CHAPTER 4

4.1. Reliability Analysis.

Using Cronbach's Alpha, which is based on the average correlation of item's within a test if the items is standardized.

Reliability Test (Cronbach Alpha). Table of calculation of cronbach alpha for each of the dimension of statistic. N=222

Dimension	Mean	S.D	Max	Min	Cronbach A
Org Chrac	4.3003	4.4240	4.4054	4.2477	0.8098
Inter Chrac	4.3865	8.1363	4.4414	4.3333	0.9053
Inst Proc	4.1712	7.5194	4.4550	3.1622	0.8096
Ind Inst	4.4170	17.9421	4.5450	4.1441	0.9599

The closer the reliability coefficient gets to 1.0, the better. (Umu Sekaran, 2000). In general, reliabilities less than .60 are considered to be poor, those in the .7 range, acceptable, and those over .8 is considered good.

Based on the analyzed data obtained from the SPSS the reliability of all the data obtained (Cronbach Alpha) is more than 0.8 and can be considered good.

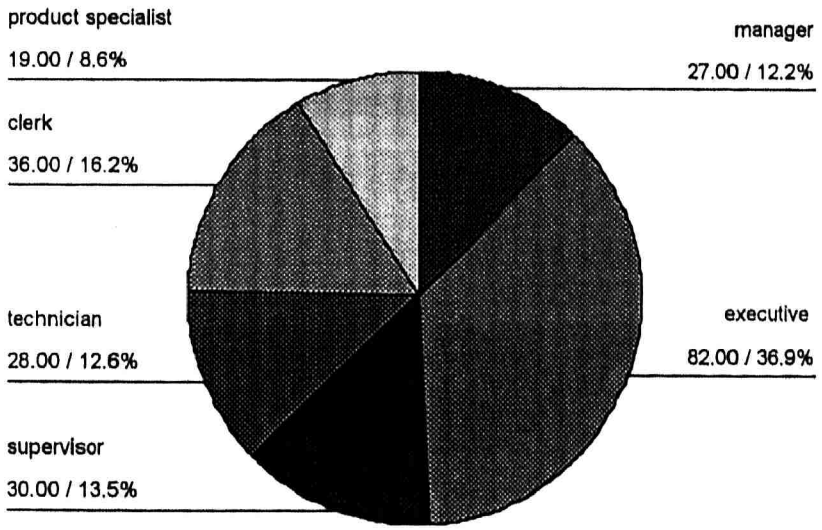
4.2. Frequency Analysis.

4.2.1 Characteristic of Respondents

Statistics
POSITION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manager	27	12.2	12.2	12.2
	Executive	82	36.9	36.9	49.1
	Supervisor	30	13.5	13.5	62.6
	Technician	28	12.6	12.6	75.2
	Clerk	3	16.2	16.2	91.4
	product specialist	19	8.6	8.6	100.0
	Total	222	100.0	100.0	

POSITION

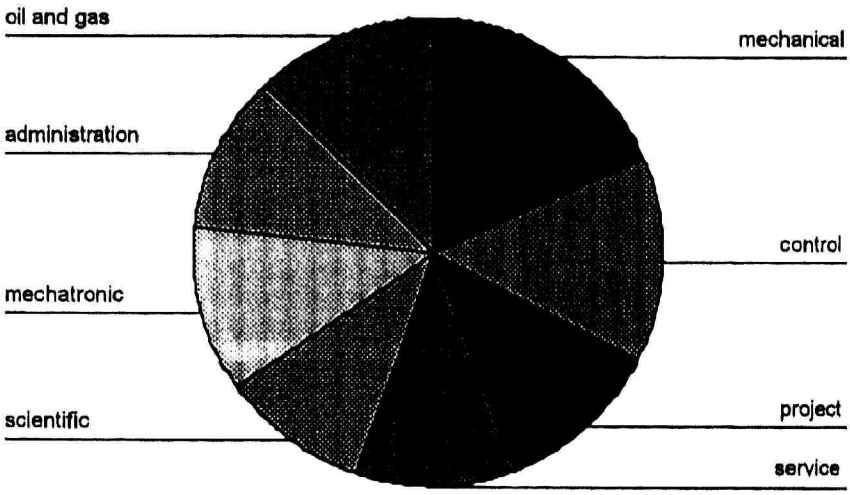


The total number of respondent for the survey of 222 numbers of employee is further separated into 6 main position criteria. About 12.2 % of total respondent are manager ranking from middle management to upper management, the biggest group of position that cover almost 36.9% of total population are executive, this include the technical and non technical executive. Then follow by supervisor level, technician, clerk level and product specialist position.

DEPARTMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	mechanical	41	18.5	18.5	18.5
	Control	31	14.0	14.0	32.4
	Project	26	11.7	11.7	44.1
	Service	25	11.3	11.3	55.4
	Scientific	22	9.9	9.9	65.3
	mechatronic	25	11.3	11.3	76.6
	administration	24	10.8	10.8	87.4
	oil and gas	28	12.6	12.6	100.0
	Total	222	100.0	100.0	

DEPT

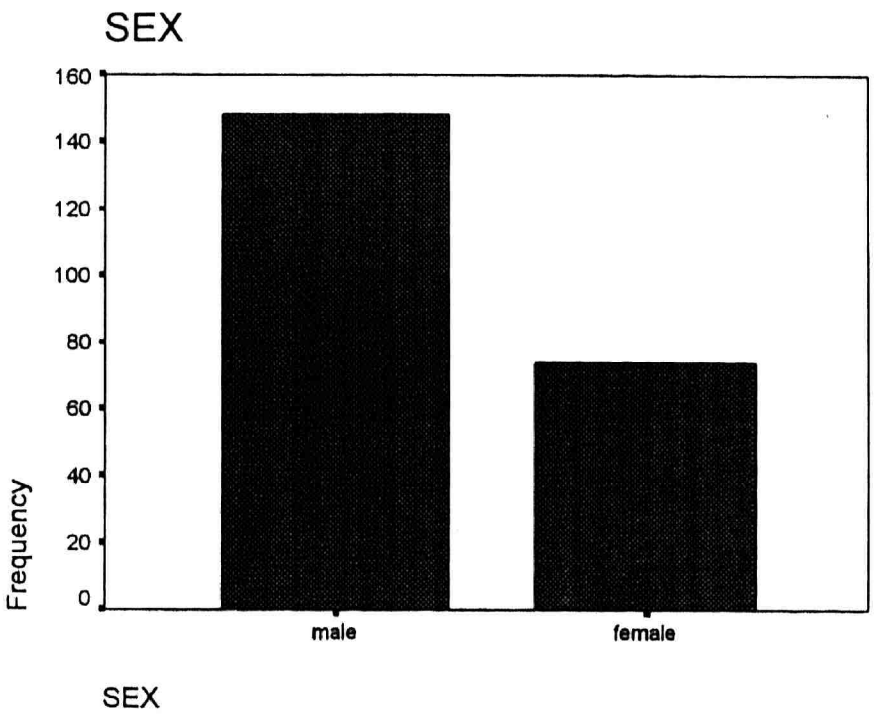


For this paper, the survey is limited to the engineering division of Sime Darby Berhad subsidiary company. The total numbers of 8 department is involved in this survey. The frequency of the department is as per chart shown, mechanical department cover nearly 18.5% of total survey population, Control department 14% of the total survey population, the Oil and Gas department that involved in

oil and gas industry cover 12.6% of the total survey. The rest of the departments are Scientific, Project, Service and administration.

