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A Model For Developing Potential Of Executive In Food Production In The Eastern Economic Corridor (EEC) In The Digital Age

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Abstract

This study aimed to analyze the confirmatory factors of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age. The Samples used in this study consisted of 400 executives in the category 10 factory which is food product production factory in the Eastern Economic Corridor. The research instrument was a 5-level rating scale questionnaire based on the Likert method and relative model fit index by confirmatory factor analysis.

The results of the research revealed that the executives in the category 10 factory which is food product production factory in the Eastern Economic Corridor had opinions about a model for developing potential of executive in food production in the Eastern Economic Corridor in the digital age as a whole and all aspects at a high level. Results of the confirmatory factor analysis showed that the structural equation model for the development of food product production executives in the Eastern Economic Corridor in the digital age was consistent with the empirical data ($\chi^2 = 87.180$, df = 461, p = 0.474, χ^2/df = 1.002, GFI = 0.971, RMSEA = 0.002)

Keywords: Digital Era, Eastern Economic Corridor, Executives, Food Processing Industry, Potential

Introduction

At this present, technology is evolving and changing rapidly. This can be seen from the emergence of artificial intelligence, 3D printing technology, cloud technology, and unmanned aerial vehicle technology as well as Internet of Things, etc. These things changed the living environment, the way of life of people in society, including consumer behavior dramatically. Thailand focuses to the food industry, which has a policy to expand the role of agro-food processing business in order to become the "Kitchen of the World" by driving various strategies under the 20-year national strategic plan (2018-2037) (Office of the National Economics and Social Development Council, 2017). The plan sets the target of the country to become a high-income country by 2027, with the strategy of enhancing competitiveness as the driving mechanism by creating and developing special economic zones to be a tool for economic development and spreading prosperity to the region in order to raise the level of income and quality of life of the people by developing the Eastern Economic Corridor to have infrastructure readiness that will make Thailand being the hub of industry and innovation.

Nowadays, the government focuses on investing in the Eastern Economic Corridor (EEC) with the Thailand 4.0 economic model (Office of Industrial Economics, 2016) using the implementation of technology and innovation as a mechanism to drive the economy and the development of new target industries (S - Curve) to drive economic growth which is the Thailand economic model 4.0 (Thailand 4.0) as a New Engines of Growth by transforming Thailand's Comparative Advantage in two aspects, namely Biodiversity and Cultural Diversity into a Competitive Advantage by fulfill it with technology, creativity, innovation, science, technology and research and development and then extend to comparative advantages in 5 targeted technology groups and industries, namely, Food, Agriculture &

Bio-Tech, 2) Health, Wellness and Bio-Med, 3) Smart Devices, Robotics & Mechatronics, 4) Digital, Internet of Things, Artificial Intelligence & Embedded Technology and 5) Creative, Culture & High Value Services

The food processing industry is very important to Thailand as it is a labor-intensive industry. It is worth investing in both labor and innovation research and development. Therefore, management is extremely important for executives in the food processing industry as the executives are another key factor that will make the organization successful. At the present, changes caused by the advancement of digital technology which is a pressure for the digital revolution. As a result, executives in this century must adapt themselves to have appropriate competencies necessary for positions in organizational management (McClelland (1973)) to drive the organization to achieve its goals. The potential of executives in the organization is an important issue that has been studied. This is because the executives play an important role in driving the organization's operations to be successful. However, due to rapid changes in the environment causing the organization to face many problems and obstacles Therefore, the new generation of executives should have the ability to solve problems of the organization under the changes that occur. It means they must have the potential to integrate differences and persuade the personnel in the organization to cooperate to work for the organization.

Based on the background and problems mentioned above, the researcher is therefore interested in conducting a research study on A model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age in order to develop the potential of executives in the food processing industry to become leaders. That can effectively manage the organization with commercial skills and digital behavior and is to raise the country's competitiveness potential of the country.

