LEARNING AND CONCLUSIONS OF EFQM SELF-ASSESSMENT PROCESS IN HEIs IN SPAIN AND IN JORDAN

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SUMMARY
The purpose of this paper is to compare the European Foundation for Quality Management (EFQM) self-assessment model in higher education institutions (HEIs) in Spain and in Jordan. Case study methodology on eight services provided by a public university in Spain and seven services provided by one public and one private university in Jordan is used. The findings show the steps that an administrative service may follow in order to apply the questionnaire approach to conduct self-assessment in a successful manner; and the difficulties, benefits and success factors in both countries and compare the results. It provides lessons for decision makers and managers from other universities in developing countries, who wish to perform an exercise in self-assessment using a questionnaire approach.

Keywords: Self-assessment, EFQM model, Quality management, Higher education, Spain, Jordan

1. INTRODUCTION

Total quality management (TQM) has been successfully adopted by private [1-3] and public [4-6] sector organisations, aiming at continuous improvement. In this context, the establishment of self-assessment techniques is a way to carry out this continuous improvement process [7-9]. This has been used in higher education institutions (HEIs) as a way to develop a quality system [10].

Regarding quality assessment in HEIs, several countries have developed self-assessment systems and mechanisms, usually composed of initial self-assessment processes that are later complemented with external assessment practices [11]. For instance, in Spain there is an agency designated for the deployment of these assessment processes in HEIs (Spanish Agency for Quality Assessment and Accreditation –ANECA–), while the specific services provided within each university are generally assessed by applying the European Foundation for Quality Management (EFQM) model [see 12]. In Jordan since 2007 a Higher Accreditation Commission was formed and from now on all the new regulations adopted by the Commission should be followed by all the public and private universities in Jordan. The internal implementation of a quality assurance within the university management system rest upon the universities themselves.

Although there is an increasing number of universities adopting self-assessment [13], little empirical literature has addressed this process in the education sector from an academic point of view. The purpose of this research is to examine the application of the EFQM model for

the self-assessment of eight different administrative services in a Spanish public university and seven university services in 2 Jordan universities, 1 public and the other one private. Primary and secondary data from these administrative services were considered, following the case study methodology.

2. LITERATURE REVIEW

Self-assessment has been examined by several studies in private organisations [14], public organisations [5] and in both [15]. Although to a lesser extent, self-assessment has also been analysed in HEIs.

HEIs may use models based on quality awards, or models created specifically for self-assessment in academia. Regarding the former, mention must be made of the standardised quality models, such as the Malcolm Baldrige National Quality Award model in the USA [16,17], the EFQM model in Europe [18-19] and the Deming Prize model in Japan [16,20]. For instance, the EFQM methodology as a basis for self-assessment is rapidly emerging in the UK education sector [21]. Alongside these models, several academic studies have developed instruments for measuring quality management applicable to both industrial and service organisations [e.g. 22,23].

In relation to the deployment of models created for academia, HEIs may also use models such as the European Quality Improvement System (EQUIS) accreditation [see 24] and the Malcolm Baldrige Criteria for Performance Excellence for Education [see 25]. It is worth analysing those studies which have developed empirically validated instruments for quality measurement in HEIs [26], or for the measurement of administrative quality in universities [27]. In Spain, ANECA has been promoting the use of self-assessment methods for the implementation of quality systems in administrative services using a procedure similar to that used by the EFQM model [12]. Similarly, in Jordan, King Abdullah II Center for Excellence is promoting an excellence model which is a derivative of the EFQM model.

Generally speaking, organisations may resort to different approaches to self-assessment: questionnaire, workshops, pro-forma and award simulation [19]. Irrespective of the approach chosen, the generic stages for self-assessment are the following [19]:
1. Developing management commitment.
2. Communicating self-assessment plans.
3. Planning self-assessment.
4. Establishing teams and training.
5. Conducting self-assessment.
6. Establishing action plans.
7. Implementing action plans.
8. Review.

Although models and scope vary, a common objective of self-assessment processes is to identify areas for improvement [5,7,8]. This process makes it possible to identify strengths and areas for improvement in order to develop an action plan, which could be linked to strategic planning; measure performance; involve people in developing a process improvement approach to quality; and raise the understanding and awareness of quality-related issues [14, 19,28-30]. Ritchie and Dale [7] found the benefits associated with the self-assessment process after studying self-assessment practices in 10 organisations. They included as benefits, amongst others, identifying improvement actions; encouraging employee involvement and ownership; raising understanding and awareness of quality-related issues; developing a common approach to improvement across the company; helping to refocus

employees' attention on quality; providing a "healthcheck" of processes and operations; and encouraging improvements in performance.

