

CHAPTER 4

RESEARCH

RESULTS

4.1 PROFILE OF THE RESPONDENTS

9.57% respondents of the survey were IT managers or CIOs. Application/account managers respondents accounted for 12%. A fair participation from business relationship managers, Release managers, capacity managers and service level managers as these roles directly linked up with the IT service delivery. Figure 4.1 chart below illustrates the respondents profile.

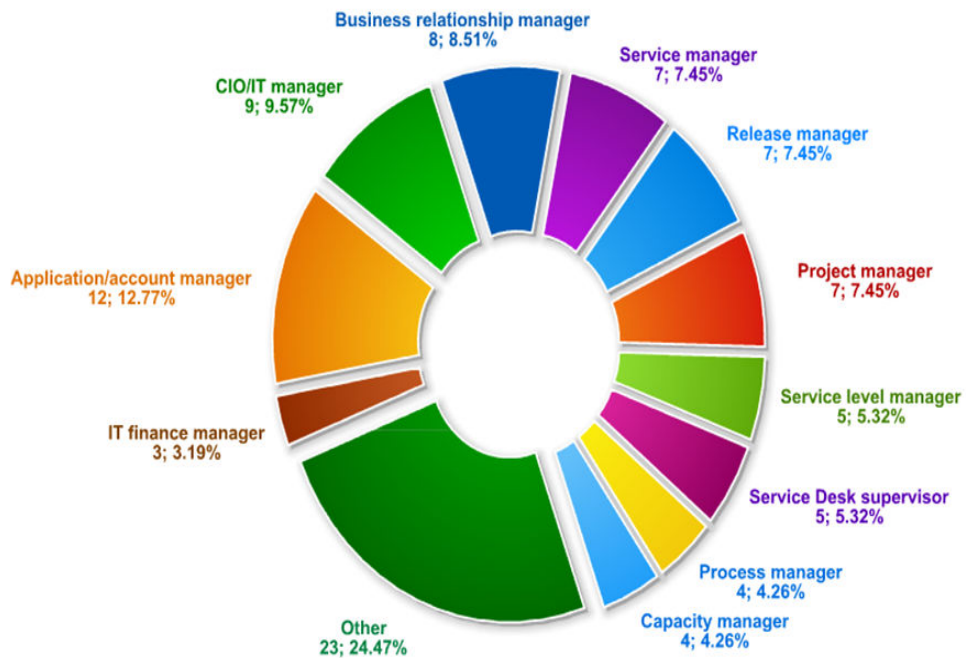


Figure 4.1: Profile of respondent

4.2 ORGANIZATIONS DESIGNATED MSC LOCATIONS

Figure 4.2 illustrate that more than half of the respondents were from Cyberjaya as Cyberjaya host the highest number of MSC status organizations as part of MSC designated area. Technology Park Malaysia ranked second with 15% of respondent. Technology Park Malaysia was one of the earliest MSC status designated area after MSC commenced.

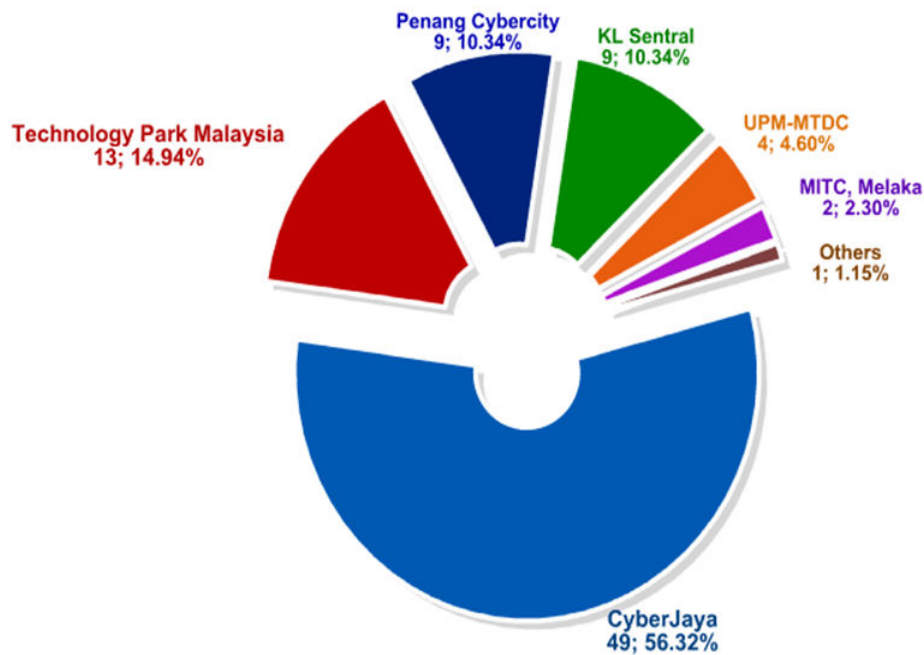


Figure 4.2: Participating organizations designated MSC locations

4.3 ORGANIZATIONS SECTORS

As illustrated in figure 4.3, the highest number of respondents were from shared services and out sourcing sectors, although the highest number of MSC status companies are in software development sector.

