

IMPROVING EMPLOYEE INDUCTION AND WORKPLACE CULTURE DEVELOPMENT PROCESS USING LEAN SIX SIGMA METHODOLOGY

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Abstract

A focus on developing HRM practices has become one of the critical concerns of modern organizations. Multiple researchers prove that appropriate development of the HRM strategy delivers multiple benefits to businesses, including an increase in employee motivation, customer satisfaction, and overall company performance. A complete HRM strategy includes induction as an important process. This paper provides an overview of the analysis of the organizational culture dimensions and employee induction process with the focus of improving the overall quality of the organization's services. A survey was conducted to find out the employee induction and culture issues. 610 surveys were sent to the employees of different organizations in the UAE. Out of that 438 responses were received. Based on the survey results, different issues were identified for improvement. Lean Six Sigma DMAIC approach was implemented to analyze the root cause for each of the issues. Based on the conducted analysis, the recommendations regarding improvements for the workplace culture and employee induction development have been formulated.

Keywords: employee induction, organizational culture, job performance, Lean Six Sigma

INTRODUCTION

Employee induction is one of the core processes of human resources. Efficient employee induction provides the best talent as well as saves time for completion of the induction process. Often employee induction faces several issues to the workplace environment (Abuhashesh et al., 2019). Besides, the work place culture plays a significant role in defining the business management strategy, which in turn delivers outcomes to business performance (Kaplan et al., 2016). According to Saha & Pandita (2017), incorporation of the employee entails training of the employee on the roles that they are supposed to carry out, the company's culture, people in the company, the company's clientele to ensure effective employment associations. The purpose of an induction is to integrate the new employee into the company by ensuring they comprehend the procedures followed in the company (Saha & Pandita, 2017). Before starting an induction program, the employee should be assigned a good mentor who comprehends the importance of the program, not to be rush in providing information to the employee, and they should make sure that the employee feels welcomed in the company. They should also have received a copy of the company's Legal or conduct of code handbook so that whenever they have queries, they can be answered.

The administration needs to orient new employees properly so that they can understand the organizational culture. Lai et al. (2017) argue that the proper induction process plays a vital role in the development process of the employees. It is the first most important motivating factor that helps the new employees to feel part and parcel of the organization. The employees start to learn the expectations of the administrators. They also learn the culture of the people in that organization and are thus able to maintain the company's reputation (Lai et al. 2017). Improving employee induction is the best method of ensuring the efficacy of newly hired employees. It gives them an outline of the daily expectations at the work station. Effective induction does help not only new employees but also the existing ones. During the induction process, the old employees have reminded of their duties as well as the organizational goals that everyone should work hard to achieve. As a result, the new and existing employees acquire the motivation, skills, and expertise they require in their daily activities. It welcomes the new employees and makes them be part of the team. They understand the organizational systems, the working environment, and acquire a sense of belonging (Saha & Pandita, 2017).

Consequently, they easily integrate into the system, and their contribution is felt within a few hours. Different employees have different methods of conducting the induction period. Some prefer to do it at the departmental

level, while others start with a general induction, and then narrows down to the departments.

The Lean Six Sigma DMAIC methodology is used for discovering issues in the field of developing its workplace culture and ensuring appropriate induction of fit employee induction. The Six Sigma concept is based on evaluating existing problems in the chosen process and delivering an appropriate strategy to reduce the number of errors (Adina-Petruta & Roxana, 2014). Hence, the utilization of the Six Sigma concept allows reducing costs, improving resource utilization, and, therefore, ensuring higher business efficiency. As Kapoor (2014) claims, the Six Sigma methodology can be utilized for any business processes, including HRM practice. Since the purpose of the given paper is to provide recommendations about improving the current capabilities of the existing process of employee induction and organization culture development, the DMAIC method has been utilized. Therefore, the present study covers the following research questions:

- What is the current organizational culture?
- How can the Lean Six Sigma approach be utilized by the company to ensure its quality improvement?
- What strategic steps should be taken by the company to increase its business efficiency?