Research's Objectives

1. To study a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age.

2. To analyze the confirmatory factors of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age.

Hypothesis. There are 3 main components of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age, namely, Knowledge, Skills, and Attributes where all main components are under the key component.

Materials and Methods

1. Population and sample

1.1 The informants in the qualitative research giving information through in-depth interview were 7 executives in the category 10 factory which is food product production factory, environmental specialists, the toxic environment protection system supervision specialist from government agencies, human resource development specialist and relevant academics from government agencies, private sectors, and education sectors in the Eastern Economic Corridor (EEC) which consisting of Chachoengsao Province, Chonburi Province, and Rayong Province, obtained from Purposive Sampling.

1.2 The informants who gave quantitative data, namely, 400 executives in the category 10 factory which is food product production factory in the Eastern Economic Corridor (EEC) which consisting of Chachoengsao Province, Chonburi Province. and Rayong Province, namely, executives in a factory with code 10801 engaging in business related to Production of ready meals for pets, executives in a factory with code 10795 engaging in business related to ice production for consumption, executives in a factory with code 10774 engaging in business related to Monosodium Glutamate Production, executives in a factory with code 10743 engaging in business related to production of finished and semi-finished starchy food products, executives in a factory with code 10611 engaging in business related to rice milling, executives in a factory with code 10499 engaging in business related to manufacture of other products derived from vegetable oils not classified elsewhere, executives in a factory with code 10491 engaging in business related to production of animal oils and fats, executives in a factory with code 10304 engaging in

business related to preservation of fruits and vegetables by drying, soak in salted water or vinegar, executives in a factory with code 10302 engaging in business related to production of canned fruits and vegetables, executives in a factory with code 10294 engaging in business related to production of fishmeal for use as animal feed, executives in a factory with code 10294 engaging in business related to production of aquatic products dried, smoked, salted, in brine or vinegar, executives in a factory with code 10222 engaging in business related to production of canned aquatic animals (except fish), executives in a factory with code 10222 engaging in business related to production of other products from meat and poultry, executives in a factory with code 10131 engaging in business related to production of dried, salted or smoked meat and poultry, executives in a factory with code 10111 engaging in business related to Slaughter of animals (except poultry), executives in a factory with code 10133 engaging in business related to production of canned meat and poultry and executives in a factory with code 10761 engaging in business related to coffee production, totaling 443 factories registered with Department of Industrial Works Ministry of Industry (Department of Industrial Works, 2022).

1.3 Specialists participated in a Focus Group Discussion to consider the suitability and feasibility of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age, consisting of 20 executives in the category 10 factory which is food product production factory, environmental specialists, the toxic environment protection system supervision specialist from government agencies, human resource development specialist and relevant academics from government agencies, private sectors, and education sectors obtained from purposive sample method.

2. Research Variables

2.1 Structural variables consisting of 3 components: Knowledge, Skills, and Attributes.

2.2 Indicative variable consisted of 1) Knowledge component consisting of 5 indicators 2) Skills component consisting of 5 indicators and 3) Attribute component consisting of 5 indicators.

3. Research areas

Research area: This research was conducted to study and collect data from a group of the category 10 factory which is food product production factory in the Eastern Economic Corridor (EEC), consisting of Chachoengsao Province, Chonburi Province, and Rayong Province.

4. Assessment of Research Tools

The research instrument was a questionnaire on A model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age which was developed as a Likert's 5-scale, namely (Likert, 1932), Highest, Hight, Moderate, Low and Lowest. The criterion for interpretation was as follows, the mean of 4.51 - 5.00 refers to Highest, 3.51 - 4.50 refers to High, 2.51 - 3.50 refers to Moderate, 1.51 - 2.50 refers to Low, and 1.00 - 1.50 refers to Lowest (Spooren et al., 2007; Srisa-ard, 2010; Silpcharu, 2017), divided into 3 areas, which are Knowledge, Skills and Attributes with the Index of Item Objective Congruence (IOC) of 0.80 - 1.00, Power of Discrimination from 0.29 to 80, and Reliability of the entire questionnaire of 0.97.