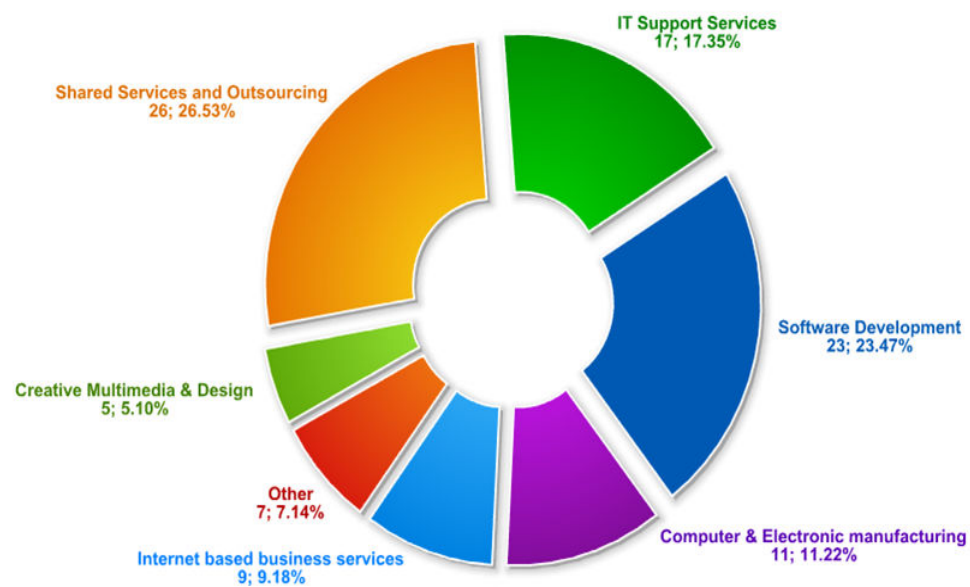


Figure 4.3: Participating organizations business sectors

4.4 ORGANIZATIONS OWNERSHIP

22% of the responses came from foreign companies. Some of these organizations are classified by MDC as world-class organizations. 54% of respondents were from local MSC status organization. 24% were from MSC status organizations with both local and foreign ownership.