However, some organisations derive little benefit from self-assessment processes [31]. This might be due to the difficulties that may arise. Ritchie and Dale [7] pointed out, for instance, the lack of commitment and enthusiasm from the management and employees; the time-consuming nature of the process, not knowing where to start; and lack of resources. Other difficulties could be the lack of support (e.g. by the quality department) and the difficulty in implementing the improvement actions.

In view of all this, the literature lists several success factors which help to overcome these difficulties and leading to successful self-assessment. Such factors are management commitment; employee involvement; open communication; training; and the development and review of an improvement plan [7,14,29,30,32].

Concerning these topics, studies on HEIs mentioned that the purpose of this methodology is to focus on the strengths and areas for improvement as a method for improvement, and also identified establishing senior level commitment and focusing on customer delivery as major issues to address in self-assessment [10,13,21,33]. In addition, although these aspects were analysed in public services in HEIs, they did not show the similarities and differences between countries.

Based on this literature review, these issues are evaluated, compared and contrasted in order to analyse similarities and differences between the eight services in Spanish public university and seven services in Jordan universities. Thus, three research questions are formulated:

RQ1. Are the stages to success similar in the Spanish and Jordan HEIs?

RQ2. Are the difficulties and benefits similar in the Spanish and Jordan HEIs?

RQ3. Are the success factors similar in the Spanish and Jordania HEIs?

3. METHODOLOGY

The case study methodology was used to answer to these three research questions. Case study research is defined as research that provides a detailed account and analysis of one or more cases and the evidence may be qualitative, quantitative or both. The interest here is to show the results from 15 cases using quantitative and qualitative evidence.

Data collection combined several methods: interviews, surveys, direct observation, organisation documents and feedback from eight administrative services in Spanish public HEI and 7 universities services in Jordan. This way, the findings were validated by employing the triangulation technique, which reinforces the belief that the result is a valid one, and not a methodological artifact. Thus, during the research process primary and secondary data were obtained. The primary data were collected through observation (visits to services and contact with employees); interviews (interviews with the team members in each public service.); and surveys with the self-assessment team members in each university service. This information was used to analyse: the objective of the self-assessment and why it was performed; how the process was started; its stages, difficulties and benefits; and the success factors. Secondary data sources included access to internal documents: self-assessment plan, written material produced during the process (e.g. forms containing strengths, weaknesses and improvement actions, forms containing action plans), objectives, indicators, and materials from the training sessions. This information was used to supplement the primary data.

The eight Spanish services chosen were those taking part in the self-assessment process during the 2005-6 academic year at the University of Alicante (UA) in Spain. These cases were chosen because they conducted a successful self-assessment exercise. The same criteria

applied in the selection of the university services in Jordan, where all the services participated in the self-assessment exercise conducted in the framework of a Structural Complementary Measure of the III Tempus programme. Table 1 reflects the characteristics of these services.

Table 1. Size of the services and teams

Spain				Jordan		
Service	Service size	Team size		Service	Service size	Team size
A	28	4		A	5	4
B	12	3		B	5	4
C	3	3		C	50	4
D	20	5		D	40	5
E	27	5		E	10	2
F	5	3		F	26	3
G	8	3		G	15	3
H	13	3				

4. RESULTS

Regarding Spanish services, the UA has taken part in the Quality Scheme for Spanish Universities (approved by the government). The UA scheme aims to assess all the administrative services from 2003 to 2007 using the EFQM model. This paper focuses on the experience of the academic year 2005-06, in which eight services were assessed using the questionnaire approach. This assessment was carried out in two stages: the internal assessment or self-assessment, between February and July 2006, and the improvement plan, approved by top management. The purpose of this process was to evaluate the situation in each service, in order to develop a plan for the improvement of the service, as part of the overall quality improvement strategy of the UA.

The process started with the approval of the plan by top management. After that, the top manager called a meeting during which, alongside the quality manager, he would explain the plan to those responsible for each service involved. The purpose was to inform them about their participation in the process and receive their agreement to participate (in February 2006). More specifically, eight services agreed to take part in this process. These were precisely the services considered as case studies for the research presented here. Next, the academic responsible for the quality area, acting as facilitator, addressed all the employees in each service in order to familiarise the staff with the quality scheme. Following this, the teams were created, and the training and self-assessment began. The process finished with the preparation of the improvement plan (September 2006), which was submitted to top management.

