to be conveyed in ways that people can

understand and convince them. In which, the majority of survey participants highly appreciate the following skills (very necessary and necessary levels): Clearly define work goals (Selected by 90,7% of survey respondents), Provide a suitable method of action for the contents of the job (Selected by 85,9% of survey respondents), Forming and organizing to build a strategy for the organization (Selected by 89,4% of survey respondents), Use the right resources (Selected by 84,2% of survey respondents).

To respond to the context of integration, to accomplish the common goals of the organization, businesses require employees to have teamwork skills. This makes it possible for people with similar goals to work and collaborate together for interactions and mutual assistance.

The survey results show that the majority of the survey respondents highly appreciate the following skills (very necessary and necessary levels): Listen to others (Selected by 94,5% of survey respondents), Proper work organization (Selected by 91,2% of survey respondents), Present the problem persuasively (Selected by 92,1% of survey respondents), Respect and help each other (Selected by 90,8% of survey respondents), Responsible for assigned work (Selected by 86,1% of survey respondents). When recruiting, businesses all want candidates with good teamwork skills. To form this skill, learners need to practice listening skills, know how to organize work appropriately, present problems persuasively, have an attitude of respect and help each other and be responsible, with assigned work. That will help complete the work better, achieve higher efficiency and save time and effort, promote the strength of the team.

Results of the analysis of learners' ability to meet skills for businesses

Results of construction of the scale and questionnaire: the scale is developed as a one-way five-point scale from level 1 to level 5 (level 1 is poor and level 5 is good). To ensure that the research contents are fully and objectively collected, the author has designed a questionnaire. The designed questionnaire has been sent to experts and managers who can specialize in universities and businesses for opinions.

The author selected stratification. Subjects were divided into two groups: leaders at universities and businesses. Participating in the survey were principals, vice-chancellors, deans and heads of departments involved in training activities at universities. Next is the group of leaders, managers at the enterprise are directors, deputy directors or heads of human resources or equivalent. The larger the sample selected, the more representative it is, if other conditions are constant. The minimum sample size to use is: N = 5 * number of measurement

variables. The article presents 31 measurement variables. Therefore, at least 155 questionnaires must be distributed. In this study, the sample size was determined to be 250 people surveyed, which is consistent with the number of variables identified in the study. The results of this reference will be display and parsing at the next section.

Table 1. Sample Descriptive Statistics

Research sample		Quantity (person)	Percentage (%)
Gender	Male	148	59,2
	Female	102	40,8
Age	Under 30 years old	24	9,6
	31 - 45 years old	58	23,2
	45-55 years old	146	58,4
	Over 55 years old	22	8,8
Position	Principal/Vice Principal	12	4,8
	Head of the university department	31	12,4
	Head/Deputy Faculty	16	6,4
	Head/Deputy Head of Department	14	5,6
	Director/Deputy Director	51	20,4
	Head of department at enterprise	126	50,4

Source: own study

The author uses survey method at 98 universities and 152 enterprises to learn about the relationship between universities and enterprises; necessary skills that learners need to accumulate when studying at university to meet the requirements of digital businesses. The study conducted a separate survey of two groups of subjects, namely enterprises and universities, according to the following contents: information on survey subjects, linkage activities between universities and enterprises; necessary skills that learners need to accumulate when studying at university to meet the requirements of digital businesses.

On the basis of reference to the researches of previous authors, the article has generalized that there are 4 groups of skills that have a positive influence on the recruitment needs of enterprises today. These skill groups include:

- H1: Occupational skills have a positive influence on recruitment needs of enterprises (Bloom, 1982; Forsyth, J. and Cowap, L., 2017).
- H2: Communication skills have a positive influence on recruitment needs of enterprises (Hang, N.T., Huan, N.V. (2020); Hang, N.T., et al. (2021a); Hang, N.T. (2021c).
- H3: Teamwork skills have a positive influence on recruitment needs of enterprises (Tuan.TM, Hung.NQ & Hang.NT, 2021).
- H4: Planning skills have a positive influence on recruitment needs of enterprises (Hang, N.T., 2021c; Leesa Wheelahan, 2012; Edward. F. & Crawle, 2009).

In the new development context, when the trend of globalization and the context of digital transformation have strongly affected most fields and professions, learners need to develop comprehensive skills to quickly adapt and respond to the volatile working environment in digital enterprises. It also means that learners must accumulate work skills to meet the requirements of today's employers. Therefore, on the basis of absorbing the opinions of experts, managers at universities and employers at enterprises and referring to the theories presented in the overview, the author has drawn the following conclusions: The factors affecting the trained skills of students to meet the recruitment needs of enterprises include 31 observations presented in table 2.