SEX

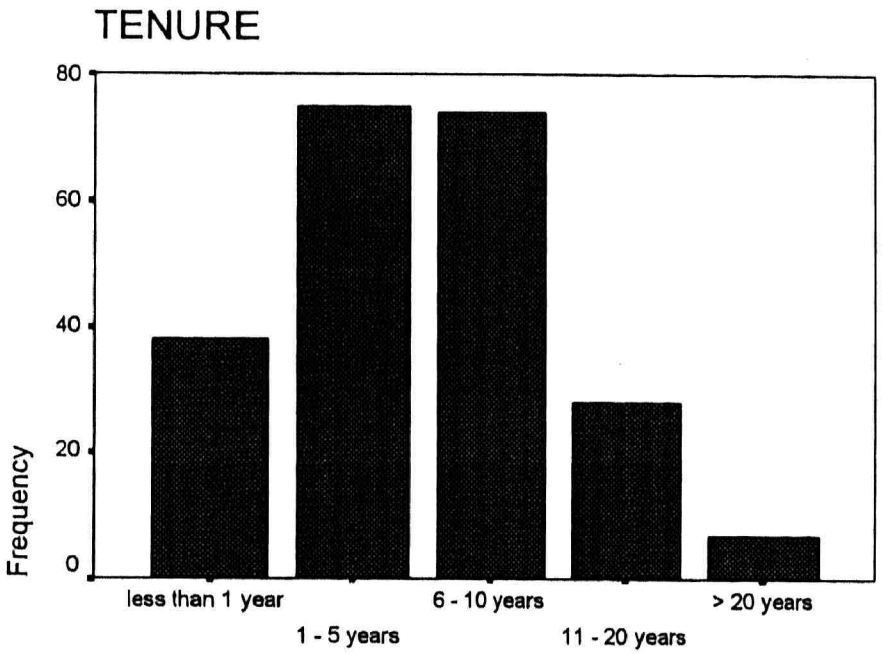
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	148	66.7	66.7	66.7
	female	74	33.3	33.3	100.0
	Total	222	100.0	100.0	



Male cover about 66.7 % from all the correspondent that involved in this survey. This is related to the nature of business that the company involved in engineering industry. Despite the industry is more towards man nature, the company still employed woman of about 40 % of the total population of employee.

TENURE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 year	38	17.1	17.1	17.1
	1 - 5 years	75	33.8	33.8	50.9
	6 - 10 years	74	33.3	33.3	84.2
	11 - 20 years	28	12.6	12.6	96.8
	> 20 years	7	3.2	3.2	100.0
	Total	222	100.0	100.0	



The company start operation since 1964, the number of employee that worked for more than 20 years is less due to the high turnover among employee. This is general problem in the engineering industry whereby the employee tends to move after they have required certain knowledge and skills. For this survey the highest level is employee that have been working between 1 to 5 years, cover 33.8 % followed by 6 to 10 years of 33.3 %, people that working less than 1

years of 17.1 % and 11 to 20 years of 12.6 % and the last 3.2 % of people that worked more than 20 years.

4.2.2 Means Score

4.2.2.1 Organization Characteristic

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q1. Congruence 1 : The improvement initiate is in harmony with the organization's managerial philosophy	222	1	7	4.41	.936
Q2. Congruence 2 : The improvement initiate is in harmony with the other changes taking place in the organization	222	1	6	4.27	.930
Q3. Stability of environment and technology : The improvement initiatives in conducted in stable environment	222	1	7	4.25	1.014
Q4. Stability of environment and technology : The changes are dealt with directly by the change program	222	1	7	4.29	1.080
Q5. Unionization : The diffusion of improvement initiatives is easier because changes do not affect union contract such as salary and fringe benefits	222	1	7	4.28	1.048
Q6. Unionization : The diffusion of improvement initiatives is easier because changes do not affect union contract such as job design and employee flexibility	222	1	7	4.31	1.153
Valid N (list wise)	222				

Table 4.2.2.1, the mean score for organization characteristic are at minimum of 4.25 (stability of environment and technology : the improvement initiatives in conducted in stable environment) and maximum of 4.41 (congruence : the improvement is in harmony with organization managerial philosophy). The rest of the variance is within the range of this two variance.

4.2.2.2 Intervention Characteristic

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q7. Goal Specificity : The improvement initiative goals direct socializing activities such as training	222	1	7	4.36	1.144
Q8. Goal Specificity : The improvement initiative goals directly linked new behaviors with rewards	222	1	7	4.36	.926
Q9. Programmability : One of the target of th improvement initiative is looking into strategic intent	222	1	7	4.39	1.189
Q10. Programmability : Target of the improvemen initiative strategy is employee involvement and improvin impersonal and group process	222	1	7	4.33	1.136
Q11. Level of Change Target : The target of change is the total organization	222	1	7	4.44	1.182
Q12. Level of Change Target : There is a promotion o consensus across the organization	222	1	7	4.40	1.124
Q13. Internal Support : There is an effective interna support system to guide the change process	222	1	7	4.42	1.222
Q14. Internal Support : The external consultant brings expertise on organization design and trains members to implement the design	222	1	7	4.41	1.010
Q15. Sponsorship : There is a powerful sponsor who initiates allocates, legitimizes and controls the appropriat resources for improvement initiatives	222	1	6	4.35	1.090
Q16. Sponsorship : The middle managers support th improvement initiatives	222	1	7	4.40	1.014
Valid N (list wise)	222				

Results from this table shows that the mean for intervention characteristic is between 4.33 to 4.44, whereby the different between the minimum and maximum is very small for the intervention characteristic.

4.2.2.3 Institutionalization Process

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q17. Socialization : There is considerable learning and experimental on the job	222	1	7	4.39	1.197
Q18. Socialization : There is a continual process o socialization and promotion of persistence about the change program	222	2	7	4.34	1.117
Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved	222	1	7	4.44	1.031
Q20. Commitment : Change is a constant agenda in the management of the business	222	1	7	4.41	1.121
Q21. Reward Allocation : The improvement initiativ provides opportunities for challenging development and accomplishment	222	1	6	3.16	1.318
Q22. Reward Allocation : The reward systems is constantly revised to maintain a high level of desired behaviors	222	1	7	3.62	1.481
Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working	222	1	7	4.24	1.713
Q24. Diffusion : The NWW complement the organization values and norms	222	1	7	4.32	1.020
Q25. Sensing and Calibration : There are continuous assessments conducted in the form of internal audit	222	1	7	4.45	1.112
Q26. Sensing and Calibration : Variation i performances/preferences/norms and values are corrected	222	1	7	4.34	1.096
Valid N (list wise)	222				

The results for institutionalization process thus show a significant different between the maximum (4.45) and minimum (3.16). The big different in means score are due to the reward allocation mean that are relatively low as compare to the rest of the variance mean score, this probably is a good analysis factor that should be concentrate in the study.

4.2.2.4 Indicator of Institutionalization

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q27. Knowledge : Organization members hav knowledge of NWW and behaviors associated with the improvement initiative	222	2	6	4.30	1.025
Q28. Knowledge : Organization members hav knowledge to perform the NWW	222	1	6	4.14	1.032
Q29. Performance : I feel a vast majority of the member are performing the NWW	222	1	6	4.15	1.016
Q30. Preference : The NWW have assisted m understand the business better	222	1	6	4.31	1.001
Q31. Preference : The NWW has facilitated my work	222	2	7	4.45	.949
Q32. Normative Consensus : The organizational change in line with the business requirements	222	2	7	4.48	.896
Q33. Value Consensus : The changes has promoted the concept of internal customer service	222	2	7	4.35	1.043
Q34. Value Consensus : The changes has promoted the concept of external customer service	222	1	7	4.44	1.119
Q35. Value Consensus : There is an effective custome complaint handling system	222	1	7	4.49	1.133
Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness	222	2	7	4.48	1.124
Q37. Value Consensus : The change has promoted the concept of continuous learning	222	2	7	4.51	1.096
Q38. Divisional Performance : Market Share	222	1	7	4.41	1.055
Q39. Divisional Performance : Profit Growth	222	2	6	4.47	1.079
Q40. Divisional Performance : labor productivity	222	2	6	4.49	1.037
Q41. Divisional Performance : Return on assets	222	2	6	4.40	1.096
Q42. Divisional Performance : Return on investment	222	1	6	4.43	1.081
Q43. Divisional Performance : Development of new product	222	1	7	4.45	1.143
Q44. Divisional Performance : Sales growth	222	2	6	4.46	1.083
Q45. Divisional Performance : Capacity utilization	222	1	7	4.55	1.128
Q46. Divisional Performance : Cost control	222	1	7	4.53	1.096
Q47. Divisional Performance : Personnel development	222	1	6	4.33	1.124
Q48. Divisional Performance : Company Image	222	1	6	4.47	1.096
Q49. Divisional Performance : Customer Satisfaction	222	1	7	4.50	1.129
Valid N (list wise)	222				

The table above shows that the mean score for all the variance are small in different with minimum mean of 4.14 and maximum score of 4.55. the different are very low of 0.44. The mean for the rest of the variance is along this range.