LITERATURE REVIEW

Employee Induction

Employee induction is one of the HRM processes focused on making new employees familiar with an organization and its processes. According to Dragomiroiu et al. (2014), the purpose of the induction training is to ensure the social and psychological adaptation of new employees to a company's conditions. As Zafar and Zafar (2019) stress, employee induction allows minimizing time and costs for new employees to follow a company. Besides, Bharthvajan and Kavitha (2019) discover that induction training allows employees to identify and achieve their career goals. Dragomiroiu et al. (2014) also propose to use the employee induction program for increasing productivity and reducing error rates of work. Therefore, employee induction is considered as an essential component of talent development, which should be appropriately implemented to ensure the achievement of the organization's goals. Employee induction programs should be developed per the existing organizational culture, which will allow ensuring high efficiency of employees' training.

Factors to be Considered When Forming an Induction Process

When the company has a vacancy, before, they hire an employee; a well-designed induction plan should be formulated. The purpose of an induction is to introduce and train the new employee on business operations (Lamb & Kwok, 2016). Every business has different ways in which they run their operations. By Nisar & Yeung (2015), many business operations are determined by the needs of the business. A study carried out by HRDIVE shows that 43% of new employees leave their new jobs within the first ninety days because the job was not what they expected. In the views of Burt (2016), a well-designed induction plan entails a breakdown of the most crucial parts, the parts that directly affect the employee. The crucial parts are like the employees who are at a higher managerial position compared to them, the accounting department, and the roles they are performing (Burt, 2016). A well-designed plan should ensure that the employee feels welcomed and knowledgeable about the company's culture. Induction can be either on-site or off-site. According to Arulrajah et al. (2015), on-site induction is where the employee physically goes to the business location and is introduced to the staff. However, delivering the induction on-site or off-site, the company has to decide on the programs to be followed to achieve optimum engagement and to increase the chances of a successful induction. Considering the size of the company, a one to one conversation with the Chief Executive Officer will help in welcoming the new employee into the company and for the roles and values to be clearly defined. Burt (2016) depicts that a guided tour of the business can be beneficial (Robinson 2018). All these factors are to be considered in ensuring that the company's induction process is successful.

Failure of an Induction

Inductions are not always successful. An induction is determined as a failure once the employee does not last three months in the position. An investigation by INC shows that 28% of new employees quit their jobs within the first ninety days. Employees quit their new jobs because of many reasons, such as; the company is attempting to do everything on day one, the expectations are unclear, and bombarding the new employee with much information. Another reason is hiring employees for a busy time. When new employees are hired during the busy period, their induction may be done very fast. According to Chamberlain (2015), the induction process is a process, not an event. When advertising for vacancies in the company, the job description might not be very accurate. To add on that, Taylor (2017) argues that during the reporting days, the worker's role and expectations are not clearly defined. Also, if the matrix of performance evaluation is not disclosed to them, for them to succeed in the role, they may give up (Taylor, 2017). When the employee's experience does not concur with what they were set to perform, considering the job description, they are likely to quit and look for other job

opportunities. Lamb and Kwok (2016) agree that during the induction process, the employee is supposed to be given information bits by bits. For instance, if day one is about legal work needed to be understood, it becomes that, and the next day a different issue is tackled (Lamb and Kwok, 2016). However, if they are given all information in one-day mistakes can happen.

WorkplaceCulture

Workplace(or organizational) culture characterizes the collective environment existing in a particular company. It is the shared beliefs, virtues, and attitudes shared by people working in the same place. In views of Rowland et al. (2017), these beliefs are determined by how an individual was brought up, and their views on social and culture. Workplace cultures vary from one company to another because people are different, and their upbringing is also different. Workplace cultures can be innovative, transparent, mutual respect, fun, and empowerment (Rowland, Ruth & Ekot (2017)). The importance of workplace cultures is its ability to lure and keep talent, enhancing a successful induction. According to Glassdoor, a company being named a Best Place to Work, it is associated with a 0.75% rise in stock. Workplace cultures are characterized as respectful, where each person in the organization has the respect of each other. Lai, Saridakis & Johnstone (2017) point out that they are also with integrity in that there are things that the employees cannot take part in with or without supervision; corruption. They are flexible, making them change with changing times; when technology changes. They promote teamwork. Saha & Pandita (2017) add that for the organization to work efficiently, all workers should work together to achieve the company goals and objectives. Work cultures also provide learning opportunities for the employees as the skills possessed by people are different Saha & Pandita (2017). They are also accountable such that the employees clearly describe events without hesitation.