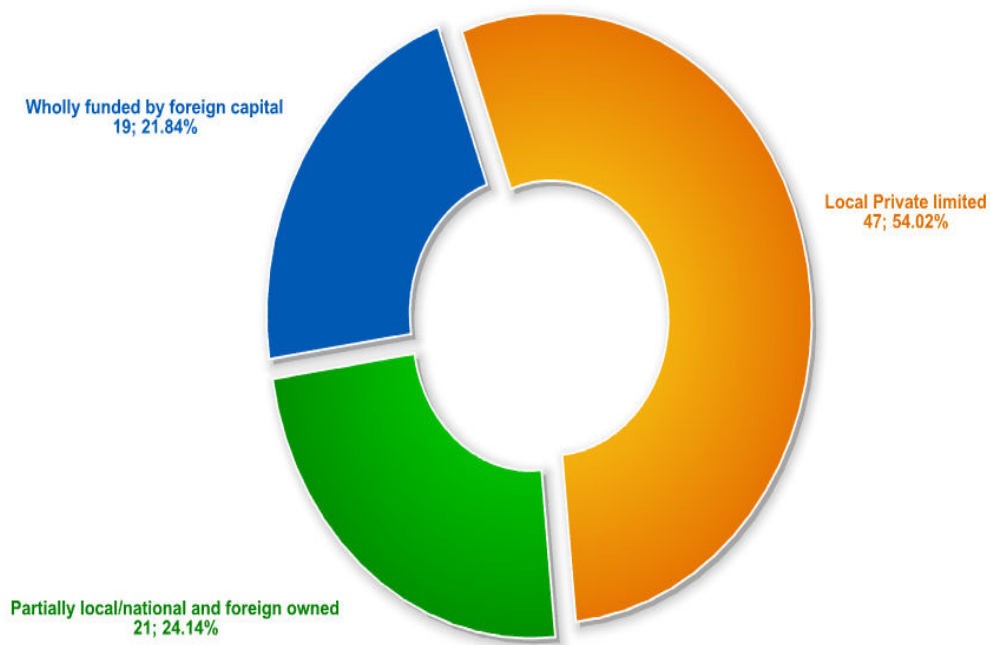


Figure 4.4: Participating organizations ownership

4.5 ORGANIZATIONS YEARLY TURNOVER AND SIZE IN TERMS OF NUMBER OF STAFF

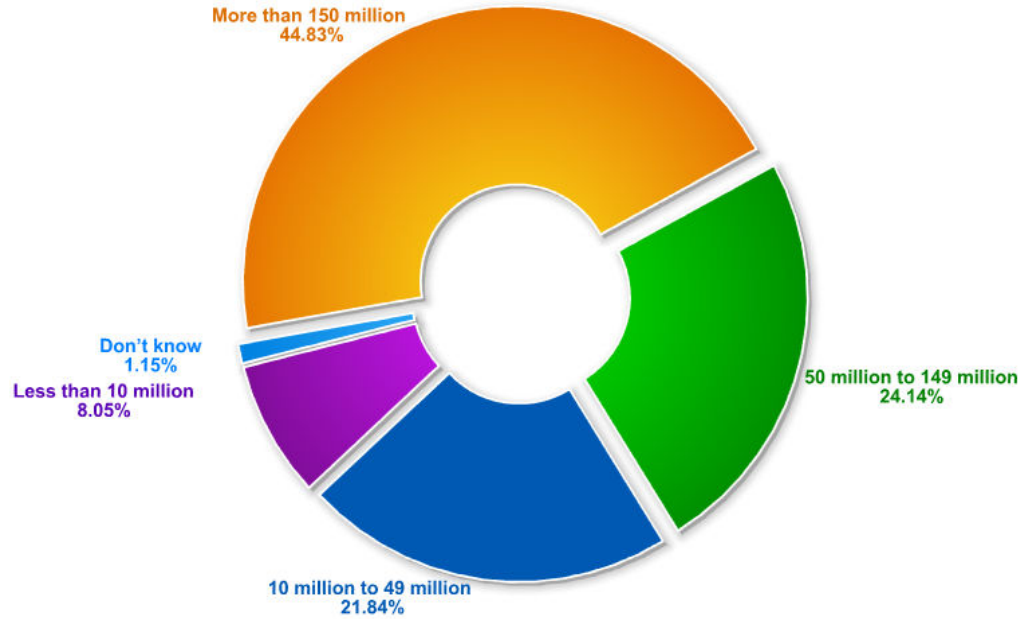


Figure 4.5: Participating organizations yearly turnover

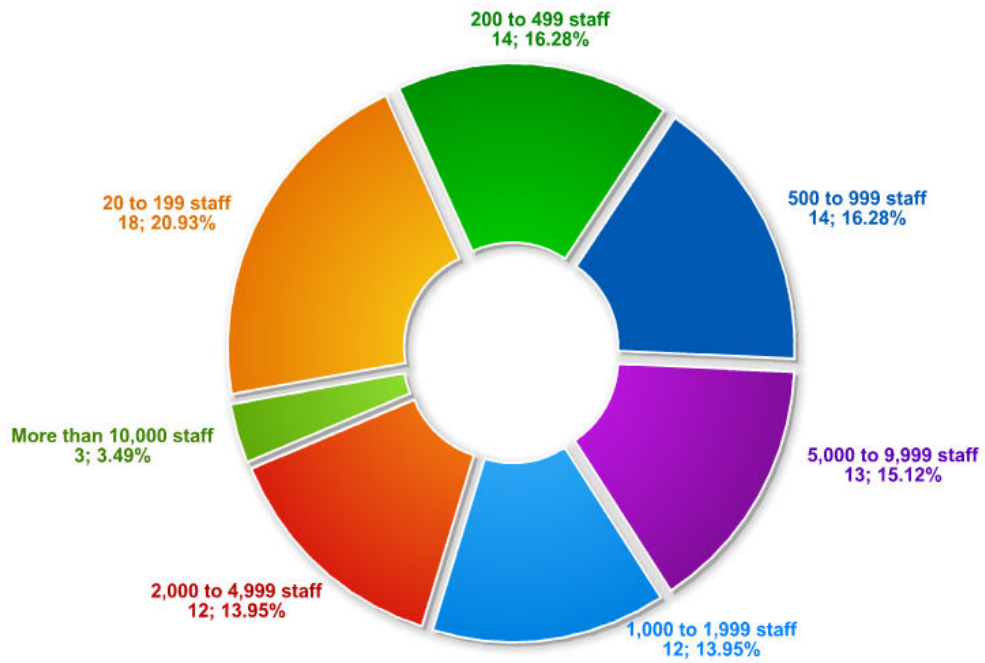


Figure 4.6: Organizations size in terms of number of staff

4.6 NUMBER OF IT STAFF IN ORGANIZATIONS

The survey results indicate that 35% of respondents organizations have more than 400 IT staff. This is illustrated in figure 4.7.

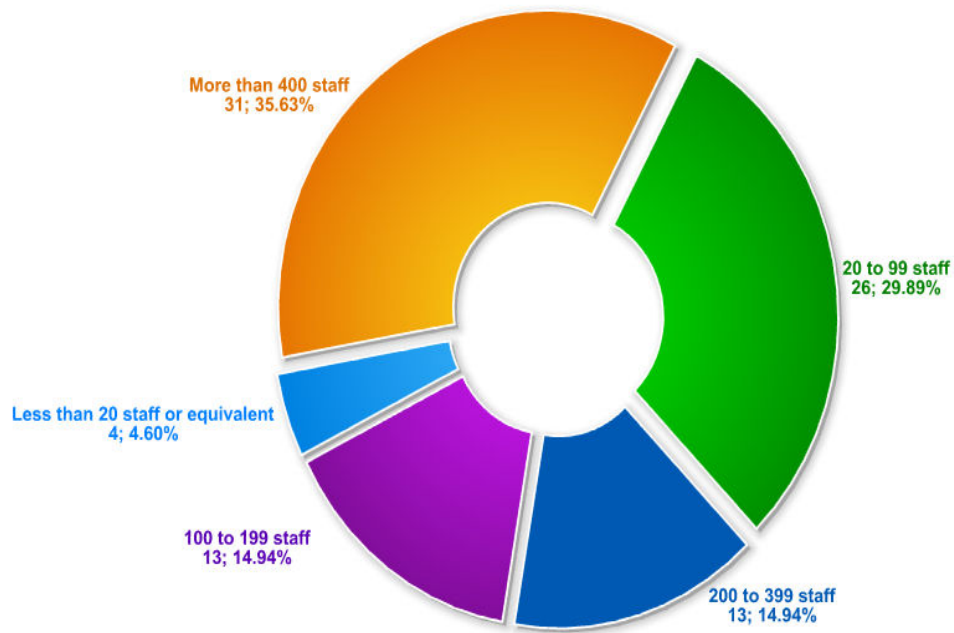


Figure 4.7: Organization size in terms of number of IT staff

4.7 PROGRESS ON IT SERVICE MANAGEMENT / MANAGEMENT FRAMEWORK IN ORGANIZATIONS

Preliminary survey results indicated that ITIL implementation is progressing more than other IT framework in MSC status companies. This is in accordance with the findings reported by Cater-Steel (2008) that more and more organizations are now implementing ITIL as the de-facto standard of IT service management.

Only 16% of the organizations have no plan to implement ITIL. 41% of organizations have largely or fully implemented ITIL framework. The research findings are in line with Malaysian IT service management chapter (itSMF) survey which stated that more than three quarters (78 per cent) of Malaysian organizations have realized significant gains by implementing information technology service management (ITSM) framework.

