CHAPTER 4

RESULTS

In this chapter, the data analysis was made according to the 3 objectives of the study (See Chapter 1). Results are shown in 4 parts, including, general information of respondents, external and internal factors influencing Virtual Organization (VO) adoption in hotel management, external and internal barriers inhibiting VO adoption, and hypothesis testing.

4.1 General Information of Respondents

The first part of the questionnaire sought the respondents' general information concerning gender, age, education, average monthly income, previous experience in VO, rate of importance of the virtual adoption in Thailand, awareness of conducting business through the VO worldwide, source of such awareness, type of the working company ownership, years of working experiences in hotel industry, virtual practice at the workplace, and recent working position and department, correspondingly. All information was displayed in the form of frequency and percentage of the respondents, as the following:

1. Respondents' Gender

As shown in Table 4.1.1, nearly 60 percent of the respondents were female and the rest were male.

Table 4.1.1 Descriptive for 'Respondents' Gender'

Gender	Frequency	Percentage
Male	82	44.1
Female	104	55.9
Total	186	100.0

2. Respondents' Age

According to Table 4.1.2, nearly 70 % of the respondents had the age group not more than 40 years, and almost 30% of over 40 years.

Table 4.1.2 Descriptive for 'Respondents' Age'

Age	Frequency	Percentage
21-30 years	63	33.9
31-40 years	66	35.5
41-50 years	40	21.5
Above 50 years	17	9.1
Total	186	100.0

3. Respondents' Education

According to Table 4.1.3, over 73% of the respondents had graduated in Bachelor Degree and higher and approximate 27% with background in Technical/Vocational School and Hotel Certificate/Diploma.

Table 4.1.3 Descriptive for 'Respondents' Education'

Education	Frequency	Percentage
Technical/ Vocational School	32	17.2
Hotel Certificate/Diploma	18	9.7
Bachelor Degree	127	68.3
Master Degree	9	4.8
Total	186	100.0

4. Respondents' Monthly Income

Regarding Table 4.1.4, 71% of the respondents earned less than THB 25,000 per month, and only 29% earned higher.

Table 4.1.4 Descriptive for 'Respondents' Average monthly income'

Average monthly income	Frequency	Percentage
THB 8,000 - THB 15,000	94	50.5
THB 15,001 - THB 25,000	38	20.4
THB 25,001 - THB 35,000	26	14.0
THB 35,001- THB 45,000	14	7.5
Higher than THB 45,000	14	7.5
Total	186	100.0

5. Respondents' Past Experience in VO

Regarding Table 4.1.5, this study found that 77% of the respondents had never worked in any VO before, and the rest 23% had experienced.

Table 4.1.5 Descriptive for 'Respondents' past experience in VO'

Past Experience in VO	Frequency	Percentage
Yes	42	22.6
No	144	77.4
Total	186	100.0

6. Respondents' Opinion in VO Adoption in Thailand

Regarding Table 4.1.6, 42% of the respondents thought that the virtual adoption in Thailand is important, and 30% rated the importance of virtual adoption as neutral.

Table 4.1.6 Descriptive for 'Rate of importance of the virtual adoption in Thailand'

Rate of importance	Frequency	Percentage
Very important	24	12.9
Important	78	41.9
Neutral	56	30.1
Not important	26	14.0
Not important at all	2	1.1
Total	186	100.0

7. Respondents' Awareness of conducting VO Worldwide

As shown in Table 4.1.7, 48% of the respondents were aware and very much aware of VO worldwide, 23% of the them were not aware, and only 8% were not aware at all.

Table 4.1.7 Descriptive for 'Awareness of conducting VO worldwide'

Awareness	Frequency	Percentage
Very much aware	36	19.4
Aware	53	28.5
Neutral	40	21.5
Not aware	42	22.6
Not aware at all	15	8.1
Total	186	100.0

8. Respondents' Source of VO Information Worldwide

Corresponding to Table 4.1.8, 129 respondents (See: Table 4.1.7, who replied neutral, aware and very much aware of conducting VO worldwide) knew about VO conduction and its practices worldwide by 'Internet / Virtual Programs' (35.7%) and first-hand experience in VO (34.1%), majorly.

Table 4.1.8 Descriptive for 'Respondents' Source of VO Information Worldwide'

Sources of Information	Frequency	Percentage
Your previous work experience in Virtual Organization	44	34.1
Television	14	10.9
Internet/ Virtual Programs	46	35.7
Journal/Publications	21	16.3
Others	4	3.1
Total	129	100.0

9. Respondents' Company Ownership Type

As shown in Table 4.1.9, a large amount of respondents (88.7%) were working for 'Thai Sole proprietorship', whereas, the rest worked for 'other type of the company ownership' (4.8%), 'Multinational Company' (3.8%), and 'Foreign Direct Investment' (2.7%).

Table 4.1.9 Descriptive for 'Respondents' Company Ownership Type'

Type of the company	Frequency	Percentage
Thai Sole proprietorship	165	88.7
Multinational Company	7	3.8
Foreign Direct Investment	5	2.7
Others (Joint Venture, Merger & Acquisition, Trusts, S-Corporation)	9	4.8
Total	186	100.0

10. Respondents' Company Ownership Type

According to Table 4.1.10, most of the respondents (50%) were working in hotel industry more than 5 years. In additional the number of respondents, who has less than 3 years of service years in hotel industry, represented 32%.

Table 4.1.10 Descriptive for 'Years of working experiences in hotel industry'

Years of working experiences	Frequency	Percentage
Less than 1 year	32	17.2
Yr 1- Yrs 3	27	14.5
Yrs 3.1- Yrs 5	33	17.7
Yrs 5.1- Yrs 10	42	22.6
More than 10 Yrs	52	28.0
Total	186	100.0

11. Respondents' Work Remote Allowance

Regarding Table 4.1.11, the majority 75% of the respondents' workplace did not allow employees to work remotely, whereas, only 25% allowed.

Table 4.1.11 Descriptive for 'The respondent's workplace allow employees to work remotely'

Allow work remotely	Frequency	Percentage
Yes	47	25.3
No	139	74.7
Total	186	100.0

12. Respondents' Positions

According to Table 4.1.12, most of the respondents were working in supervisory level (65%) and the rest were working as General Manager or Management level (35%).

Table 4.1.12 Descriptive for 'Respondents' Work Position'

Position	Frequency	Percentage
General Manager or Management level	66	35.5
Supervisory level	120	64.5
Total	186	100.0

13. Respondents' Work Departments

According to Table 4.1.13, majority of the respondents (62%) were working in the Back Office positions, as follows: 14% in Human Resources Department, 14% in Food and Beverages Department (F & B), 13% in Accounting Department, 6.5% in Rooms Service and Housekeeping Department, 3% in Engineering Department, 0.5% in Research and Development (R&D), 0.5% in Customer Service, 0.5% in Tour Operation and 0.5% in Administration. 'Front Office' was the only customer Interface's front office position and accounted for 38%, in this study.