6. Data Collection

Distribute a questionnaire by hand delivery and online via google form to 443 executives in the category 10 factory which is food product production factory in the Eastern Economic Corridor (EEC), consisting of Chachoengsao Province Chonburi Province and Rayong Province. There were 383 executives who participated in completing the question which is accounted for 95.75%. Verify completeness of the questionnaire responses. Then record the answer of the questionnaire into the computer program for data analysis and summarize the research results.

7. Data analysis

7.1 Qualitative data was analyzed by Contents Analysis of data collected from in-depth interviews to and systematizing the data.

7.2 Analyze opinions on a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age by using basic statistics, namely mean and standard deviation.

7.3 Analyze structural equation model in confirmatory component analysis in the form of second-order confirmatory factor analysis.

8. Research procedures are as follows.

8.1 Study of documents and research related to the performance of McClelland (1973), a study of

the 20-year national strategic plan (2018 - 2037), the 13th National Economic and Social Development Plan (B.E. 2023 - 2027) (Royal Thai Government Gazette, 2022 ; Office of the National Economic and Social Development Council, 2022) Thailand Industrial Development 4.0 Strategy for 20 years (2017 - 2036) (Office of Industrial Economics, 2016), future personnel competency for 12 targeted industrial groups (2016) 2020 - 2024) of the National Higher Education, Science, Research and Innovation Policy Council Ministry of Higher Education, Science, Research and Innovation (Office of the National Higher Education, Science, Research and Innovation Policy Council, 2019) and interview executives in the category 10 factory which is food product production factory, environmental specialists, the toxic environment protection system supervision specialist from government agencies, human resource development specialist and relevant academics from government agencies, private sectors, and education sectors.

8.2 Create a semi-structured, in-depth interview. (Semi-Structures Interview) is characterized by open-ended questions about a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age in order to apply their opinions to create the questions in the questionnaire.

8.3 Conducted in-depth interviews with executives in the category 10 factory which is food product production factory, environmental specialists, the toxic environment protection system supervision specialist from government agencies, human resource development specialist and relevant academics from government agencies, private sectors, and education sectors in order to know about guideline to develop the executives in food production in the Eastern Economic Corridor (EEC) in the digital age. The results of this in-depth interview will be used as a guideline for creating a questionnaire in the next step.

8.4 Create Likert's 5- rating scale questionnaire on a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age (Likert, 1932), which rating as very high, high, moderate, low, very low. The criterion for interpretation is the mean between 4.51 - 5.00 means "very high", 3.51 - 4.50 means "High", 2.51 - 3.50 means "Moderate", 1.51 - 2.50 means "Low" and 1.00 - 1.50 means "very Low" (Spooren et al., 2007; Srisa-ard, 2010; Silpcharu, 2017), divided into 3 aspects: Knowledge, Skills and Attributes. The result of checking the appropriateness of the text and its validity by considering the content validity of the questionnaire by experts found that there was a consistency between the question and the objective (Index of item objective congruence : IOC) between 0.80 - 1.00, which is greater than 0.50 (Pinyoanantapong, 2002) and the results of the Try-out of a questionnaire with 30 non-sample executives, showed that the discriminant power ranged from 0.29 to 0.80 which is between 0.20 – 0.80 (Pattiyathani, 2006). The confidence value of the whole questionnaire is 0.97 (Cronbach, 1990).

8.5 Collect data by using a quality questionnaire with 400 executives in the category 10 factory which is food product production factory in the Eastern Economic Corridor (EEC), consisting of Chachoengsao Province Chonburi Province and Rayong Province.

8.6 Analyze the data obtained from the data collection and summarize the research results.

8.7 Conduct a Focus Group Discussion with experts who are executives in the category 10 factory which is food product production factory, environmental specialists, the toxic environment protection system supervision specialist from government agencies, human resource development specialist and relevant academics from government agencies, private sectors, and education sectors in order to obtain policy recommendations on a model for developing executive potential in food production in the Eastern Economic Corridor (EEC) in the digital age for use as a guideline for developing executive potential in food production and other industries next.