Jordan Higher Education Institutions have been greatly influenced by the recent higher education reform plan of the kingdom (2005) that has emphasized on the necessity to enhance quality assurance at higher education institutions. Meanwhile the Tempus Programme financed by the European Commission placed quality assurance as a key priority within the framework of the higher education cooperation objectives.

The Jordan University and the Open Arab University together with the University of Alicante presented the IRIS Tempus project "Stimulating Quality Assurance and Accreditation in Jordan Universities" in order to develop guidelines, criteria and methodologies for the implementation of internal quality assurance systems. The proposal was elaborated by the IRIS consortium following basic guidelines of project drafting (problems analysis, needs analysis, exchange of information between partners, etc). The methodology of the project was planned taking into consideration the needs and constraints of the Jordan institutions and

following the objective of efficiency, also a set of theoretical and practical training courses were delivered followed by a practical self-assessment exercise based on the UA experience. Based on the eight self-assessment stages, the following analysis was made of how to implement them in both countries.

Step 1 – Developing management commitment
Management leadership is a key factor in self-assessment in HEIs [10,13]. At the UA the commitment has been obtained through the approval of the plan, written communication to each service concerning their participation in the process, and support to the improvement actions. In Jordan management commitment has being obtained during the drafting of the project proposal where managers from participating institutions agreed on the assessment process, the assessment model to be used and the services to be assessed. During the kick-off meeting the steps of the assessment process were discussed and agreed between the president of the university, the managers in charge of the assessment process at Jordanian Universities and the Spanish experts in charge of the external assessment.

Step 2 – Communicating plans
The objectives of self-assessment have to be clear to everyone involved [14]. At the UA the objective was to prepare an improvement plan, and communication took place in two ways. First, by presenting the plan to the person responsible for each service; second, a talk was given to all the employees in each service. The presentation was used to inform the service that it would take part in the process. The talk allowed all the employees to learn that their service was to be assessed, and how it was going to be done and why. At the Jordan universities, the self-assessment process and the methodology were presented through departmental visits by Jordan University managers to the services involved in the self-assessment. The Dean of the Faculty and managers presented the self-assessment process in a general meeting to the head of the departments. The objectives of the meeting were to inform the head of the services of the assessment methodology and to communicate the support of the management team throughout the process. After the meeting, the head of the services were in charge of informing the employees of the service of the self-assessment. The results of this step were that the employees understood what was to be done, why, and what the purpose of the methodology was.

Step 3 - Planning self-assessment
As mentioned in the literature section, an organisation may follow various approaches. For the 2005-2006 scheme, the UA used the EFQM model and the questionnaire approach. However, previous attempts in the quality scheme developed by the UA (namely, during the academic years 2003-04 and 2004-05) were based on the workshop approach. Although this methodology was successful, it posed several difficulties which led to its abandonment [34], in favour of a simpler and faster approach (questionnaire approach), expecting that it would facilitate the assessment. Hence, a questionnaire was designed according to the principles of the EFQM model, to be used for the academic years 2005-06 and 2006-07. It consisted of 140 questions, 81 covering the enabler categories and 59 assessing the results categories, plus an additional open question for each category. The enabler categories were leadership (16 questions), policy and strategy (13 questions), people (17 questions), partnerships and resources (18 questions), and processes (17 questions). Results categories were customer results, people results, society results and key results (13, 19, 12 and 15 questions respectively). Each of the items was valued according to its degree of importance for the service, and its degree of implementation, in a 4-point scale. A brief explanation section was also included that provided descriptions of terms. With the results, a weighted average was

calculated for each item, which was then used in order to detect which aspects were more or less implemented, and thus list the strengths and areas for improvement.

Taking into account the experience of the UA and the young experience in quality assurance of Jordan institutions the questionnaire approach was chosen as the self-assessment methodology at Jordan universities. The questionnaire used in Jordan Universities is an adaptation of the questionnaire used in UA. The first step towards getting a contextualised and applicable questionnaire in Jordan Universities was done by quality assurance experts at the University of Alicante, where the questionnaire was simplified. During the retraining visit in Alicante university managers and quality assurance experts work on the questionnaire during several workshops and come out with a final version; thereafter the questionnaire was translated into classical Arabic.

