THE APPLICATION OF QUALITY FUNCTION DEPLOYMENT FOR RECRUITING NEW GOVERNMENT STAFF

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Universiti Teknologi Malaysia is one of the leading Research University that is owned by the Malaysian Government. Throughout the year a lot of academician and management staff had been recruited to become the university staff. It is the Registrar Office task to make sure that the university hired is the best available candidates. The staff must be able to do all the job description that had been set by their respective superior. A lot of problem will happen if the staff hired is actually have different qualification or experience than their job description. Surely they wouldn't be able to perform in their task and duties. To overcome this problem the university will have to spend a lot of money as training budget in order to train them for their specific job description. This is surely a waste of the university money and resources. This research will propose a method called the House of Quality (HOQ)from the Quality Function Deployment as a quality tool to help the Registrar Office to overcome the problem. By using this quality tool the university would be able to identify the specific customer requirements, in this case the job description and find the best technical requirements to fulfill those description. As an example we take the job description for the post of Technician (Grade 17), after running the HOQ analysis we determined the best candidates for this post must be from the diploma graduate from the UTM (UniversitiTeknologi Malaysia) since they can actually fulfill all the job description for the Technician (Grade 17) post. The HOQ can also be used to different type of job such as lecturers, administrator, sconce officer and other related jobs.

Keywords: Quality Function Deployment, House of Quality, Government Staff.

1. INTRODUCTION

A good staff can be defined as a staff that can do their job properly without any mistakes and according to their job description. In order to do so, they must have proper knowledge and experience. In Universiti Teknologi Malaysia, we have a lot of different post that have different job description. It is important that the staff hired for a particular post to have sufficient knowledge and experience. The combination of excellent academic qualification plus sufficient experience is the key for staff recruitment in this university. A lot of problem will occur if the recruitment process doesn't provide suitable candidates for the post. The worst case scenario is when the university appoints staffs that are not qualified for the post. Although this problem never happen in UTM it is crucial for us to find an alternative method to find the best candidates for recruitment purpose. One of the best methods that we could think of is by applying the Quality Function Deployment, House of Quality as a mechanism to find the best applicant for a post in UTM. While HOQ is famous for its role in product development, we find out that it is also a powerful tool for staff selection. By integrating HOQ in the recruitment process we can actually eliminate the possibilities of appointing wrong person for the wrong post.

2. LITERATURE REVIEW

Quality Function Deployment (QFD)

QFD is a tool that normally used in product development. However due to its nature that is flexible, it can also be used in product development. This research uses QFD in the process of recruiting new staffs in a Public University in Malaysia. This process involves the integration between different department in the

university like the Human Resource Department, Quality Department, and the Academic Division. (Griffin, 1992) considered QFD as an investment in people and information. . It enables an organization to measure customer "wants" and map them against the engineering "how" in a way that highlights trade-offs and drives the product's design towards customer requirements (Vonderemse and Ragunathan, 1997). QFD facilitates the growth and prosperity of a firm by developing an array of products that are attractive to existing and new customers (Akao, 1990; Cohen, 1988; Hales, 1994). Since QFD is normally being referred to product development, the researcher would consider the "products" that are being develop in this research are the new staff that are being recruited by the university. Products designed with QFD may have lower production cost, shorter development time, and higher quality than products developed without QFD (Graessel, 1993; Hunter, 1994; Raynor, 1994). These benefits are attracting an increasing number of product development practitioners to the QFD methodology (Akao, 1990; Ealey, 1988; Garvin, 1988; King, 1989). Although manufacturing industries were the first to adopt QFD, service and government organizations are also using it in their efforts to improve performance (Garvin, 1987; Hauser and Clausing, 1988; Kogure and Akao, 1983; Sullivan, 1986 and 1988).Based on the literature review we can say that QFD can be one of the most appropriate tools that can be used as a tool to recruit new university staffs that would fulfill the requirements for their respective job descriptions.