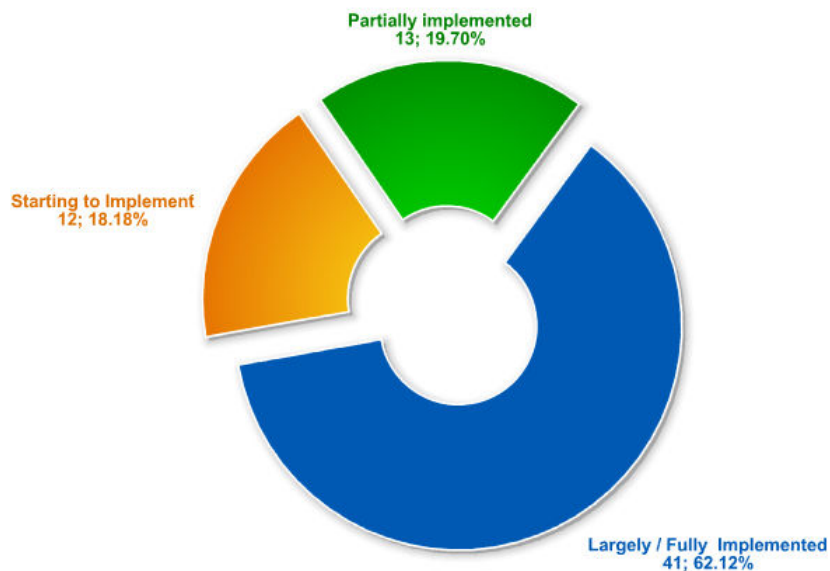


Figure 4.8: ITIL implementation progress in organizations

4.8 ITIL EFFECTIVENESS, SATISFACTION AND SUCCESSFUL IMPLEMENTATION

Cater-Steel and Wui Gee (2006) reported that 56% of the organizations in Australia felt ITIL implementation has met or exceeded their expectations. In the Malaysian context, 73% of the MSC status companies felt that ITIL has met or exceeded their expectations as illustrated in Figure 4.9.

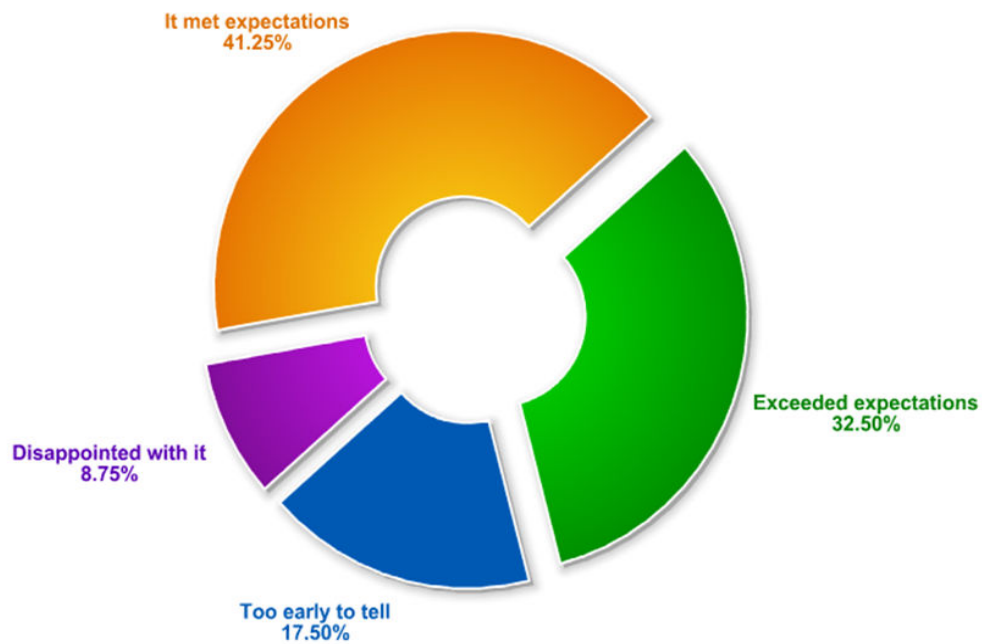


Figure 4.9: ITIL implementation satisfaction in organizations

Figure 4.10 illustrate the ITIL implementation progress in local and foreign MSC status companies. ITIL implementation is more progressing in Foreign MSC status companies as compare to local MSC status companies.