The result of this stage is the selection of the method for conducting self-assessment, and therefore, for the determination of the resources that may be required.

Step 4 – Establishing teams and training

At the UA, each of the eight services created a team of at least three persons to complete the assessment process. Some of these teams were made up of staff from the service itself only, whereas others also included external people. Notwithstanding the regular use of customers' opinion surveys, some services considered that the inclusion of external users in their assessment teams would provide a more complete identification of strengths and areas for improvement.

Training is a major component of quality management and it should be a priority when implementing self-assessment because it is another way of motivating people, and a prerequisite for gaining understanding. At the UA, the eight services received training sessions and workshops. The employees were not familiar with the EFQM model or the general issues regarding quality prior to this exercise. Therefore, training and workshops were necessary and useful because they allowed employees to become acquainted with the model and acquire a working methodology in order to understand how to conduct self-assessment, and also to review their work during each of the workshops.

During the retraining visit in Alicante, managers' team for Jordanian Universities were trained on the EFQM model and the 8 steps for the successful implementation of the assessment exercise. In particular the training focused on: EFQM Excellence Model, the fundamental concepts and the eight steps for the successful development of the assessment exercise. The trainees after having received intensive training at the UA were in charge to organise the training within their institutions this was done through workshop on selected issues.

This training was necessary to become acquainted with the EFQM model (criteria, methodology, marking and consensus). In this way, the foundations were created to carry out a self-assessment exercise and to overcome one of the difficulties listed in the literature: not knowing where to start.

Step 5 – Conducting self-assessment

At the UA, this procedure consisted in training sessions and workshops, with support from the facilitator, plus meetings of the members of each team to finish the self-report. The purpose of these actions was to identify the main stakeholders, processes, strengths, areas for improvement and improvement actions based on information from the training sessions and three surveys (one for employees, one for users, and one based on the EFQM model).

The employee and user surveys were carried out by the technicians from the quality area, in order to gauge their satisfaction level, whereas the team members individually completed by themselves the questionnaire based on the EFQM model. In this respect, for those teams with less than five members it was decided that the questionnaire should be filled in by some additional employees or even the whole staff (as decided by each service), so that the number

of people answering the questionnaire should total between 5 and 7. Thus, a person from the quality area was appointed to process the results of the employees' and users' surveys, those of the EFQM model questionnaire, and also to deliver the results to each service. Next, the teams, in view of the results from the three surveys, were able to first list the strengths and areas for improvement, and then decide the improvement actions. The result of these workshops was a draft self-report containing the items reflected in Table 2.

At the Jordan universities, following the training of trainers, a general meeting involving the heads of the services to be assessed and UA experts was chaired by the Dean of the Faculty. The questionnaire and the assessment process were again presented and a schedule was agreed for the passing and delivering of the questionnaire.

UA experts visited each department when the questionnaire was passed and presented to the rest of the team within each service. This help obtain an inside view of the process for the UA experts and give to all the employees involve in the service a chance to ask questions while answering the questionnaire and make comments on the questionnaire itself. The self-report used in the UA was adapted for the Jordan services (see Table 2).

Table 2. Self-report

1.Introduction
  1.1. Members of the self-assessment committee and working plan
  1.2. Describing the service: service organisational chart, role within the UA structure, number of employees and physical location
  1.3. Mission, vision and critical factors for success
  1.4. Objectives and services offered
  1.5. Stakeholders
  1.6. Process mapping
	After a brief explanation on these issues supplied by the quality area, the team members draft the corresponding sections

2. Analysis of survey results
  2.1. Population and sample
  2.2. Data collection process
	The UA quality area handed in to the services two surveys which some teams adjusted to their needs and others used with no modification. These surveys were statistically processed by a person from the quality area, which in turn sent the results to the services. This information allowed the team members to consider other points of view when defining strengths, areas for improvement and improvement actions.

3. Strengths, areas for improvement and improvement actions	The team members fill in this section (for each criterion) with the results from the 3 surveys (EFQM model, customer satisfaction and employee satisfaction).
4. Improvement plan	Prepared by each team with the information from section 3. In this table the teams establish the following items for each improvement action: task, person responsible, time, resources and follow-up. These improvement actions are divided into two sub-sections: those for which the service is responsible and those for which the service is not responsible (e.g. those corresponding to the management, the rector and vice-rectors, etc.).
5. Appendices	In this section the teams may include some example of one of the processes, the results from the surveys, etc.