Table 4.1.13 Descriptive for 'Respondents' work departments'

Department	Frequency	Percentage
Front Office	71	38.2
Rooms Service and Housekeeping	12	6.5
Accounting	25	13.4
Sales and Marketing	17	9.1
Human Resources	26	14.0
Food and Beverages (F & B)	26	14.0
Engineering	5	2.7
Research & Development (R & D)	1	0.5
Customer Service	1	0.5
Tour Operation	1	0.5
Administration	1	0.5
Total	186	100.0

4.2 The Factors influencing Virtual Adoption in the Hotel Management

This part is designed to comprehend the respondents' attitude toward the factors influencing virtual adoption in the hotel industry.

All information was measured by applying two types of factors, in this study: external and internal environmental factors towards virtual adoption. External environment factors are inclusive of Macro-ICT infrastructure factor, Transportation-related factor, Macro-global economy factor, Macro-environmental and political factor, Macro-legal factor, Micro-competitor factor, and Micro-customer factor. Five internal influential factors, are similarly discussed and comprise of Relational factor, Structural factor, Individual factor, Financial factor, and Management competencies and strategic factor.

Closed-ended question with the Likert 5-point scale were used to measure the degree of agreement with the factor components. The findings were shown in the form of frequency distribution, mean, statistic deviation, and factor analysis.

4.2.1 External environmental factors influencing VO adoption in hotel management in Chiang Mai province

An Exploratory Factor Analysis was performed to examine the external environmental factors influencing VO in Hotel management. The Kaiser-Meyer-Olkin value from sampling adequacy was 0.903, and the Bartlett's test of sphericity was significant (Sig = 0.00), supporting the factorability of the correlation matrix. Items that did not load to a significant extent (coefficients of less than 0.4) to a unique factor were deleted. The Factor Analysis results of each of the two measuring scales are shown in Table 4.2.1.1. From the factor analysis, 2 sub factors (Ex-factor1 and Ex-factor2), can be retrieved, as the following:

4.2.1.1 External environmental factors (Factor Analysis)

As shown in Table 4.2.1.1, this study indicates that Ex-factor 1, or PLEECC, consists of 7 components. The components of this factor include Environmental (E) & Political (P) sub- factor, Legal (L) sub-factor, Global Economy (E) sub-factor, Customer (C) sub-factor, ICT (I) sub-factor, and Competitor (C) sub-factor.

'PLEECC' includes 'Teleworking plays a vital role in keeping operations going, while there is the business disruption from natural disaster, workplace violence, etc.; Legislation in many countries regarding teleworking is enacted to support companies to offer telecommuting to employees; Workforce components are shifted from agriculture to information-based global economy; The shifting economic pressures have invented new organizational forms-teleworking or virtual organization; Imaginary corporations, dynamic networks, and flexible work teams, etc.; VO would swap its investment and utilize the saving from traditional business structure to research and development for more creative and innovation products/services; VO focuses quick and well on customer quality services and market responsiveness' demand by providing 24/7 support; Investing VO consumes lower capital requirements and lessens the cash loss's opportunity for the new entry'.

Moreover, Ex-factor 2, or 'IT', consists of 3 components. The components of this factor include ICT sub-factor and Transportation related sub-factors. 'IT' comprise of 'Technology plays the important role worldwide making change to economic progress and traditional business structure; Technological advances have made communication across geographic space easier, leading significant increases in capacity, cost reduction, available product features and services, etc.; Teleworking is designed to reduce the amount of teleworkers' commuting activities; reduction in traffic, congestion, car accidents and air pollution'.

Table 4.2.1.1 Rotated Component Matrix (External environmental Factors)

Questions	Component	
	1	2
Ex-factor 1 (PLEECC)		
1.1 (Q6). Teleworking plays a vital role in keeping operations going, while there is the business disruption from natural disaster, workplace violence, etc.	**.833**	.180
1.2 (Q7). Legislation in many countries regarding teleworking is enacted to support companies to offer telecommuting to employees.	**.805**	.235
1.3 (Q4). Workforce components are shifted from agriculture to information-based global economy.	**.795**	.234
1.4 (Q5). The shifting economic pressures have invented new organizational forms-teleworking or virtual organization; imaginary corporations, dynamic networks, and flexible work teams, etc.	**.731**	.400
1.5 (Q10). Virtual Organization would swap its investment and utilize the saving from traditional business structure to research and development for more creative and innovative products/services.	**.688**	.381
1.6 (Q9). Virtual Organization focuses quick and well on customer quality services and market responsiveness' demand by providing 24/7 supports.	**.638**	.418
1.7 (Q8). Investing Virtual Organization consumes lower capital requirements and lessens the cash loss's opportunity for the new entry.	**.619**	.409

Questions	Component	
	1	2
Ex-factor 2 (IT)		
2.1 (Q1). Technology plays the important role worldwide making change to economic progress and traditional business structure.	.259	**.895**
2.2 (Q2). Technological advances have made communication across geographic space easier, leading significant increases in capacity, cost reduction, available product features and services, etc.	.282	**.891**
2.3 (Q3). Teleworking is designed to reduce the amount of teleworkers' commuting activities; reduction in traffic, congestion, car accidents and air pollution.	.358	**.730**

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization (a rotation converged in 3 iterations)

4.2.1.2 Reliability towards External environmental Factors in VO adoption:

Table 4.2.1.2 presents an acceptable value for Cronbach's Alpha of over 0.8, for seven related questionnaire questions in Ex-factor1 (PLEECC), and 3 questions in Ex-factor2 (IT), after performing Factor Analysis.

Table 4.2.1.2 Reliability of External environmental Factors in VO Adoption

Influential Factors (After Factor Analysis)	Questionnaire no.	Cronbach Alpha
Ex-Factor1 (PLEECC)	4, 5, 6, 7, 8, 9, 10	.9061
Ex-Factor2 (IT)	1, 2, 3	.8828

4.2.1.3 Descriptive findings towards External environmental Factors in VO adoption:

Table 4.2.1.3 indicates that overall, most of the respondents agreed that external factors are rated agree ($\bar{x}$ = 3.83, S.D. = 0.51) and may have the positive influence on virtual formation in the organization. As regards, 'Ex-Factor2/IT' influenced the most with rating of 'agree' ($\bar{x}$ = 4.12, S.D. = 0.09), and same rating for 'Ex-Factor1/PLEECC' ($\bar{x}$ = 3.70, S.D. = 0.29), respectively. For details, aspects factors have been explicated below:

Ex-factor1/PLEECC:

'Micro-customer factor' has been the major selection sub factors among the external factors. In which, the majority of the respondents assented with "Virtual Organization focuses quick and well on customer quality services and market responsiveness' demand by providing 24/7 supports" ($\bar{x}$ = 3.87), and with "Virtual Organization would swap its investment and utilize the saving from traditional business structure to research and development for more creative and innovative products/services" ($\bar{x}$ = 3.75).

