

The 5<sup>th</sup> STOU Graduate Research Conference

# ปัจจัยที่มีอิทธิพลต่อความสนใจเพื่อทำงานในอุตสาหกรรมโลจิสติกส์ Factors Influencing the Job Seeker Preferences in Logistics Industry

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#### Abstract

The objectives of this research study were: (1) to study the level of preference towards working in logistics industry and other related fields (2) to study variables affecting the decision to work in the logistics field of senior students in Logistics. (3) to determine the relationship among the independent variables, consisting of Reliability, Rates, Resources, Risk Factors, and Responsiveness, on the degree of interest in the working in logistics industry. (4) to find the most significant factors impacting the decision to work in Logistics industry of senior students in Logistics; Management and Marketing fields. The study population was 240 students in senior year from three majors: Logistics, Marketing, Management faculties from two universities as potential candidates' intention to work in logistics. Samples were using the stratified random sampling method. The instrument for data collection was a questionnaire; the tool was pilot-tested on 60 students with reliability at 0.785 of Cronbach's alpha. Findings were (1) Overall preference towards working in logistics business was at moderate level. (2) Variables affected decision of logistics students were "Reliability" (0.603) with a significantly positive relationship at level 0.002 for those who had an interest to work in logistics field; "Rate" (0.974) had no significantly affect with a positive relationship for who had no interest (sig.0.067). For total all students in logistics faculty, the most impact was "Reliability" (0.517) with a positive relationship significantly to intention to work in logistics field at level 0.001 (3) Relationship by Pearson's method reported that for all students in logistics faculty who had an interest to work in logistics. The correlations showed that Reliability was the most correlated to Intention to work in logistics industry at 0.475 with significant level at 0.000, followed by Rates at 0.339 was having a significant level at .009 which both rejected  $H_0$ (4) Focus on all students from three faculties individually only for whom had an interest to work in logistics field. For Logistics faculty, "Reliability" (0.603, sig.0.005); for Marketing faculty, "Rates" (0.431, sig.0.038) and for Management faculty, "Risk Free" (0.512, sig.0.011) was the most significant factors impacting the decision, respectively. The study found that from overall respondents "Responsiveness" brings in role important for today graduate students to focus on. With the high pay, Rate factor was in between among those who had intention or without any intention. These showed that the candidates awareness were around the fast and quick to response the job duties, work loaded responsibility as well as the earning (either in form of salary, overtime or incentive). Most refusals who deny the logistics careers were claimed for not match their field of study. The most popular channel of sources for job searching is internet surfing. Most students, especially those are studying in logistics and also having an interest to work in this industry has less update news in both international transport course, practice and free training offer in the market out of their campus. While those non interests to work for this field knew all these news for course and free training practice better than them. To prepare all these forth coming, the logistics labor shortage would be preferred a candidate with adopt joint program to academic institution, such as joint-half training to the workplace during 2<sup>nd</sup> year to solve the problem of not familiar or unknown chance in logistic careers, the different perceives in air business may be just only a portion of air crew or hostess than the candidate's willingness to work as a ground clerical which mainly using typing skill and English communication. For future study the research should be verify the second plan as an BCM (Business Continuity Management) for the shifting to any other possibilities to recruit a foreigner staff from neighbor countries such as Vietnamese or Burmese as a new sector for labor intensive under AEC context.

Keywords: 5R's Model, Intention, Logistics career, Motivation employee, Service Performance Unit

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### Introduction

Despite the fact that the average number of graduates in Logistics and related field is 15,640 annually, the supply for workers in this field is still short due to the rapid growth of the industry. According to Dr. Sirion Sethamanit (2011), Full Time Lecturer of the Faculty of Commerce and Accountancy, Chulalongkorn University, this industry needs around 150,000 more staff members from 2008 to 2011. Out of 52,848 vacant positions, there were only 7,195 candidates who finished high schools and vocational schools and 7,222 who finished bachelor's degree applying for jobs through the assistance of governmental agencies. In the meantime, the demand for graduates who finish bachelor's degree or higher amounts to 17,319 positions (National Bureau of Statistics, 2012). However, shortages of labors in logistics fields are still existing and unable to be fulfilled. This leads to a pilot project of study on such targets' perceives. And made clearer understanding for what are those candidates' interest and preferences.

#### **Research Objective**

The study was conducted with the following objectives:

1. To study the level of preference towards working in logistics and related fields among senior students in Logistics and other related fields such as Management, Marketing, etc.

2. To study variables affecting the decision to work in the logistics field of senior students in Logistics.

3. To determine the relationship among the independent variables, consisting of Reliability, Rates, Resources, Risk Factors, and Responsiveness, on the degree of interest in the working in logistics industry.

4. To find the most significant factors impacting the decision to work in Logistics industry of senior students in Logistics; Management and Marketing fields.

#### **Research Questions**

RQ1: What is the level of work interest of senior students in logistics field?

- RQ2: What are the impacts of Reliability, Rate, Resources, Risk Factors, and Responsiveness on the level of interest in working in logistics field?
- RQ3: What is the most significant factor producing the highest impacts on the level of interest in working in logistics field?
- RQ4: What are the similarities and differences of the factors determining the level of interest in working in logistics field and those of the other fields?

#### **Literature Review**

Although researches on selection has been spread across many literatures, either among work of HR (Human resources), OD (Organization Development), Career Selection and Preference, etc. Most of them were for the existing employees, training and hardness in motivate the team work and sales people quite broadly published. However, there were not any literatures to construct for Graduate's perceive as a potential candidate for his/her decisions, especially in transport and logistics fields. After investigated several reviews about the graduate students with career survey in Thailand, that usually were under view of an employers towards the staff recruitment attributes. Therefore, this study has been done through composite all main three theoretical backgrounds from selection attribute, selecting job attributes, partner selection (to fulfill the gap for selecting a boss or career for job seeker's attributes), since this main study under the transport service, related to supply chain management as service sector, not the mythology of product. Then the attribute of quality in service and service quality was also included into this review. Moreover, since the job satisfaction, job selection were relate to Human resources theory in motivations. This study followed the path of construct from the work of Wiley, C. (1995) for employee's motivated factor. The body reviewed all attributes duration more than 4 decades (1946 to 1996) of what motivates employees according to over 40 years of motivation surveys.

#### Motivation factors for employees



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Wiley, C. (1995, p.266) claimed that one of the first surveys was conducted in 1946 mentioned in the work of Hersey and Blanchard, (1969, p.35) cited in Wiley (1995). It was done by the Labour Relations Institute of New York and reported in Foreman Facts. At that era, the most considerations were on three dimensions, which were ability of employee performance, the work environment (this would be included the workplace and its tangibility), and motivation (active to work). However, their work was discuss about the employee performance and foreseen discussed for labor lacks ability, appropriate training can be employed. But this area was suit to the study of the existing employees. Later, Wiley (1995) indicated that in year 1992, almost the survey results was selected the variable as Good Wages was chosen as the top motivational factor employee. In addition, Japanese boss had designed the incentive program and bonus since year 1991. In the same year, the survey resulted that USA and important labor were rank for incentive and cash bonus was most important.

Gibson, C., H. Hardy III, Buckley, M.R., (2014) suggested that networking of organization behavior were occurs both inside-out and outside-in of an organization utilizing interpersonal relationships. The outside customer is important. However, internal customer must be also important, this congruent to Wiley's (1995) statement that average workers are frequently overlooked. And all of them need the recognition and rewards for workers' contributions strengthen a company's reputation. This is the conclusion of companies were frequently use to motivate all the employees over these 40 years. Often the strongest potential motivators are the things employees' value to perform at levels that positively affect the bottom line.

To understand the variable, study of Gibson et al. (2014) illustrated out the model proposed that networking is influenced by several variables such as a variety of individual, job, and organizational level factors and leads to increased visibility and power, job performance, organizational access to strategic information, and career success. However, at the final of Wiley's work, he concluded for the strongest construct from overall studies were five dimensions as:

- (1) good wages;
- (2) full appreciation for work done;
- (3) job security;
- (4) promotion and growth in the organization; and
- (5) interesting work.

These factors reflect the current state of affairs in terms of employee needs and imply that reward systems and job redesign strategies which lead for company's competitiveness through the ability of the worker's (employees' preferences).