4.3 Correlation Analysis

In this study, Bivariate Pearson Product moment correlation (one tailed test) was used to test the causal relationship between the indicator of institutionalization variables and organization characteristic, intervention characteristic, institutionalization process.

Correlation Analysis

		Q21	Q27	Q28	Q33	Q36	Q37	Q44
Q1	Pearson Correlation	.086	.133	.183	.359	.327	.257	.262
	Sig.(2-tailed)	.203	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q2	Pearson Correlation	.120	.154	.214	.314	.328	.302	.251
	Sig.(2-tailed)	.075	.000	.001	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q3	Pearson Correlation	.065	.259	.268	.362	.360	.334	.328
	Sig.(2-tailed)	.338	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q4	Pearson Correlation	.151	.317	.372	.418	.402	.466	.383
	Sig.(2-tailed)	.025	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q5	Pearson Correlation	118	.339	.176	.324	.393	.317	.401
	Sig.(2-tailed)	.080	.000	.005	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q6	Pearson Correlation	.116	.279	.236	.244	.363	.376	.404
	Sig.(2-tailed)	.086	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q7	Pearson Correlation	.162	.324	.197	.360	.393	.301	.406
	Sig.(2-tailed)	.016	.000	.003	.000	.000	.000	.000
	N	222	222	222	222	222	222	222

Q8	Pearson Correlation	.114	.258	.319	.476	.449	.449	.396
	Sig.(2-tailed)	.032	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
		Q21	Q27	Q28	Q33	Q36	Q37	Q44
Q9	Pearson Correlation	.176	.276	.334	.532	.457	.445	.448
	Sig.(2-tailed)	.009	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q10	Pearson Correlation	.166	.276	.298	.477	.459	.459	.423
	Sig.(2-tailed)	.013	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q11	Pearson Correlation	.131	.339	.263	.483	.477	.479	.488
	Sig.(2-tailed)	.051	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q12	Pearson Correlation	.072	.324	.320	.520	.471	.473	.406
	Sig.(2-tailed)	.286	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q13	Pearson Correlation	.134	.318	.324	.443	.432	.409	.392
	Sig.(2-tailed)	.046	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q14	Pearson Correlation	.080	.482	.408	.349	.387	.311	.342
	Sig.(2-tailed)	.238	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q15	Pearson Correlation	-.002	.400	.425	.352	.394	.391	.438
	Sig.(2-tailed)	.976	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q16	Pearson Correlation	.175	.256	.291	.330	.421	.469	.394
	Sig.(2-tailed)	.009	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222

Q17	Pearson Correlation	.121	.197	.229	.401	.407	.473	.400
	Sig.(2-tailed)	.073	.000	.001	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
		Q21	Q27	Q28	Q33	Q36	Q37	.434
Q18	Pearson Correlation	.076	.349	.353	.463	.543	.548	.000
	Sig.(2-tailed)	.261	.000	.000	.000	.000	.000	222
	N	222	222	222	222	222	222	Q44
Q19	Pearson Correlation	.247	.303	.399	.394	.512	.469	.527
	Sig.(2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q20	Pearson Correlation	.113	.302	.367	.355	.420	.431	.394
	Sig.(2-tailed)	.092	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q21	Pearson Correlation	1	.075	.099	.123	.033	.049	.119
	Sig.(2-tailed)	.	.268	.141	.000	.000	.467	.000
	N	222	222	222	222	222	222	222
Q22	Pearson Correlation	.628	.180	.167	.287	.208	.215	.186
	Sig.(2-tailed)	.000	.007	.013	.000	.000	.001	.000
	N	222	222	222	222	222	222	222
Q23	Pearson Correlation	.139	.333	.518	.280	.427	.446	.353
	Sig.(2-tailed)	.038	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q24	Pearson Correlation	.059	.520	.442	.482	.515	.435	.438
	Sig.(2-tailed)	.379	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q25	Pearson Correlation	.156	.357	.353	.447	.542	.500	.540
	Sig.(2-tailed)	.020	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222

Q26	Pearson Correlation	.147	.450	.477	.525	.489	.493	.425
	Sig.(2-tailed)	.029	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
		Q21	Q27	Q28	Q33	Q36	Q37	.361
Q27	Pearson Correlation	.075	1	.485	.405	461	.372	.000
	Sig.(2-tailed)	.268	.	.000	.000	.000	.000	222
	N	222	222	222	222	222	222	Q44
Q28	Pearson Correlation	.099	.485	1	.394	.412	.375	.398
	Sig.(2-tailed)	.141	.000	.	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q29	Pearson Correlation	.131	.522	.605	.463	.409	.395	.546
	Sig.(2-tailed)	.052	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q30	Pearson Correlation	.164	.540	.561	.506	.543	.511	.506
	Sig.(2-tailed)	.015	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q31	Pearson Correlation	.118	.437	.473	.487	.529	.468	.483
	Sig.(2-tailed)	.079	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q32	Pearson Correlation	.071	.464	.419	.539	.534	.440	.517
	Sig.(2-tailed)	.289	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q33	Pearson Correlation	.123	.405	.394	1	.581	.559	457
	Sig.(2-tailed)	.068	.000	.000	.	.000	.000	.000
	N	222	222	222	222	222	222	222
Q34	Pearson Correlation	.028	.405	.364	.560	.562	.487	.515
	Sig.(2-tailed)	.679	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222

Q35	Pearson Correlation	.140	.353	.280	.550	632	.545	.549
	Sig.(2-tailed)	.037	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
		Q21	Q27	Q28	Q33	Q36	Q37	.536
Q36	Pearson Correlation	.033	.461	.412	.581	1	.676	.000
	Sig.(2-tailed)	.625	.000	.000	.000	.	.000	222
	N	222	222	222	222	222	222	Q44
Q37	Pearson Correlation	.049	.372	.375	.559	.676	1	.507
	Sig.(2-tailed)	.467	.000	.000	.000	.000	.	.000
	N	222	222	222	222	222	222	222
Q38	Pearson Correlation	.059	.291	.302	.434	.466	.509	.558
	Sig.(2-tailed)	.383	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q39	Pearson Correlation	.051	.377	.439	.368	.453	.486	.562
	Sig.(2-tailed)	.447	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q40	Pearson Correlation	.134	.377	.420	.434	.505	.492	.604
	Sig.(2-tailed)	.047	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q41	Pearson Correlation	-.026	.397	.405	.418	.494	.508	.675
	Sig.(2-tailed)	.696	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q42	Pearson Correlation	.119	.395	.427	.472	.542	.514	.709
	Sig.(2-tailed)	.076	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q43	Pearson Correlation	.062	.337	.370	.432	.550	.452	.665
	Sig.(2-tailed)	.355	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222

Q44	Pearson Correlation	.119	.361	.398	.457	.536	.507	1
	Sig.(2-tailed)	.078	.000	.000	.000	.000	.000	.
	N	222	222	222	222	222	222	222
		Q21	Q27	Q28	Q33	Q36	Q37	.713
Q45	Pearson Correlation	.053	.399	.383	.486	.486	.477	.000
	Sig.(2-tailed)	.433	.000	.000	.000	.000	.000	222
	N	222	222	222	222	222	222	Q44
Q46	Pearson Correlation	.125	.363	.349	.431	.533	.556	.607
	Sig.(2-tailed)	.062	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q47	Pearson Correlation	.076	.396	.497	.498	.475	.519	.669
	Sig.(2-tailed)	.257	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q48	Pearson Correlation	.141	.363	.432	.536	.552	.498	.623
	Sig.(2-tailed)	.035	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222
Q49	Pearson Correlation	.131	.365	.467	.505	.597	.519	.653
	Sig.(2-tailed)	.051	.000	.000	.000	.000	.000	.000
	N	222	222	222	222	222	222	222

Result Analysis

The pearson's correlation coefficient allows us to assess the strength and direction of the relationship between two variables. This procedures yields a single number of 0.00 to 1.0. The closer the absolute value is to 1.0 the stronger the relationship, the closer the absolute value to 0.00 the weaker the relationship. Following is a table that determine the strength of association suggested by the absolute value of a correlation coefficient :

0..8 – 1.0	strong association between variables
0.60 – 0.79	strong moderate association
0.40 – 0.59	weak moderate association
0.30 – 0.39	strong – weak association
0.20 – 0.29	weak – weak association
0.00 – 0.19	little, if any association

A negative sign (referred to as a negative or inverse correlation) means that an upward change in one variable is accompanied by a downward change in the other variable or vice versa. A positive sign suggests that an upwards change in one variable is accompanied by an upward change in the other variable.