Table 2. Description of observed variables

Class	Specific variable names suggested by the author	Group of observed variables
1	Problem-solving skills	H1: Occupational skills have a positive effect on recruitment needs of enterprises (Refer to research by Bloom, 1982; Forsyth, J. and Cowap, L., 2017).
2	Information management and control skills	
3	Task management and team leadership skills	
4	Critical thinking	
5	Creative skills	
6	Ability to work with others	
7	Language skills	

8	Good advice and persuasion	H2: Communication skills (Refer to research by authors: Hang, N.T., Huan, N.V. (2020); Hang, N.T., et al. (2021a); Hang, N.T. (2021c)
9	Good foreign language communication	
10	Communicate with a friendly attitude	
11	Always listen and get along	
12	Discuss strategies for feedback, assessment, and self-assessment	
13	Ability to receive information from others	
14	Effective communication in many forms: written, electronic communication, graphics, presentations, dialogue	
15	Determine operational goals and select personnel with appropriate qualities	H3: Teamwork skills (Refer to research by authors: Tuan.TM, Hung.NQ & Hang. NT, 2021)
16	Identify the stages of team formation and the life cycle of the group	
17	Explain team tasks and procedures	
18	Define the roles and responsibilities of team members	
19	Conduct project management plan, work plan	
20	Organizational management planning	
21	Conduct project management plan, work plan	H4: Planning skills (Refer to research by the authors: Hang, N.T., 2021c; Leesa Wheelahan, 2012; Edward. F. & Crawle, 2009)
22	Organizational management planning	
23	Business project management planning	
24	Synthesize information through survey activities, market research	
25	Assess the factors that affect business performance	
26	Researching issues related to monetary policy to regulate investment activities of enterprises	
27	Enterprises decide to hire if the employees meet the expectations of the business	Ability to meet recruitment needs (Nguyen Thi Hang et al., 2021)
28	Enterprises feel satisfied with the recruitment if the employees meet the expectations of the enterprise	
29	In the future, the enterprise will decide to hire if the employee meets the expectations of the enterprise	
30	In the future, the enterprise will be satisfied if the employees meet the expectations of the enterprise	
31	Enterprises will recommend other businesses to recruit if employees meet their expectations	

Source: author recommends specific variables based on reference to variable groups

The regression equation of the research model has the form:

$$NCTDDN = \beta 0 + \beta 1.SNN + \beta 2.SGT + \beta 3.SG + \beta 4.SKH.$$

In which:
- professional skills to meet employability,
- communication skills for employability responsiveness,
- Team work skills to meet employability,
- team work skills for employability responsiveness.

Table 3. Scale coding and Cronbach Alpha test results

Group of observed variables	Observable variable encoding	Number of observed variables	Cronbach Alpha
Occupational skills	SNN	7	0,876
Communication skills	SGT	7	0,812
Teamwork skills	SG	6	0,789
Planning skills	SKH	6	0,781
Ability to meet recruitment needs	NCTDDN	5	0,822

Source: own study

The results of the study to evaluate the reliability of the scale analyzed on SPSS software version 20 show that the Cronbach Alpha test results are satisfactory because the Cronbach's Alpha coefficient is greater than 0.6. That shows that the analyzes are satisfactory and meet the conditions for exploratory factor analysis (EFA). After analyzing Cronbach Alpha, there are 4 garbage variables removed from the model, keeping only 31 variables included for EFA factor analysis. The factor analysis aims to reduce the original observed variables into meaningful new factors, and at the same time discover the hidden structure between research concepts according to actual data to form new factors that can more meaningful.

Table 4. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,786
Bartlett's Test of Sphericity	Approx. Chi-Square	2133,398
	df	391
	Sig.	,000

Source: own study

EFA exploratory factor analysis EFA analysis of the independent variable. The KMO coefficient is 0.786 (0.5 < KMO < 1). Bartlett's test results with Sig significance level is 0.000 less than 0.05, the observed variables in the population are correlated with each other and prove that the data used for factor analysis is completely consistent.

The extracted variance has a result of 71,786% (>50%), showing that the extracted factors explain 71,786% of the variation of the data; 4 extracted factors have Eigenvalues = 1,390(>1). Observed variables with factor loading meet the requirements of 0.5 or more. The EFA analysis was completed because statistical confidence was reached. Sig value of the ANOVA analysis on the fit of the regression model, Sig. < 0.01, it can be concluded that the model is consistent with the actual data. In other words, the independent variables are linearly correlated with the dependent variable with a confidence level of 78%. The analysis results of the regression coefficients in the model show that the significance level of the components Sig.=0,000 (less than 0.05). Therefore, the remaining independent variables all have an impact on the response to employability. All components are significant in the model and have a positive impact on the response to employability because the regression coefficients have positive signs.

