An empirical study to explore modular courses for the development of intelligence retail to the elimination of differences between theory and application in Taiwan

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Abstract. This paper focused on modulation courses for intelligent retail services to alleviate the discrepancy between learned theory and application. Using the IPO (Bushnell, 1990) method and the ADDIE (Hodell, 2012) method serve as the theoretical basis for the analysis of questionnaires collected before and after the course with a Paired-sample t-test and Multiple Regression Analysis. How the reduction of theory-application discrepancy and guiding students to seek further professional knowledge are the aim of modulated courses. This research found that students must have the drive and thirst for knowledge to eliminate differences between theory and application.

INTRODUCTION

The development of e-commerce and retail industries has been closely and rapidly developing with intelligent retail services. It is also one of the main axes of global marketing operations. According to the Ministry of Economic Affairs (2021), the value of Taiwan's retail industry in 2021 is 3.68 trillion. The e-commerce industry turnover was 239.5 billion. Compared with 2016, the physical retail industry grew by 118.52%, and the e-commerce industry grew by 179.53%. The development of retail intelligence functions is also a trend.

Chen (2014) pointed out that talent is the main factor in developing the e-commerce industry. However, the rapid development of e-commerce systematization highlights the problem that higher education still educates students with traditional thinking. The e-commerce teachers on the education side still need to be strengthened, and the content of relevant e-commerce courses lacks practicality and specific talent training goals. Therefore, Chen suggests curriculum planning should integrate industry experts, practical teaching, corporate internship opportunities, digital learning, and others.

Wang *et al.* (2017) believe that the international e-commerce talent demand should deepen the planning of e-commerce talent digital programs in 5 significant steps namely: 1. Basic abilities, 2. Special abilities, 3. Extended abilities, 4. Development abilities, 5. Innovation abilities and other practical teaching modes. The CIPP evaluation model of Stufflebeam and Shinkfield (1985) is used to analyze the effectiveness of each ability training course. The aim is to provide e-commerce talents more in line with the needs of the workplace and have professional operation ability in international e-commerce.

In summary, in response to the rapid development of the global e-commerce industry, the demand for talents with marketing and management capabilities in e-commerce or new retail is increasing. Through literature research, this research determines whether the current talent cultivation plan can genuinely achieve the talents and professional capabilities required by enterprises to close the gap. Between the practical use of talents and the learning and use of talents, then establish a rolling practical talent-teaching course to promote the connection of learning to practice and use it as the basis for cultivating practical e-commerce talents.

This research summarizes the abilities possessed by intelligent retail talents. How to set up practical talent training courses from planning and execution to effectiveness evaluation and to achieve the desired research objectives is as follows:

1. Combine with the project management course. Strengthen its practical application and enhance the competitiveness of the curriculum employment orientation.
2. Due to the strengthening of e-commerce and new retail models in various industries, the demand for intelligent retail service talents is increasing day by day. The training courses should strengthen the application ability of platforms and increase the number of talent training directions for e-commerce and the Internet of Things.
3. Focus on cultivating students' professional capabilities in e-commerce innovation and intelligent retail services. Strengthen employment aspirations, cooperate with enterprises to improve students' practical ability, integrate knowledge and employment skills, and promote educational cooperation to enable students to introduce practical operation before employment. It is beneficial for students to explore the workplace, improve employment functions, and steadily grow the employment success rate.

This paper is mainly aimed at the trainees who take this training course. The questionnaires taken before the study course were compared with those after the enterprise internship. There were 45 people in each training course, and ten intelligence digitization courses were offered, so the total number of questionnaires before the course was 450, and the number of questionnaires after the internship was 450. Questionnaire distribution is based on the internet, so the system will remind the questions of unfilled content during the filling process. Therefore, it is not necessary to delete invalid questionnaires after recovery.

LITERATURE REVIEW

E-commerce talents

Lin Huijun, general manager of Amazon Global Selling Taiwan, pointed out that traditional physical transactions are due to the global trend of producing small and fragmented orders. Therefore, Taiwanese enterprises have begun to face the transformation of production processes and sales models for global trends. In addition, due to the phenomenon of international small-value transactions, a cross-border e-commerce transaction market has emerged. Investment in e-commerce has become one of the choices for enterprises. Enterprises must also strengthen intelligent retail and use the intelligence e-commerce model to quickly enter domestic and overseas markets. As a result, there is also an increasing demand for market talents.