3. RESEARCH FRAMEWORK

The research frame work in this research is based on the process of recruiting new staff in a Public University in Malaysia.
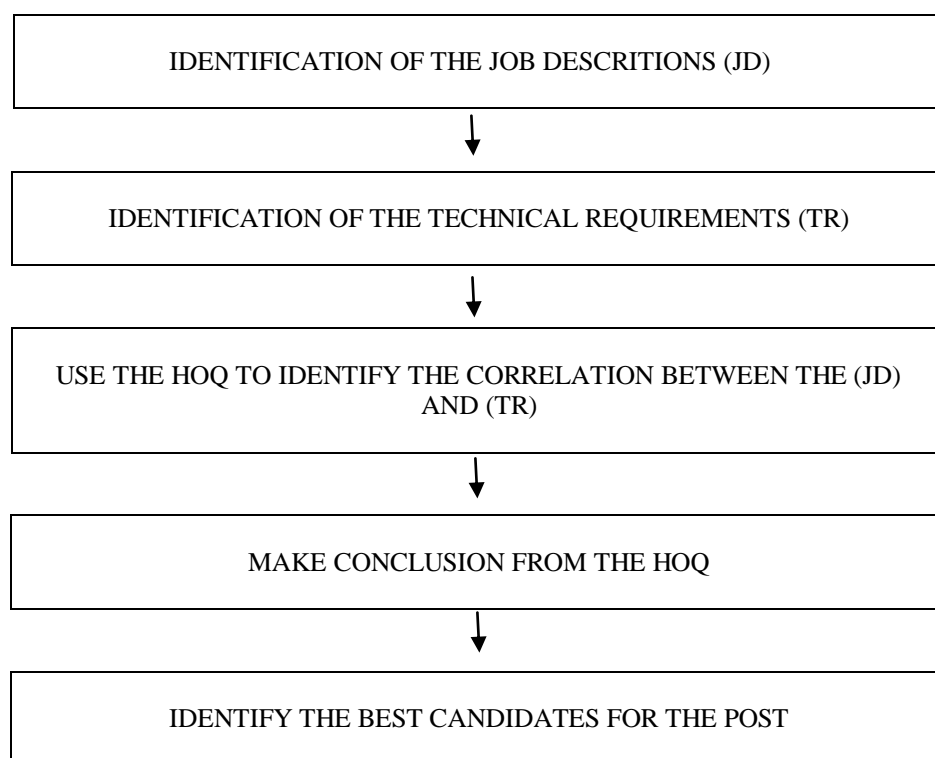

Figure 1: The Application of QFD for Recruiting New Government Staff

4. RESEARCH OUTCOME

Based on the job description three modified HOQ Matrices are created and each of it would consider the relevent customer and technical requirements. The first HOQ Matrix will have the job description as the customer requirements and the skill to fullfill those requirements as the technical requirements.

Technician (Grade J17)								
Selecting: Technician Grade (J17)	Faculty of Mechanical Engineering							
Date: 15/05/2012	Technical Requirements							
Technical Committee Member	1. Dean, FME							
	2. Head of Department (Lab), FME							
	3. Deputy Registrar, FME							
Customer Requirements	Importance	Have the knowledge in machine preventive	Have the knowledge on in	Able to repair & trouble-shoot machine	Have the understanding on	Have the report	Sum for Customer Requirements	Percentages
Perform periodic preventive maintenance on machine	5	9	3	3			75	36%
Perform lab set-up, inspection & calibration on machine to meet daily lab schedule	4	9	9	3			60	28%
Repair & trouble-shoot lab machines & facility equipment	3	3	3	9			45	22%
Support teaching & learning on day to day issue	2				9		18	9%
Write daily reports regarding the condition of the lab machine and facilities	1				1	9	10	5%
Sum for Technical Requirements		90	60	54	19	9		
Percentages		39%	26 %	23%	8%	3 %		
Conclusion	The highest percentage for customer requirements is perform periodic preventive maintenance on machine (36%)							
	The highest percentage for technical requirements is able to perform periodic preventive maintenance on machine (39%)							

Table 1: First HOQ Matrix

The second HOQ Matrix will have the skills to fulfil the job description as the customer requirements and the method of obtaining those skills as the technical requirements.