The result of the correlation analysis above showed there exist a relation between all the variables, dependent and independent variables except for question 21 and 22, under the section of reward allocation, where the significant figure are more than $p>0.01$.

There are few variable that fall under strong moderate category, question no 9 (programmability B), question 11 (level of change target), question 12 (level of change target), question 13 (internal support) and question 18 (socialization). All these five variables showed a strong correlation in general towards organization characteristics, intervention characteristics and institutionalization process, with a pearson correlation of more than 0.6.

The variable no 21 and 22 (under reward allocation) had the weakest relation in general to organization characteristic, intervention characteristic and institutionalization process. The pearson correlation from 0.08 to 0.20 thus show a weak relationship. This showed that the organization have failed to fulfill the employee needs in term of reward allocation, not only referring to financial reward but also non financial rewards, such as carrier development and etc. the result also found that the rest of the variable that not discuss above is significant even though did not showed any strong or week relationship.

4.4 STEPWISE REGRESSION ANALYSIS.

To test hypotheses 1 – 5, stepwise regression analysis was run.

Whereas the correlation coefficient r indicates the strength of relationship between two variables, it gives no idea of how much of the variance in the dependent variable will be explained when several independent variables are theorized to simultaneously influence. Therefore, multiple regression, which is an extension of bivariate correlation, is used. The result of regression is an equation that represents the best prediction of a dependent variable from several independent variables.

Multiple regression analysis helps in understanding how much of the variance in the dependent variable is explained by a set of predictors. If the process is to know which, among the set of predictors, is the most important in explaining the variance, which is the next most important, and so on, a stepwise multiple regression analysis can be done.

Summary of the interpretation of hypotheses by using the Stepwise Regression

Multiple regression analysis is utilized to test the hypotheses. Although dummy variables (nominal variables coded 0, 1) may be used, all other variables must be interval or ratio.

Example: $Y = B0 + B1X1 + B2X2 + \ldots\ldots + BnXn$

Where: B0 = a constant value of Y when all the X values are zero

Bi = The slope of the regression surface or the response surface. The B represents the regression coefficient associated with each Xi.

The regression coefficients are stated either in raw scores units of the actual X values of standardized coefficients. In either case, the value of the regression coefficients states the amount the Y varies with each unit change of the associated X variable when the effects of all other X variables are being held constant.

When the regression equation are standardized, they are called beta weights (B), and their values indicate the relative importance of the associated X values, particularly when the predictors are unrelated.

Adjusted R square is adjusted to reflect the model's goodness of fit for the population. The net effect is to make it comparable to other R square from equations with different number of independent variables.

The test statistic for ANOVA is the F ratio. If the null hypothesis is true, there should be no difference between the populations and the ratio should be close to zero.

The column 'BETA' gives the regression coefficients expressed in standardized form. When these are used, the regression Y intercept is zero. Standardized coefficients are useful when the variables are measured on different scales. The beta coefficients also show the relative contribution of the independent variables to the explanatory power of this equation. On the other hand, standard error is a measure of the sampling variability of each regression coefficients.

The column headed 't' measures the statistical significance of each of the regression coefficients. Again, compare these to the table value of t values using degrees of freedom for one independent variable. If all the regression coefficients are judged to be significantly, then they are both individually and jointly statistically significant.

The higher the value of R square, the greater the explanatory power of the regression equation. And therefore, the better the prediction of the dependent variable.

The coefficient r indicates the strength of relationship between two variables. When these variables are jointly regressed against the dependent variable in an effort to explain the variance in it, the individual correlations get collapse into what is called a multiple r or multiple correlation. The square of r, R-square or R2 as is commonly known, is the amount of variance explained in the dependent variable by predictors. Such analysis, where more than one predictor variable is jointly regressed against the criterion variable, it is known as multiple regression analysis. When the R-square value, the F statistic and its significance level are known, the results can be interpreted(Sekaran, 1992).

Lastly, collinearity of multicollinearity is the situation where two or more of the independent variables are highly correlate and it can have damaging effects on multiple regression. VIF is a variable inflation factor index, where large values of VIF, that is when VIF is greater that 10.0, it suggests a collinearity or multicollinearity problem. On the other hand, a high tolerance figure means an absence of multicollinearity.

H1 : Knowledge .

A positive relation is expected between organizations member to have knowledge to perform the new ways of working and organization characteristics, intervention characteristics and institutionalization processes. That is, staff need to know what is expected of them in order for the change program to be institutionalize (accepted and implemented)

Model Summary for H1

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.736	.542	.524	1.22268	.012	5.544	1	213	.019

h Predictors: (Constant), Q24. Diffusion : The NWW complement the organization values and norms, Q14. Internal Support : The external consultant brings expertise on organization design and trains members to implement the design, Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected, Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved, Q17. Socialization : There is considerable learning and experimental on the job, Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working, Q16. Sponsorship : The middle managers support the improvement initiatives, Q15. Sponsorship : There is a powerful sponsor who initiates allocates, legitimizes and controls the appropriate resources for improvement initiatives

ANOVA FOR H1

	Sum of Squares	df	Mean Square	F	Sig
Regression	376.314	8	47.039	31.465	.00
Residual	318.425	213	1.495		
Total	694.739	221			

h Predictors: (Constant), Q24. Diffusion : The NWW complement the organization values and norms, Q14. Internal Support : The external consultant brings expertise on organization design and trains members to implement the design, Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected, Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved, Q17. Socialization : There is considerable learning and experimental on the job, Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working, Q16. Sponsorship : The middle managers support the improvement initiatives, Q15. Sponsorship : There is a powerful sponsor who initiates allocates, legitimizes and controls the appropriate resources for improvement initiatives

i Dependent Variable: KNOW

Coefficients for H1

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.492	.496		3.006	.003		
Q24. Diffusion : The NWW complement the organization values and norms	.392	.114	.226	3.428	.001	.496	2.016
Q14. Internal Support : The external consultant brings expertise on organization design and trains members to implement the design	.346	.105	.197	3.307	.001	.606	1.651
Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected	.387	.097	.239	3.997	.000	.601	1.664
Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved	.505	.100	.294	5.066	.000	.641	1.561
Q17. Socialization : There is considerable learning and experimental on the job	-.313	.089	-.211	-3.506	.001	.593	1.686
Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working	.326	.095	.198	3.420	.001	.643	1.555
Q16. Sponsorship : The middle managers support the improvement initiatives	-.272	.112	-.155	-2.423	.016	.523	1.912
Q15. Sponsorship : There is a powerful sponsor who initiates allocates, legitimizes and controls the appropriate resources for improvement initiatives	.236	.100	.145	2.355	.019	.566	1.766
Adj R Square 0.524							
F- Value 31.465							
N 222							

a Dependent Variable: knowledge

The result of the stepwise regression for Hypotheses 1, showed that all independent variables in the regression equation had low VIF values ranging from 1.555 to 2.01 ; showing absence of multi – collinearity problem. [a common cutoff threshold is VIF value of 10.0. any variables with VIF values greater than 10.0 suggest collinearity or multi collinearity problem.