Fedirko (2020) discusses the development trend of e-commerce and its relevance to the international labor market. The growth of e-commerce is creating new jobs and destroying unnecessary jobs. The results confirmed that when e-commerce merchandising and merchandising system services increased revenue by 1%, employment increased by 0.013%.

Tran (2021) studied the impact of the Covid-19 epidemic on business activities. A systematic PEEP (Perceived Effectiveness of E-Commerce Platforms) framework has been proposed for going through interrelationships affecting consumers and predicting economic benefits. This research uses the satisfaction theory as the model basis and takes widespread fear as the boundary condition. The primary research method is the PLS (partial least squares) analysis technique. A sample of 617 consumers was analyzed. That was found to have a positive moderating effect on the relationship between PEEP (perceived effectiveness of e-commerce platforms), economic benefits, and sustained consumption. The greater the fear level, the more consumers will use e-commerce platforms for transactions. Therefore, the demand for service talents in e-commerce increased after the Covid-19 epidemic.

Based on the above, it can be seen that traditional talents have been unable to meet the needs of today's physical retail development. In addition, the intelligent retail system requires more digital majors. At present, talents need to master physical professional functions. It is also necessary to master various things such as e-commerce platform operation, digital application, and intelligent retail services, digital marketing, big data analysis, community operation, Internet of Things, mobile e-commerce, APP development technology, block-chains, digital dialogue systems, retail intelligence majors in content services, cash flow logistics, cross-border regulations and taxation, innovation and creative marketing, copywriting and digital animation skills. In general, both brick-and-mortar and online retailing interact within a sales strategy. Therefore, the trend of intelligent e-commerce is accompanied by the demand for talents, which are the cornerstone of market expansion.

Tran's (2021) research proposed that the development of e-commerce is affected by Covid-19. The importance of e-commerce has risen, and the transaction volume has increased significantly. As a result, e-commerce has seen a considerable transaction volume in the wake of Covid-19. However, talents cannot increase who needs to be trained.

Alsaad et al. (2021) studied the global proliferation of B2B e-commerce. The study uses an institutional theoretical model that illustrates the dissemination of e-commerce, influenced by national institutional frameworks, international institutional pressures, and market complexity. It examines cross-sectional data from 146 countries and territories from 2013 to 2016 and studies the differences between developed and developing countries in disseminating e-commerce. The results indicate that
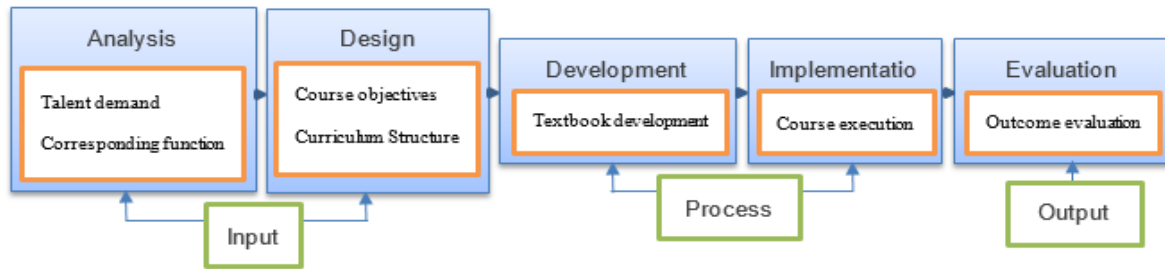
Figure 1. Talent cultivation curriculum planning model.

national institutional frameworks, international institutional pressures, and market complexity contribute positively to the proliferation of e-commerce. Therefore, as every country enjoys different levels of freedom in industry development, their talent needs are also different.

From the above, the events' occurrence and the degree of state support show that e-commerce is an integral part of economic growth. Consumers can purchase goods directly through the Internet. Sellers can also place orders directly through the Internet to obtain domestic or overseas goods. Therefore, the original traditional entity-based transaction model has been completely changed, and this operating model has promoted the transformation and upgrading of the retail industry. Therefore, when e-commerce develops rapidly, the following trends will appear: First, many new operating enterprises will be established. Secondly, the amount of the transaction will increase. Thirdly, the transaction costs and transaction thresholds will be lowered. Fourthly, there is a need for more professionals. This research examines whether the intelligence retail development module course can effectively train students to apply what they have learned and achieve pragmatic and practical purposes in the workplace.

Based on the above trends, Taiwan's industries are predicted to have a high demand for talents with diverse abilities in four categories: "Talent," "Network," "Technology," and "E-commerce." The professional ability of talents is the driving force for the development of other matters. Therefore, the most crucial key to the future growth of enterprises is to focus on talents. One of these capabilities is the need for talent with intelligence retail capabilities.