Following by, 'Macro-competitors Factor', the hefty number of respondents consented with "Investing Virtual Organization consumes lower capital requirements and lessens the cash loss's opportunity for the new entry" ($\bar{x}$ = 3.69). "The shifting economic pressures have invented new organizational forms-teleworking or virtual organization; imaginary corporations, dynamic networks, and flexible work teams, etc.", and, "Workforce components are shifted from agriculture to information-based global economy", or 'Macro-global economy factor' ($\bar{x}$ = 3.69) have become another large selection, in our study.

The result indicated also that "Legislation in many countries regarding teleworking is enacted to support companies to offer telecommuting to employees" ($\bar{x}$ = 3.62). However, the key difference among the Ex-Factor 1 (PLEECC) and Ex-Factor 2 (IT), after the factor extraction, is that 'Macro-environmental and political factor';

"Teleworking plays a vital role in keeping operations going, while there is the business disruption from natural disaster, workplace violence, etc.", has been the least selective sub factor in 'Ex-Factor 1/PLEECC' ($\bar{x} = 3.61$).

Ex-factor 2/IT:

Among the external factors, most of the respondents strongly agreed with 'Macro-ICT infrastructure', and agreed with 'Transport-related factor' sub-factors, respectively. "Technology plays the important role worldwide making change to economic progress and traditional business structure" related factor ($\bar{x}$ = 4.23), followed by, "Technological advances have made communication across geographic space easier, leading significant increases in capacity, cost reduction, available product features and services, etc." ($\bar{x}$ = 4.22). Moreover, majority of the respondents agreed with "Teleworking is designed to reduce the amount of teleworkers' commuting activities; reduction in traffic, congestion, car accidents and air pollution" ($\bar{x}$ = 3.92).

Table 4.2.1.3 Descriptive for 'External environmental Factors towards VO adoption in hotel management'

External factors toward virtual adoption (Ex-Factor1/PLEECC: 1-7) (Ex-Factor2/IT: 8-10)	Level of Agreement					$\bar{x}$	S.D.
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
1. (Q 9). Virtual Organization focuses quick and well on customer quality services and market responsiveness' demand by providing 24/7 supports.	43 (23.1)	86 (46.2)	47 (25.3)	9 (4.8)	1 (0.5)	3.87	0.84
2. (Q 5). The shifting economic pressures have invented new organizational forms-teleworking or virtual organization; imaginary corporations, dynamic networks, and flexible work teams, etc.	36 (19.4)	84 (45.2)	54 (29.0)	12 (6.5)	- (-)	3.77	0.83

External factors toward virtual adoption (Ex-Factor1/PLEECC: 1-7) (Ex-Factor2/IT: 8-10)	Level of Agreement					$\bar{x}$	S.D.
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
3. (Q 10). Virtual Organization would swap its investment and utilize the saving from traditional business structure to research and development for more creative and innovative products/services.	38 (20.4)	77 (41.4)	58 (31.2)	13 (7.0)	- (-)	3.75	0.86
4. (Q 8). Investing Virtual Organization consumes lower capital requirements and lessens the cash loss's opportunity for the new entry.	31 (16.7)	81 (43.5)	60 (32.3)	13 (7.0)	1 (0.5)	3.69	0.85
5. (Q 7). Legislation in many countries regarding teleworking is enacted to support companies to offer telecommuting to employees.	33 (17.7)	66 (35.5)	72 (38.7)	13 (7.0)	2 (1.1)	3.62	0.89
6. (Q 6). Teleworking plays a vital role in keeping operations going, while there is the business disruption from natural disaster, workplace violence, etc.	32 (17.2)	71 (38.2)	63 (33.9)	19 (10.2)	1 (.5)	3.61	0.91

External factors toward virtual adoption (Ex-Factor1/PLEECC: 1-7) (Ex-Factor2/IT: 8-10)	Level of Agreement					$\bar{x}$	S.D.
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
7. (Q 4). Workforce components are shifted from agriculture to information-based global economy.	28 (15.1)	77 (41.4)	61 (32.8)	19 (10.2)	1 (0.5)	3.60	0.88
Overall Ex-factor1 (PLEECC)						3.70	0.03
8. (Q 1). Technology plays the important role worldwide making change to economic progress and traditional business structure.	91 (48.9)	61 (32.8)	23 (12.4)	8 (4.3)	3 (1.6)	4.23	0.94
9. (Q 2). Technological advances have made communication across geographic space easier, leading significant increases in capacity, cost reduction, available product features and services, etc.	88 (47.3)	67 (36.0)	18 (9.7)	9 (4.8)	4 (2.2)	4.22	0.96
10. (Q 3). Teleworking is designed to reduce the amount of teleworkers' commuting activities; reduction in traffic, congestion, car accidents and air pollution.	47 (25.3)	83 (44.6)	50 (26.9)	6 (3.2)	- (-)	3.92	0.80

External factors toward virtual adoption (Ex-Factor1/PLEECC: 1-7) (Ex-Factor2/IT: 8-10)	Level of Agreement					$\bar{x}$	S.D.
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
Overall Ex-factor2 (IT)						4.12	0.09
Overall Influential External Factors						3.83	0.05

4.2.2 Internal environmental Factors influencing VO adoption in hotel management in Chiang Mai province

An exploratory factor analysis was performed to examine the internal environmental Factors influencing VO in Hotel management. The Kaiser-Meyer-Olkin value from sampling adequacy was 0.924, and the Bartlett's test of sphericity was significant (Sig = 0.00), supporting the factorability of the correlation matrix. Items that did not load to a significant extent (coefficients of less than 0.4) to a unique factor were deleted. The factor analysis results of each of the two measuring scales are shown in Table 4.2.2.1. From the factor analysis, 3 sub factors (In-factor1, In-factor2 and In-factor3), can be extracted, as the following:

4.2.2.1 Internal environmental Factors (Factor Analysis):

From Table 4.2.2.1, this study indicates that In-factor 1, or 'RS', consists of 11 components. The component of this factor includes Structural and Relational sub factors. 'RS' includes 'Clear evaluation can enhance productivity when managers are unable to physically supervise their subordinates in a virtual setting; Telework gives the organization the benefit of recruiting and retaining the best employees even though they may live far away or are unable or unwilling to commute; Trust from the managerial or supervisory and employee can enhance overall business performances and employee retention while adopting teleworking; Teleworking reduces stress and improves dispositions and interpersonal interaction, by giving workers the flexibility to manage their work and family requirements; Clarity of evaluation criteria enhances

the teleworking adoption's probability; New information technology (IT) generates the pooled interdependence, whereby individuals can work autonomously at an individual level; Regarding the management perspective, providing flexible work arrangement, there is the higher possibility to lessen employees' turnover and absenteeism, while increase higher productivity and healthier workers; Dual-agenda is arranged to enable flexibility in work venue and work schedule and to achieve business objectives and providing greater opportunities to effectively manage work and personal/family like; Organizational connectedness inspires the employees with a feeling that there is a community that they can rely upon for support and information; Cultural difference will positively linked to the virtual adoption's decision or Virtual Organization success if communication, trust and management system compatibility exist among partners'.