Results

1. Analysis of the opinion on a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age, as a whole and individual aspects.

The opinion of executives in the category 10 factory which is food product production factory, on a model for developing potential of executive in food

production in the Eastern Economic Corridor (EEC) in the digital age at a high level (mean score of 4.33) as a whole. When each individual aspects were considered, it was found that the opinion on Attribute (mean score of 4.35) was highest and followed by Knowledge (mean score of 4.32) and Skills (mean score of 4.31), respectively. Detail is shown in Table 1.

Table 1. Mean, standard deviation and the level of opinions on a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age as a whole and in each individual aspect.

Evaluation list	$\bar{X}$	**S.D.**	**Level of Opinion**
Knowledge	4.32	0.72	High
Skills	4.31	0.71	High
Attributes	4.35	0.70	High
As a whole	**4.33**	**0.71**	High

2. Structural equation model analysis in the form of second-order confirmatory factor analysis of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age revealed that

The model was consistent with the empirical data with all statistical values within the appropriate criteria which had a Chi-Square Probability Level (p) equalrf to 0.474 which was greater than 0.05 (Arbuckle, 2011); Diamantopoulos and Siguaw, 2000 : 83). Relative chi-square values (CMIN\DF) equaled to 1.002, less than 3 (Bollen, 1989: 278; Diamantopoulos and Siguaw, 2000: 98). The Goodness of Fit Index (GFI) was 0.971, greater than 0.90 (Diamantopoulos and Siguaw, 2000: 87) and the root mean square index of error estimation (RMSEA) was 0.014, less than 0.08 (Diamantopoulos and Siguaw, 2000 : 85). All of them ranged from 0.50 to 0.95 and were all statistically significantly different from zero at the 0.001 level.

When considering the weight of the standard component (B) by component, it was found that

1. Knowledge: The variable with the most significant weight was the knowledge about setting strategies for customer satisfaction management both in the short term and long term (Ko2) with standard component weight of 0.93 and a common variation with knowledge component of 0.87%, followed by knowledge about product development to meet international standards and Halal standards (Ko4) with weight of standard component of 0.93 and a common variation with knowledge component of 0.86 percent, knowledge about food processing factory development towards a smart factory with digital technology (Ko7) with standard component weight of 0.89 and a common variation with knowledge component of 0.79%, knowledge about risk management that occurs that affects the organization and has a long-term effect (Ko12) with standard component weight of 0.88 a common variation with knowledge component of 0.77%, knowledge about work process improvement and innovation development to enhance food processing product quality (Ko15) with standard component weight of 0.79 and a common variation with knowledge component of 0.6%, respectively..

2. Skills: The variable with the most significant weight was decision making skills which is being able to make decisions under various limitations (Sk3) with standard component weight of 0.88 and a common variation with skill component of 0.78%, followed by language and communication skills (Sk5) with standard component weight of 0.74 and have a common variation with skill component of 0.55%, teamwork development skills (Sk6) with standard component weight of 0.89 and a common variation with skill component of 0.80%, skills in analyzing data to interpret and draw conclusions that are useful for decision making (Sk9) with standard component weight of 0.96 and a common variation with skill component of 0.92%, and skills in using digital tools or work applications (Sk11) with standard component weight of 0.84 and a common variation with skill component of 0.70%, respectively.