Talent cultivation curriculum planning model

Hodell (2012) used ADDIE mode. Designing divided curriculum into five stages: Analysis, Design, Development, Implementation, and Evaluation. First, analysis: What the trainee is going to learn. Second, design: How the trainee learns. The third is the development of the teaching materials framework. Fourth, implement teaching and its environmental setting. Fifth, assess the results of learning. After summarizing the

assessment opinions, it can be used as the basis for subsequent reinforcement and revision. Therefore, this research chooses to adopt the ADDIE curriculum-planning model through analysis, design, development, implementation, and evaluation of five directions. Develop intelligent retail digital talent training courses that meet the needs of the industry.

1. Basic Ability: Consumer behavior, e-commerce management, logistics management.
2. Special Ability: Internet of things, block-chain, e-commerce practice.
3. Extended Ability: Intelligent marketing and big data analysis, distribution development model, and future business opportunities.
4. Development Ability: Internet of Things store practice, logistics, and composite supply chain management.
5. Innovation Ability: Job practice, workplace learning, and ability assessment.

Effectiveness evaluation

Since there are many types of talent cultivation training, the feasibility, execution, and effectiveness of cultivation training have to test through a systematic evaluation model. A training evaluation model is a set of guidelines or methods to assist training evaluation. Bushnell (1990) proposed an educational training system model of "Input→Process→Output." It believes that the performance evaluation of education is a dynamic process.

This research integrates the ADDIE model and the IPO model for curriculum planning, execution, and output through the analysis, design, development, implementation, evaluation of five directions, and this process: input→Process→Output, and creates a practical talent training course for intelligence retail digital development that meets the needs of industrial talents (Figure 1).

METHODOLOGY

The literature review recognized that the method of
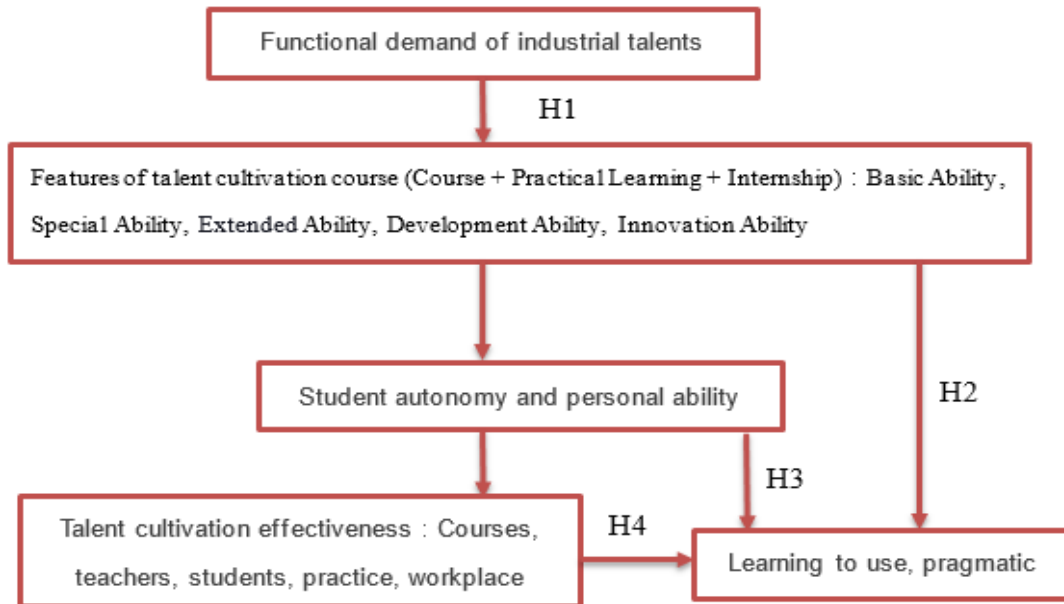
Figure 2. Research framework for practical talent cultivation in the digital development of intelligence retail

evaluating the learning effect, therefore, the curriculum planning increases the learning procedures such as industry expert teachers, practical teaching, corporate internship, and digital learning. Furthermore, this study used a paired-sample t-test and multiple regression analysis to estimate samples. The questionnaire period is from September 2018 to June 2021. There are ten courses in total and a corporate internship. The courses are consumer behavior, e-commerce management, circulation development mode and future business opportunities, intelligent marketing, big data analysis, internet of things store practice, logistics, composite supply chain management, e-commerce practice, internet of things, job practice (corporate internship), workplace learning and ability assessment (enterprise internship).