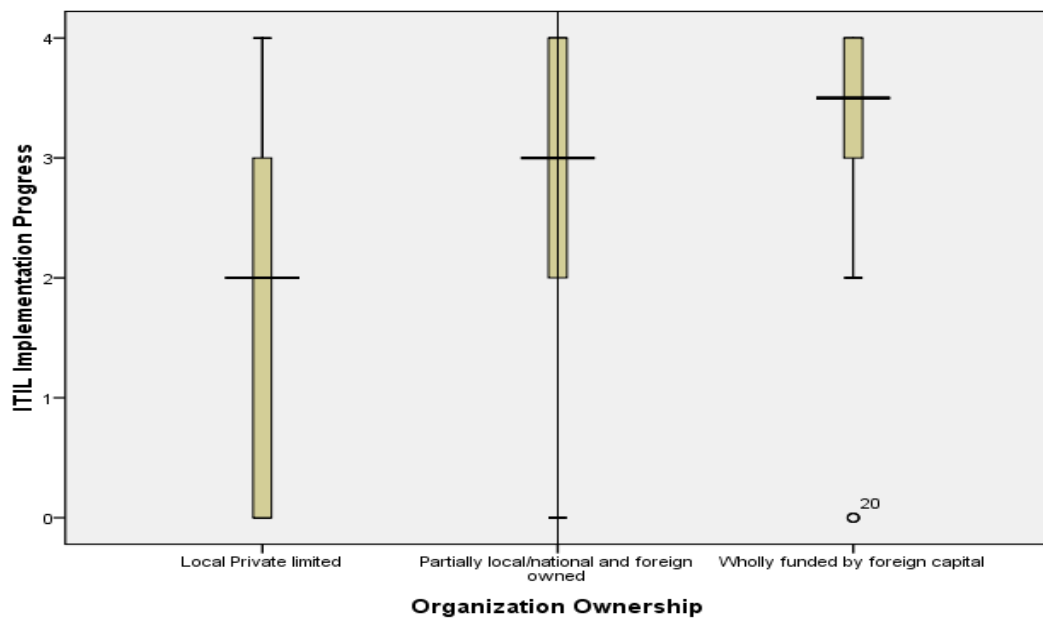


Figure 4.10: ITIL implementation progress in local and foreign MSC status organizations (0- No plan, 4 largely/fully completed)

4.9 ANALYSIS AND TESTING OF HYPOTHESIS

4.9.1 Implementation of ITIL is positively associated with organization size in terms of budget/turnover.

The descriptive statistics in table 4.1 provides a snapshot in a glance that ITIL implementation progress has been largely completed in organizations which are bigger in terms of profit turnover or budget.

ITIL Implementation Progress						Total
Organization Turnover / Budget	No Plan	Starting	Partially	Largely	Fully	
Less Than 10 million	2	3	1	0	0	6
10 Million to 49 million	7	3	5	4	1	20
50 Million to 149 million	4	5	3	6	1	19
150 million to 500 million	2	0	2	5	4	13
More Than 500 million	2	1	2	9	11	25
Total	17	12	13	24	17	83

Table 4.1: ITIL implementation and organization financial turnover/budget

To test the hypothesis that implementation of ITIL is positively associated with organization size in terms of budget/turn over, Spearman's rho statistical test was executed (Table 4.2)

Correlation				
			Annual IT Budget/Turnover	ITIL Implementation Progress
Spearman's rho	Organization Annual Turnover / Budget	Correlation	1.000	.288**
		Coefficient		
		Sig. (1-tailed)	.	.004
Spearman's rho=0.288, p=0.004;N=83 **. Correlation is significant at the 0.01 level (1-tailed).				

Table 4.2: Correlation ITIL implementation progress and organization turnover

Figure 4.11 also provides a snapshot of ITIL implementation progress in organizations segregated by budget / turnover.

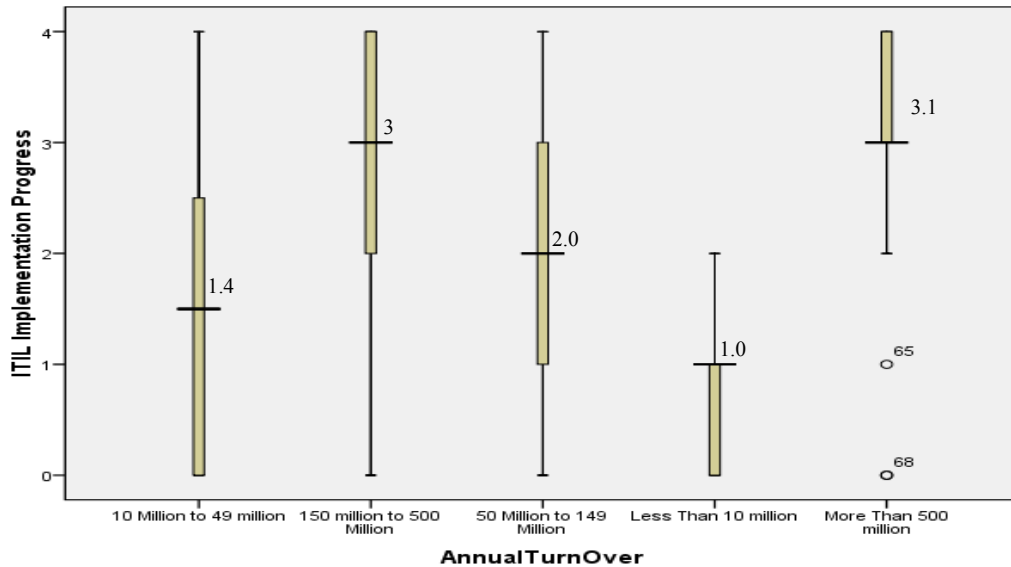


Figure 4.11: Correlation ITIL implementation progress and organization turnover (0-no plan to implement, 4 fully implement)

Spearman's rho estimate the strength and direction of association between two variables. Based on the spearman correlation test, a weak positive relationship between organization annual turnover/budget and ITIL implementation progress was identified. The spearman correlation coefficient of 0.288 indicate that relationship is positive. Hence, the result supports the hypothesis that in MSC status organizations, ITIL implementation progress is positively associated with organization annual turnover/budget.

The finding of this research contradict with the findings of Cater-Steel and Wui Gee (2006) who reported that ITIL implementation progress in Australia is not associated with organization turnover. In addition, it was observed that implementation of ITIL is progressing more in foreign MSC companies operating in Malaysia.

Figure 4.12 suggests that foreign MSC status companies have higher progress rate of ITIL implementation as compare to local MSC status companies.