3. Attribute: The variable with the most significant weight was Integrity and Ethics (At1) with standard component weight of 0.98 and a common variation with attribute component of 0.96%, followed by leadership (At5) with standard component weight of 0.88 and a common variation with attribute component of 0.78%, coordination with agencies in all sectors and communicating with people of all ages (At8) with standard component weight of 0.87 and a common variation with attribute component of 0.76%, continuous learning and pursuit of knowledge with standard component weight of 0.77 and a common variation with attribute

component of 0.60%, and flexibility and adaptability (At13) with standard component weight of 0.67 and a common variation with attribute component of 0.45%

From the hypothesis, it was found that all 3 components were under the same key component. The weight of the components was between 0.99 to 1.00, ranked in descending order of the weight of the components: knowledge, followed by skills and attributes had a weight of 1.00 1.00 and 0.99, respectively.

Details are shown in Table 2 and Figure 1.

Table 2. Statistical values derived from second order confirmatory component analysis a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age after model improvement.

Variable		**Estimate**		**R^2**	**Variances**	**C.R.**	**P**
		standardized	**Unstandardized**				
Dependent Variables							
a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age							
Independent Variables							
	Knowledge	1.00	1.00	1.00	0.00		
	Skill	1.00	0.96	1.00	0.00	29.165	***
	Attribute	0.99	1.07	0.99	0.01	41.854	***
Knowledge							
Ko2	knowledge about setting strategies for customer satisfaction management both in the short term and long term	0.93	1.00	0.87	0.08		
Ko4	knowledge about product development to meet international standards	0.93	1.00	0.86	0.08	34.475	***
Ko7	knowledge about food processing factory development towards a smart factory with digital technology	0.89	1.00	0.79	0.14	30.192	***
Ko12	knowledge about risk management that occurs that affects the organization and has a long-term effect	0.88	0.98	0.77	0.15	28.92	***
Ko15	knowledge about work process improvement and innovation development to enhance food processing product quality	0.79	0.92	0.63	0.26	22.558	***
Skill							
Sk3	decision making skills which is being able to	0.88	1.00	0.78	0.14		

Variable		Estimate		R^2	Variances	C.R.	P
		standardized	Unstandardized				
	make decisions under various limitations						
Sk5	language and communication skills	0.74	0.82	0.55	0.26	18.566	***
Sk6	teamwork development skills	0.89	1.02	0.80	0.13	26.498	***
Sk9	skills in analyzing data to interpret and draw conclusions that are useful for decision making	0.96	1.10	0.92	0.05	32.191	***
Sk11	skills in using digital tools or work applications	0.84	0.99	0.70	0.20	23.069	***
Attribute							
At1	integrity and ethics	0.98	1.00	0.96	0.03		
At5	leadership	0.88	0.90	0.78	0.14	33.953	***
At8	coordination with agencies in all sectors and communicating with people of all ages	0.87	0.88	0.76	0.15	31.975	***
At10	continuous learning and pursuit of knowledge	0.77	0.81	0.60	0.26	22.940	***
At13	flexibility and adaptability	0.67	0.72	0.45	0.39	17.097	***

Note : *** There was statistical significance at the 0.001 level.