Organizational culture can be defined as a set of shared values, patterns, norms, and beliefs, determining an appropriate behavior of individuals (Odor, 2018). Organizational culture influences the way of doing business and, therefore, has a direct impact on business excellence. For instance, De Waal and Frijns (2016) claim that the UAE business society is currently representing a mix of traditional Arab values and Western business practices, which in turn influences organizations' organizational cultures. Further, the findings of a study conducted by Kassem et al. (2016) on the UAE businesses show that a type of organizational culture determines the overall level of business excellence. Moreover, in their quantitative study focused on Saudi business, Saad and Abbas (2018) prove that organizational culture and job performance are closely related. Besides, while studying the UAE market, Al Jerjawi (2016) emphasizes that national cultural dimensions influence a company's performance management practices. Many researchers agree that national culture influences business performance via influencing organizational culture.

According to the Hofstede classification, organizational culture can be characterized in terms of six autonomous dimensions, including effectiveness, customer orientation, level of control, focus, approachability, and management philosophy (Hofstede Insights, 2018). In particular, the effectiveness dimension characterizes whether a company is means-oriented or goal-oriented. The customer orientation dimension illustrates a company as externally or internally driven. Further, the level of control shows whether a company has implemented a strict work discipline or an easygoing work discipline. The focus dimension illustrates whether a company has a local (internal) focus or professional (external) focus. The approachability component characterizes an organization as an open or closed system, depending on its accessibility to insiders and outsiders. Finally, the management philosophy dimension shows whether a company is employee-oriented or work-oriented.

RESEARCH METHODOLOGY

Research Design

The present research is designed as a descriptive survey utilizing primary quantitative data. Cross-sectional data for the survey has been collected at a particular time-interval to collect insights from the different employees of a local organization. With this, a chosen research design allows providing a snapshot for a current attitude and practice implemented by the organizations.

Sampling and Data Collection

The research sample covers employees working at a local organization in the UAE. The study was conducted by sending a survey to 535 people through e-mail. Out of that, 412 responses were received with a response rate of 77%. The questionnaire was divided into seven sections. The first section includes three questions asking to provide information about the respondents' gender and work experience in the chosen company. The remaining six sections examine organizational cultural dimensions and include six questions each — the questions for analyzing cultural dimensions presented in a bi-variate form. In particular, the respondents have been asked to choose one of the two statements describing the opposite

characteristics

of the organization's cultural dimensions. For instance, one of the questions examining focus dimension includes the following statements: "Applicants who are like currently employed workers have a better chance of being hired" (local focus) and "Our company appreciates diversity and can hire employees that are not like our current workers" (professional focus). Based on the collected data, a lean six sigma methodology was used to improve the overall induction process.

Data Analysis and Results

The analysis of the collected data has been conducted using the Six Sigma methodology chosen due to several advantages. Firstly, Six Sigma focuses on the issues which should be eliminated to ensure a lower level of failure from the respondents' vision. Secondly, this approach delivers a standard metric, which can be used to compare the results with other similar businesses. Thirdly, comparing with other approaches, Six Sigma provides more sensitive indicators, which allows increasing the overall analysis efficiency. DMAIC approach is used as below:

Define Phase

Table 1 provides the project charter, describing the Six Sigma project charter for process improvement. In order to illustrate project milestones and relationships between different tasks, a Gantt Chart has been created (Appendix A)

TABLE 1: PROJECT CHARTER

Problem statement	To improve employee induction and workplace culture development process
Business case	Improving the induction process will increase the productivity and efficiency of employees
Goal statement	To define areas for improving organizational culture, which is critical for ensuring better company performance
Project scope	The project is limited to work on the improvement induction process.
Tools and techniques to be deployed	Pareto Chart, Pugh matrix, correlation analysis, independent sample t-test, cause, and effect diagram

Measure Phase

Pareto chart serves to identify the most significant contributors to the organizational culture. For this purpose, organizational cultural dimensions are divided into groups, depending on their impact on organizational performance. The evaluation has been conducted based on the self-reported questionnaire, where the respondents were asked to rate organizational culture dimensions concerning their importance for the organization's business efficiency.