In-factor 2 (FIRMS) covered 7 components which are related to Financial sub-factor, Individual sub-factor, Relational sub-factor, Management competencies and strategic sub-factor, and Structural sub-factor. 'FIRMS' comprises of 'Virtual Organization responses the managements' intention to seek for savings by reducing real estate and energy costs, labor cost, commercial premises cost and other related costs; Internet or a networked computer system accelerates the shipments and value chain process resulting in speedy service to the customers in ordering or any customer needs; Virtual Organizations' performance can be uplifted by having potential outsourcings that possesses the excellence in service and expertise; Job suitability for teleworking should be based on intimate knowledge of specific jobs; Men are likely to be full-time teleworkers, while part-time teleworkers were more likely to be female; Nowadays, with the flexible workplace model, employers who offer additional alternatives work option can retain employees; Companies need flexibility and access to the best talent, wherever it is; they will create multi-function, multi-location teams to assemble their best talent world-wide; Small firm size is more appealing to managers to adopt virtual model; Age, as a moderator, may impact on the virtual implementation' decision'.

Sequentially, In-Factor 3, or 'Individual', is indicated by three components that cover 'Gender has the impact on the virtual adoption; Virtual experiences workers may seem teleworking attractive and less concerned about the uncertainty and ambiguity

surrounding their task management; Slow woman teleworkers' expansion is due to family duties'.

Table 4.2.2.1 Rotated Component Matrix (Internal environmental Factors)

Questions	Component		
	1	2	3
In-factor 1 (RS)			
1. (Q20). Clear evaluation can enhance productivity when managers are unable to physically supervise their subordinates in a virtual setting.	**0.776**	0.091	0.303
2. (Q16). Telework gives the organization the benefit of recruiting and retaining the best employees even though they may live far away or are unable or unwilling to commute.	**0.769**	0.203	0.131
3. (Q11). Trust from the managerial or supervisory and employee can enhance overall business performances and employee retention while adopting teleworking.	**0.718**	0.231	0.171
4. (Q21). Teleworking reduces stress and improves dispositions and interpersonal interaction, by giving workers the flexibility to manage their work and family requirements.	**0.697**	0.363	0.179
5. (Q19). Clarity of evaluation criteria enhances the teleworking adoption's probability.	**0.697**	0.376	0.088
6. (Q17). New information technology (IT) generates the pooled interdependence, whereby individuals can work autonomously at an individual level.	**0.676**	0.475	0.022
7. (Q23). Regarding the management perspective, providing			

Questions	Component		
	1	2	3
flexible work arrangement, there is the higher possibility to lessen employees' turnover and absenteeism, while increase higher productivity and healthier workers.	**0.652**	0.380	0.168
8. (Q22). Dual-agenda is arranged to enable flexibility in work venue and work schedule and to achieve business objectives and providing greater opportunities to effectively manage work and personal/family like.	**0.580**	0.356	0.217
9. (Q14). Strong virtual leadership is important in creating relationships with employees, focusing on their use of technology and bringing virtual team members achieving the common goal.	**0.533**	0.526	0.112
10. (Q12). Organizational connectedness inspires the employees with a feeling that there is a community that they can rely upon for support and information.	**0.501**	0.401	-0.043
11. (Q13). Cultural difference will positively linked to the virtual adoption's decision or Virtual Organization success if communication, trust and management system compatibility exist among partners.	**0.490**	0.373	0.285
In-factor 2 (FIRMS)			
12. (Q31).Virtual Organization responses the managements' intention to seek for savings by reducing real estate and energy costs, labor cost, commercial premises cost and other related costs.	0.377	**0.800**	-0.067
13. (Q32). Internet or a networked computer system accelerates the shipments and value chain process	0.323	**0.790**	0.104

Questions	Component		
	1	2	3
resulting in speedy service to the customers in ordering or any customer needs.			
14. (Q33). Virtual Organizations' performance can be uplifted by having potential outsourcings that possesses the excellence in service and expertise.	0.237	**0.699**	0.259
15. (Q30). Job suitability for teleworking should be based on intimate knowledge of specific jobs.	0.327	**0.656**	0.242
16. (Q29). Men are likely to be full-time teleworkers, while part-time teleworkers were more likely to be female.	0.266	**0.654**	0.224
17. (Q15). Nowadays, with the flexible workplace model, employers who offer additional alternatives work option can retain employees.	0.574	**0.600**	-0.042
18. (Q18). Companies need flexibility and access to the best talent, wherever it is; they will create multi-function, multi-location teams to assemble their best talent world-wide.	0.487	**0.580**	0.201
19. (Q24). Small firm size is more appealing to managers to adopt virtual model.	0.141	**0.577**	0.513
20. (Q25). Age, as a moderator, may impact on the virtual implementation' decision.	0.353	**0.566**	0.363
In-factor 3 (Individual)			
21. (Q27). Gender has the impact on the virtual adoption.	0.151	0.119	**0.907**
22. (Q26). Virtual experiences workers may seem teleworking	0.152	0.188	**0.862**

Questions	Component		
	1	2	3
attractive and less concerned about the uncertainty and ambiguity surrounding their task management.			
23. (Q28). Slow woman teleworkers' expansion is due to family duties.	0.145	0.081	**0.849**

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization (a Rotation converged in 5 iterations)

4.2.2.2 Reliability towards Internal environmental Factors in VO adoption:

Table 4.2.2.2 presents an acceptable value for Cronbach's Alpha of over 0.8, for eleven related questionnaire questions in In-factor1; 9 elements in In-factor2 and 3 elements in In-factor3, after performing Factor Analysis.

Table 4.2.2.2 Reliability of Internal environmental Factors in VO Adoption

Influential Factors (After Factor Analysis)	Questionnaire no.	Cronbach Alpha
In-Factor1 (RS)	11, 12, 13, 14, 16, 17, 19, 20, 21, 22, 23	0.9215
In-Factor2 (FIRMS)	15, 18, 24, 25, 29, 30, 31, 32, 33	0.9158
In-Factor3 (Individual)	26, 27, 28	0.9010

4.2.2.3 Descriptive findings towards External environmental Factors in VO adoption:

Table 4.2.2.3 indicates that most of the respondents think internal factors are highly influencing virtual formation in the organization ($\bar{x}$=3.66). For details, aspect factors are shown below:

In-Factor1/ RS:

Relational and structural sub-factors have been selected and have been categorized as **In-Factor 1 (RS)**. Most of the respondents agree with "New Information Technology (IT) generates the pooled interdependence, whereby, individuals can work autonomously at an individual level" the most ($\bar{x}$ = 3.90), followed by "Organizational connectedness inspires the employees with a feeling that there is a community that they can rely upon for support and information" ($\bar{x}$ = 3.89). Relational sub-factors related to 'trust enhancement and its benefits in VO adoption' ($\bar{x}$ = 3.74), 'trustworthy communication among the cultural differences' team members' ($\bar{x}$ = 3.67), 'strong

virtual leadership creating strong team relationship', and 'worldwide employee selection and retention' ($\bar{x}$ = 3.62), are the major selection among the respondents.