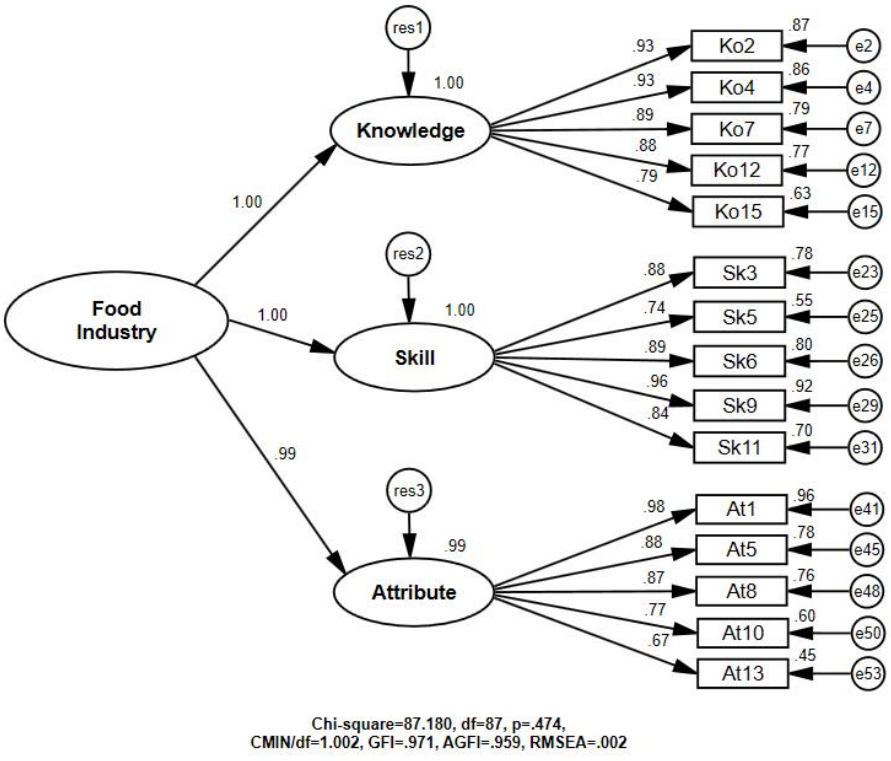

Figure 1. Structural equation of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age in Standardized Estimate Mode

Summary and Discussion

1. Result of a study on a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age revealed that executives in the category 10 factory which is food product production factory had an opinion, as a whole, in a high level and in each individual aspect, namely, Knowledge, Skills and Attribute was in a high level as well. When each aspect was considered, it was found that in term of Knowledge, the highest mean was knowledge of developing a food processing factory to become a smart factory with digital technology. In term of Skills, the highest mean was teamwork skills. In term of Attribute, the highest mean was coordination with agencies in all sectors and communicating with people of all ages. The results of this research may be due to changes caused by the advancement of digital technology, which is a pressure to cause the digital revolution causing organizations and personnel to adapt in terms of competency, consisting of: knowledge, skills, and attributes in order to be in line with the changes arising from the development of human resources, all 3 aspects must be developed: Knowledge, Skill, and Attribute. (McClelland, 1973) mentioned that the individual acts as a way of thinking and behavior in the workplace that will affect the performance of the individual and continual self-development that will result in the achievement of standards. or higher than the standards set by the organization. For Thailand, there is Industry 4.0 which has realized that personnel in organizations, both government and private sectors, the education sector. Especially in the industrial sector, have been adapted to be in line with the industrial age under the Thailand 4.0 economic model driving by digital technology and innovation. This model focuses on the development of the workforce to meet the needs of the industrial sector, therefore, has prepared guidelines for promoting and developing competency by Reskilling, Upskilling and Multiskilling in the current workforce (Scientific Research Institute and Technology of Thailand (TISTR.), 2021)

2. The results of the confirmatory factor analysis of a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age found that the structural equation model of the second order of the confirmatory component analysis model a model for developing potential of executive in food production in the Eastern Economic Corridor (EEC) in the digital age was consistent with empirical data as follows.

2.1 Knowledge consists of 5 sub-components, namely, (1) knowledge about setting strategies for customer satisfaction management both in the short term and long term (2) knowledge about product development to meet international standards (3) knowledge of developing a food processing factory to become a smart factory with digital technology (4) knowledge about risk management that occurs that affects the organization and has a long-term effect and (5) knowledge about work process improvement and innovation development to enhance food processing product quality which is consistent with Somnomchai and Sangayothin (2020) found that potential development of first-level executives in the frozen food industry to Thailand 4.0 in terms of knowledge, consisting of the development of technical advice Strategic development for use and knowledge development in technical innovation in frozen food industry.