Technician (Grade J17)								
Selecting: Technician Grade (J17)	Faculty of Mechanical Engineering							
Date: 15/05/2012	Technical Requirements							
Technical Committee Member	1. Dean, FME							
	2. Head of Department (Lab), FME							
	3. Deputy Registrar, FME							
Customer Requirements	Importance	Malaysian Education Certificate and Certificate in Engineering from any	CGPA more than 3.00	Familiar with the lab lay out and equipment	Understand the concept of Outcome	Have attend a report writing course or have	Sum for Customer Requirements	Percentages
Have the knowledge in machine preventive maintenance	5	9	9	9			135	42 %
Have the knowledge on in inspection & calibration	4	9	9	1			76	24 %
Able to repair & trouble-shoot machine and	3	9	9	9			81	25

equipment								%
Have the understanding on teaching & learning process	2					9	18	6%
Have the report writing skill.	1				3	9	12	4%
Sum for Technical Requirements		108	108	76	21	9		
Percentages		34%	34%	24%	7%	3%		
Conclusion	The highest percentage for customer requirements is have the knowledge in machine preventive maintenance (42%)							
	The highest percentage for technical requirements is have the Malaysian Education Certificate and Certificate in Engineering from any institution recognized by the Malaysian Public Service Department & CGPA more than 3.0 (34%)							

Table 2: Second HOQ Matrix

The final HOQ Matrix will have the method of obtaining those skills as the customer requirements and the institution that provide the relevant skills as the technical requirements.

Technician (Grade J17)								
Selecting: Technician Grade (J17)		Faculty of Mechanical Engineering						
]Date: 15/05/2012		Technical Requirements						
Technical Committee Member		1. Dean, FME						
		2. Head of Department (Lab), FME						
		3. Deputy Registrar, FME						
Customer Requirements	Importance	MLVK Colleges	Advance Technical College	MARA Technical College	Industrial Training Institute	Polytechnic	Sum for Customer Requirements	Percentages
Malaysian Education Certificate and Certificate in Engineering from any institution recognized by the Malaysian Public Service Department.	5	9	9	9	9	9	225	42%
CGPA more than 3.00	4	9	9	9	9	9	180	33%
Familiar with the lab lay out and equipment	3	3	3	3	9	9	81	15%
Understand the concept of Outcome Based Education	2	1		1	9	9	40	7%
Have attend a report writing course or have experience doing report writing	1	1	1		3	9	14	3%
Sum for Technical Requirements		93	91	92	129	135		
Percentages		17%	16%	17%	24%	25%		
Conclusion	The highest percentage for customer requirements is having Malaysian Education Certificate and Certificate in Engineering from any institution recognized by the Malaysian Public Service Department.							
	The highest percentage for technical requirements is Polytechnic							

Table 3: Final HOQ Matrix

Finally we can conclude that the best candidate for this post can be identified among the graduates of diploma from the Polytechnic because they should be able to fulfil all the necessary requirements of Technician (Grade 17).

5. CONCLUSION

By integrating the HOQ into the process of recruiting new staff we will able to minimize the potential threat of appointing staff that are not suitable for the job post. By using this method we can actually narrow down the potential candidates up to the institution that they graduated. There are no limitations to this method whereby it can be use in numerous job posts. It can be also used up to more than three matrices depending on the job description of that particular job post. Finally we can conclude that not only this method can reduce the probabilities of unsuitable recruitment but it can also help the institution reduce the amount of waste in budget and resources by reducing the need of sending staff for training in order for them to fulfill their basic job description.

6. AUTHOR BIOGRAPHY

Dina Azleema Mohamend Nor served as an Assistant Registrar at the Human Capital Management Office, Registrar Office,UniversitiTeknologi Malaysia. She holds anMSc in Chemistry and BSc (Hons) in Oleochemistry from the National University of Malaysia. She had attended a lot of training and seminar in Human Resource Management. Although her academic background is in Chemistry but her passion for Human Resource Management has led her to conduct several research in that field.Her main research interest is in Recruitment and Compensation.

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