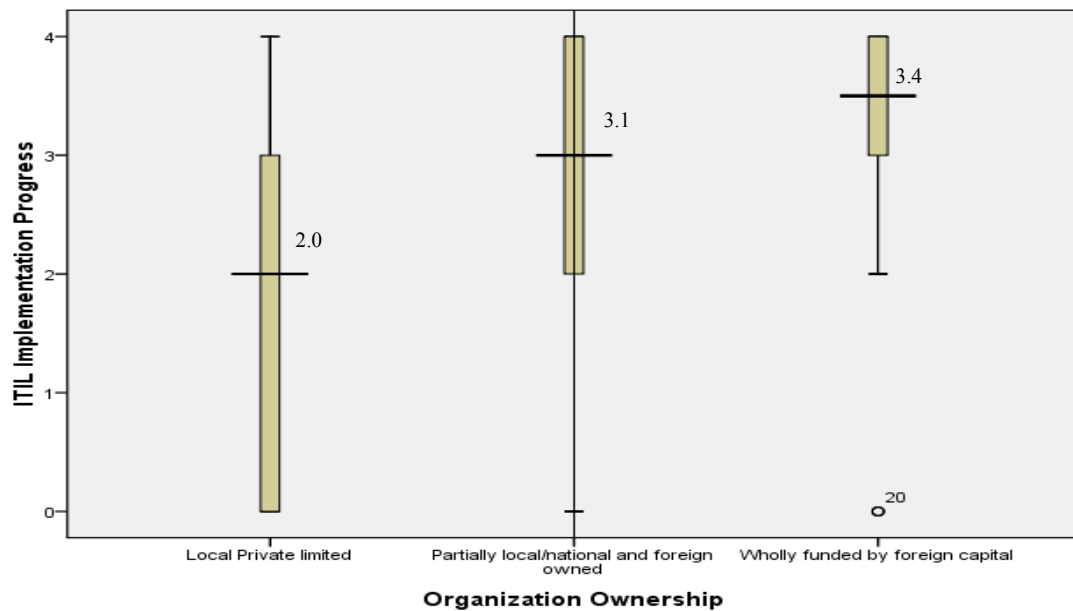


Figure 4.12: Correlation ITIL implementation progress and organization turnover (0-no plan to implement, 4 fully implement)

Hence, the hypothesis one is supported by this research findings that ITIL implementation progress is positively associated with organization size in terms of turnover/budget.

4.9.2 Implementation of ITIL is positively associated with organization size in terms of total employment.

Table 4.3 clearly illustrates that ITIL implementation is progressing more in large organization (in terms of number of staff).

ITIL Implementation Progress * Total number of Staff Cross tabulation					
		Total number of Staff			Total
		100 to 500	500 to 2000	More Than 2000	
ITIL Implementation Progress	No Plan	9	6	2	17
	Starting	10	2	1	13
	Partially	8	3	2	13
	Largely/Fully	4	15	22	41
Total		31	26	27	84

Table 4.3: ITIL implementation progress and organizations size in terms of number of staff

The spearman correlation coefficient of 0.523 clearly indicates a strong positive relationship between organization size in terms of total number of staff and ITIL implementation progress.

Correlation between Number of IT Staff and ITIL implementation Progress				
			Total Staff	ITIL Implementation Progress
Spearman's rho	Total Staff	Correlation Coefficient	1.000	.523**
		Sig. (1-tailed)	.	.000
** . Correlation is significant at the 0.01 level (1-tailed). Spearman rho=.523, p=0.000, N=84				

Table 4.4: Correlation- ITIL implementation progress and total number of staff

The spearman correlation coefficient clearly indicates a strong positive relationship between organization size in terms of total number of staff and ITIL implementation progress. This is in conformity with the findings reported by Narney (2003) that higher proportion of IT managers of large organizations (24%) were familiar with ITIL compared to IT managers at small and medium-sized organizations (17%).

The positive relationship is also in accord with Cater-Steel and Wui Gee (2006) findings. They reported that there is a significant positive relationship between ITIL implementation progress and organization size in terms of total number of staff. A separate study (Ghobadian and Gallear, 1997) reported that when compared with the large organizations, SMEs are slower in implementing frameworks like TQM. Figure 4.13 suggested that ITIL implementation in larger organizations (in terms of number of staff) is much more progressing than smaller organizations.

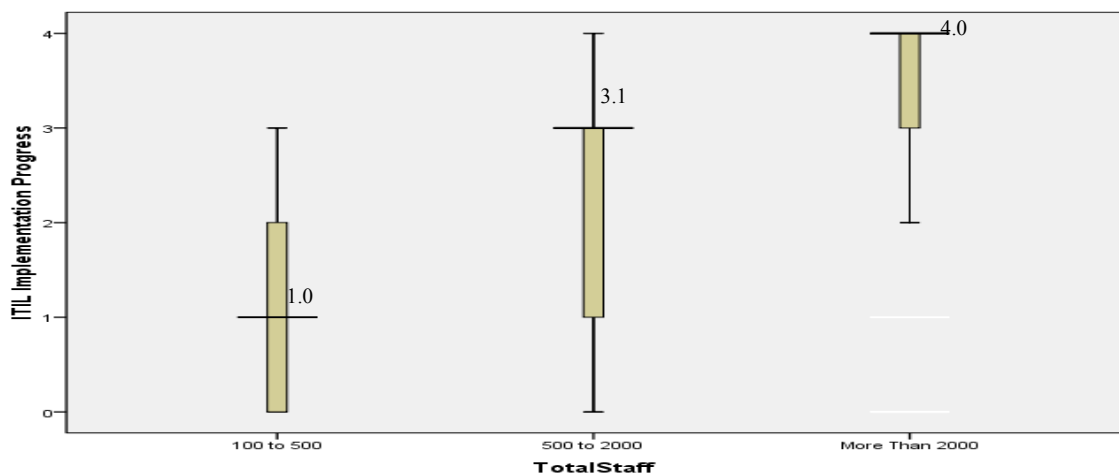


Figure 4.13: ITIL implementation progress and organization total staff (0=no plan to implement, 4 fully implement)

Hence, the hypotheses 2 which illustrate that positive relationship exist between organization size in terms of number of staff and ITIL implementation progress is supported by this study.