'Arrangement of flexible dual-agenda' ($\bar{x}$ = 3.76), 'stress reduction from flexible workplace and family arrangement' ($\bar{x}$ = 3.70), 'flexible work arrangement lessen employee turnover and absenteeism' ($\bar{x}$ = 3.67), 'clarity of evaluation criteria enhance VO adoption' ($\bar{x}$ = 3.60), and 'clarity of evaluation enhance productivity in a virtual setting' ($\bar{x}$ = 3.55) were selected under structural sub-factors.

In-Factor 2/ FIRMS:

Financial, Relational, Structural, Individual, and Management Competencies and Strategic sub-factors are being selected and classified in **In-Factor 2 (FIRMS)**. Greater number of the respondents agree with "Virtual Organization responses the managements' intention to seek for savings by reducing real estate and energy costs, labor cost, commercial premises cost and other related costs" ($\bar{x}$ = 4.01), followed by "Technology plays the important role worldwide making change to economic progress and traditional business structure" ($\bar{x}$ = 3.94).

Related to financial and management competencies and strategic sub-factors, 'speedy customer service from Internet or a networked computer system' ($\bar{x}$ = 3.80), 'potential outsourcings can excel VO business performances" ($\bar{x}$ = 3.72), are the majority of the responses, when the informants were asked about the attitude towards internal factors.

Moreover, age may perhaps have the impact on virtual adoption decision ($\bar{x}$ = 3.68). Likewise, it is interesting to learn that "Men are likely to be full-time teleworkers, while part-time teleworkers were more likely to be female" ($\bar{x}$ = 3.68). However, smaller number of respondents think that "Job suitability for teleworking should be based on intimate knowledge of specific jobs" ($\bar{x}$ = 3.59).

'Access the best talent worldwide' ($\bar{x}$ = 3.75) and 'small firm size is more appealing to apply VO' ($\bar{x}$ = 3.67), are the top two selected responses under "Structural sub-factor".

In-Factor 3/ Individual:

The finding, showing in **In-Factor 3 (Individual)**, represents only the selection of 'Individual factors' as the internal factors influencing virtual adoption. 'Task management attracts virtual experienced workers to telework' ($\bar{x}$ = 3.17), 'Gender impact on virtual adoption' ($\bar{x}$ = 3.14), and 'Family duties delay woman teleworkers' expansion' ($\bar{x}$ = 3.06), are the major reactions back from the informants, when they are asked about the influential internal factors in VO implementation.

Table 4.2.2.3 Descriptive for 'Internal Factors towards VO Adoption in hotel management'

Internal factors toward virtual adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-20) (In-factor3/Individual: 21-23)	Level of agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
1. (Q17).New information technology (IT) generates the pooled interdependence, whereby individuals can work autonomously at an individual level.	60 (32.3)	63 (33.9)	49 (26.3)	12 (6.5)	2 (1.1)	3.90	0.97
2. (Q12).Organizational connectedness inspires the employees with a feeling that there is a community that they can rely upon for support and information.	52 (28.0)	78 (50.0)	42 (22.6)	11 (5.9)	3 (1.6)	3.89	0.94

Internal factors toward virtual adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-20) (In-factor3/Individual: 21-23)	Level of agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
3. (Q14). Strong virtual leadership is important in creating relationships with employees, focusing on their use of technology and bringing virtual team members achieving the common goal.	50 (26.9)	77 (41.4)	44 (23.7)	14 (7.5)	1 (0.5)	3.87	0.92
4. (Q22). Dual-agenda is arranged to enable flexibility in work venue and work schedule and to achieve business objectives and providing greater opportunities to effectively manage work and personal/family like.	42 (22.6)	73 (39.2)	57 (30.6)	13 (7.0)	1 (0.5)	3.76	0.90
5. (Q11). Trust from the managerial or supervisory and employee can enhance overall business performances and employee retention while adopting teleworking.	43 (23.1)	70 (37.6)	57 (30.6)	11 (5.9)	3 (1.6)	3.74	0.95
6. (Q21). Teleworking reduces stress and improves dispositions and interpersonal interaction, by giving workers the flexibility to manage their work and family requirements.	32 (17.2)	85 (45.7)	53 (28.5)	14 (7.5)	2 (1.1)	3.70	0.88

Internal factors toward virtual adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-20) (In-factor3/Individual: 21-23)	Level of agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
7. (Q13). Cultural difference will positively linked to the virtual adoption's decision or Virtual Organization success if communication, trust and management system compatibility exist among partners.	27 (14.5)	81 (43.5)	70 (37.6)	6 (3.2)	2 (1.1)	3.67	0.80
8. (Q23). Regarding the management perspective, providing flexible work arrangement, there is the higher possibility to lessen employees' turnover and absenteeism, while increase higher productivity and healthier workers.	33 (17.7)	78 (41.9)	58 (31.2)	14 (7.5)	3 (1.6)	3.67	0.91
9. (Q16). Telework gives the organization the benefit of recruiting and retaining the best employees even though they may live far away or are unable or unwilling to commute.	31 (16.7)	75 (40.3)	61 (32.8)	17 (9.1)	2 (1.1)	3.62	0.91
10. (Q19). Clarity of evaluation criteria enhances the teleworking adoption's probability.	28 (15.1)	73 (39.2)	68 (36.6)	16 (8.6)	1 (0.5)	3.60	0.87

Internal factors toward virtual adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-20) (In-factor3/Individual: 21-23)	Level of agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
11. (Q20). Clear evaluation can enhance productivity when managers are unable to physically supervise their subordinates in a virtual setting.	27 (14.5)	76 (40.9)	59 (31.7)	20 (10.8)	4 (2.2)	3.55	0.94
Overall In-factor 1 (RS)						3.72	0.05
12. (Q31). Virtual Organization responses the managements' intention to seek for savings by reducing real estate and energy costs, labor cost, commercial premises cost and other related costs.	57 (30.6)	87 (46.8)	31 (16.7)	9 (4.8)	2 (1.1)	4.01	0.88
13. (Q15). Nowadays, with the flexible workplace model, employers who offer additional alternatives work option can retain employees.	47 (25.3)	93 (50.0)	35 (18.8)	9 (4.8)	2 (1.1)	3.94	0.85
14. (Q32). Internet or a networked computer system accelerates the shipments and value chain process resulting in speedy service to the customers in ordering or any customer needs.	37 (19.9)	87 (46.8)	50 (26.9)	11 (5.9)	1 (0.5)	3.80	0.85