Research structure

Based on the above, this research establishes a research framework based on the development curriculum of intelligence retail and talent cultivation to solve the elimination of differences between learning and use (Figure 2).

Research hypothesis

By the above executive research framework, the research hypotheses of this research are established as follows:

1. H1 (Reaction): The functional requirements are connected with the established curriculum and have a positive and significant impact.

2. H2 (Learning): Theoretical and practical learning planning and professional employment degree have a positive and significant impact.
3. H3 (Behavior): Obtaining good recognition for autonomous learning and personal ability improvement from the academic program has a positive and significant impact on employment enhancement.
4. H4 (Results): Evaluation mode through talent cultivation. From the curriculum, teachers, learning, practice, workplace, and other items, examining the results of the overall training program has a positive and significant effect.

Paired-sample t-test

In this study, a paired-sample t-test was used to compare the differences in the questionnaires' mean quality before and after the test. It uses the data of two pairs of samples to check whether there is a significant difference in the maternal mean. Therefore, the samples before the course and after the internship are set as X_{1i} and X_{2i} , and the difference is $d_i = X_{1i} - X_{2i}$, independent and from normal distribution, then whether the parent expected value μ of d_i is μ_0 and the following statistic $\tau = \frac{\bar{d} - \mu_0}{s_d/\sqrt{n}}$.

Multiple regression analysis

In this study, multiple regression analysis using to

distinguish the variables of the study into the number of variables in the questionnaire before the course (you can apply what you have learned in this course) and the number of variables after the internship (you can apply it after participating in this course). The independent variables still establish independent variable correlation functions according to the questionnaire items. Furthermore, use the sample data to estimate the parameters in the model. Therefore, this study uses a multiple regression model to measure the degree of forecast change. It establishes the core of hypothesis testing. The results of the questionnaire items are placed in the independent variables to calculate whether the independent variables affect the dependent variables. The pattern is $Y=a+b_iX_i+\cdots b_nX_n,\ i=1\ldots n$, where Y is the dependent variable, X is the independent variable, a is a constant, and b is the regression coefficient.

This study will use quantitative research methods through primary data analysis. From the perspective of "function orientation", building the Basic Ability, Special Ability, Extended Ability, Development Ability, and Innovation Ability are intelligent retail development practical talents that are needed. Practical talent training courses that meet the needs of today's industry, cultivate professional skills, and conduct research using paired-sample t-test, multiple regression analysis, and other research methods. This study had questionnaires completed by students before they learned the module course. The questionnaire survey after the internship has achieved the goal of pragmatic practical. Therefore, this study researched the difference between learning and practical application. Furthermore, in the analysis, a confidence interval of 95% was used (indicated by **).

RESULTS

The course period of the modular course practice at the Taiwan's China University of Technology was from September 2018 to June 2021. During this period, the questionnaires were distributed once at the beginning and at the end of each course by the course opening time, aimed at students taking module courses. 450 questionnaires for the pre-test and 450 for the post-test were distributed for ten lessons. There are no invalid questionnaires, and the total valid questionnaire rate is 100%. After the data is collected, this research uses SPSS 23.0 for Windows as the analysis tool to carry out relevant descriptive and inferential statistical analysis.

Reliability refers to using the measurement tool repeatedly to measure the same data. In addition, whether the results of multiple measurements are consistent. If the correlation is high, the measurement tool is stable and has a certain degree of consistency. This measurement tool has a high degree of accuracy and precision. This study used the Cronbach α coefficient to analyze the questionnaire's reliability, and some latent variables'

content consistency and stability were tested. This study's Cronbach alpha coefficient of the questionnaire dimension was 0.89, and the reliability coefficient was more significant than 0.7, indicating good reliability.

Paired-sample t-test

In order to measure learning quality, students are asked to take a questionnaire before and after the course. Each questionnaire has five pairs of questions.

To reduce the burden of journal space. Tables 1 and 2 are examples of the paired-sample t-test in this study. Moreover, explain the difference between applying what will have learned and being pragmatic to use. The rest of the results are described in the next section. It is a collation and summary of the paired-sample t-test results of all research.

The test is conducted in the consumer behavior course (Basic Ability). A difference was found for pair 2, with a significant (0.01) effect. It means that the expectations of students before learning are more significant than the degree of professional ability improvement they can obtain after learning (Table 1).