Adj R squared = 0.524, indicating that 52.4 percent of the variation in the independent variable is explained by the independent variables.

Since the calculated F value is greater than the critical value (31.465 > 0.19) [d.f. 8, 213, 0.05 critical value of F dist], we can conclude that there are statistically significant differences between two or more pair of means. The F-ratio of 31.465 at 8 and 213 degree of freedom is statistically significant at the 0.05 level. This means that the estimated functional relationship is not due to change or random variation. There does appear to be an association between the dependent and the independent variables other than random variation in the data. [Sekaran, 2000, pg 337]

The tabled t value for a significant level of 0.05 with 213 degrees of freedom is 1.96. looking at the column of t values, noted that there are six variables exceed this value and are candidates for inclusion. Hypotheses 1 is accepted as indicated by the positive and significant coefficients.

Discussion.

From the equation :

$$Y = B0 + B1X1 + B2X2 + \ldots\ldots + BnXn$$

For hypotheses 1

$$Y = 1.492 + 0.392Q24 + 0.346Q14 + 0.387Q26 + 0.505Q19 + 0.326Q23 + 0.236Q15.$$

From the coefficient table, the column beta (unstandardized coefficient), there are eight numbers of independent variable that are significant at 0.00 to 0.01 level. The highest number of beta is at 0.505 for employee's commitment ; there is commitment towards the improvement initiatives from employees / middle managers / upper managers involves. The positive beta showed, in order for the employee to have the knowledge level of understanding towards the change program implemented, commitment from the management is the most important factor in making the change a success.

The second most important factor with beta of .239 is under question 26. sensing and contributing (variation in performances/preferences/norms and values are corrected) followed by diffusion ; (the NWW complement the organization values and norms) with beta of 0.392 and followed by the rest.

H2 : Internal Customer Service

The new system implemented have promoted the concept of internal customer service and has a positive relation with statements regarding organization characteristics, intervention characteristics and institutionalization process. That is, staff need to understand the best practice in handing internal customer in order for the change program to be institutionalize.

Model Summary for H2

		R Square	Adjusted R Square	Std. Error of the Estimate	Chang Statistic				
Model					R Squar Chang	F Change	df1	df	Sig. Change
5	.67	.451	.439	.782	.01	6.580	1	21	.011

e Predictors: (Constant), Q9. Programmability : One of the target of the improvement initiative is looking into strategic intent, Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected, Q12. Level of Change Target : There is a promotion of consensus across the organization, Q24. Diffusion : The NWW complement the organization values and norms, Q22. Reward Allocation : The reward systems is constantly revised to maintain a high level of desired behaviors

ANOVA FOR H2

Model		Sum of Squares	df	Mean Square	F	Sig.
5	Regression	108.619	5	21.724	35.555	.000
	Residual	131.975	216	.611		
	Total	240.595	221			

e Predictors: (Constant), Q9. Programmability : One of the target of the improvement initiative is looking into strategic intent, Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected, Q12. Level of Change Target : There is a promotion of consensus across the organization, Q24. Diffusion : The NWW complement the

organization values and norms, Q22. Reward Allocation : The reward systems is constantly revised to maintain a high level of desired behaviors
f Dependent Variable: Q33. Value Consensus : The changes has promoted the concept of internal customer service

Coefficients for H2

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.733	.281		2.604	.010		
Q9. Programmability : One of the target of the improvement initiative is looking into strategic intent	.198	.056	.226	3.565	.000	.634	1.578
Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected	.186	.064	.195	2.882	.004	.554	1.804
Q12. Level of Change Target : There is a promotion of consensus across the organization	.197	.059	.212	3.342	.001	.629	1.589
Q24. Diffusion : The NWW complement the organization values and norms	.171	.066	.167	2.599	.010	.617	1.621
Q22. Reward Allocation : The reward systems is constantly revised to maintain a high level of desired behaviors	9.441E-02	.037	.134	2.565	.011	.931	1.074
Adj R Square 0.439							
F-value 35.555							
N 222							

a Dependent Variable: Q33. Value Consensus : The changes has promoted the concept of internal customer service

The result of the stepwise regression for Hypotheses 1, showed that all independent variables in the regression equation had low VIF values ranging from 1.074 to 1.804 ; showing absence of multi – collinearity problem. [a common cutoff threshold is VIF value of 10.0. any variables with VIF values greater than 10.0 suggest collinearity or multi collinearity problem.

Adj R squared = 0.439, indicating that 43.9 percent of the variation in the dependent variable is explained by the independent variables.

Since the calculated F value is greater than the critical value (35.555 > 0.11) [d.f. 5, 216, 0.05 critical value of F dist], we can conclude that there are statistically significant differences between two or more pair of means. The F-ratio of 35.555 at 5 and 216 degree of freedom is statistically significant at the 0.05 level. This means that the estimated functional relationship is not due to change or random variation. There does appear to be an association between the dependent and the independent variables other than random variation in the data. [Sekaran, 2000, pg 337]

The tabled t value for a significant level of 0.05 with 216 degrees of freedom is 1.96. looking at the column of t values, noted that there are six variables exceed this value and are candidates for inclusion. Hypotheses 2 is accepted as indicated by the positive and significant coefficients.

Discussion

From the equation :

$$Y = B0 + B1X1 + B2X2 + \ldots\ldots + BnXn$$

For Hypotheses 2

$$Y= 0.733 + 0.198Q9 + 0.186Q26 + 0.197Q12 + 0.171Q24$$

From the coefficient table, there are five independent variable that are significant with hypotheses 2 (internal customer service). The beta column shows that programmability (one of the target of the improvement initiative is looking into strategic intent has the highest score of 0.198 and has the positive relation. This showed that for the organization to have a proper internal customer service system the management need to have a proper program on how to implement the ISO 9000 system.

The second factor that contribute towards the internal customer service is level of change target, with score of 0.186 followed by sensing and calibrating and this is followed by the rest of the independent variable.

H3 : Sales Growth

The implementation of the new system have increase the sales growth and has a positive relation with statement regarding organization characteristics, intervention characteristics, institutionalization processes. That is, after the implementation of organizational change there should be sales growth in the organization as the result of change program implemented.

Model Summary for H3

		R Square	Adjusted R Square	Std. Error of the Estimate	Chang Statistic				
Model					R Squar Chang	F Change	df1	df	Sig. Change
5	.72	.522	.511	.757	.01	5.142	1	21	.024

e Predictors: (Constant), Q35. Value Consensus : There is an effective customer complaint handling system, Q29. Performance : I feel a vast majority of the member are performing the NWW, Q19. Commitment : There is commitment towards the improment initiative from employees/ middle managers/ upper managers involved, Q5. Unionization : The diffusion of improvement initiatives is easier because changes do not affect union contract such as salary and fringe benefits, Q11. Level of Change Target : The target of change is the total organisation

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
5	Regression	135.314	5	27.063	47.210	.000
	Residual	123.821	216	.573		
	Total	259.135	221			

e Predictors: (Constant), Q35. Value Consensus : There is an effective customer complaint handling system, Q29. Performance : I feel a vast majority of the member are performing the NWW, Q19. Commitment : There is commitment towards the improment initiative from employees/ middle managers/ upper managers involved, Q5. Unionization : The diffusion of improvement initiatives is easier because changes do not affect union contract such as salary and fringe benefits, Q11. Level of Change Target : The target of change is the total organisation
f Dependent Variable: Q44. Divisional Performance : Sales growth

Coefficients for H3

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	9.195E-0	.301		.03	.976		
Q35. Value Consensus : There is an effective customer complaint handling system	.19	.058	.204	3.37	.001	.606	1.652
Q29. Performance : I feel a vast majority of the member are performing the NWW	.33	.056	.316	6.01	.000	.802	1.248
Q19. Commitment : There is commitment towards the improment initiative from employees/ middle managers/ upper managers involved	.24	.060	.233	4.11	.000	.688	1.454
Q5. Unionization : The diffusion of improvement initiatives is easier because changes do not affect union contract such as salary and fringe benefits	.12	.055	.124	2.30	.022	.771	1.297
Q11. Level of Change Target : The target of change is the total organization	.12	.054	.133	2.26	.024	.645	1.550
Adj R Square 0.522							
F-value 47.210							
N 222							

a Dependent Variable: Q44. Divisional Performance : Sales growth

The result of the stepwise regression for Hypotheses 1, showed that all independent variables in the regression equation had low VIF values ranging from 1.248 to 1.652 ; showing absence of multi – collinearity problem. [a common cutoff threshold is VIF value of 10.0. any variables with VIF values greater than 10.0 suggest collinearity or multi collinearity problem.