#### **Selection Concept and attributes**

Aforementioned, to fulfill the literatures body lacking in job's selection, then the nearest to this study is service selection whereas all broadly topics in supply chain and relationship (not among the boss but among its chain members and supply chain, then supplier selection would be adopted and adapted into the framework). Both theoretical issues on how to select suppliers attribute regarded as how a candidate has to consider during selecting his/her boss or a company to work with, as well as the exchanging of given service, pay wages as for service fee which provided, this regarded as hiring a worker to exchange their wages. Hence, in supply chain sciences, the selections in service and relationship attributes were reviewed.

The five R(s) independent variables (5 R's) adjusted from service quality model to be SPU model (Pisoot, 2013a). This was developed from Parasuraman Zeithaml & Berry (1988) who came up with four types of efficiency: quality, delivery, operations, and price to determine service quality. Later, Service quality was modified. Parasuraman's (1988) SERVQUAL model was known as "RATER" constructed by Reliability, Assurance, Tangibility, Empathy and Responsiveness. Leenders et al (2002) introduced the 5-dimensions SERVQUAL, consisting of:

- a. Those related to physical facilities, including service providers and communications.
- b. Those related to reliability, the ability to deliver promises and provide the right services on time.
- c. Those related to the willingness to serve customers in a responsive manner.
- d. Those related to warranty, the ability to deliver services which are free of error and damage to result in trust and credibility on the part of the service providers.
- e. Those related to the ability to customize the services to achieve one-to-one communications scheme.



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Matear & Gray (1993) mentioned the important criteria used for selected suppliers in sea freight must include service efficiency, readiness in quality assurance and risk recognition. These perceive, the attributes emphasis on Assurance and Risk avoidance. Hokey Min (1994) and Whyte (1993, p. 34) proposed the following variables: transportation time, risk recovery, flexibility of service charges, the understanding of the problems and the willingness to help as main criteria for supplier selection. This concluded that they given risk perceived along with the empathy of service quality. However, previous discussed was about Empathy in ServQual will be suited only for the old customer who existed and engaged in the service. But might not the newcomer, since the newcomer is at position of a potential (being a customer), therefore the empathy would not be existed in any cases. This is the main reason to cut the variable of empathy out of the framework and re functioned for a lower degree dropped into Responsiveness as an item, as "willingness to help" which had been proposed by Whyte (1993). Hence, the main dimension as Empathy was recall the price from its previous model to be included as Rates (Monetary perceives: either rates, fees, wages, overtimes, and any about cash, benefits, profit earn in form of a financial variable perceives: Profitability (Pisoot, 2015).

Cheng, S.K. and Karn B.H. (2008, p. 348) proposed reliability was ability to provide services and risk management were the most important factors in supply chain management. These attributes were mainly discussed across supply chain and risk management. Perceives reflected assurance, qualify and guarantee, risk attachment upon service or purchase. Hereby, such risk consideration does apply in reverse as when a new customer considers about the risk before his/her selecting goods and service during purchasing. Such attribute will be considered towards the supplier who provide and give the goods or service. This is why the career candidate might consider selecting a job or wages earn before taking job application. This attribute deals with the risk of candidate's perceives either in workplace and/or risk on the task assignments.

Hence, to purify all dimensions were in same understanding, genuine as generality to all study about any selection either purchased product or service purchasing were employed, below the interpretation was explained (HR into SCM science with similar meaning) for variables grouping construct into the related dimensions. Aforementioned in HR. motivation key variables of Wiley (1995) interpret into SCM knowledge as in blankets.

- (1) good wages (= Rates)
- (2) full appreciation for work done; (= Responsiveness)
- (3) job security; (Assurance = Risk avoidance)
- (4) promotion and growth in the organization; and (Firm's Resources and system or management)
- (5) interesting work. (= Reliability, brand, image, rely on work reputation)

This research adapted Interest Work (Reliability), Financial Benefits (Rate), Promotion & Growth (Resource), Job Security (Risk Factors), and Responsiveness (Appreciation to response the work) to be the five independent variables in determining the level of interest in working in logistics industry.

### 1. Reliability / Interesting work

Leenders et al (2002, p. 42) suggested corporate reputation and financial status was high priority for suppliers to be considered. Bally (2005, p. 185) further explained that in consideration of before & after sales services, contact convenience, technical readiness and supporting facilities.

Reliability is important when it comes to supplier selection, especially in the high-value products transportation. Reliability often springs from confidence and trustworthiness; these factors are formalization, flexibility, empathy, completeness, preference (Whyte, 1993, p. 31). Reliability can be a result of operations (delivery and shipment) or finance. Small companies may hard in gaining reputation coming from financial status.

Cassola (1993, p. 25) suggested reliability can be referred from interviews, observations. Organization members who can perform reliably are important assets. Reliability is also of paramount importance for companies established a network for success in supply chain management. Each party in the supply chain must work with high reliability. Reliability determines the reputation of the companies. A reliable inbound logistics system makes sure with the expectation of the customers. Therefore, reliability is treated as one of the most important factors determining the selection of the services. Reliability in the context of this study means firms with high reliability will be able to attract more staff



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members either by company's brand image, service reputation or goodwill, the reliable or trust from whom its may concerned.

#### 2. Rate / Financial Benefits

Lysons & Farrington (2006, p. 17) proposed that a competitive price structure will be possible if pricing is incorporate into a strategic planning process. The value of the firms will increase by the improvement of the profitability of the organization either through revenue or the minimization of operating costs (Ellram, 1995). Min (1994) said the most important elements of financial strength is the maximization of profit and the minimization of process expenditure, including the community price, the transportation costs, documentation costs, fees, the costs. Slater (2007, p. 160) mentioned that the operational efficiency and the cost minimization were two key factors in becoming the top-of-mind operators. Thus, in this study researcher considered that the earning profit could be transparent into income or fringe benefit earned by the employees.

#### 3. Resource / Promotion and Growth

Baily (2005) said successful companies know how to formulate and deploy effective strategies. Resource management, together with effective internal communications creates a competitive edge for companies which know how to utilize the tools. Baily (2005, p. 185) proposed that the ability of the suppliers to help minimize the workload of the customers, the convenience resulted from frequency and flexibility in the schedules were essential. Matear & Gray (1993) mentioned that the frequency of the schedule, the availability of space and the ability to attend to special requirements were very needy in the achievement of business success. A resource was meaning as assets and company's equipment and tooling, either in property, prosperous wealth with own premises / facilities or number of employees which were resources of the firm.

#### 4. Risk Factors / Job Security

Richy & Marshell (1993, p. 28) mentioned that a good practice of risk management can protect the companies from dangers. Leenders et al (2002, p. 244) said risks were unavoidable in all circumstances. Richy & Marshell (1993, p. 30) mentioned that many people were ignorant about risk management due to familiarity with the situations. In times of rapid change, risk management becomes correspondingly more important for setting up efficient supply chains.

Blomba & Axelsson (2007) suggested that in some situations trust could be used as a proxy to risk perception. Supply chain efficiency, which is directed at improving a company's financial performance, is different from supply chain resilience, whose goal is risk reduction. Min (1993) mentioned that risk inspections are integrated in the logistics processes are planned inspections. Any processes in actions, the firm should be planned and investigate process which inspection bring into consideration. Out of control in management or operating system, the failure would be affects by risk in operation. Recognize to risk avoidance would be an important dimension.

#### **5.** Responsiveness / Appreciation to Work (fast and accurate)

Essentially responsiveness means the ability to respond in ever-shorter lead times with the greatest possible flexibility. Quick response is a concept and a technology that is spreading rapidly across industries. For the foreseeable future, speed will be a prime competitive variable in most markets. The emphasis in logistics strategy will be upon developing the means to ship smaller quantities, more rapidly, direct to the point of use or consumption.

Bhatnagar & Viswanathan (2000, p. 13) explained that companies were seeking a partner that had the ability to be extremely flexible and fast in this rapidly evolving climate. Leenders (2002, p. 244) proposed that for companies to capitalize on the latest trends, they needed a supply chain that is flexible and responsive. (Further reading about the essential of time management in replenishment, Pisoot & Pochaman, 2015) Third party logistics partners are able to provide the necessary expertise to efficiently manage inventory levels. Knowing about a potential surge in popularity among products is only beneficial if such products can be delivered on time. Contract logistics can provide the partnership needed to deliver goods quickly and easily (UESCAP, 2009). The main idea for Responsiveness is a driver for quick and fast in response. This usually deals with time response, a respond to customer's need in quick. The responsiveness is also included the assigned job and functions must be accomplished within a reasonable timeframe. Scope of duty and responsibility were automatically attached within a proper time consuming counted.