4.9.3 Implementation of ITIL is positively associated with organizational size in terms of the number of IT staff.

Table 4.5 illustrate that ITIL implementation is much more progressing in the larger organizations (in terms of number of total IT staff).

Total IT Staff * ITIL Implementation Progress Cross tabulation						
ITIL Implementation Progress						Total
		No plan	Starting	Partially	Largely/Fully	
Total IT Staff	100 to 199	0	3	0	0	3
	20 to 99	9	7	5	5	26
	200 to 399	2	2	4	4	12
	Less Than 20	4	0	3	5	12
	More than 400	2	1	1	27	31
Total		17	13	13	41	84

Table 4.5: ITIL implementation progress and organization total IT staff

Spearman correlation coefficient of 0.555 in Table 4.6 indicates a significant and strong positive relationship between number of IT staff in organization and implementation progress of ITIL.

Total IT Staff and ITIL Implementation Correlation				
			ITIL Implementation Progress	Total IT Staff
Spearman's rho	ITIL Implementation Progress	Correlation Coefficient	1.000	.555**
		Sig. (1-tailed)	.	.000
** . Correlation is significant at the 0.01 level (1-tailed).				
Spearman rho=.555, p=0.000, N=84				

Table 4.6: Correlation - ITIL implementation progress and number of IT staff

The results of this study further substantiate the findings reported by Cater-Steel and Wui-Gee (2006) who studied the relationship between ITIL implementation and organization's total number of IT staff. Cater-Steel and Wui Gee (2006) reported that in Australian organizations a positive relationship exists between ITIL implementation progress and organization size in terms of number of IT staff. The same was observed in MSC status organizations where organizations with the higher number of IT staff have made more progress toward ITIL implementation as compared to the organizations with lesser number of IT staff. This is also evident in the figure 4.14 where organizations with the higher number of IT staff have a mean of 4, which indicate a 'full implementation of ITIL'

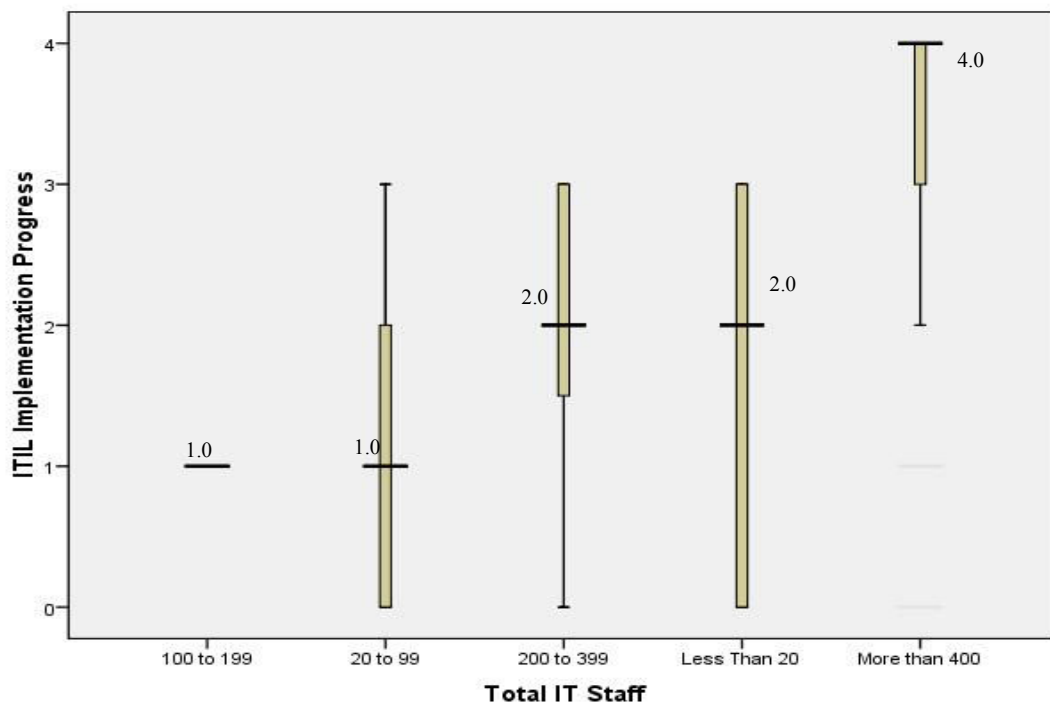


Figure 4.14: ITIL implementation progress and organization total IT staff (0-no plan to implement, 4 fully implement)

Hence, this study shows that relationship between ITIL implementation progress and number of IT staff in organization exists and hypothesis is supported by this study.

4.9.4 Satisfaction with effectiveness of ITIL is positively associated with ITIL implementation progress

Table 4.7 indicates the ITIL satisfaction with various phases of implementation. The data suggested that satisfaction with ITIL increase with ITIL implementation progress

ITIL SATISFACTION * ITIL Implementation Progress Cross tabulation					
		Starting	Partially	Largely/Fully	Total
ITIL-SATISFACTION	Exceeded Expectation	6	4	10	20
	Met Expectations	6	7	15	28
	Disappointment with it	0	1	6	7
Total		12	12	31	55

Table 4.7: ITIL Satisfaction and ITIL implementation progress

An ordinal variable representing satisfaction was derived from the responses with a value of 1 for 'disappointed', 2 for 'met expectations', and 3 for 'exceeded expectations'. Organizations who were not sure on ITIL satisfaction or did not answer the question were excluded from this analysis. Spearman's correlation test performed on the data (Table 4.8)

Correlations				
			ITIL SATISFACTION	ITIL Implementation Progress
Spearman's rho	ITIL SATISFACTION	Correlation Coefficient	1.000	.236*
		Sig. (1-tailed)	.	.031
		N	84	55
		Spearman rho=0.236, p=0.31, N=84		
*. Correlation is significant at the 0.05 level (1-tailed).				