This study tests the e-commerce management course in the program (Basic Ability). A difference was found for pair 1, with a significant (0.00) effect. Students' expectations for the course content before learning are more significant than their expectations for the content after learning. There is also a difference for pair two and a significant (0.01) effect. It means that the expectations of students before learning are more significant than the degree of professional ability improvement they can obtain after learning (Table 2).

Paired-sample t-test research results sorting and summary

It is a course for workplace learning and ability assessment for internships. The arrangement of this internship inspires the students' intuitive exploration ability. It produces a difference between the course and the enterprise internship (in line with hypothesis H3: The self-directed learning and personal ability improvement obtained from the course are well commended and are related to employment enhancement. It has a significant positive impact. Mainly in the average difference, the value is negative 0.1778. That is for all, after learning this course (workplace internship), it will indeed stimulate the students' learning momentum in the workplace.

It found that there is a difference between the expectations of the depth of the course content and the situation of the course (Basic Ability: E-commerce Management Course; Extensive Ability: Circulation Development Model and Future Business Opportunity Course; Development Ability: Internet of Things Store

Table 1. Paired-sample t-test of Basic Ability: Consumer Behavior Course.

Items		Number of pairwise differences					T	df	Significance (double tail)
		Mean	Standard deviation	Standard error mean	95% difference confidence interval				
					Lower limit	Upper limit			
Pair 1	1. May I ask your expectations for the depth of content that may be generated from studying this course in the future? - 6. Will the contents of the course you get after participating in this course match your expectations?	.0667	.8969	.0945	-.1212	.2545	.705	44	.483
Pair 2	2. May I ask your expectations for the professional improvement of this course in the future? - 7. Will you gain professional knowledge after participating in this course?	.2333	.6712	.0708	.0927	.3739	3.298	44	.001**
Pair 3	3. How might this course affect how you self-learn in the future? - 8. After you participate in this course, it will increase your automatic exploration of deeper knowledge of this course.	.0667	.7614	.0803	-.0928	.2261	.831	44	.408
Pair 4	4. Do you have any idea that this course will strengthen your workability in the future? - 9. Will your participation in this course help you strengthen the functions required for your job?	.0778	.8377	.0883	-.0977	.2532	.881	44	.381
Pair 5	5. Do you think the lecturers you have hired are good at expressing this course content? - 10. The lecturers hired for this course match your personal needs.	.0111	1.0222	.1077	-.2030	.2252	.103	44	.918

Practice Course; Special Ability: E-commerce Practice Course; Special Ability: Internet of Things Course). The mean difference is positive. It does not meet hypothesis H1: Functional requirements and the established curriculum positively and significantly affect the connection. The result shows room for review and improvement of future course content.

For pair 2, the researchers learned a difference between the course training and the improvement of student's professional abilities. The expected value of the employee before learning is greater than the degree of professional ability improvement obtained after learning. It does not match hypothesis H2. The H2 is that learning planning of theory, practice, and actual combat has a positive and significant impact on the professional degree of employment. Furthermore, the average difference value is

a positive number (Basic Ability: Consumer Behavior Course; Basic Ability: E-commerce Management Course; Development Ability: Logistics and Composite Supply Chain Management Course; Innovation Ability: Job Practice Course). The main practical courses are designed according to functional needs regarding professional competencies. Therefore, there is a difference between design and practice, and there is room for review and improvement in future courses (Table 3).

Multiple regression analysis

This study uses multiple regression to evaluate the difference between students' learning and practical application. For students with no experience, the various

Table 2. Paired-sample t-test of Basic Ability: E-commerce Management Course

Items		Number of pairwise differences					T	df	Significance (double tail)
		Mean	Standard deviation	Standard error mean	95% difference confidence interval				
					Lower limit	Upper limit			
Pair 1	1. May I ask your expectations for the depth of content that maybe generated from studying this course in the future? - 6. Will the contents of the course you get after participating in this course match your expectations?	.5568	.6584	.0702	.4173	.6963	7.933	44	.000**
Pair 2	2. May I ask your expectations for the professional improvement of this course in the future? - 7. Will you gain professional knowledge after participating in this course?	.2614	.7191	.0767	.1090	.4137	3.410	44	.001**
Pair 3	3. How might this course affect how you self-learn in the future? - 8. After you participate in this course, it will increase your automatic exploration of deeper knowledge of this course.	-.0455	.5008	.0534	-.1516	.0607	-.851	44	.397
Pair 4	4. Do you have any idea that this course will strengthen your workability in the future? - 9. Will your participation in this course help you strengthen the functions required for your job?	.0568	.4880	.0520	-.0466	.1602	1.092	44	.278
Pair 5	5. Do you think the lecturers you have hired are good at expressing this course content? - 10. The lecturers hired for this course match your personal needs.	.0114	.5570	.0594	-.1066	.1294	.191	44	.849