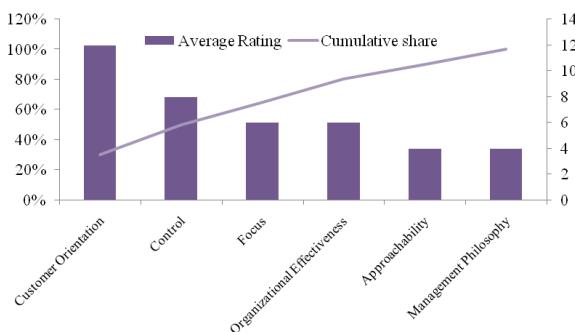


Figure 1: Pareto Chart

Analyze Phase

Based on the respondents' answers, each organization's cultural dimension for the organization has been assessed. For this purpose, the total value of the respondents' answers for each separate organization's

cultural dimension has been calculated. Further, the average value for each dimension has been counted by dividing the total sum of the respondents' answers by their number. Next, a share of the average value for each dimension in the maximum value has been calculated (Appendix B.2). The gained values have been compared with the optimal level defined by the Hofstede Insight (figure 2).

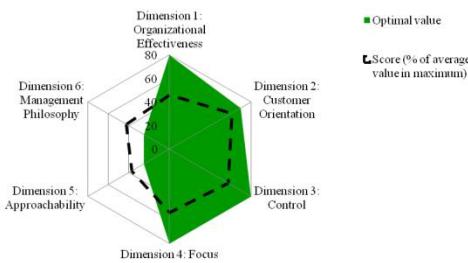


Figure 2: Organizational culture assessment chart

During the analysis phase, the hypothesis testing has been conducted, which allowed providing the description of the research problem and determining potential areas of improvement. Work experience has been considered to be an independent variable, and organizational cultural dimensions have been considered to be dependent variables. Thus, based on the conducted literature review, the following research hypotheses are formulated:

Null hypothesis H0: There is no statistically significant relationship between the organization's culture dimension and the duration of the employee work experience in the company.

Alternative hypothesis H1: There is a statistically significant relationship between the organization's culture dimension and the duration of the employee work experience in the company.

Inferential statistic tools have been implemented to test the hypotheses. Firstly, Pierson's correlation coefficient has been calculated for each couple of calculated organization cultural dimensions. As appendix C illustrates, a statistically significant correlation has been detected for the following couples of organizational cultural dimensions: organizational effectiveness and focus (positive moderate), organizational effectiveness and management philosophy (positive moderate), and focus and approachability (positive strong).

Secondly, an independent samples t-test has been conducted for two groups of respondents. The first group includes the respondents that are new to the company culture and have been employed for two years or less, and the second group includes the respondents that have been employed by the company for three last years or more. According to the outcomes provided in Appendix D, the level of statistical significance p-value for all variables is more than 0.05 (the chosen level of statistical significance). As a result of this, the null hypothesis is failed to be rejected, and it could be concluded that the employees' working experience does not influence their expression of cultural dimensions.

Additional analysis has been conducted separately for each question, assessing organizational cultural dimensions. Based on the results of the independent samples t-test (Appendix E), it has been discovered that the p-value is less than 0.05 for the following items: CO1, CO6, and A3. Hence, for these variables, the null hypothesis has been rejected, and the following conclusions have been made. New employees believe that there are opportunities for organization improvement, while more experienced employees believe that their company already does things in the best possible way (item CO1). Further, new employees choose the statement "Compete or die," while other employees believe that they should not worry about competitors (item CO6). Finally, new employees prefer to give a second chance for those who fail, while employees who have been working in the company for three years and more believe that people should be assumed guilty until proven innocent (item A3).

ImprovePhase

In order to improve and optimize the process of employee induction and workplace culture development, a PughMatrix tool has been utilized. This tool defines the most appropriate direction for strengthening the workplace culture of the organization. For this purpose, six dimensions have been evaluated and compared under the chosen criteria. As table 2 illustrates, the Pugh Matrix analysis has shown that it is crucial to improve Dimension 4: Focus is the most appropriate alternative to the organization.