Internal factors toward virtual adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-20) (In-factor3/Individual: 21-23)	Level of agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
15. (Q18). Companies need flexibility and access to the best talent, wherever it is; they will create multi-function, multi-location teams to assemble their best talent world-wide.	37 (19.9)	84 (45.2)	49 (26.3)	14 (7.5)	2 (1.1)	3.75	0.90
16. (Q33). Virtual Organizations' performance can be uplifted by having potential outsourcings that possesses the excellence in service and expertise.	36 (194)	74 (39.8)	65 (34.9)	9 (4.8)	2 (1.1)	3.72	0.87
17. (Q29). Men are likely to be full-time teleworkers, while part-time teleworkers were more likely to be female.	29 (15.6)	82 (44.1)	62 (33.3)	12 (6.5)	1 (0.5)	3.68	0.83
18. (Q25). Age, as a moderator, may impact on the virtual implementation' decision.	31 (16.7)	83 (44.6)	54 (29.0)	17 (9.1)	1 (0.5)	3.68	0.88
19. (Q24). Small firm size is more appealing to managers to adopt virtual model.	34 (18.3)	74 (39.8)	62 (33.3)	15 (8.1)	1 (0.5)	3.67	0.89
20. (Q30). Job suitability for teleworking should be based on intimate knowledge of specific jobs.	24 (12.9)	78 (41.9)	70 (37.6)	12 (6.5)	2 (1.1)	3.59	0.83

Internal factors toward virtual adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-20) (In-factor3/Individual: 21-23)	Level of agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
Overall In-factor2 (FIRMS)						3.76	0.03
21. (Q28). Slow woman teleworkers' expansion is due to family duties.	17 (9.1)	54 (29.0)	69 (37.1)	36 (19.4)	10 (5.4)	3.17	1.02
22. (Q26). Virtual experiences workers may seem teleworking attractive and less concerned about the uncertainty and ambiguity surrounding their task management.	20 (10.8)	46 (24.7)	69 (36.6)	44 (23.7)	8 (4.3)	3.14	1.04
23. (Q27). Gender has the impact on the virtual adoption.	19 (10.2)	40 (21.5)	72 (38.7)	43 (23.1)	12 (6.5)	3.06	1.06
Overall In-factor3 (Individual)						3.12	0.02
Overall Influential Internal Factors						3.66	0.07

4.3 The Barriers inhibiting Virtual Adoption in the Hotel Management

The third part of this chapter, responded the second objective of this study, searching for the respondents' attitude toward the barriers inhibiting virtual adoption in the organization. All information was measured in terms of external and internal barriers toward virtual adoption.

4.3.1 External Barriers toward the VO adoption in hotel management, in Chiang Mai province:

As shown in Table 4.3.1.1, external barriers, toward VO adoption in the hotel management, are highly selected as the major inhibitor of virtual adoption in the organization ($\bar{x}$ = 3.78). For details, it was found that "Deficient IT and language knowledge is a major barrier to the take-up of teleworking" represented the highest influential barriers concerning virtual adoption in the organization ($\bar{x}$ = 3.96), followed by "High cost of telecommunications and proprietary software delay the virtual adoption decision" ($\bar{x}$ = 3.85). However, "Legislation and local restriction on home-based work forbid the teleworking expansion" depicted the least inhibiting barriers in virtual formation ($\bar{x}$ = 3.49) (See Table 4.3.1.1).

Table 4.3.1.1 Descriptive for 'External Barriers toward VO Adoption in the Hotel Management'

External Barriers toward VO Adoption	Level of Agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
1. Deficient IT and language knowledge is a major barrier to the take-up of teleworking.	55 (29.6)	85 (45.7)	32 (17.2)	12 (6.5)	2 (1.1)	3.96	0.91
2. High cost of telecommunications and proprietary software delay the virtual adoption decision.	40 (21.5)	93 (50.0)	40 (21.5)	11 (5.9)	2 (1.1)	3.85	0.86

External Barriers toward VO Adoption	Level of Agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
3. It is normally viewed that Thais prefer face-to-face interaction than via web-based telecommunications.	45 (24.2)	83 (44.6)	44 (23.7)	10 (5.4)	4 (2.2)	3.83	0.93
4. Lack of awareness and exposure to the virtual concept and its benefit as well as the real implication experience restrain virtual adoption.	45 (24.2)	78 (41.9)	48 (25.8)	15 (8.1)	-	3.82	0.89
5. Unreliable systems and technical problems discourage the entrepreneur to implement virtual idea fearing of less productive.	33 (17.7)	85 (45.7)	55 (29.6)	13 (7.0)	-	3.74	0.83
6. E-business firms are considered very high competitive industry in the market, lessening new entrants.	33 (17.7)	87 (46.8)	50 (26.9)	14 (7.5)	2 (1.1)	3.73	0.88
Overall Influential External Barriers						3.77	0.03

4.3.2 Internal Barriers toward the VO adoption in hotel management, in Chiang Mai province:

From Table 4.3.2.1, most of the respondents agreed that internal barriers are highly inhibit virtual adoption in the organization ($\bar{x}$ = 3.67). This is to say that "Lower management focus or unwillingness to apply virtual model and its related investment can lead to unsuccessful Virtual Organization" slowed down virtual adoption in the organization the most ($\bar{x}$ = 3.84) , followed by "Cultural issues occur when there is lack of sharing, regarding, values, assumptions, or perceptions in the diverse global virtual teams" ($\bar{x}$ = 3.81). Nevertheless, "Huge investment on e-business implementation impacts on firms' cash flow due to the slow return." impacted the least in virtual adoption ($\bar{x}$ = 3.42) (See Table 4.3.2.1).

Table 4.3.2.1 Descriptive for 'Internal Barriers toward VO Adoption in the Hotel Management'

Internal Barriers toward VO Adoption	Level of Agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
1. Lower management focus or unwillingness to apply virtual model and its related investment can lead to unsuccessful Virtual Organization	41 (22.0)	83 (44.6)	54 (29.0)	8 (4.3)	-	3.84	0.81
2. Cultural issues occur when there is lack of sharing, regarding, values, assumptions, or perceptions in the diverse global virtual teams.	32 (17.2)	96 (51.6)	48 (25.8)	10 (5.4)	-	3.81	0.78