2.2) Skills consists of 5 sub-components, namely, (1) decision making skills which is being able to make decisions under various limitations (2) language and communication skills (3) teamwork development skills (4) skills in analyzing data to interpret and draw conclusions that are useful for decision making and (5) skills in using digital tools or work applications. The result of this research may be due to the fact that today's world is in a digital age that changes rapidly and all the time, causing every organization to be ready to cope with the changes that occur, including the potential of product production executives. The food will need to be consistent and accommodate the changes and challenges that arise. Supharasamee (2020) presented the results of a study of competency for

high-level executives in the Thai public sector in the 21st century showed that senior executives must have coordination skills with all departments and communicate with people of all ages. As well as the research results of Somnomchai and Sangayothin (2020) found that the potential of early managers in the frozen food industry towards Thailand 4.0 in terms of skills consists of developing leadership traits to be team builders. The Office of the Civil Service Commission (2017) revealed that senior executives' digital skills should include skills in analyzing data to interpret and draw conclusions for decision-making which is consistent with the findings of Somnomchai and Sangayothin (2020), it was found that the potential of first-level executives in the frozen food industry to Thailand 4.0 in terms of skills consisted of skills in using information technology.

2.3 Attributes consists of 5 sub-components, namely, (1) integrity and ethics (2) Leadership (3) coordination with agencies in all sectors and communicating with people of all ages (4) continuous learning and pursuit of knowledge and (5) flexibility and adaptability. The results of this study may be due to the fact that good leaders who succeed in their work should have a sense of duty, have confidence in oneself, love the duty of being leadership, be honest to colleagues and to work in their duties, dare to deny oneself, willing to sacrifice or give up their opinions when they are found to be inaccurate, have willingness to devote their brainpower to solve problems in their duties, have a good personality, ready to deal with problems and difficult situations firmly, dare to listen to blame for their shortcomings from others as well as being honest and trustworthy of all people, have expertise in the work done, have good judgment, have common sense, can see problems and plan ahead, have perfect physical health and good mental condition (Bunyasophon and Chalermjirarat, 2013). Management in the industrial sector in the 21st century is changing rapidly, making it a great challenge for executives in food production and other executives. For example, the rapidly spreading situation of COVID-19 across the world. As a result, executives at all levels must be aware of changes and assess situations that occur without sticking to methods or solutions or traditional practices. Therefore, they must be flexible and adaptable to the surrounding situation in a timely manner (Supharasamee, 2020). This is in line with research results of Somnomchai and Sa-Sangayothin (2020) found that the potential of the first level executives in the frozen food industry towards Thailand 4.0 in terms of skills consisted of leadership personality, executive relationship management, and development of consciousness of honesty in terms of skills consisted of flexibility, adaptability, accepting changes and use of information technology. Leaders must have flexibility and adaptability. Flexibility is the ability to adapt tasks and team needs to different situations. (DuBrin, 2010) Thongprasit (2022) has researched ways to develop manpower potential in manufacturing and service industries in Rayong Industrial Zone in Thailand. The results of the confirmatory factor analysis for the development of manpower potential in the manufacturing and service industries in the industrial zone, Rayong Province, in terms of desirable characteristics, amounting to 4 indicators, namely, honesty and ethics, leadership, continuous learning and curiosity and work to achieve success.

Recommendations

1. General Recommendation

1.1 Office of the Permanent Secretary for Higher Education, Science, Research and Innovation, the Ministry of Higher Education, Science, Research and Innovation should use the results of this research to formulate policies and plans to promote manpower to have higher skills in management in the food processing industry and other industries.

1.2 Educational institutions should use this research as a guideline for improving the curriculum for teaching and learning of students in the field of food science and technology, Industrial Business Development and Human Resources Manufacturing and Service Industry Management or other related disciplines.

1.3 Office of the Permanent Secretary for Higher Education, Science, Research and Innovation, The Ministry of Higher Education, Science, Research, and Innovation should use the results of this research to formulate policies and plans to promote manpower to have higher skills in management in the food processing industry and other industries.

2. Suggestions for further research

The findings of this research should be applied to develop the potential of executives in other industries in order to promote and develop the country's industrial potential according to the Thai Industrial Development 4.0 strategic plan to effectively enhance the country's economic competitiveness.

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