aspects of the course are oriented to applying what they have learned (Note: 12. May I ask if the major you have acquired after participating in this course can be applied to what you have learned?) (Dependent variable). However, when the trainees go to the company for an internship, they will conduct a pragmatic and practical impact assessment on all courses (Note: 11. May I ask you if the professional knowledge acquired after participating in this course is a practical force?) (Dependent variable). Therefore, for each subject, there will be two influences of applying what they have learned and applying them pragmatically, and the method is carried out with a reliability interval of 95% (Significance marked with **).

To reduce the burden of journal space, the multiple regression analysis of this study takes Tables 4 and 5 as examples to explain the difference between applying what

they have learned and being pragmatic to use.

First of all, this study uses the knowledge of the Basic Ability: Consumer Behavior Course to apply the multiple regression analysis. It is known that item 2 is the motivation that affects students to apply what they have learned. Before learning, students believe that they can apply what they have learned in the future. The significance is 0.001, and the α value is less than 0.05 (Table 4).

This research uses the "Basic Ability: Consumer Behavior Course" to conduct a pragmatic and practical multiple regression analysis. It learned that "6. Will the contents of the course you get after participating in this course match your expectations?" "8. After you participate in this course, it will increase your robotic exploration of deeper knowledge of this course." Curriculum more

Table 3. Collation of the research results of paired-sample t-test.

Courses \ Pair No.	Pair 1	Pair 2	Pair 3	Pair 4	Pair 5
Basic Ability: Consumer Behavior Course	-	■(.001**)	-	-	-
Basic Ability: E-commerce Management Course	■(.000**)	■(.001**)	-	-	-
Extended Ability: Circulation Development Model and Future Business Opportunities Course	-	-	-	-	-
Extended Ability: Intelligence Marketing and Big Data Analytics Course	-	-	-	-	-
Development Ability: Internet of Things Store Practice Course	■(.010**)	-	-	-	-
Development Ability: Logistics and Composite Supply Chain Management Course	■(.000**)	■(.000**)	-	-	-
Special Ability: E-commerce Practice Course	■(.000**)	-	-	-	-
Special Ability: Internet of Things Course	■(.003**)	-	-	-	-
Innovation Ability: Job Practice Course	-	■(.000**)	-	-	-
Innovation Ability: Workplace Learning and Ability Assessment Course	-	-	■(.045**)	-	-

Note:
Pair 1: 1. May I ask your expectations for the depth of content that maybe generated from studying this course in the future? - 6. Will the contents of the course you get after participating in this course match your expectations?
Pair 2: 2. May I ask your expectations for the professional improvement of this course in the future? - 7. Will you gain professional knowledge after participating in this course?
Pair 3: 3. How might this course affect how you self-learn in the future? - 8. After you participate in this course, it will increase your automatic exploration of deeper knowledge of this course.
Pair 4: 4. Do you have any idea that this course will strengthen your workability in the future? - 9. Will your participation in this course help you strengthen the functions required for your job?
Pair 5: 5. Do you think the lecturers you have hired are good at expressing this course content? - 10. The lecturers hired for this course match your personal needs.

Table 4. Multiple regression analysis of Basic Ability: Consumer Behavior Course - applying what you have learned.

Model	Unstandardized coefficients		Standardized coefficient	T	Significance	Collinearity Statistics	
	B	Standard error	Beta			Tolerance	VIF
(Constant)	.457	.341		1.339	.184		
1. May I ask your expectations for the depth of content that maybe generated from studying this course in the future?	-.220	.160	-.216	-1.375	.173	.228	4.388
2. May I ask your expectations for the professional improvement of this course in the future?	.523	.146	.487	3.574	.001**	.304	3.290
3. How might this course affect how you self-learn in the future?	.126	.135	.121	.933	.354	.337	2.964
4. Do you have any idea that this course will strengthen your workability in the future?	.230	.157	.212	1.470	.145	.271	3.695
5. Do you think the lecturers you have hired are good at expressing this course content?	.193	.117	.206	1.648	.103	.362	2.761

Dependent variable: 12. May I ask if the major you have acquired after participating in this course can be applied to what you have learned?