#### **Conceptual Framework**



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The holistic model illustrated measuring instrument for intention and variables affects to work in logistics industry. This study supports to balance the lack of literature in job selection behavioral attributes in logistics and transport filed about selecting employees' attributes. The framework modified from ServQual as Service Performance Unit (SPU). The model is employed Motivation key factor of employee for working in order to understand and interpret predictable perceives, service attitudes, interests or intention measuring into five dimensions of service perceptions. Second, components of 5R's as: Company's brand image concept (reliability); Financial Benefits (rate) included income and welfare (commission; incentive); Company Development; Promotion & Growth (resources, assets and wealth); risk factor (assurance, safety and qualifying); and Appreciation work (responsiveness) are well robust constructed to explain one's subjective items (qualitative) to a value as measurable unit for more likely objectives (quantitative). The dependent variable in this study was interest in working in logistics field. Respondents' intention to job application in logistics business will be explored by this below framework. Finally, the model employed five variables to construct a dimension to test a facet for intention to work in logistics industry and related field. The model shown as below Fig.1

Figure 1 Framework for Interest / Intention to work in logistics field.



Source: Adapted from Wiley, C. (1995) and Pisoot (2013a, p.1365)

### **Definition of terms**

- **Interesting work:** Reinforcement Theory as a means of altering workplace behavior. This included workplace reliability, brands, image, reputation, style in management, good wills and so on.
- **Financial benefit:** Wages, salary, payroll, overtime, incentive or commission, staff welfare, includes all utilities and other benefits, such as return and any earning, annual tour and bonus.
- **Promotion & Growth:** clusters (Kanfer, 1992 cited in Wiley, 1995): arranged three personality-based views; cognitive choice/decision approaches, and goal/self-regulation perspectives. (Related to Hierarchy, personalize, self-esteem and ego)
- Job security: To secure from loss or jobless, unemployment risk, as well as risk avoidance and risk involvement.
- Appreciation work: The appreciation of worker to work, attractive by recognition and rewards.

**Research Hypotheses** 



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1. Reliability (image, reputation and so on)

- H1: Reliability is positively related to the interest in working in logistics industry.
  - **2. Resources** (ownership of corporate assets)
- H2: Resources is positively related to the interest in working in logistics industry.
- **3. Rate** (the amount of income earned)
- H3: Rate is positively related to the interest in working in logistics industry.
  - 4. Risk Factors (the risk involved)
- H4: Risk Factor is positively related to the interest in working in logistics industry.
  - 5. Responsiveness (duty to prompt response)

H5: Responsiveness is positively related to the interest in working in logistics industry.

#### **Research Methods**

### Scope of the Research

The samples of this study were limited to the senior-year students in Logistics, Management, and Marketing Faculty who was going to graduate in 2011 from two out-skirts universities where one is located nearby the industrial estate and another is situated nearby ICD (inland container depot). Both universities are same distance far from Bangkok city.

#### Population, Sample, and Sampling Technique

Students in the three majors (Logistics, Management, and Marketing) of the two universities were divided into six groups. The stratified random sampling was used. Samplings of 60 were selected from the six groups for pilot test, the total number of samples were 240 respondents.

#### **Research Instrument**

Questionnaire was used as the main research instrument. There are three parts of the questionnaire. Part 1 starts with the general information of the respondents. Part 2 is the rating of the related variables.

#### **Data Collection**

The 240 questionnaires were sent to the six groups of samples for three different majors were logistics faculty; marketing faculty and management faculty of two universities. Questionnaires were sent by hand and face-to-face approaches. Data were collected by two methods; face to face and online collection using XLS platform E-Questionnaires (Pisoot, 2013b, p.1403) for those who cannot be personal contacted directly.

### **Data Analysis**

Most several previous studies offer to present and analysis on only means and standard error, however this study base on ease of use as an idea for assessable and understandable presentation to the audiences. Hence, this study used simply analysis, as simple statistical techniques than using any other difficulties in measuring and analysis (Pisoot, 2014; 2015). Hence, a simple descriptive analysis will be applied.

The pre-test was done with 60 sets of questionnaire (equally selected 10 each of the 6 groups). Only senior-year students in Logistics, Management, and Marketing would be considered. The Cronbach's Alpha of 0.785 was achieved to guarantee that the research instrument contained high degree of reliability. There are three main statistical analyses in the study:

- 1. The demographic data of the respondents
  - a. The number of students in each major separated by universities
  - b. The comparative findings of the students from the two universities
- 2. Data Processing
  - a. Categorized by universities and majors
    - i. the five independent variables, categorized by universities and majors (6 groups)
    - ii. a dependent variable, categorized by universities and majors (6 groups)
  - b. Categorized by majors
    - i. the five independent variables, categorized by majors (3 groups)



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ii. one dependent variable, categorized by majors (3 groups) c.

- Intra-group Comparison
- i. Logistics major compared with Management and Marketing
- ii. Logistics major compared with other non-logistics majors

#### **Statistics Methods**

T-test was used to find difference in the same group. F-test was used in case there was more than one group. In case the analysis involved more than two groups, Scheffe's post-hoc analysis was used

### **Research Findings**

### 1. Demographic

Out of the 240 total respondents, 159 or 66.20% are female. The majors were equally divided (33.33% for each major). 120 respondents were from each university. (Table 1)

	Logistics-	U1	U1	Marketing	g-U1	U1	Managem	ent-U1	U1	All	U1 stu	dents	
Decision	Interest	Not	Total	Interest	Not	Total	Interest	Not	Total	Inte	erest	Not	Total
Male	9	2	11	- 1	6	7	3	5	8		13	13	26
Female	22	7	29	17	16	33	11	21	32		50	44	94
Total	31	9	40	-18	22	40	14	26	40		63	57	120
	Logistics-	U2	U2	Marketing	;-U2	U2	Managem	ent-U2	U2	All	U2 stu	dents	
Decision	Interest	Not	Total	Interest	Not	Total	Interest	Not	Total	Inte	erest	Not	Total
Male	11	3	14	4	17	21	6	14	20		21	34	55
Female	17	9	26	4	15	19	3	17	20		24	41	65
Total	28	12	40	8	32	40	9	31	40		45	75	120
	Logistics	(all)	(All)	Marketin	g (all)	(All)	Manageme	ent (all)	(All)	Resp	onde	nts	
Decision	Interest	Not	Total	Interest	Not	Total	Interest	Not	Total	Inte	erest	Not	Total
Male	20	5	25	5	23	28	9	19	28		34	47	81
Female	39	16	55	21	31	52	14	38	52		74	85	159
Total	59	21	80	26	54	- 80	23	57	80		108	132	240

Table 1 Interest / Not interest to work in logistics fields by Gender

From the total 240 respondents (100%), 108 respondents had an interest (45%), 132 had no interest, 55% of all respondents showed no interest in working in the logistics field. The numbers of interested persons were in first University than the second, approximately 16.67% different for interested persons and 13.64% different for those who having no any interest. By gender, total 240 were males 81 (34%) and females were 129 (66%). From these 81 males, 25 were from logistics faculty (10.42%), 28 were from marketing faculty (11.67%) and 28 were from management faculty (11.67%) respectively. Total 159 females, 55 were from logistics faculty (22.92%), 52 were from marketing (21.67%) and 52 were from management faculty (21.67%).

108 students who had an interest to work in logistics industry, 34 were males and 74 were females. The 132 remainders were persons who had no interest to work in logistics industry, 47 were males and 85 were females. The top of overall for interest to work in logistics industry were 50 females from the first university.