R squared = 0.522, indicating that 52.2 percent of the variation in the dependent variable is explained by the independent variables.

Since the calculated F value is greater than the critical value (34.930 > 0.11) [d.f. 5, 216, 0.05 critical value of F dist], we can conclude that there are statistically significant differences between two or more pair of means. The F-ratio of 47.210 at 5 and 216 degree of freedom is statistically significant at the 0.05 level. This means that the estimated functional relationship is not due to change or random variation. There does appear to be an association between the dependent and the independent variables other than random variation in the data. [Sekaran, 2000, pg 337]

The tabled t value for a significant level of 0.05 with 215 degrees of freedom is 1.96. looking at the column of t values, noted that there are five variables exceed this value and are candidates for inclusion. Hypotheses 3 is accepted as indicated by the positive and significant coefficients.

Discussion

From the equation :

$$Y = B0 + B1X1 + B2X2 + \ldots\ldots + BnXn$$

For hypotheses 3

$$Y = 9195E\text{-}03 + 0.195Q35 + 0.337Q29 + 0.245Q19 + 0.128Q5 + 0.122Q11$$

From the coefficient table, it is understand that there are six independent variable contributing towards the sales growth of the organization after the implementation of ISO 9000 quality system. from the standardized coefficient (beta) it is understand that Q29. performance giving the highest score as compared to the rest of the independent variable with 0.337 this shows that performance of every employee plays important role for the organization to have

positive growth in sales. Commitment from all around the organization is a critical factor to the organization, not only from the management but also from the employee itself.

H4 : Team Work

The implementation of new system promote the concept of team work and cohesiveness and has a positive relation with the statement regarding organization characteristics, intervention characteristics and institutionalization process. That is, staff of the organization should cooperate and unite in order for the change to be instituted.

Model Summary for H4

		R Square	Adjusted R Square	Std. Error of the Estimate	Chang Statistic				
Model					R Squar Chang	F Change	df1	df	Sig. Change
4	.67	.460	.450	.834	.02	10.779	1	21	.001

d Predictors: (Constant), Q18. Socialization : There is a continual process of socialization and promotion of persistence about the change program, Q19. Commitment : There is commitment towards the improment initiative from employees/ middle managers/ upper managers involved, Q24. Diffusion : The NWW complement the organisation values and norms, Q12. Level of Change Target : There is a promotion of consensus across the organisation

ANOVA for H4

Model		Sum of Squares	df	Mean Square	F	Sig.
4	Regression	128.434	4	32.108	46.157	.000
	Residual	150.953	217	.696		
	Total	279.387	221			

d Predictors: (Constant), Q18. Socialization : There is a continual process of socialization and promotion of persistence about the change program, Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved, Q24. Diffusion : The NWW complement the organization values and norms, Q12. Level of Change Target : There is a promotion of consensus across the organization

e Dependent Variable: Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness

Coefficients for H4

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.304	.316		.962	.337		
Q18. Socialization : There is a continual process of socialization and promotion of persistence about the change program	.177	.068	.176	2.607	.010	.548	1.824
Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved	.300	.063	.275	4.719	.000	.736	1.359
Q24. Diffusion : The NWW complement the organization values and norms	.286	.067	.260	4.306	.000	.684	1.462
Q12. Level of Change Target : There is a promotion of consensus across the organization	.191	.058	.191	3.283	.001	.737	1.357
Adj R Square 0.450							
F-Value 46.157							
N 222							

a Dependent Variable: Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness

The result of the stepwise regression for Hypotheses 1, showed that all independent variables in the regression equation had low VIF values ranging from 1.357 to 1.824 ; showing absence of multi – collinearity problem. [a common cutoff threshold is VIF value of 10.0. any variables with VIF values greater than 10.0 suggest collinearity or multi collinearity problem.

Adj R squared = 0.450, indicating that 45.0 percent of the variation in the dependent variable is explained by the independent variables.

Since the calculated F value is greater than the critical value (46.157 > 0.01) [d.f. 4, 217, 0.05 critical value of F dist], we can conclude that there are statistically significant differences between two or more pair of means. The F-ratio of 46.157 at 4 and 217 degree of freedom is statistically significant at the 0.05 level. This means that the estimated functional relationship is not due to

change or random variation. There does appear to be an association between the dependent and the independent variables other than random variation in the data. [Sekaran, 2000, pg 337]

The tabled t value for a significant level of 0.05 with 217 degrees of freedom is 1.96. looking at the column of t values, noted that there are five variables exceed this value and are candidates for inclusion. Hypotheses 4 is accepted as indicated by the positive and significant coefficients.

Discussion.

From the equation :

$$Y = B0 + B1X1 + B2X2 + \ldots\ldots + BnXn$$

For Hypotheses 4

$$Y = 0.304 + 0.177Q18 + 0.300Q19 + 0.286Q24 + 0.191Q12$$

From the coefficient table, it is understood that there are four independent variable influencing hypotheses 4, (team work). All the four independent variable are significant with the statement of team work. Commitment having beta of 0.300, showing weak level of influence to team work.

H 5 : Continuous Learning

The implementation of the new system promote the concept of continuous learning and has a positive relation with the statement regarding organization characteristics, intervention characteristics and institutionalization process. That is, staff should be able to absorb new knowledge in order for the change program to be instituted.

Model Summary for H5

		R Square	Adjusted R Square	Std. Error of the Estimate	Chang Statistic				
Model					R Squar Chang	F Change	df1	df	Sig. Change
6	.68	.464	.449	.814	.01	4.689	1	21	.031

f Predictors: (Constant), Q18. Socialization : There is a continual process of socialization and promotion of persistence about the change program, Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working, Q11. Level of Change Target : The target of change is the total organization, Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved, Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected, Q7. Goal Specificity : The improvement initiative goals direct socializing activities such as training

ANOVA for H5

Model		Sum of Squares	df	Mean Square	F	Sig.
6	Regression	123.082	6	20.514	30.972	.000
	Residual	142.400	215	.662		
	Total	265.482	221			

f Predictors: (Constant), Q18. Socialization : There is a continual process of socialization and promotion of persistence about the change program, Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working, Q11. Level of Change Target : The target of change is the total organization, Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved, Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected, Q7. Goal Specificity : The improvement initiative goals direct socializing activities such as training
g Dependent Variable: Q37. Value Consensus : The change has promoted the concept of continuous learning

Coefficients for H5

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.600	.314		1.915	.057		
Q18. Socialization : There is a continual process of socialization and promotion of persistence about the change program	.215	.067	.219	3.225	.001	.541	1.848
Q23. Diffusion : There is a wide organizational acceptance towards the new ways of working	.214	.058	.210	3.673	.000	.762	1.312
Q11. Level of Change Target : The target of change is the total organization	.226	.061	.243	3.702	.000	.578	1.730
Q19. Commitment : There is commitment towards the improvement initiative from employees/ middle managers/ upper managers involved	.218	.063	.205	3.442	.001	.706	1.417
Q26. Sensing and Calibration : Variation in performances/preferences/norms and values are corrected	.160	.063	.160	2.541	.012	.631	1.584
Q7. Goal Specificity : The improvement initiative goals direct socializing activities such as training	-.131	.061	-.137	-2.165	.031	.623	1.605
Adj R Square 0.449							
F-Value 30.972							
N 222							

a Dependent Variable: Q37. Value Consensus : The change has promoted the concept of continuous learning

The result of the stepwise regression for Hypotheses 1, showed that all independent variables in the regression equation had low VIF values ranging from 1.312 to 1.848 ; showing absence of multi – collinearity problem. [a common cutoff threshold is VIF value of 10.0. any variables with VIF values greater than 10.0 suggest collinearity or multi collinearity problem.