Internal Barriers toward VO Adoption	Level of Agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
3. Less trust-building leads to the problems related to connectedness, cohesion and objective consensus among team members.	27 (14.5)	96 (51.6)	53 (28.5)	9 (4.8)	1 (0.5)	3.75	0.78
4. The distraction from home environment; the chatter of children, loses working concentration and business disruption.	30 (16.1)	83 (44.6)	52 (28.0)	19 (10.2)	2 (1.1)	3.65	0.91
5. Teleworkers might become socially isolated, when become apart from coworkers and separated by time and space.	27 (14.5)	80 (43.0)	62 (33.3)	15 (8.1)	2 (1.1)	3.62	0.87
6. Since there is no permanent and limited structures and human contact among the virtual teams, the feeling of belonging and commitment as well as self-motivation and willingness to take responsibility for the company, will be low.	26 (14.0)	81 (43.5)	62 (33.3)	16 (8.6)	1 (0.5)	3.62	0.85
7. Virtual teams are reluctant to share work-in-progress electronically due to distrust among members.	20 (10.8)	92 (49.5)	56 (30.1)	17 (9.1)	1 (0.5)	3.61	0.82

Internal Barriers toward VO Adoption	Level of Agreement					$\bar{x}$	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
8. Huge investment on e-business implementation impacts on firms' cash flow due to the slow return.	18 (9.7)	68 (36.6)	74 (39.8)	26 (14.0)	- (-)	3.42	0.85
Overall Influential Barriers						3.67	0.05

4.4 Hypothesis Testing

Refer to the third objective of this study; t-test has been utilized to indicate the differences in opinion, toward influencing external and internal factors adopting VO adoption in hotel management, among managerial and supervisory positions. The hypotheses can be shown as the following:

4.4.1 External environment factors influencing VO adoption in hotel management:

H_1: There is a difference between management and supervisory position on attitude towards the different external environmental factors influencing VO in Hotel management.

In this study, researcher has tested the external environmental factors, by categorizing into two sub-groups, as follows:

H_{1a}: There is a difference between managerial and supervisory position on attitude towards the different external environmental factors which is the Ex-Factor1 (PLEECC), influencing VO in Hotel management.

H_{1b}: There is a difference between managerial and supervisory position on attitude towards the different external environmental factors which is the Ex-Factor2 (IT), influencing VO in Hotel management.

Ex-Factor 1 (PLEECC):

As stated in Table 4.4.1.1, Hypothesis$_{1a}$ indicated that there was a difference between managerial and supervisory position on attitude towards the different external environment factors (ie. Ex-factor1) influencing VO adoption in hotel management, at the significance level of 0.05, when asked about 'The shifting economic pressures have invented new organizational forms-teleworking or virtual organization; imaginary corporations, dynamic networks, and flexible work teams, etc.; Technology plays the important role worldwide making change to economic progress and traditional business structure; and Investing Virtual Organization consumes lower capital requirements and lessens the cash loss's opportunity for the new entry, Managers and Supervisors expressed differently their opinions toward the external factors influencing VO adoption in hotel management.

Ex-Factor 2 (IT):

In addition, when testing Hypothesis$_{1b}$, this study indicated that there was a difference between management and supervisory position on attitude towards the external environmental factors (ie. Ex-factor2) influencing VO adoption in hotel management, at the significance level of 0.05.

Managers and Supervisors replied inversely that 'Technology plays the important role worldwide making change to economic progress and traditional business structure; Technological advances have made communication across geographic space easier, leading significant increases in capacity, cost reduction, available product features and services, etc.; Teleworking is designed to reduce the amount of teleworkers' commuting activities; reduction in traffic, congestion, car accidents and air pollution'.

Therefore, from the findings, we can conclude that the three questions related to Macro-global economy factor (Q5), Macro-Environmental and Political factor (Q6), and Macro-competitors factor (Q8), under Ex-factor 1 (PLEECC), represented the dissimilarities between managers and supervisors on attitude towards the different external environmental factors, at the significance level of 0.05. In which, Supervisors stated higher the importance of Macro-ICT infrastructure ($\bar{x}$ = 4.69) than Managers ($\bar{x}$ = 4.65).

Likewise, the informants expressed their point of view differently, for all sub-factors, related to Transportation and Macro-ICT infrastructure factors, under Ex-factor2 (IT), at the significance level of 0.05. In which, Macro-ICT infrastructure related factor has been the only sub-factor that Supervisors gave the importance much higher than Manager, at the significance level of 0.05.

As stated, we can, therefore, draw the conclusion that:

H_1: There is a difference between management and supervisory position on attitude towards the different external environmental factors, in both sub-groups (Ex-factor1/PLEECC and Ex-factor2/IT), influencing VO adoption in hotel management.

In this study, researcher has tested the external environmental factors, by classified into two sub-groups, as follows:

H1a: There is a difference between management and supervisory position on attitude towards the different external environmental factors, in Ex-factor1/PLEECC.

H1b: There is a difference between management and supervisory position on attitude towards the different external environmental factors, in Ex-factor2/IT.

Table 4.4.1.1 T-Test: Manager and Supervisor point of view related to external environmental factors adopting the VO in hotel management (After Factor Analysis)

External influential factors toward VO adoption (Ex-factor1/PLEECC: 1-7) (Ex-factor2/IT: 8-10)	Manager		Supervisor		t	P
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
Ex-factor1 (PLEECC): 1. (Q5). The shifting economic pressures have invented new organizational forms-teleworking or virtual organization; imaginary corporations, dynamic networks, and flexible work teams, etc.	3.94	0.849	3.70	0.555	2.021	0.045*
2. (Q4). Workforce components are shifted from agriculture to information-based global economy.	3.71	0.928	3.56	0.801	1.184	0.239
3. (Q6). Teleworking plays a vital role in keeping operations going, while there is the business disruption from natural disaster, workplace violence, etc.	3.77	0.493	3.54	0.480	2.099	0.037*
4. (Q7). Legislation in many countries regarding teleworking is enacted to support companies to offer telecommuting to employees.	3.67	1.054	3.62	0.725	0.546	0.586
5. (Q8). Investing Virtual Organization consumes lower capital requirements and lessens the cash loss's opportunity for the new entry.	3.89	0.636	3.61	0.630	2.480	0.014*

External influential factors toward VO adoption (Ex-factor1/PLEECC: 1-7) (Ex-factor2/IT: 8-10)	Manager		Supervisor		t	P
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
6. (Q9). Virtual Organization focuses quick and well on customer quality services and market responsiveness' demand by providing 24/7 supports.	3.92	0.686	3.86	0.376	0.702	0.483
7. (Q10). Virtual Organization focuses quick and well on customer quality services and market responsiveness' demand by providing 24/7 supports.	3.88	0.686	3.71	0.855	1.489	0.138
Ex-factor2 (IT): 8. (Q1). Technology plays the important role worldwide making change to economic progress and traditional business structure.	4.42	0.493	4.16	0.480	2.099	0.037*
9. (Q2). Technological advances have made communication across geographic space easier, leading significant increases in capacity, cost reduction, available product features and services, etc.	4.42	0.393	4.14	0.506	2.235	0.027*
10. (Q3). Teleworking is designed to reduce the amount of teleworkers' commuting activities; reduction in traffic, congestion, car accidents and air pollution.	4.11	0.717	3.84	0.577	2.376	0.019*

*$p < 0.05$

4.4.2 Internal environment factors influencing VO adoption in hotel management:

H_2: There is a difference between managerial and supervisory position on attitude towards the different internal environmental factors influencing VO in Hotel management.