Table 5. Multiple regression analysis of Basic Ability: Consumer Behavior Course - pragmatic to use.

Model		Unstandardized coefficients		Standardized coefficient	T	Significance	Unstandardized coefficients	
		B	Standard error	B			Tolerance	VIF
	(Constant)	.353	.259		1.363	.177		
1	6. Will the contents of the course you get after participating in this course match your expectations?	.442	.108	.458	4.092	.000**	.279	3.588
	7. Will you gain professional knowledge after participating in this course?	-.114	.120	-.111	-.946	.347	.254	3.944
	8. After you participate in this course, it will increase your automatic exploration of deeper knowledge of this course.	.639	.112	.608	5.707	.000**	.307	3.253
	9. Will your participation in this course help you strengthen the functions required for your job?	.067	.121	.064	.557	.579	.265	3.776
	10. The lecturers hired for this course match your personal needs.	-.121	.113	-.128	-1.071	.287	.244	4.101

Dependent variable: 11. May I ask you the professional knowledge acquired after participating in this course is a practical force?

profound knowledge has a pragmatic influence after trainees' corporate internships, and its significance is 0.001, less than 0.05 (Table 5).

Multiple regression research results collation and summary

According to the multiple regression analysis, the curriculum positively correlates with the application of learned theory. The item "1. May I ask your expectations for the depth of content that maybe generated from studying this course in the future?" It displays a positive correlation between "Special Ability: E-commerce Practice Course" and "Innovation: Workplace learning and ability evaluation," which shows that students enrolled in these two courses think that courses can help them apply the learned theory. However, after course completion, the students' tenures as interns show that only "Innovation-Workplace Learning and Ability Evaluation" had any actual impact. Its relative impact is shown in the item: "6. Will the contents of the course you get after participating in this course match your expectations?"

Next, this research paper explains that applying theory positively correlates with the curriculum. With item "2. May I ask your expectations for the professional improvement of this course in the future?" and this correlation comes from "Basic abilities: Course on consumer behavior, widely applicable Abilities-modes of distribution development and future opportunities," "Special Ability: E-commerce Practice Course," and "Special Ability: Internet of Things Course." These courses affect this item particularly severely: "7. Will you gain professional knowledge after participating in this course?" Therefore, it is known that these courses affect the application of theoretical knowledge.

Then, analyze item "3. How might this course affect how you self-learn in the future?" The courses that affect application are: "Development Ability: Navigating the markets of the internet," "Development Ability: Logistics and management of compound supply chains," and "Innovation Ability: Workplace learning and Ability Evaluation." However, the course with the most impact is "Development Ability: Logistics and Management of Compound Supply Chains."

Finally, the analysis resulted in this item having a positive regressive correlation: "5. Do you think the lecturers you have hired are good at expressing this course content?" Which was generated by " Special Ability: E-commerce Practice Course," "Special Ability: Internet of Things Course," and not an item "10. The lecturers hired for this course match your personal needs." However, that has an

Table 6. Collation of research results of multiple regression analysis.

No.	Courses	Applying what you learned	Pragmatic to use	Notes
1	Basic Ability: Consumer Behavior Course	2(.001**)	6(.000**), 8(.000**)	1. May I ask your expectations for the depth of content that maybe generated from studying this course in the future?
2	Basic Ability: E-commerce Management Course	-	6(.015**), 8(.000**), 9(.029**)	2. May I ask your expectations for the professional improvement of this course in the future? 3. How might this course affect how you self-learn in the future?
3	Extended Ability: Circulation Development Model and Future Business Opportunities Course	2(.022**)	9(.004**)	4. Do you have any idea that this course will strengthen your workability in the future? 5. Do you think the lecturers you have hired are good at expressing this course content?
4	Extended Ability: Intelligence Marketing and Big Data Analytics Course	-	7(.000**), 8(.011**)	6. Will the contents of the course you get after participating in this course match your expectations? 7. Will you gain professional knowledge after participating in this course?
5	Development Ability: Internet of Things Store Practice Course	3(.002**)	6(.000**)	8. After you participate in this course, it will increase your automatic exploration of deeper knowledge of this course.
6	Development Ability: Logistics and Composite Supply Chain Management Course	3(.002**)	8(.000**), 9(.044**)	9. Will your participation in this course help you strengthen the functions required for your job? 10. The lecturers hired for this course match your personal needs.
7	Special Ability: E-commerce Practice Course	1(.000**), 2(.050**)	7(.000**), 8(.000**)	
8	Special Ability: Internet of Things Course	2(.027**), 4(.006**), 5(.001**)	7(.024**)	
9	Innovation Ability: Job Practice Course	-	8(.038**)	
10	Innovation Ability: Workplace Learning and Ability Assessment Course	1(.000**), 3(.001**)	6(.005**), 9(.009**)	

internship impact on "7. Will you gain professional knowledge after participating in this course?" and "8. After you participate in this course, it will increase your robotic exploration of deeper knowledge of this course and have practical impacts on professional knowledge and self-exploration capabilities.