Table 2 Types of Logistic fields preference (Rank by respondents' interest)



Types of	Logistics	5		Marketin	ıg		Manager	nent			Not	
Logistics	Interest	Not	Total	Interest	Not	Total	Interest	Not	Total	Interest	interest	Total
Airline	23	3	26	12*	9*	21*	13*	11*	24*	48*	23*	71*
3PL	27*	3	30*	13*	7*	20*	4	4	8	44*	14	58*
Public w/h	25*	9*	34*	5	5	10	5	3	8	35*	17*	52
Port w/h	20	3	23	6	4	10	2	2	4	28	9	37
Retail w/h	13	5*	18	5	3	8	9*	5*	14*	27	13	40
Shipping line	16	3	19	4	2	6	3	4	7	23	9	32
Plant w/h	10	2	12	6	4	10	4	0	4	20	6	26
Rail	2	1	3	4	3	7	6	4	10	12	8	20
Trucking	3	1	4	0	0	0	1	0	1	4	1	5
Other w/h	0	0	0	0	0	0	0	0	0	0	0	0

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Respondents were offered freedom of choices would be selected as in table 2. They were allowed to choose more than a single choice, alternatives were focus on ranking of the interest. Airline business is the top industry where respondents would like to pursue careers, followed by third party logistics service providers (3PL), then public warehouse. These three businesses were without any significantly differences from those who had no interest. For logistics faculty, the students who have interest to work in logistics, their first preference is 3PL, followed by public warehouse is their second alternative. For those had no interest, will go for public and retail warehouse. Almost marketing students were having same top preferences as the interested person in logistics faculty. Management students had interested in airline and retail's warehouse business. Top ranks from persons who having no interest in logistics fields, airline business and public warehouse were chosen.

In this case, the study focuses on intention to logistic career for international transport business. The concentration was most related to 3PL and might be shipping line or truck transport. The result showed that students in management faculty were not in this area neither 3PL nor shipping lines business focus. On the other hand, the rail transport sector manager should go more focus more on these management students as their potential candidates for recruitment. In addition, out of the two top ranks in marketing faculty's selection, the result showed that total marketing students' preferences were equally distributed to work for all types of warehouse operators. These were 10, 10, 10, and 8 for public warehouse, port warehouse, factory's (plant) warehouse and retail's warehouse respectively.

	All who	had no interes	st in logistics	
Motivation factors in other careers	Logistics	Marketing	Management	Total
match study	2	18	28	48
better welfare	0	11	16	27
better pay	2	16	4	22
more growth	0	9	10	19
want a trial	0	8	7	15
work at home	1	2	7	10
follow relatives	0	1	4	5
follow friends	0	0	3	3
Others	0	0	1	1

Table 3 Motivation factors to choice for other careers

Table 3 were responses from those whose choices were having no interest in logistics careers, they have preference in any other alternative of choices. Hence, the students who had no interest in logistics sector, selected for these drivers. The factors were a key driven for motivation reflected the attractiveness of other jobs selection. From total 48 showed that because the other careers will match their field of study, while believed that in other fields will offer them better welfare and pay. 19 persons seemed that other careers will have better growth and promotion. 15 of them want to have a trial on their interested jobs, 10 of them will work at home due to family business. The rest 5 and 3 were followed their relatives and friends to introduce a job for them. Table 4 Interested positions in Logistics careers



Type of Careers	Logistics			Marketin	g		Managen	nent			Not	
		Not			Not			Not				
in Logistics	Interest	Int.	Total	Interest	Int.	Total	Interest	Int.	Total	Interest	interest	Total
Overseas	30	5	35	14	7	21	6	3	9	50	15	65
W/H staff	26	3	29	8	3	11	5	3	8	39	9	48
Customer svc.	11	3	14	12	7	19	3	4	7	26	14	40
I.T and system	14	5	19	7	5	12	5	2	7	26	12	38
Document	8	3	11	7	2	9	5	3	8	20	8	28
Acct/Financial	3	1	4	3	1	4	8	9	17	14	11	25
Sales/Marketing	3	1	4	3	4	7	3	2	5	9	7	16
Forklift/Lifting	6	0	6	2	3	5	3	1	4	11	4	15
Truck driver	2	1	3	1	0	1	0	0	0	3	1	4

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Table 4 showed the top ranks for most selected positions was an overseas staff, these 65 people wants to have challenges in foreigner language and communications. Surprisingly, this position was interested by 35, 21 and 9 by logistics students more than marketing and management students respectively. Logistics students' preference overseas coordinator position, followed by warehouse employee, I.T and system, related to computer and network by 19 and 12 from logistics and marketing students. Then the last would be a customer services who support sales, marketing and after sales service. For marketing students, the result showed that only 8.75 % (7 from 80) want to be a sales or marketing staff. This was less than 10% from all marketing respondents. Their top preferences were an overseas staff and a customer service. This seems that marketing students' interest went across into International Business Management area. Another wonderful result, 12 of them do prefer more I.T and system career than a job of marketing. For the management students, most of them were preferred accounting and financial jobs as their most preference. This is also making a surprise outcome, how these respondents had most interest in the managerial account. These may be a conclusion for those who would not claim as those not match to their field of study.

Refusal in logistics fields	Logistics (not interest)	Marketing (not interest)	Management (not interest)	Total
Not match	1	22	33	56
Not familiar	1	18	14	33
No attention	0	9	7	16
Not growth	0	8	8	16
Not Thai lang.	0	19-1-	2	3
Not plan yet	1	2	0	3
Not high pay	0	Thread of 0	87787871	1

Table 5 Refusal reasons by no interest persons

Table 5 showed for only persons who had no interest to work in logistics and related fields. 56 of them claimed that it was not their major area of study as the main reason for rejection. Other refusals to work in logistics field were 33 people showed no understanding, unknown knowledge or related to logistics activities. Equally 16 were no attention to any of these careers, as well as 16 believed that no growth or promotion if work in this field. The remainders 3, 3 and 1 were because English language would be involved in communication, without any planning and seem it was not a high pay job, respectively.

Table 6 Channel sources for Job seeking



Channels of Job Seeking	Logistics Interes t	Not Int.	Tota 1	Marketin Interes t	ig Not Int.	Tota 1	Manager Interes t	nent Not Int.	Tota 1	Interest	Not interes t	Tota 1
Internet	32	16	48	16	42	58	4	28	32	52	86	138
Teacher	30	6	36	10	10	20	4	14	18	44	30	74
Parents	21	5	26	7	15	22	4	7	11	32	27	59
Newspaper	9	5	14	4	9	13	5	10	15	18	24	42
Friends	12	3	15	4	9	13	2	9	11	18	21	39
Others	2	1	3	0	3	3	0	1	1	2	5	7

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Table 6 showed most favorable source from all students, 138 students would search their job through internet surfing. Secondary source was getting an advice from their teachers. Third, they listened to their parents to give them guidance. The newspaper and friends were the last choice of channels for job searching. Despite almost the interested person in management, all channels would not influence them much either: internet, teacher or parents for job inducements. This seems that students in this group (management with interest to work in logistics field) having more self-confident or trust more on newspaper for job searching.

Known	Logistics			Marketin	g		Manager	nent		(All)	Not	
Course Offer	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	interest	Total
know-U1	9	1	10	- 8	15	23	1	20	21	18	36	54
know-U2	4	2	6	2	8	10	0	2	2	6	12	18
Total	13	3	16	10	23	33	1	22	23	24	48	72
Unknown	Logistics		~	Marketin	g		Manager	nent			Not	
Course offer	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	interest	Total
Unknow-U1	22	8	30	10	7	17	13	6	19	45	21	66
Unknow-U2	24	10	34	6	24	30	9	29	38	39	63	102
Total	46	18	64	16	31	47	22	35	57	84	84	168
All respondents	59	21	80	26	54	80	23	57	80	108	132	240

Table 7 Known and Unknown for available international transport course

Table 7 showed all respondents' responses for their known or unknown perceives to course offer about logistic transport out of their class. This course is about international transport, export-import practices which available out of their campus. It was conducted and handled by ITBS (International Transport Business School) under support by TIFFA (Thai International Freight Forwarder Association). From the table, it was self-explanatory that the most were logistics students in second University. Most of them did not know that there is an available course in international transport business, especially, those who are studying in logistics major also with his/her interest to work in logistics industry. Nevertheless, also the logistics students from first University, they also did not know such course before, unlike all those students who had no interest either from marketing or management faculties of first University.