R squared = 0.499, indicating that 49.9 percent of the variation in the dependent variable is explained by the independent variables.

Since the calculated F value is greater than the critical value (30.972 > 0.01) [d.f. 6, 215, 0.05 critical value of F dist], we can conclude that there are statistically significant differences between two or more pair of means. The F-ratio of 30.972 at 6 and 215 degree of freedom is statistically significant at the 0.05 level. This means that the estimated functional relationship is not due to change or random variation. There does appear to be an association between the dependent and the independent variables other than random variation in the data. [Sekaran, 2000, pg 337]

The tabled t value for a significant level of 0.05 with 215 degrees of freedom is 1.96. looking at the column of t values, noted that there are five variables exceed this value and are candidates for inclusion. Hypotheses 5 is accepted as indicated by the positive and significant coefficients.

Discussion

From the equation :

$$Y = B0 + B1X1 + B2X2 + \ldots\ldots + BnXn$$

For hypotheses 5

$$Y = 0.600 + 0.215Q18 + 0.214Q23 + 0.226Q11 + 0.218Q19 + 0.160Q26$$

From the stepwise regression analysis data, under the coefficient table, there are six independent variable influencing the continuous learning. Level of change target with beta of 0.226 is the highest, followed by diffusion, socialization and commitment having a score of more than 0.2 in term of beta.

4.5 T – Test Analysis

T-Test Analysis used to determine whether a sets of scores are from the same population (Coakes and Steed, 2001)

Group Statistics

	sex	N	Mean	Std. Deviation	Std. Error Mean
Q27. Knowledge : Organization members have knowledge of NWW and behaviors associated with the improvement initiative	male	148	4.38	.999	.082
	female	74	4.14	1.064	.124
Q33. Value Consensus : The changes has promoted the concept of internal customer service	male	148	4.32	.977	.080
	female	74	4.41	1.169	.136
Q35. Value Consensus : There is an effective customer complaint handling system	male	148	4.53	1.066	.088
	female	74	4.42	1.261	.147
Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness	male	148	4.53	1.128	.093
	female	74	4.38	1.119	.130
Q37. Value Consensus : The change has promoted the concept of continuous learning	male	148	4.52	1.072	.088
	female	74	4.49	1.150	.134
Q44. Divisional Performance : Sales growth	male	148	4.41	1.130	.093
	female	74	4.57	.980	.114

Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means					
		F	T	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Q27. Knowledge : Organization members have	Equal variances assumed	.507	1.673	.096	.24	.145	-.043	.530

knowledge of NWW and behaviors associated with the improvement initiative								
	Equal variances not assumed		1.638	.104	.24	.148	-.050	.537
Q33. Value Consensus : The changes has promoted the concept of internal customer service	Equal variances assumed	3.633	-.545	.586	-.08	.149	-.374	.212
	Equal variances not assumed		-.513	.609	-.08	.158	-.394	.231
Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness	Equal variances assumed	.015	.928	.354	.15	.160	-.167	.464
	Equal variances not assumed		.931	.354	.15	.160	-.167	.464
Q37. Value Consensus : The change has promoted the concept of continuous learning	Equal variances assumed	.299	.216	.829	.03	.156	-.274	.342
Q44. Divisional Performance : Sales growth	Equal variances assumed	3.081	-1.052	.294	-.16	.154	-.466	.142
	Equal variances not assumed		-1.103	.272	-.16	.147	-.452	.128

The result of the T-test analysis, hypotheses 1(knowledge), hypotheses 2 (internal customer support), hypotheses 3 (sales growth), hypotheses 4 (team work), hypotheses 5 (continuous learning) there exist no significant between men and woman for this five hypotheses, thus indicate that the organization have

no differentiation for men and woman in term of knowledge development and the rest of independent variable tested.

Based on the significant value of $p > 0.05$ indicated that there is no significant between the two groups, male and female. Referring to the 95% confident level which does not contain any 0, thus indicate that there are no different and it is not significant.

There are no different exist on most of the tested independent and dependent variable, most probably due to the nature of business they involved into. In this nature of business, where team work and cooperation among employee is the most important factor towards the success of the business. The team building series and induction program being introduce during the first day they joint the organization helped the employee to reduce the gap between man and woman. This is further reduced when they were given task as a group where there are no individual project/tast to be completed. Most of the project is done on group basis and the success of each project is depend on the whole group. Members of a team is mixed between man and woman, and also various position and level of education. They we given specific task starting from marketing, product introduction, market identification, tendering, process, manufacturing, delivery, installation, testing and commissioning of the system. To do this, a high level of commitment and communication among team member is highly required.

4.6 Anova Analysis.

Measures whether or not the equation represent a set of regression coefficient that are statistically significant from zero. ANOVA helps to examine helps to examine the significant means differences among more than two groups on an interval or ratio scaled dependent variable (sekaran 2000).

The results of ANOVA show whether or not the means of the various groups are significant different from one another, as indicated by the F statistic. The F statistic shows whether two sample variances differ from one another or if they are from the same population. The F distribution is a probability distribution of sample variance and the family distribution changes with the changes in the sample size.

4.6.1 Anova Analysis : Position in Organization

ANOVA

		Sum of Squares	df	Mean Square		Sig.
Q27. Knowledge : Organization members have knowledge of NWW and behaviors associated with the improvement initiative	Betwee Group	9.330	5	1.866	1.80	.113
	Withi Group	223.048	216	1.033		
	Tota	232.378	221			
Q28. Knowledge : Organization members have knowledge to perform the NWW	Betwee Group	9.568	5	1.914	1.83	.108
	Withi Group	225.819	216	1.045		
	Tota	235.387	221			
Q33. Value Consensus : The changes has promoted the concept of internal customer service	Betwee Group	10.611	5	2.122	1.99	.081
	Withi Group	229.983	216	1.065		
	Tota	240.595	221			
Q34. Value Consensus : The changes has promoted the concept of	Betwee Group	13.797	5	2.759	2.26	.049

external customer service						
	Withi Group	262.941	216	1.217		
	Tota	276.739	221			
Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness	Betwee Group	25.279	5	5.056	4.29	.001
	Withi Group	254.109	216	1.176		
	Tota	279.387	221			
Q37. Value Consensus : The change has promoted the concept of continuous learning	Betwee Group	16.991	5	3.398	2.95	.013
	Withi Group	248.491	216	1.150		
	Tota	265.482	221			
Q44. Divisional Performance : Sales growth	Betwee Group	22.597	5	4.519	4.12	.001
	Withi Group	236.538	216	1.095		
	Tota	259.135	221			

The anova result for position showed that there is a significant based on P<0.05, at three independent sample tested, sales growth (hypotheses 3), team work (hypotheses 4) and continuous learning (hypotheses 5) this is further elaborated in multiple comparison table.