Conclusions and recommendations for the theoretical model of factors on learners' trained skills that affect the satisfaction of employability include 4 independent factors: Occupational skills; Communication skills; Teamwork skill; Planning skills. The dependent variable is the ability to meet recruitment needs.

5. Discussion of results and conclusion

The association and cooperation between universities and businesses has been widely applied in Vietnam and in the system of universities around the

world. This cooperation model has brought many benefits to both universities and businesses and especially students in accessing businesses to find jobs. By quantitative analysis technique, the research has introduced and analyzed the factors according to different approaches, which are continuously built and developed, including 31 independent variables. The independent variables belong to 4 independent scales, 1 dependent scale. The results of EFA analysis and multiple linear regression analysis showed that the research model has 4 influencing factors. H1: Occupational skills have a positive influence on recruitment needs of enterprises. H2: Communication skills have a positive influence on recruitment needs of enterprises. H3: Teamwork skills have a positive influence on recruitment needs of enterprises. H4: Planning skills have a positive influence on recruitment needs of enterprises.

On the basis of the research results, the author proposes some managerial implications to promote the development of sharing and connection between universities and businesses so that learners can adapt to the future working environment.

One is, for universities. In addition to innovating teaching contents and curricula, it is necessary to improve teaching equipment, organize training courses, study, exchange, and exchange experiences with enterprises. Develop lectures to provide information, knowledge, update documents and training courses for students in the direction of business.

Secondly, on the business side, create conditions for universities to bring students to practice and practice at enterprises. Participate in organizing contests, events, forums related to startups. Because when participating, students not only discover themselves, recognize their strengths and weaknesses, but also learn from many projects and start-up models and can connect with experts, thereby evoking their desire to participate. want to do business to get closer to the business.

Third, in terms of financial resources and technology. Universities need to contact businesses to research and establish start-up investment funds, capital support, and experimental equipment. Fourth, about policy. Universities need to contact the competent authorities to have policies to encourage and support students to start a business in the form of credits with preferential interest rates; policies on tax exemption and reduction, corporate income tax reduction for students who leave their jobs in the first years after graduation.

Fifth, about expanding opportunities with external organizations. Universities need to create conditions for students to exchange and learn to be more confident about themselves, to work and study in a pressurized environment so that

students can adapt and get used to the outside environment. In order to connect and share information between universities and businesses in Vietnam is growing, universities need to improve teaching. Specifically, setting up websites to answer questions for students, set up lectures on risks and inadequacies that may be encountered in the process of starting a business.

Thereby, students understand and get ready, help students become more confident, approach closer to labor recruitment enterprises. Encourage businesses to invest in research and technology development cooperation with the university. It is necessary to create a specific mechanism to popularize highly specialized training disciplines to enhance the role of enterprises in student training when cooperating with universities. This is an important connection channel to share resources in human resource training.

Second, we would like to mention that with internet of things, banks now can know which is market risk level happening to their business on stock market easily. And it helps one bank to compare risk level to another banks and to average index of bank risk.

To meet the needs of developing digital businesses, employees need to strengthen connection activities between businesses and workers through direct and indirect job platforms to find workers. Therefore, workers need to accumulate basic knowledge about the profession; basic knowledge of information technology; In-depth knowledge on exploiting and applying information technology to build information systems to support managers in forecasting, planning, administering, managing and making optimal decisions, building plans strategic planning for organizational development. In particular, they need to be equipped with professional skills, communication skills, teamwork skills, planning skills. That is the foundation for them to consult and advise in the field of governance and management in enterprises; implementing investment projects to develop and apply information technology to management and administration; Effectively operate and exploit modern technology systems in business administration and economic management.

Abstract

In the context of the strong outbreak of the Covid-19 pandemic leading to increasing social distancing, it is difficult for businesses to access the labor market. Therefore, it is necessary to create a connection channel between the employer and the labor supplier. That helps to adapt to the context of the Covid-19 pandemic, while also taking advantage of the achievements from the Industrial

Revolution 4.0. The development of a training model that connects human resource trainers with human resource users who are businesses is considered an important requirement in the context of the Covid-19 pandemic. The university-enterprise model demonstrates active cooperation and has a profound impact on teaching and scientific research activities in universities. Since then, constantly improving the quality of training to create labor products that meet the rigorous needs of enterprises. This study uses exploratory factor analysis methods to screen observations to analyze, evaluate and draw conclusions about the formation of a university-enterprise linkage model. Thereby helping to create a bridge in cooperation between universities and businesses. On that basis, propose solutions to promote cooperation between universities and businesses in the current Vietnamese conditions, contributing to creating high-quality labor for society, meeting the needs of digital businesses.

Keywords

Digital economy, digital education, Digital Transactions, high-quality human resources, digital enterprise.

JEL Code: M12, M1, M3, M53.

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