Table 4.8: Correlation-ITIL satisfaction and ITIL implementation progress

The analysis suggested a weak positive association between ITIL implementation progress and perceived ITIL satisfaction in MSC status organizations.

Cater-Steel and Wui-Gee (2006) reported that in Australian organizations, no positive relationship exists between the level of satisfaction and ITIL implementation progress. This could be due to the number of organizations in Australia that fully implemented ITIL were lesser than number of organizations reported in this study. For example, in Cater-Steel and Wui Gee Tan (2006) study, only 14 organizations in Australia who implemented ITIL largely or fully were taken as sample size to test the hypothesis, while in this study the number of organizations which implemented ITIL fully or largely were 31. However, Cater-Steel and Wui-Gee Tan study was conducted in 2006 and ITIL implementation have taken steam in Australia from 2006 to 2010. It was also observed that Cater-Steel and Wui-Gee Tan study did not indicate if respondent companies were inclusive of foreign companies. As in case of Malaysia, it has been established that ITIL is largely or fully implemented in MSC status foreign companies. These companies may have implemented ITIL in their parent or home location headquarters first and gained experience and satisfaction level before implementing ITIL in Malaysian branch/office. Hence, this study support the hypothesis that ITIL satisfaction is positively associated with the progress of ITIL implementation.

4.9.5 Implementation progress of ITIL is associated with implementation of IT governance frameworks COBIT.

As discussed earlier in section 2.1.8, it was expected that organizations implementing ITIL would also be implementing COBIT. However, as shown in Table 4.9, sixty-five respondents answered both ITIL and COBIT implementation questions and 45 of them have no plans to adopt COBIT even though they all have commenced ITIL implementation. Therefore, the hypothesis that implementation of ITIL is associated with implementation of COBIT is not supported.

ITIL Implementation Progress and COBIT Implementation Progress Cross-tabulation						
		COBIT Implementation Progress				Total
		No Plan	Starting	Partially	Fully	
ITIL Implementation Progress	Starting	11	1	0	0	12
	Partially	7	4	1	0	12
	Largely	14	9	0	1	24
	Fully	13	2	0	2	17
Total		45	16	1	3	65

Table 4.9 ITIL and COBIT implementation progress

IT service management framework (ITIL) and governance frameworks (COBIT) are not mutually exclusive, and when implemented together they provided a commanding IT governance, control and best practice in IT service management (Mingay & Bittinger, 2002).

ITIL provides set of best practices and documentation but organizations are advised to implement COBIT as well to introduce greater governance coverage (Mingay & Bittinger, 2002). Table 4.10 indicates the list of top 4 IT management framework which MSC status organizations are either implementing or already implemented.

Framework	N	No Plan (0)	Starting (1)	Partially (2)	Largely (3)	Fully (4)	Mean	Std Deviation
ITIL	83	17	12	13	24	17	2.14	1.1
ISO/IEC 2009	80	59	6	6	5	4	0.81	1.3
MOF	82	57	7	8	3	7	0.61	1.2
IBM SML	81	71	0	5	4	1	0.47	1.1

Table 4.10 Different ITSM implementation progress

Cater-Steel and Wui Gee (2007) reported that it appears that organizations who are adopting both frameworks are implementing ITIL prior to adopt COBIT. This research compliments the same findings as it suggested that ITIL implementation progress has no relationship with COBIT implementation in MSC status organizations. Hence, the hypothesis that implementation progress of ITIL is associated with implementation of IT governance frameworks COBIT is not supported.

4.9.6 ITIL success factors ranked

Findings reported by Somers and Nelson (2001) on general ERP success factors context, it is no surprise that top management support identified as the most important factors in Malaysian MSC status organizations.

Table 4.11 suggested that Top management support is the most critical success factor of successful ITIL implementation, followed by sufficient funding for ITIL initiative. Cater-Steel and Wui Gee (2006) also reported that top management support is the most critical factor of ITIL implementation in Australian organizations.

Table 4.11 suggested that Top Management support, sufficient funding, ITIL training provided to staff, sufficient allocation of staff to ITIL initiative are the top factors required for any ITIL implementation to be successful.

ITIL Implementation Success Factors	N	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Mean	Std Deviation
Commitment From Senior Management	83	1	1	7	28	46	4.41	0.797
Sufficient Funding	83	1	3	12	31	36	4.18	0.899
ITIL Training provided to Staff	83	1	2	13	36	31	4.13	0.852
Sufficient Allocation of Staff to ITIL initiative	82	1	4	11	33	33	4.13	0.913
Effective Change Management	83	3	1	10	39	30	4.11	0.924
Understanding of Business Needs	82	1	4	12	36	29	4.07	0.911
Ability for IT Staff to adopt the changes	82	1	6	22	30	23	3.83	0.966
Involvement of Business Staff	83	4	3	19	43	14	3.72	0.954
Champion to advocate ITIL Framework	82	2	10	18	34	18	3.68	1.029
Documentation and Integration of Processes	83	7	14	19	25	17	3.38	1.234

Table 4.11: Ranked ITIL success implementation success factors in Malaysia MSC status organizations