TABLE 2: PUGH MATRIX

Criteria	Baseline	Weight	Organization Culture Dimensions					
			D1	D2	D3	D4	D5	D6
Ease of implementation	0	2	-1	1	1	0	-1	-1
Cost	0	1	-1	1	0	0	1	-1
Increase in customer satisfaction	0	4	1	1	1	1	0	0
Increase in employee satisfaction	0	3	0	-1	-1	1	1	1
Time to implement	0	1	-1	0	-1	-1	0	-1
Total			0	4	2	6	2	-1

Control Phase

In order to ensure the success of the implemented strategy, the company should also utilize Key Performance Indicators (KPIs). This tool will allow tracking the improvements, calculate the sigma level of enhanced dimensions, detect necessary changes to the chosen strategy, and improve it. With this, the following metrics are proposed to ensure the control of the implemented changes: increase in employees' evaluation of the necessity to stay aware of the competition from other organizations; increase in employees' desire to accept professionals with other vision and behavior in their company.

DISCUSSION

The framework based on the Six Sigma approach has been developed with the focus to characterize existent issues in the employee induction and workplace culture development and ensure the quality improvement of the chosen processes. The conducted analyses allow discovering that the current organizational culture can be characterized as a closed system with means and work-oriented vision and the company being internally directed with easygoing work discipline. The implemented DMAIC approach has provided evidence about the necessity to develop an induction strategy for quality improvement (Kassem et al., 2016). The research findings can be summarized using the cause and effect diagram (figure 3), which illustrates the causes of the weak organizational structure.

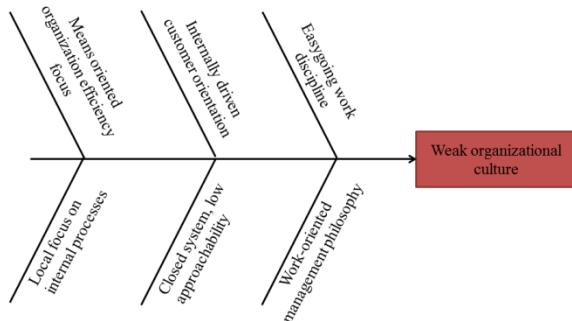


Figure 3: Cause and Effect Diagram

The detected causes do not deliver negative outcomes in general, but rather should be changed to gain the optimal level (as illustrated by figure 2). Besides, the Pugh matrix analysis has shown that an improved employee induction should be conducted with a specific focus on Dimension 4: Focus of the company organization culture, which in turn will allow increasing the overall organization efficiency (Dragomiroiu et al., 2014; Zafar & Zafar, 2019). The company will be able to effectively use its HRM instruments to ensure higher employee productivity, leading to improved business performance.

Recommendation

Considering the current transition status of the UAE business culture, it is recommended to increase the focus on professional abilities and opportunities that deliver a competitive advantage (De Waal & Frijns, 2016). On the one hand, the organization should focus on some innovative ideas and communicate with the employees. Additionally, it would be reasonable to increase employees' awareness about the place of their company on the market and its competitive concerns and opportunities. In this case, the employer should use the traditional collectivist vision that is common for the UAE culture and motivate workers to associate their success with the success of their company, and, thereby, to do their best to ensure their company's prosperity.

CONCLUSIONS

The Six Sigma methodology has been implemented in order to discover issues appearing for the organization in the field of developing its workplace culture and ensuring appropriate implementation of its employee induction. The implemented DMAIC approach allows identifying key areas for improvement. Based on the conducted analysis, the recommendations to other institutions and organizations have been provided

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APPENDIX A

GanttChar

Phase	Month 1		Month 2		Month 3		Month 4		Month 5		Month 6													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Define																								
Measure																								
Analyze																								
Improve																								
Control																								