Table 8 Known and Unknown for free training campaigns for logistics skill and knowledge



Known free	Logistics	-		Marketin	g		Managen	nent			Not	
Training campaign	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	interest	Total
know-U1	8	5	13	5	8	13	7	14	21	20	27	47
know-U2	3	2	5	3	10	13	1	4	5	7	16	23
Total	11	7	18	8	18	26	8	18	26	27	43	70
Unknown free Training	Logistics			Marketin	g		Managen	nent			Not	,
campaign	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	Not Int.	Total	Interest	interest	Total
Unknow-U1	23	4	27	13	14	27	7	12	19	43	30	73
Unknow-U2	25	10	35	5	22	27	8	27	35	38	59	97
Total	48	14	62	18	36	54	15	39	54	81	89	170
All respondents	59	21	80	26	54	80	23	57	80	108	132	240

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Table 8 showed the respondents perceives to known and unknown free training campaigns induced by Department of Skill Development: DSD, hosted by Ministry of Labor and Social Welfare. Such campaigns are available for labors skill development as well as promote into a training program to develop the skill and knowledge in logistics. The result found that overall students in first university having news more than the second university. Especially, the both known and unknown among total students from logistics and marketing in first university has an equal perceive for knowing and unknown these free training campaigns offered. The maximum numbers of students who unknown this program were most coming from logistics and management students from second university. Despite from total 240 respondents, the unknown has been counted as 170 which over 50% of the total. Upon the focus only on all logistics students, it showed that 62 students out of 80 did not know it. Only 18 logistics students knew this free offering.

### 2. Model testing

First, demographic was tested by t-test two tails in order to investigate the gender of respondents will have no any significant affect to the first decision for having an interest or having no interest to work in logistics field. Hence, below table 9 and table 10 were the results.

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Decisions	Male	81	1.58	.497	.055
	Female	159	1.53	.500	.040

Table 9 Group Statistics (by Gender)

Table 10 Independent Samples Test (Gender and Decisions)



			In	depend	lent Samp	les Test				
		Levene's Equal Varia	Test for ity of inces			t-tes	st for Equality	y of Means		
						Sig. (2-	Mean	Std. Error	95% Cor Interva Diffe	nfidence l of the rence
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
Decisions	Decisions         Equal variances assumed         2.013         .157         .670         238         .503         .046         .068        089									.180
	Equal variances not assumed         .672         162.189         .503         .046         .068        089         .18									

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Table 10 showed that the F significant value was 0.157 which greater than .05. At 95% interval confidence (alpha = .05),  $H_0$  was accepted, since significant (2-tailed) valued at 0.503. This is concluded that either gender was males or females were having same variances and no any significantly difference affect to decisions of interest because of gender.

The model was tested twelve times to illustrate the R results from different groups for different perspectives. Table 11, the data analyzed by multiple regression for different subgroups. Divided into interest persons group and had no interest persons. Subgroups were divided by faculty: logistics, marketing and management, respectively. Then, regroup of all faculties to analyze the model with all respondents as final test.

	Log	gistics (Inter	rest)	Mar	keting (Inte	erest)	Mana	ngement (In	terest)		All (Interest	t)
	Coeff.		1	Coeff.	- Z. 16		Coeff.			Coeff.		
	В	Т	Sig.	В	Т	Sig.	В	Т	Sig.	В	Т	Sig.
(CONS	0.915	1.204	0.234	3.264	4.122	0.001	3.576	2.921	0.010	2.082	3.956	0.000*
X1	0.603	2.905	0.005*	0.099	0.505	0.619	-0.097	-0.471	0.644	0.200	1.555	0.123
X2	0.081	0.425	0.672	0.431	2.219	0.038*	-0.314	-1.515	0.148	0.176	1.346	0.181
X3	0.116	0.805	0.425	0.011	0.072	0.943	0.103	0.733	0.473	0.128	1.395	0.166
X4	0.240	1.278	0.207	-0.08	-0.501	0.622	0.512	2.837	0.011*	0.181	1.567	0.120
X5	-0.291	-1.651	0.105	-0.215	-1.253	0.224	-0.015	-0.102	0.920	-0.162	-1.467	0.146
F	- A	4.265			1.608			2.138	7 2	6.	4.242	
SIG.		0.002*			0.204			0.110		$\sim$	0.002*	
R		.536 <sup>a</sup>			.535 <sup>b</sup>		_	.621°			.415 <sup>d</sup>	
R2		0.287		\ <b>T</b>	0.287	~	0/	0.386			0.172	
ADJ.R		0.220			0.108		2	0.206	~		0.132	
ST.ER		0.6266	71		0.40875			0.3069			0.5627	
Durbin		1.946	N=59	272	1.092	N=26	NKI-	1.828	N=23		1.777	N=108
	Logis	tics ( No In	terest)	Marke	eting (No Ir	nterest)	Manage	ement ( No	Interest)	Al	l ( No Inter	est)
	Coeff.			Coeff.			Coeff.		7 /	Coeff.		
	В	Т	Sig.	В	- T	Sig.	В	Т	Sig.	В	Т	Sig.
(CONS	-1.675	-0.878	0.394	1.803	1.940	0.058	2.176	1.694	0.096	1.475	2.119	0.036*
X1	0.455	1.269	0.224	0.171	1.111	0.272	0.241	0.943	0.350	0.203	1.548	0.124
X2	0.974	1.974	0.067	0.040	0.230	0.819	0.165	0.523	0.603	0.224	1.424	0.157
X3	-0.666	-1.928	0.073	0.159	0.996	0.324	-0.245	-1.07	0.290	-0.158	-1.281	0.203
X4	0.038	0.106	0.917	-0.502	-3.160	0.003*	-0.464	-1.577	0.121	-0.377	-2.768	0.006*
X5	0.416	1.398	0.182	0.418	2.764	0.008*	0.501	1.918	0.061	0.502	4.100	0.000*
F		2.000			4.030			1.047			4.932	
SIG.		0.137			0.004*			0.400			0.000*	
R		.632 <sup>e</sup>			.544 <sup>f</sup>			.305 <sup>g</sup>			.405 <sup>h</sup>	
R2		0.400			0.296			0.093			0.164	
ADJ.R		0.200			0.222			0.004			.131	
ST.ER		0.8878			0.65203			0.9442			0.8256	
Durbin		2.543	N=21		2.118	N=54		1.761	N=57		2.056	N=132
	L	ogistics (Al	11)	М	arketing (A	All)	Ma	inagement (	All)	A	ll Responde	nts
	Coeff.			Coeff.			Coeff.			Coeff.		
	В	Т	Sig.	В	Т	Sig.	В	Т	Sig.	В	Т	Sig.
(CONS	0.219	0.286	0.776	1.813	1.772	0.080	0.795	0.619	0.538	0.730	1.303	0.194
X1	0.517	2.892	0.005*	0.061	0.337	0.737	0.039	0.153	0.879	0.224	1.938	0.054*
X2	0.222	1.162	0.249	0.214	1.034	0.304	0.126	0.414	0.680	0.242	1.825	0.069
X3	-0.156	-1.084	0.282	-0.245	-1.434	0.156	0.049	0.227	0.821	-0.168	-1.716	0.088

Table 11 Multiple Regression Coefficients for variables



X4	0.276	1.573	0.120	-0.079	-0.450	0.654	0.085	0.313	0.755	0.013	0.114	0.910
X5	0.024	0.152	0.879	0.447	2.625	0.011*	0.393	1.647	0.104	0.408	3.916	0.000*
F		4.936			1.926			1.627			7.180	
SIG.		0.001*			0.100			0.163			0.000*	
R		.500 <sup>i</sup>			.339 <sup>j</sup>			.315 <sup>k</sup>			.365 <sup>1</sup>	
R2		0.250			0.115			0.099			0.133	
ADJ.R		0.199			0.055			0.038			0.114	
ST.ER		0.7499			0.90276			1.0313			0.9132	
Durbin		2.096	N=80		1.003	N=80		1.211	N=80		2.222	N=240

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Results from table 11 showed coefficients of predictors. First, groups were focus only on groups of persons who had an interest to work in logistic. The most influence for logistics students was X1 (Reliability) with positives coefficient value at 0.603 with significant value at 0.005. For marketing students was X2 (Rates) was the most related variable with positive at 0.431 units with significant value at 0.038. The management students was X4 (Risk factor) had a positive coefficient value at 0.512 with significant value at 0.011. However, for all students of all three majors who had an interest (N=108), the coefficients had accept null hypothesis only on dependent variable (Y=2.082, sig.0.000), due to there were no any significantly affects by any predictors (X1 to X5) significantly. Only the dependent variable as "intention" had a positive affect at 2.082 units with a significant value to reject null hypothesis at 0.000.