In this study, researcher has tested the internal environmental factors, by classified into three sub-groups, as follows:

H_{2a}: There is a difference between managerial and supervisory position on attitude towards the different internal environmental factors which is the In-factor 1 (RS), influencing VO adoption in hotel management.

H_{2b}: There is a difference between managerial and supervisory position on attitude towards the different internal environmental factors which is the In-factor 2 (FIRMS), influencing VO adoption on in hotel management.

H_{2c}: There is a difference between managerial and supervisory position on attitude towards the different internal environmental factors which is the In-factor 3 (Individual), influencing VO adoption in hotel management.

In-Factor 1/RS:

As stated in Table 4.4.2.1, Hypothesis 2 indicated that there was a difference between managerial and supervisory position on attitude towards the different internal environment factors (ie. In-factor1) influencing VO adoption in hotel management, at the significance level of 0.05.

The informants responded diversely that "Clarity of evaluation criteria enhances the teleworking adoption's probability and; New information technology (IT) generates the pooled interdependence, whereby individuals can work autonomously at an individual level".

Therefore, from the findings, the two questions related to Structural factors (Q17, Q19), under, In-factor1 (RS), showed the distinct in expressing the ideas among Managers and Supervisors, at the significance level of 0.05.

No significance has been found when comparing two informants' attitudes toward In-factor 2 (FIRMS). Nevertheless, when asked the Managers and Supervisors on the attitudes toward In-factor3 (Individual), they expressed their point of view differently, for all sub-factor related to Individual factor, at the significance level of 0.05. In which, Supervisors gave the importance of Individual related factor ($\bar{x}$ = 3.31), as the VO influencer, much higher than Managers ($\bar{x}$ = 3.29).

We can, therefore, draw the conclusion, from the finding that :

H_{2a}: There is a difference between managerial and supervisory position on attitude towards the different internal environmental factors which is the In-factor 1 (RS), influencing VO adoption in hotel management.

$H_{2c:}$ There is a difference between managerial and supervisory position on attitude towards the different internal environmental factors which is the In-factor 3 (Individual), influencing VO adoption in hotel management.

H_2: There is a difference between management and supervisory position on attitude towards the different internal environmental factors, which are In-factor1 and In-factor 3, influencing VO adoption in hotel management.

Table 4.4.2.1 T-Test: Manager and Supervisor point of view related to internal environmental factors adopting the VO in hotel management (After Factor Analysis)

Internal influential factors toward VO adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-17) (In-factor3/Individual: 18-20)	Manager		Supervisor		t	P
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
In-factor1(RS):						
1. (Q 20) Clear evaluation can enhance productivity when managers are unable to physically supervise their subordinates in a virtual setting.	3.59	0.866	3.55	0.760	0.649	0.456
2. (Q 16) Telework gives the organization the benefit of recruiting and retaining the best employees even though they may live far away or are unable or unwilling to commute.	3.71	0.899	3.58	0.725	0.988	0.324
3. (Q 11) Trust from the managerial or supervisory and employee can enhance overall business performances and employee retention while adopting teleworking.	3.91	0.786	3.67	0.760	1.854	0.065
4. (Q 21) Teleworking reduces stress and improves dispositions and interpersonal interaction, by giving workers the flexibility to manage their work and family requirements.	3.76	0.857	3.70	0.954	0.612	0.541
5. (Q 19) Clarity of evaluation criteria enhances the teleworking adoption's probability.	3.77	0.659	3.52	0.776	2.073	0.040*

Internal influential factors toward VO adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-17) (In-factor3/Individual: 18-20)	Manager		Supervisor		t	P
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
6. (Q17). New information technology (IT) generates the pooled interdependence, whereby individuals can work autonomously at an individual level.	4.12	0.920	3.81	0.974	2.365	.019*
7. (Q23). Regarding the management perspective, providing flexible work arrangement, there is the higher possibility to lessen employees' turnover and absenteeism, while increase higher productivity and healthier workers.	4.17	0.791	3.69	0.725	0.336	0.737
8. (Q22). Dual-agenda is arranged to enable flexibility in work venue and work schedule and to achieve business objectives and providing greater opportunities to effectively manage work and personal/family like.	3.71	0.899	3.81	0.689	-0.556	0.579
9. (Q14). Strong virtual leadership is important in creating relationships with employees, focusing on their use of technology and bringing virtual team members achieving the common goal.	4.00	0.712	3.80	0.760	1.487	0.139
10. (Q12). Organizational connectedness inspires the employees with a feeling that there is a community that they can rely upon for support and information.	4.05	0.686	3.84	0.641	1.717	0.088

Internal influential factors toward VO adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-17) (In-factor3/Individual: 18-20)	Manager		Supervisor		t	P
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
11. (Q13). Cultural difference will positively linked to the virtual adoption's decision or Virtual Organization success if communication, trust and management system compatibility exist among partners.	3.71	0.748	3.66	0.277	0.504	0.615
In-factor2 (FIRMS): 12. (Q30). Job suitability for teleworking should be based on intimate knowledge of specific jobs.	3.77	0.600	3.50	0.751	1.725	0.132
13. (Q31). Virtual Organization responses the managements' intention to seek for savings by reducing real estate and energy costs, labor cost, commercial premises cost and other related costs.	4.14	0.507	3.96	0.760	2.875	0.756
14. (Q32). Internet or a networked computer system accelerates the shipments and value chain process resulting in speedy service to the customers in ordering or any customer needs.	3.86	0.728	3.78	0.816	.624	0.547
15. (Q33). Virtual Organizations' performance can be uplifted by having potential outsourcings that possesses the excellence in service and expertise.	3.71	0.866	3.73	1.032	0.888	0.549
16. (Q15). Nowadays, with the flexible workplace model, employers who offer additional	4.09	0.493	3.88	0.439	3.369	0.156

Internal influential factors toward VO adoption (In-factor1/RS: 1-11) (In-factor2/FIRMS: 12-17) (In-factor3/Individual: 18-20)	Manager		Supervisor		t	p
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
alternatives work option can retain employees.						
17. (Q29). Men are likely to be full-time teleworkers, while part-time teleworkers were more likely to be female.	3.80	0.935	3.63	0.519	1.597	0.213
In-factor3 (Individual): 18. (Q26). Virtual experiences workers may seems teleworking attractive and less concerned about the uncertainty and ambiguity surrounding their task management	3.15	1.064	3.15	1.198	0.479	0.120`
19. (Q27). Gender has the impact on the virtual adoption.	2.97	1.115	3.12	0.987	0.552	0.509
20. (Q28). Slow woman teleworkers' expansion is due to family duties.	3.05	1.263	3.25	0.751	0.047	-0.037*

*p < 0.05