APPENDIX B.1

Collected Data

Respondent	R1	R2	R3	R4	R5	R6	R7	R8	R9
Gender	Female	Male	Female	Female	Male	Male	Male	Female	Male
Work experience (years)	2	6	8	8	4	2	1	1	6
OR1	0	1	0	1	1	0	1	1	0
OR2	0	0	0	1	0	1	1	0	0
OR3	0	1	1	1	1	1	1	1	0
OR4	0	0	1	1	0	0	0	1	1
OR5	0	0	1	1	1	0	1	0	0
OR6	1	1	0	0	0	0	0	0	0
CO1	1	1	0	0	1	1	1	1	1
CO2	0	1	1	0	0	1	0	0	1
CO3	0	0	1	0	1	0	1	0	0
CO4	1	1	1	0	1	0	0	0	1
CO5	1	1	1	1	1	1	1	0	0
CO6	1	0	0	1	1	1	1	1	1
C1	0	1	1	1	0	1	0	1	1
C2	1	1	1	1	0	1	1	0	0
C3	0	1	0	1	0	1	1	0	1
C4	0	0	0	0	1	1	0	1	1
C5	1	0	1	0	1	1	1	0	1
C6	1	0	0	1	1	1	0	0	0
F1	0	1	0	1	0	1	0	1	0
F2	1	0	0	1	1	0	0	1	0
F3	0	1	1	1	1	0	1	1	1
F4	0	0	1	1	1	0	1	0	0

F5	0	0	1	0	1	0	0	1	0
F6	1	1	0	1	1	0	1	1	1
A1	0	0	0	0	1	0	1	1	0
A2	0	0	1	0	0	0	0	1	0
A3	0	0	0	1	1	0	0	0	1
A4	0	0	1	1	0	0	0	1	1
A5	1	1	1	0	1	0	0	0	0
A6	0	0	1	1	1	0	1	0	0
MP1	0	1	0	1	1	0	1	1	0
MP2	0	0	0	0	1	0	1	1	0
MP3	0	1	1	0	0	1	0	0	1
MP4	1	0	0	0	1	0	0	1	1
MP5	0	1	1	1	0	0	1	0	0
MP6	0	1	0	1	0	1	0	0	0

APPENDIX B.2

Organization Cultural Dimension Assessment

Respondent	Dimension 1: Organizational Effectiveness	Dimension 2: Customer Orientation	Dimension 3: Control	Dimension 4: Focus	Dimension 5: Approachability	Dimension 6: Management Philosophy
R1	1	4	3	2	1	1
R2	3	4	3	3	1	4
R3	3	4	3	3	4	2
R4	5	2	4	5	3	3
R5	3	5	3	5	4	3
R6	2	4	6	1	0	2
R7	4	4	3	3	2	3
R8	3	2	2	5	3	3
R9	1	4	4	2	2	2
Average value	3	4	3	3	2	3
Maximum value	6	6	6	6	6	6
Optimal value	80	70	80	80	25	25
Score (% of average value in maximum)	46	61	57	54	37	43
Opportunity for improvement	34	9	23	26	-12	-18
Dimension characteristic	Means oriented	Internally directed	Easygoing work discipline	Local	Closed System	Work- oriented

APPENDIX C

Correlations

		Organizational_effectiveness	Customer_Orientation	Control	Focus	Approachability	Management_philosophy
Organizational_effectiveness	Pearson Correlation	1	-,448	-,179	,677*	,444	,665
	Sig. (2-tailed)		,226	,644	,045	,231	,050
	N	9	9	9	9	9	9
Customer_Orientation	Pearson Correlation	-,448	1	,147	-,450	-,120	-,189
	Sig. (2-tailed)	,226		,705	,224	,759	,626
	N	9	9	9	9	9	9
Control	Pearson Correlation	-,179	,147	1	-,589	-,546	-,279
	Sig. (2-tailed)	,644	,705		,095	,128	,468
	N	9	9	9	9	9	9
Focus	Pearson Correlation	,677*	-,450	-,589	1	,760*	,563
	Sig. (2-tailed)	,045	,224	,095		,018	,114
	N	9	9	9	9	9	9
Approachability	Pearson Correlation	,444	-,120	-,546	,760*	1	,192
	Sig. (2-tailed)	,231	,759	,128	,018		,621
	N	9	9	9	9	9	9
Management_philosophy	Pearson Correlation	,665	-,189	-,279	,563	,192	1
	Sig. (2-tailed)	,050	,626	,468	,114	,621	
	N	9	9	9	9	9	9