Multiple Comparisons
Tukey HSD

			Mea Differenc (I-J	Std. Error	Sig	95% Confidence Interval	
Dependent Variable	(I) positio	(J) position				Lower Bound	Upper Bound
Q36.	manage	executive	.1	.241	.99	-.57	.81
		supervisor	.8	.288	.06	-.02	1.63
		technician	-.0	.293	1.00	-.85	.83
		clerk	.7	.276	.08	-.05	1.53
		product specialist	-.1	.325	1.00	-1.04	.83
	executiv	manager	-.1	.241	.99	-.81	.57
		supervisor	.6	.231	.03	.02	1.35
		technician	-.1	.237	.99	-.81	.55
		clerk	.6	.217	.05	.00	1.25
		product specialist	-.2	.276	.96	-1.01	.57

	superviso	manager	-.8	.288	.06	-1.63	.02
		executive	-.6	.231	.03	-1.35	-.02
		technician	-.8	.285	.05	-1.64	.00
		clerk	-.0	.268	1.00	-.84	.70
		product specialist	-.9	.318	.05	-1.82	.01
	technicia	manager	.0	.293	1.00	-.83	.85
		executive	.1	.237	.99	-.55	.81
		supervisor	.8	.285	.05	.00	1.64
		clerk	.7	.273	.07	-.04	1.54
		product specialist	-.0	.322	1.00	-1.02	.83
	cler	manager	-.7	.276	.08	-1.53	.05
		executive	-.6	.217	.05	-1.25	.00
		supervisor	.0	.268	1.00	-.70	.84
		technician	-.7	.273	.07	-1.54	.04
		product specialist	-.8	.308	.07	-1.73	.04
	produc specialis	manager	.1	.325	1.00	-.83	1.04
		executive	.2	.276	.96	-.57	1.01
		supervisor	.9	.318	.05	-.01	1.82
		technician	.0	.322	1.00	-.83	1.02
		clerk	.8	.308	.07	-.04	1.73
Q37.	manage	executive	.1	.238	.99	-.57	.80
		supervisor	.7	.285	.09	-.07	1.56
		technician	.1	.289	.99	-.70	.97
		clerk	.6	.273	.18	-.15	1.42
		product specialist	.0	.321	1.00	-.88	.96
	executiv	manager	-.1	.238	.99	-.80	.57
		supervisor	.6	.229	.07	-.03	1.28
		technician	.0	.235	1.00	-.66	.69
		clerk	.5	.214	.15	-.10	1.14
		product specialist	-.0	.273	1.00	-.86	.71
	superviso	manager	-.7	.285	.09	-1.56	.07
		executive	-.6	.229	.07	-1.28	.03
		technician	-.6	.282	.26	-1.42	.20
		clerk	-.1	.265	.99	-.87	.66
		product specialist	-.7	.314	.22	-1.61	.20
	technicia	manager	-.1	.289	.99	-.97	.70
		executive	-.0	.235	1.00	-.69	.66
		supervisor	.6	.282	.26	-.20	1.42
		clerk	.5	.270	.42	-.27	1.28
		product specialist	-.0	.319	1.00	-1.01	.82
	cler	manager	-.6	.273	.18	-1.42	.15
		executive	-.5	.214	.15	-1.14	.10
		supervisor	.1	.265	.99	-.66	.87
		technician	-.5	.270	.42	-1.28	.27
		product specialist	-.6	.304	.36	-1.47	.28

	produc specialis	manager	-.0	.321	1.00	-.96	.88
		executive	.0	.273	1.00	-.71	.86
		supervisor	.7	.314	.22	-.20	1.61
		technician	.0	.319	1.00	-.82	1.01
		clerk	.6	.304	.36	-.28	1.47
Q44.	manage	executive	.0	.232	1.00	-.64	.70
		supervisor	.8	.278	.03	.04	1.63
		technician	-.0	.282	1.00	-.82	.80
		clerk	.5	.266	.29	-.21	1.32
		product specialist	-.0	.313	1.00	-.97	.83
	executiv	manager	-.0	.232	1.00	-.70	.64
		supervisor	.8	.223	.00	.16	1.44
		technician	-.0	.229	1.00	-.70	.61
		clerk	.5	.209	.12	-.08	1.12
		product specialist	-.1	.266	.99	-.87	.66
	superviso	manager	-.8	.278	.03	-1.63	-.04
		executive	-.8	.223	.00	-1.44	-.16
		technician	-.8	.275	.02	-1.64	-.05
		clerk	-.2	.259	.89	-1.02	.47
		product specialist	-.9	.307	.04	-1.79	-.02
	technicia	manager	.0	.282	1.00	-.80	.82
		executive	.0	.229	1.00	-.61	.70
		supervisor	.8	.275	.02	.05	1.64
		clerk	.5	.264	.26	-.19	1.33
		product specialist	-.0	.311	1.00	-.95	.84
	cler	manager	-.5	.266	.29	-1.32	.21
		executive	-.5	.209	.12	-1.12	.08
		supervisor	.2	.259	.89	-.47	1.02
		technician	-.5	.264	.26	-1.33	.19
		product specialist	-.6	.297	.28	-1.48	.23
	produc specialis	manager	.0	.313	1.00	-.83	.97
		executive	.1	.266	.99	-.66	.87
		supervisor	.9	.307	.04	.02	1.79
		technician	.0	.311	1.00	-.84	.95
		clerk	.6	.297	.28	-.23	1.48

* The mean difference is significant at the .05 level.

From the Anova multiple comparison result, Hypotheses 3 (sales growth) the supervisory level have the most significant level of understanding the important of sales growth as compared to the rest of the position in the organization except the clerical post.

Hypotheses 4 (team work), there exist a significant level of team work between executive level and supervisor level. This is significantly important for the organization as for their business required a significant cooperation between this two working level, in order for their project to be implemented and delivered to their customer as per required.

4.6.2 Anova Analysis : Department in the Organization.

		Sum of Squares	df	Mean Square	F	Sig.
Q27. Knowledge : Organization members have knowledge of NWW and behaviors associated with the improvement initiative	Between Groups	6.039	7	.863	.816	.575
	Withi Groups	226.339	214	1.058		
	Total	232.378	221			
Q28. Knowledge : Organization members have knowledge to perform the NWW	Between Groups	11.991	7	1.713	1.641	.125
	Withi Groups	223.396	214	1.044		
	Total	235.387	221			
Q33. Value Consensus : The changes has promoted the concept of internal customer service	Between Groups	10.462	7	1.495	1.390	.211
	Withi Groups	230.132	214	1.075		
	Total	240.595	221			
Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness	Between Groups	10.886	7	1.555	1.239	.282
	Withi Groups	268.502	214	1.255		
	Total	279.387	221			
Q37. Value Consensus : The change has promoted the concept of continuous learning	Between Groups	10.692	7	1.527	1.283	.260
	Withi Groups	254.790	214	1.191		
	Total	265.482	221			

Q44. Divisional Performance : Sales growth	Between Groups	12.487	7	1.784	1.548	.153
	Withi Groups	246.649	214	1.153		
	Total	259.135	221			

The result of the Anova analysis on department showed no significant $p<0.05$ for all the independent variable tested for this study, hypotheses 1 – 5. thus post hoc analysis is not required.

From the above table for the results of ANOVA show whether or not the means of the various groups are significant different from one another, as indicated by the F statistic. The F statistic shows whether two sample variances differ from one another or if they are from the same population. The F distribution is a probability distribution of sample variance and the family distribution changes with the changes in the sample size.

The critical F value for department is less than 2.01, thus proof that there are no significant differences between group means among the department.

4.6.3 Anova Analysis : Tenure in the Organization.

ANOVA

		Sum of Squares	d	Mean Square	F	Sig.
Q27. Knowledge : Organization members have knowledge of NWW and behaviors associated with the improvement initiative	Between Groups	6.372		1.593	1.530	.195
	Withi Groups	226.006	21	1.042		
	Total	232.378	22			
Q28. Knowledge : Organization members have knowledge to perform the NWW	Between Groups	2.208		.552	.514	.726
	Withi Groups	233.179	21	1.075		
	Total	235.387	22			
Q33. Value Consensus : The changes has promoted the concept of internal customer service	Between Groups	2.430		.608	.554	.697
	Withi Groups	238.164	21	1.098		
	Total	240.595	22			
Q36. Value Consensus : The change have promoted the concept of team work and cohesiveness	Between Groups	1.155		.289	.225	.924
	Withi Groups	278.233	21	1.282		
	Total	279.387	22			
Q37. Value Consensus : The change has promoted the concept of continuous learning	Between Groups	.840		.210	.172	.952
	Withi Groups	264.642	21	1.220		
	Total	265.482	22			
Q44. Divisional Performance : Sales growth	Between Groups	6.820		1.705	1.466	.213
	Withi Groups	252.315	21	1.163		
	Total	259.135	22			

From the above table for the results of ANOVA show whether or not the means of the various groups are significant different from one another, as indicated by the F statistic. The F statistic shows whether two sample variances differ from one another or if they are from the same population. The F distribution is a

probability distribution of sample variance and the family distribution changes with the changes in the sample size.

The critical F value for department is less than 2.37, thus proof that there are no significant differences between group means among the department.