Next, groups of persons who had no any interest to work in logistics careers and related fields, for logistics students, the result showed no any significance to reject null hypotheses, since all were over 0.005. Meantime, if suppose the alpha was changed from 0.05 to p>0.1, then the most significant affect will be X2(Rates) and followed by X3(Resources) for whom having no interest in logistics faculty. For marketing students, the most impact was X4 (Risk factor) had a negative relation at -0.502 with significant value at 0.003, followed by X5 (Responsiveness) had positive coefficient value 0.418 unit with significance at 0.008. The management students' result reported that no any significant coefficients since all predictors' values were over 0.05, the nearest was a positive value 0.061 of variable X5 (Responsiveness) at a positive coefficients value 0.502 with significance at 0.000, followed by X4 (Risk factor) at a negative coefficients value -0.377 with 0.006 significantly.

As an individual by faculty, groups of either who had an interest or without any interest to work in logistics industry and related fields were grouped and analyzed by each faculty individually. Overall, result from all students in logistics faculty showed that the most impact was X1 (Reliability) had a positive coefficients value 0.517 with significance at 0.005. Result from students in marketing faculty showed that X5 (Responsiveness) had most coefficients impact at 0.447 positively with significant value at 0.011. Different from all those in management faculty, there were neither any predictors' coefficients nor impact at significant level.

Finally, the total respondents test was done. At this time, all kinds and types of respondents was analyzed into one group as a whole (N=240). The result showed that the most impact variables were X5 and X1. X5(Responsiveness) had a positive coefficient value 0.408 with significance at 0.000 and X1 (Reliability) had a positive coefficient value 0.224 at 0.054 significantly.

The conclusion of all variables and types of group can be listed as below (table 12)

Groups	Most Impacts	Rank by Predictors:	F-Sig.	R	r2
		(Constant)	-		
Logistics (Interest)	X1 (Reliability)	-R5, R2, R1, R3, R4 = 52134	0.002*	.536ª	0.287
Marketing (Interest)	X2 (Rates)	-R5, -R4, R2, R3, R1 = 54231	0.204	.535 <sup>b</sup>	0.287
Management (Interest)	X4 (Risk factor)	-R5, R4, -R2, -R1, R3 =	0.110	.621 <sup>c</sup>	0.386
		54213			
All students (Interest)	Y (Intention)	R5, R2, R4, R3, R1 = 52431	0.002*	.415 <sup>d</sup>	0.172
Logistics (No interest)	(X2 Rates*)	R5, R1, R2, R4, -R3 = 51243	0.137	.632 <sup>e</sup>	0.400
Marketing (No interest)	-X4 (Risk factor)+X5	R5, R1, R2, -R4, R3 = 51243	0.004*	.544 <sup>f</sup>	0.296
Management (No interest)	(X5	R5, R1, R2, -R4, -R3 = 51243	0.400	.305 <sup>g</sup>	0.093
	Responsiveness*)				
All students (No interest)	X5, -X4	R5, R1, R2, -R4, -R3 = 51243	0.000*	.405 <sup>h</sup>	0.164

Table 12 Conclusion of Predictors rank by ANOVA with most impact variables



Logistics Faculty (All)	X1	R5, R2, R1, -R3, R4 = 52134	0.001*	.500 <sup>i</sup>	0.250
Marketing Faculty (All)	X5	R5, -R4, R2, R3, R1 = 54231	0.100	.339 <sup>j</sup>	0.115
Management Faculty (All)	(X5**)	R5, R1, R2, R4, R3 = 51243	0.163	.315 <sup>k</sup>	0.099
All three majors respondents	X5, (X1*)	R5, R2, R1, R4, -R3 = 52143	0.000*	.365 <sup>1</sup>	0.133
(All)					

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\*upper significant >0.05<0.70 and \*\* best result

Table 12 was analyzing for a conclusion. First, the groups were indicates from several alternatives. The most impact column showed the most influencing variables that have coefficients effects the most. The predictors ranking results were automatically generated by ANOVA test. The most important variable affects the intention were rank under multiple regressions in model testing. The significances of F were the results showing for which group's null hypothesis was rejected for  $H_0$ :  $\beta_1 = \beta_2 = ... \beta_k = 0$  (Predictors have no relationship significantly with the dependent variable). R value results average in range of lowest 305 to maximum 632. These positive R values represent the correlation of relationship to Y. On the other hand, if R value near to 0, it means that the relationship between  $X_k$  and Y were less in correlation (relationship was at the low degree). R square (r<sup>2</sup>) represents for multiple coefficient of determination (the ability in predicting Y by variance of  $X_k$ 's). If R<sup>2</sup> values equal to 0.287 it means that the compositions of variables can predict the variances only 28.7%

Table 13 showed the correlations crossover among five predictors by Pearson Correlation. Analyzed data was tested on only logistics students who had an interest to work in logistics and related fields. The correlation test resulted the first variable, X1 (Reliability) had correlated to X2 (Rates at .517) as the most and then X5 (Responsiveness at .516). Second variable, X2 (Rates) had correlated to X3 (Resources .522) as the most. Third, X3 (Resources) variable was related to X4 (Risk Free .533) is the most, and then X2 (Rates .522). Fourth, variable X4 (Risk free) was related to X5 the most (Responsiveness .626), followed by X3 (resources .533).

Overall result of logistics students' intension (only for those who had an interest to work in logistics fields). The dependent variable as Intention (Y) showed the most correlated was "Reliability" at .475, followed by Rates .339 with significant level resulted as 0.009 related to the logistics student's intension that had a willing to work in logistics field.

Logisti	cs (Interest)	Reliability	Rates	Resources	Risk Free	Responsiveness	INTENTION
Reliability	Pearson Correlation	1	.517**	.441**	.458**	.516**	.475**
	Sig. (2-tailed)	19	.000	.000	.000	.000	.000
	Ν	59	59	59	59	59	59
Rates	Pearson Correlation	.517**	9/9/7/1	.522**	.456**	.393**	.339**
	Sig. (2-tailed)	.000		.000	.000	.002	.009
	N	59	59	59	59	59	59
Resources	Pearson Correlation	.441**	.522**	50/0/21	.533**	.520**	.317*
	Sig. (2-tailed)	.000	.000		.000	.000	.015
	N	59	59	59	59	59	59
Risk Free	Pearson Correlation	.458**	.456**	.533**	1	.626**	.330*
	Sig. (2-tailed)	.000	.000	.000		.000	.011
	N	59	59	59	59	59	59
Responsiveness	Pearson Correlation	.516**	.393**	.520**	.626**	1	.173
	Sig. (2-tailed)	.000	.002	.000	.000		.191
	N	59	59	59	59	59	59

Table 13 Pearson Correlation (Logistics Students: Interest only)

\*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed).

#### Table 14 Pearson Correlation (All Respondents)



ALL R	lespondents	Reliability	Rates	Resources	Risk Free	Responsiveness	INTENTION
Reliability	Pearson Correlation	1	.331**	.298**	.405**	.299**	.226**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	240	240	240	240	240	240
Rates	Pearson Correlation	.331**	1	.429**	.262**	.295**	.203**
	Sig. (2-tailed)	.000		.000	.000	.000	.002
	Ν	240	240	240	240	240	240
Resources	Pearson Correlation	.298**	.429**	1	.322**	.390**	.082
	Sig. (2-tailed)	.000	.000		.000	.000	.206
	Ν	240	240	240	240	240	240
Risk Free	Pearson Correlation	.405**	.262**	.322**	1	.404**	.168**
	Sig. (2-tailed)	.000	.000	.000		.000	.009
	Ν	240	240	240	240	240	240
Responsiveness	Pearson Correlation	.299**	.295**	.390**	.404**	1	.309**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	Ν	240	240	240	240	240	240

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\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 14 represented total respondents' (all kinds and types) regardless either interest or without interest. (N=240). Among the predictors, the most correlated for independent variable was Rates and Resources which reflected a value as 0.429 vice versa. This means that for overall students either willing to work or not in logistics field, will pay more important on Rates (.429) and Resources (.429). More than Reliability (.405) and Risk free (.405). The dependent variable as Intention had influenced by variables Responsiveness (0.309) the most, which significant at .000 and followed by Reliability (0.226), sig.000 and Rate (0.203), sig.002. The remainders Risk Free and Resources were having no any significant affects since both significances were more than 0.05.