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

APPENDIX D

Independent samples t-test #1

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Organizational_effectiveness	Equal variances assumed	,107	,753	,547	7	,601	,500	,914	-1,662	2,662
	Equal variances not assumed			,553	6,815	,598	,500	,904	-1,649	2,649
Customer_Orientation	Equal variances assumed	,005	,947	,424	7	,685	,300	,708	-1,374	1,974
	Equal variances not assumed			,429	6,815	,681	,300	,700	-1,364	1,964
Control	Equal variances assumed	3,296	,112	-,123	7	,905	-,100	,810	-2,015	1,815
	Equal variances not assumed			-,111	3,482	,918	-,100	,900	-2,752	2,552
Focus	Equal variances assumed	,077	,790	,839	7	,429	,860	1,013	-1,544	3,244
	Equal variances not assumed			,814	5,659	,448	,850	1,044	-1,741	3,441
Approachability	Equal variances assumed	,010	,922	1,493	7	,179	1,300	,871	-,759	3,359
	Equal variances not assumed			1,494	6,598	,181	1,300	,870	-,783	3,383
Management_philosophy	Equal variances assumed	,150	,710	,921	7	,388	,550	,597	-,862	1,962
	Equal variances not assumed			,905	6,083	,400	,550	,608	-,932	2,032

APPENDIX E

Independent samples t-test #2

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	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
OR1	Equal variances assumed Equal variances not assumed	,130 ,	,729 ,	,266 ,264	7 6,391	,798 ,800	,100 ,100	,376 ,379	-,789 ,989 -,813 1,013
OR2	Equal variances assumed Equal variances not assumed	1,750 ,	,227 ,	-,882 ,854	7 5,603	,407 ,428	-,300 ,300	,340 ,351	-1,104 ,504 -,1174 ,574
OR3	Equal variances assumed Equal variances not assumed	,099 ,	,762 ,	,158 ,156	7 6,173	,879 ,881	,050 ,050	,316 ,320	-,696 ,796 -,728 ,828
OR4	Equal variances assumed Equal variances not assumed	,728 ,	,422 ,	,989 1,000	7 6,815	,356 ,351	,350 ,350	,354 ,350	-,487 ,1,187 -,482 ,1,182
OR5	Equal variances assumed Equal variances not assumed	,728 ,	,422 ,	,989 1,000	7 6,815	,356 ,351	,350 ,350	,354 ,350	-,487 ,1,187 -,482 ,1,182
OR6	Equal variances assumed Equal variances not assumed	,099 ,	,762 ,	-,158 ,156	7 6,173	,879 ,881	-,050 ,050	,316 ,320	-,796 ,696 -,828 ,728
CO1	Equal variances assumed Equal variances not assumed	74,667 ,	,000 ,	-1,440 -1,633	7 4,000	,193 ,178	-,400 ,400	,278 ,245	-1,057 ,257 -,1,080 ,280
CO2	Equal variances assumed Equal variances not assumed	,728 ,	,422 ,	,989 1,000	7 6,815	,356 ,351	,350 ,350	,354 ,350	-,487 ,1,187 -,482 ,1,182
CO3	Equal variances assumed Equal variances not assumed	,728 ,	,422 ,	,424 ,429	7 6,815	,685 ,681	,150 ,150	,354 ,350	-,687 ,987 -,682 ,982
CO4	Equal variances assumed Equal variances not assumed	,099 ,	,762 ,	1,742 1,718	7 6,173	,125 ,135	,550 ,550	,316 ,320	-,196 ,1,296 -,228 ,1,328
CO5	Equal variances assumed Equal variances not assumed	,099 ,	,762 ,	,158 ,156	7 6,173	,879 ,881	,050 ,050	,316 ,320	-,696 ,796 -,728 ,828
CO6	Equal variances assumed Equal variances not assumed	74,667 ,	,000 ,	-1,440 -1,633	7 4,000	,193 ,178	-,400 ,400	,278 ,245	-1,057 ,257 -,1,080 ,280
C1	Equal variances assumed Equal variances not assumed	1,750 ,	,227 ,	,882 ,854	7 5,603	,407 ,428	,300 ,300	,340 ,351	-,504 ,1,104 -,574 ,1,174
C2	Equal variances assumed Equal variances not assumed	,728 ,	,422 ,	-,424 ,429	7 6,815	,685 ,681	-,150 ,150	,354 ,350	-,987 ,687 -,982 ,682
C3	Equal variances assumed Equal variances not assumed	,130 ,	,729 ,	,266 ,264	7 6,391	,798 ,800	,100 ,100	,376 ,379	-,789 ,989 -,813 1,013