Although, the expectations of students and the results of the actual learning are different. They are still in line with "H4: Evaluating for talent cultivation, from curriculum, faculty, student body, practicality, workplace environment, the results can be positive and Item 8 displays this positivity: "Does the course incentivize you to delve deeper for more knowledge?" Which has the most significant number of statistics? Item 8 appeared a total of 6 times. Therefore, it that the course inspires the students to pursue more knowledge that is professional (Table 6).

CONCLUSION

As e-commerce and the Internet of Things matures, online shopping and related logistical systems improve. Moreover, the tools used in intelligence marketing and big data analysis in consumer behavior patterns are becoming increasingly developed because transactions are increasingly digital. Taiwanese companies have gradually modified their business models to develop intelligence retail services. To increase income rates, channel development, and survive in the current market environment, companies must make their employees skilled in many areas of the industry.

Enterprises actively cultivate and improve their employees' intelligence in retail service and e-commerce marketing capabilities. In this research, the content of the

curriculum module planning, implementation, and effectiveness of intelligence retail service talents is found as follows:

How much the course strengthens students in the hands-on aspect of things is of grave importance. According to the research, when students realize that the course insufficiently improves their professional abilities, this appears more often: "8. After you participate in this course, it will increase your robotic exploration of deeper knowledge of this course." Therefore, it can be known that self-exploration increases the display of professional skills and competitiveness in the practical aspects.

Industrial demand for workers in intelligence e-commerce and the Internet of Things is increasing. The ability to navigate intelligence platform applications gives students an edge in the job market. Therefore, in "applying what you have learned," students most often reply to "2. May I ask your expectations for the professional improvement of this course in the future?" and "3. How might this course affect how you self-learn in the future?" Both questions came up at three listings, which means that what is learned in this course is applied, which found that students genuinely know how to work with intelligence platforms after partaking in this course. The deepening of module courses is significant, for it focuses on developing self-learning capabilities, especially in learning professional skills. The definition of "professional" is constantly evolving and is industry-dependent, but students who use module courses to strengthen their future employability can apply learned theory and integrate it into their work. Module courses are conducive to student growth by guiding them to explore the workplace through the input of courses, teachers, practice, and workplace experience; the students, of their own volition, gain more profound knowledge.

REFERENCES

Ministry of Economic Affairs (2021). Retail sales in Taiwan in 2021. https://www.moea.gov.tw/Mns/dos/bulletin/Bulletin.aspx?kind=8&html=1&menu_id=6727.

Alsaad A, Taamneh A, Sila I, Elrehail H (2021). Understanding the global diffusion of B2B E-commerce (B2B EC): An integrated model. J. Inform. Techno. https://doi.org/ 0268396220961396.

Bushnell DS (1990). Input, process, output: A model for evaluating training. Train. Dev. J. March, pp. 41-43.

Chen T (2014). Research on e-commerce talent training based on service congregation. World Transact. Eng. Technol. Educ. 12(2):146-151.

Fedirko O (2020). The impact of E-commerce on employment in the EU. http://irn.center/wp-content/uploads/2019/11/Olha-FedirkoUkraine.pdf

Hodell C (2005). Basics of Instructional Systems Development: Instructional Systems Development. Infoline ASTD Press.

Stufflebeam DL, Shinkfield AJ (1985). Systematic Evaluation: A self-instructional guide to theory and practice. Boston: Kluwer-Nijhof.

Tran LTT (2021). Managing the effectiveness of e-commerce platforms in a pandemic. J. Retail. Consum. Serv. 58: 102287.

Wang Y, Zhang S, Fu J (2017). A Study on the Optimization Design of the Training Program of Curriculum System for Cross-border E-commerce Talents in Higher Vocational Colleges Based on the CIPP Model. Revista de la Facultad de Ingenieri'a U.C.V., 32(8):589-596.