Table 15 supported the study on those who had no interest to work in logistics field. The result of their intention was Responsiveness (at .300 with sig. .000) and Rates .173 (with sig. .047)

ALL R	Respondents	Reliability	Rates	Resources	Risk Free	Responsiveness	INTENTION
Reliability	Pearson Correlation	1	.237**	.320**	.366**	.150	.096
	Sig. (2-tailed)	S-11-	.006	.000	.000	.086	.275
	N	132	132	132	132	132	132
Rates	Pearson Correlation	.237**	1	.447**	.153	.272**	.173*
2	Sig. (2-tailed)	.006		.000	.080	.002	.047
(	N	132	132	132	132	132	132
Resources	Pearson Correlation	.320**	.447**	1	.244**	.397**	.067
	Sig. (2-tailed)	.000	.000		.005	.000	.446
	N	132	132	132	132	132	132
Risk Free	Pearson Correlation	.366**	.153	.244**	1	.348**	082
	Sig. (2-tailed)	.000	.080	.005		.000	.352
	N	132	132	132	132	132	132
Responsiveness	Pearson Correlation	.150	.272**	.397**	.348**	1	.300**
	Sig. (2-tailed)	.086	.002	.000	.000		.000
	Ν	132	132	132	132	132	132

 Table 15 Pearson Correlation (All: No interest only)

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Finally the studied objectives were achieved by following results:

(1) The level of preference towards working in logistics and related fields among senior students in Logistics and other related fields such as Management, Marketing, etc.

The level of preferences of all students in working in logistics showed (table 4) that overall interests to working in logistics was at moderate level ( $\overline{x} = 3.31$ , S.D = 1.07).

Taken into consideration by field of study, the results showed that only logistics students had high level of interest ( $\overline{x} = 3.63$ , S.D = 1.03), while students in faculty of management, and students in marketing had intentions at moderate level ( $\overline{x} = 3.19$ , S.D = 1.08) and ( $\overline{x} = 3.11$ , S.D = 1.04) respectively.

(2) Variables affecting the decision to work in the logistics field of senior students in Logistics.



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The students in Logistics faculty, the results were divided into three facets: first, only the persons who had an interest to work in logistics industry, the person who had no interest, and all persons, students who were studying in logistics faculty.

First: the persons who had an interest (Logistics with interest), the result showed that the variables affecting (refer to table 12). Predictors were ranked as -R5, R2, R1, R3 and R4 (Responsiveness -0.291, Rates .081, Reliability .603, Resources .116 and Risk free .240); while only Responsiveness had a negative coefficients to intention (Y). The most impact variable was "Reliability" = 0.603 with positive relationship (f-sig.0.002; R = .536; r2 = 0.287). It's meaning that H<sub>0</sub> was rejected, since Reliability had a positive relationship significantly to Intention. The model R in positive means that X1 (Reliability) was on same direction with Y (Intention), but it was not a closed-relationship, since it was far from 1. The ability for X1 to predict Y is almost 28.7%.

Second: the persons who had no any interest (Logistics without interest), this group's result showed that the variables affecting (refer to table 12). Predictors were ranked as R5, R1, R2, R4 and – R3 (Responsiveness .416, Reliability .455, Rates .974, Risk free .038 and Resources -0.666); while only Resources had a negative coefficients to intention (Y). The most impact variable was "Rate" = 0.974 with positive relationship (f-sig.0.137; R =.632; r2 = 0.400). This mean to accept H<sub>0</sub>, since F-sig. value was 0.137 which was over 0.05, then having no any affects significantly. The model R in positive means that X2 (Rate) was on same direction with Y (Intention), but it was not a closed-relationship, since it was far from 1. The ability for X2 to predict Y is 40.0%.

Third: the whole groups, every student either with interest or without interest and studying in logistics faculty, result showed that the variables affecting (refer to table 12). Predictors were ranked as R5, R2, R1, -R3 and R4 (Responsiveness .024, Rates .222, Reliability .517, Resources -0.156 and Risk free .276); while only Resources had a negative coefficients to intention (Y). The most impact variable was "Reliability" = 0.517 with positive relationship (f-sig.0.001; R = .500; r2 = 0.250). It's meaning that H<sub>0</sub> was rejected, since Reliability had a positive relationship significantly to Intention. The model R in positive means that X1 (Reliability) was on same direction with Y (Intention), but it was not a closed-relationship, since it was far from 1. The ability for X1 to predict Y is 25.0%.

For only logistics faculty, overall variables resulted at high level ( $\overline{x} = 3.65$ , S.D = 0.37); Responsiveness at high level ( $\overline{x} = 3.84$ , S.D = 0.36), Rate at high level ( $\overline{x} = 3.82$ , S.D = 0.46), Reliability at high level ( $\overline{x} = 3.62$ , S.D = 0.67), Resources at high level ( $\overline{x} = 3.54$ , S.D = 0.61), Risk free at high level ( $\overline{x} = 3.46$ , S.D = 0.64), and intention to work in logistics career at high level ( $\overline{x} = 3.63$ , S.D = 1.04).

Only logistics faculty, variables affect their decisions were "Responsiveness" represented for duty and response was the most influenced at  $\overline{x} = 3.84$ , follow by "Rates" variable represented for wages, salaries, overtime, bonus, and welfare at  $\overline{x} = 3.82$ 

For logistics students' items affecting decision the most were interested in international transport activities, and want to try on a training showed means results as  $\overline{x} = 3.75$  and 3.74 respectively.

(3) Determine the relationship among the independent variables, consisting of Reliability, Rates, Resources, Risk factors, and Responsiveness, on the degree of interest in the working in logistics industry.

Relationships among variables of all fields were analyzed through Pearson's correlation method. For all five variables (of all groups) the correlations result reported that: Reliability related to Risk Free at 0.405; Rates related to Resources at 0.429; Resources also related back similarly to Rates, followed by Responsiveness at 0.390; Risk free related to Reliability at 0.405 and Responsiveness at 0.404; and last Responsiveness related to Risk free (0.404) and followed by Resources at 0.390. Impacts between five predictors from all respondents were: Responsiveness (0.4808), Rate (0.242), Reliability (0.224), Risk free (0.130) and Resources (-0.168) respectively.

For all students, about the degree, 5Rs predictors' were all yielded at high degree: Responsiveness at high level ( $\overline{x} = 3.88$ , S.D = 0.72); Rate at high level ( $\overline{x} = 3.87$ , S.D = 0.53); Reliability at high level ( $\overline{x} = 3.65$ , S.D = 0.59); Risk free at high level ( $\overline{x} = 3.55$ , S.D = 0.61); Resources at high level ( $\overline{x} = 3.53$ , S.D = 0.59).

Dependent variable as intention to work in logistics transport business was at moderate level ( $\overline{x}$  = 3.31, S.D= 1.07).

By Pearson's method correlations test reported that for all students in logistics faculty who had an interest to work in logistics. The correlations showed that Reliability was the most correlated to



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Intention to work in logistics industry at 0.475 with significant level at 0.000, followed by Rates at 0.339 was having a significant level at .009 which both rejected  $H_0$ 

(4) To find the most significant factors impacting the decision to work in Logistics industry of senior students in Logistics; Management and Marketing fields.

The impacts by coefficients for all respondents were: Responsiveness, Rate, Reliability, Risk free and Resources with coefficients values at 0.408, 0.242, 0.224, 0.13 and -0.168, respectively. The R value represented model at 0.365 with  $R^2$  at 0.133 while adjusted  $R^2$  was 0.114. However, it doesn't mean model cannot be fitted well, since after tested by Durbin-Watson valued the result as 2.221, which is near to 2.0 and not exceeded 4.0 (Tu.ac.th, 2014) (more information for *Goodness of fit statistics*, recommended further reading a high R value wasn't always mean a good model (Solution Minitab, 2014).