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C4	Equal variances assumed Equal variances not assumed	,130	,729	-,266	7	,798	-,100	,376	-,989	,789
				-,264	6,391	,800	-,100	,379	-1,013	,813
C5	Equal variances assumed Equal variances not assumed	,728	,422	-,424	7	,685	-,150	,354	-,987	,687
				-,429	6,815	,681	-,150	,350	-,982	,682
C6	Equal variances assumed Equal variances not assumed	,130	,729	-,266	7	,798	-,100	,376	-,989	,789
				-,264	6,391	,800	-,100	,379	-1,013	,813
F1	Equal variances assumed Equal variances not assumed	,130	,729	-,266	7	,798	-,100	,376	-,989	,789
				-,264	6,391	,800	-,100	,379	-1,013	,813
F2	Equal variances assumed Equal variances not assumed	,130	,729	-,266	7	,798	-,100	,376	-,989	,789
				-,264	6,391	,800	-,100	,379	-1,013	,813
F3	Equal variances assumed Equal variances not assumed	.	.	1,972	7	,089	,500	,254	-,100	1,100
				1,732	3,000	,182	,500	,289	-,419	1,419
F4	Equal variances assumed Equal variances not assumed	,728	,422	,989	7	,356	,350	,354	-,487	1,187
				1,000	6,815	,351	,350	,350	-,482	1,182
F5	Equal variances assumed Equal variances not assumed	,728	,422	,424	7	,685	,150	,354	-,687	,987
				,429	6,815	,681	,150	,350	-,682	,982
F6	Equal variances assumed Equal variances not assumed	,099	,762	,158	7	,879	,050	,316	-,696	,796
				,156	6,173	,881	,050	,320	-,728	,828
A1	Equal variances assumed Equal variances not assumed	1,750	,227	-,882	7	,407	-,300	,340	-1,104	,504
				-,854	5,603	,428	-,300	,351	-1,174	,574
A2	Equal variances assumed Equal variances not assumed	,099	,762	,158	7	,879	-,050	,316	-,796	,696
				,156	6,173	,881	-,050	,320	-,828	,728
A3	Equal variances assumed Equal variances not assumed	74,667	,000	2,160	7	,068	,600	,278	-,057	1,257
				2,449	4,000	,070	,600	,245	-,080	1,280
A4	Equal variances assumed Equal variances not assumed	,728	,422	,989	7	,356	,350	,354	-,487	1,187
				1,000	6,815	,351	,350	,350	-,482	1,182
A5	Equal variances assumed Equal variances not assumed	,728	,422	,989	7	,356	,350	,354	-,487	1,187
				1,000	6,815	,351	,350	,350	-,482	1,182
A6	Equal variances assumed Equal variances not assumed	,728	,422	,989	7	,356	,350	,354	-,487	1,187
				1,000	6,815	,351	,350	,350	-,482	1,182
MP1	Equal variances assumed Equal variances not assumed	,130	,729	,266	7	,798	,100	,376	-,789	,989
				,264	6,391	,800	,100	,379	-,813	1,013
MP2	Equal variances assumed Equal variances not assumed	1,750	,227	-,882	7	,407	-,300	,340	-1,104	,504
				-,854	5,603	,428	-,300	,351	-1,174	,574
MP3	Equal variances assumed Equal variances not assumed	,728	,422	,989	7	,356	,350	,354	-,487	1,187
				1,000	6,815	,351	,350	,350	-,482	1,182
MP4	Equal variances assumed Equal variances not assumed	,130	,729	-,266	7	,798	-,100	,376	-,989	,789
				-,264	6,391	,800	-,100	,379	-1,013	,813
MP5	Equal variances assumed Equal variances not assumed	,728	,422	,989	7	,356	,350	,354	-,487	1,187
				1,000	6,815	,351	,350	,350	-,482	1,182
MP6	Equal variances assumed Equal variances not assumed	,728	,422	,424	7	,685	,150	,354	-,687	,987
				,429	6,815	,681	,150	,350	-,682	,982