By Means, the most impacts by faculty to intention studying yielded at high level were:-*Faculty: Logistics* 

Most impact were by Responsiveness ( $\overline{x} = 3.84$ , S.D = 0.36) and Rate ( $\overline{x} = 3.82$ , S.D = 0.46). *Faculty: Marketing* 

Most impact were by Rate ( $\overline{x} = 3.92$ , S.D = 0.59) and Responsiveness ( $\overline{x} = 3.90$ , S.D = 0.44). *Faculty: Management* 

Most impact were by Responsiveness ( $\overline{x} = 3.91$ , S.D = 1.14) and Rate ( $\overline{x} = 3.88$ , S.D = 0.55). Only the students from each faculty who had an interest to work in logistics industry (only interest by faculty). The results were analyzed by multiple regressions for below outcomes:-

Faculty: Logistics = RELIABILTY (X1 = 0.603 sig.0.005) (F-value 0.002, R=0.536, R2=0.287) (Predictor Rank = -R5, R2, R1, R3, R4)

Faculty: Marketing = RATES (X2 = 0.431 sig.0.038) (F-value 0.204, R=0.535, R2=0.287) (Predictor Rank = -R5, -R4, R2, R3, R1)

Faculty: Management = RISK FREE (X4 = 0.512 sig. 0.011) (F-value 0.110, R=0.621, R2=0.386) (Predictor Rank = -R5, R4, -R2, -R1, R3)

Variable which was producing the highest impact on the level of the interest in working in logistics industry of logistics students is Reliability at 0.517, Rates at 0.222, Resources at -0.156, Risk free at 0.276 and Responsiveness at 0.24 respectively.

The relationship of variables were explained by Pearson's Correlations, for those students within logistics filed, the most related among 5Rs predictors were: Reliability was related with Responsiveness as the most at 0.425; Rates, the most related was Resources at 0.552; for Resources, the most related was similar reflected back to Rates variable (0.552), followed by Risk free at 0.473; for Risk free, the most related was Responsiveness at 0.620; And the last, Responsiveness related to Risk free at 0.620 and followed by Resources at 0.445 (no table represented here for all logistics including non interest persons, due to limitation of available number of pages). To explore further in depth, the results of Scheffe's showed that:

**Reliability:** There is no significant difference in the interest in working in logistics field among students from different majors.

**Rate:** There is no significant difference in the interest in working in logistics field among students from different majors.

**Resource:** There is no significant difference in the interest in working in logistics field among students from different majors.

**Risk Factors:** There is no significant difference in the interest in working in logistics field among students from different majors.

**Responsiveness:** There is no significant difference in the interest in working in logistics field among students from different majors.

However, there is significant difference in the interest in working in international logistics field among students from different majors at the significant level of 0.05. The pair wise comparisons showed that the students in Management and Marketing expressed more interest to pursue careers in international logistics than those studying logistics and the students in Marketing expressed more interest to pursue careers in international logistics than those studying Management. (*see* table 8)



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Finally, research result can be concluded as duty in responsible functions and salary were the most important effects as two main keys, influenced candidate's interest as well as the decision making to apply for a job in logistics careers.

#### Discussion

The study analyzed all five independent variables: reliability; rates; resources; risk free; responsiveness of SPU model with a dependent variables: interest to working in logistics and related fields.

For overall students, the most impact factor was "*responsiveness*" at high level described as their worries in duty and response in fast as well as responsibility in their working. Followed by "*rates*" factor at high level reflected their earnings all are about personal benefits which are income, commission or incentive, bonus, including welfare such as: health insurance; annual tour trip, etc.

The results are therefore precise enough for firm to identify areas of which activities were in their interests. Intention was measured by five-R dimensions: reliability, rates, resources, risk avoidance and responsiveness. Findings, 55% of respondents had no interest to work in logistics field; refusals' results were not matched their studied fields. The overall intention impacts at moderate level, except logistics field. Relationship of each variable had no significant difference among students from different majors. However, the pairwise comparisons resulted as studying in of marketing having interest the most than management students and logistics students respectively. The most two impacts for intention of all respondents were responsiveness and rates. Responsiveness at high level described for quick respond to customer and focuses on accuracy. Rate at high described for ability to pay high salary with annual bonus. However, overall intentions were at moderate level determined by interested in transport activities and wanted to try in training. All items in this dimension to work in logistics were rated as moderates, except only all logistics students from both universities yield all items to high level. The tool is relatively generalities with genuine factors and easy to use. Limitation is related to samples' location. The study made at two sites where no effects to the respondents' intention and decisions making had. The tool was developed on clearly defined with theoretical foundations. SPU five dimensions of reliability, rates, resources, risk avoidance and responsiveness can balance both characteristics of activities in logistics service perceives and performance unit in form of intentions as dependence variable. The requirements are simple and objective.

The means from three groups by major of study fields (all students) were shown that "Reliability" represented most two impact items were size of organization and corporate reputation. There are no any differences either between each group or all groups for whole students for size of organization (see table 15). "Rate" factor without any differences was considered by two faculties among logistics students and management students, these also congruent to all students' outcome that the two main influences were paying them at high rate salary together with opportunity to earn annual bonus; commission or incentives. Differ to this issue, highlighted by marketing students was an opportunity to earn overtime wages instead. The two important attributes of "Resources" from management students and marketing students were same to the results from all students. They represented most important items were working at in own building, own office workplace as well as the large number of employees while logistics students had different perceives in quantity of staff but their key was possession of property for wealth and equipped assets. The "Risk" factor represented freedom from risks and risk avoidance, these resulted unanimously that working must be indoor only with providing them for health insurance. Only risk factor all of the respondents treat the employee's insurance the most important item, followed by the workplace must be indoor. Findings about "Responsiveness" showed that perceives of all students were having no any differences from those students who study in logistics faculty. The overall outcomes were shown that company at firstly must focuses and emphasizes to respond their customer's need quickly and secondly focuses on company's accuracy. By means, management students focus more on the regulatory compliance in working environment and accuracy. For marketing students, they rated highest yield for quick respond to customers with the firm must provides them for hi-tech office equipments and network.

#### Recommendations



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Most first jobbers (fresh graduates) are more concerned about task responsibilities and put first priority on income rather than the risk awareness in the workplace. This is because fresh graduates have to satisfy their lower level needs for necessity first. In the same way, since they have no job experiences, what concerns them most should be task responsibilities. The reason behind the fact that marketing students have the lowest mean value on any other factors is that most marketing students are very confident about their ability to perform jobs successfully. This reflects the perception of the new generation that they can switch to alternative, self-employed jobs like on-line business. The findings are correspondent to the popularity of materialism in the Thai context.

Works related to logistics include documentary works which require typing, communications and English abilities. Physical distribution also requires accuracy, punctuality and ability to work under time pressure, which is, of course, not simple.

HR managers in logistics industry understand that most inexperienced workers would like to apply for jobs compatible with their fields of graduation. However, one of the major problems in the area of compensation is that most graduates prefer simple, less works, and low responsibilities with high payment. Payment which is not commensurate with the skill level of the workers will lead to more accumulated problems in the future.

Top management in logistics field also needs to reserve certain amount of fund for training and development to adjust the skills of the workers to match the rapidly changing requirements of the jobs. The economic integration brought about by AEC will make English usage ability a must. On the other side of the same coin, the job market will be expanded to include all the other 9 countries in AEC. The employment of foreign labor will lead to acculturation and other types of training. Future research calls for the study of how to attract and maintain these qualified staff members. Nevertheless, the joint-training program should be developed and established as a course trial at the employer's premises and instituted campus. For future study the research should prepare for the second plan as a business management planning for Business Continuity Management: BCM, which for pros. and con. for the possibilities to recruit a foreigner employees from neighbor countries such as Vietnamese or Burmese as a new sector for labor intensive under AEC context, if such shortage go into critical employee shortage situation, since today job seekers' behavior are changing to choice for his/her variety of careers chosen from internet only.

#### About the author:

Pisoot Thankdenchai has been working in Logistics for more than 25 years, starting from the operational level. Currently he is the Director of Dragon Star Maritime Co. Ltd., responsible for performing logistical functions for major corporations in Thailand. He also performs Guest Lecturing roles in various universities, and counseling roles in various companies in Thailand. Simultaneously, he is a Doctoral Candidate in the Faculty of Logistics and Supply Chain Management, doing a thesis on the Impacts of Service Quality of Logistics Service Providers in Thailand towards the Sustainable Competitiveness of the Enterprises. His areas of specialty: Partial shipments and critical consolidation service management for logisticians. Pisoot's main research interests are in the field of physical distribution and logistics transport; include Make-or-Buy Decisions, the Reductions of Total Costs of Ownership, Service Quality, Efficiency of various Logistical Activities towards Profitability, etc. Pisoot is the corresponding author and can be contacted at: pisoott@truemail.co.th

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