Step 6 – Establishing an action plan

Some authors have pointed out that the establishment of an improvement plan for submission to higher management is a critical phase of self-assessment [14,29,30]. Should this not happen, the improvement actions may not be implemented, and the process is most likely to fail. At the UA, each team prepared its improvement plan as shown in Table 2. Then, the self-report was given out to everyone in the service in order to receive other opinions to complete the self-report, as well as the approval of the person responsible for the service. Next, the self-report was returned to the quality area for analysis. Finally, the facilitator called a final meeting in order to close the self-report, prepare the meeting with top management, and start with the implementation. At the Jordan universities, the results of the questionnaire were analysed by EFQM assessors, they established 1 to 3 strengths and areas for improvement for the 9 criteria of the EFQM model. An action plan arising from the strengths and areas for Improvement was then established comprising: 1) Improvement actions to be implemented; 2) Task to be developed; 3) Person/s responsible for the development; 4) Starting-ending date; resources needed; 5) Indicators of progress.

Step 7 – Implementing action plans

Once the improvement plan was approved by the manager of the UA, the people responsible for each service reported to top management and the quality area manager. The purpose was to obtain both the management's approval for the actions corresponding to each service and the manager's commitment to carry out these actions and to submit to the governing board those for which the UA would be responsible. At the Jordan universities, the action plan was then sent to each service to get the opportunity to have a detailed action plan and them adapted it and implemented it following their needs and expectations.

Step 8 – Review

Management-approved improvement actions have more possibilities of being implemented. Nevertheless, some kind of monitoring must be carried out [8,30]. This review consists in periodically monitoring the degree of implementation of the actions in Spanish universities. In Jordan, not monitoring of the improvement actions implementation foreseen in the framework of this project. Jordanian managers will be responsible for the monitoring depending upon the compromise and willingness of each service assessed.

In relation to difficulties, benefits and success factors in both countries, regarding the difficulties in the Spain context, the most important one perceived by the teams were lack of commitment by university managers, the difficulty in implementing improvement actions, and lack of staff commitment. The least important problem was not knowing where to start, because they considered that this can be solved by a training course (Table 3). In Jordan the biggest difficulties perceived by the teams were the lack of resources and the lack of commitment from the university managers. Indeed the lack of resources is perceived as posing a serious threat to the successful outcome of the self-assessment in Jordan universities. This difficulty can appear during the process itself –lack of human and material resources- to carry out the process and during the implementation of the improvement actions, meaning no resources available once the areas for improvement have been detected. As for the lack of commitment this was refer by the employee and managers of the service as a lack of quality assurance culture within the institution leading to a small back up of initiatives on this area. The rest of the difficulties were rate very similarly in both contexts, Spain and Jordan.

Concerning the benefits obtained, Table 3 showed that the greatest benefits in the Spanish context were identifying improvement actions and implementing such actions, in order to improve the quality of the service. They also gained increased knowledge of the quality philosophy, staff involvement in service improvement and staff awareness of the importance

of quality. In the case of Jordan the teams rated the benefit of identifying improvement action and promoting the improvement of service quality equally important, those are the main benefits to be obtained through the self-assessment. Another point that came out was the benefit of enhancing employees' awareness of the importance of quality, in deed for most of the employees the self-assessment exercise was the first time they have to deal with quality related issues. In general, the benefits related to providing knowledge of quality, enhancing employees' awareness of the quality and promoting the improvement of service are higher in Jordan universities.

At the UA, as for the success factors, the team members considered that all the factors are important for the success of the process. In Jordan, again the commitment from the university management board was seen as the most crucial point, and follow-up activities came in a second position. At Jordan universities, the team members perceived the managers' commitment more important than Spanish universities.

Table 3. Difficulties, benefits and success factors in self-assessment

	Spain		Jordan	
	Mean	Dev.	Mean	Dev.
Difficulties				
Lack of staff commitment	4,29	0,76	3,50	1,51
Time consumed in the process	3,29	1,11	4,33	0,51
Not knowing where to start	2,86	1,46	3,50	1,05
Lack of resources	3,29	1,11	5,00	0,00
Lack of commitment by UA management	4,71	0,48	4,50	0,54
Implementation of improvement actions	4,43	0,78	4,33	0,81
Benefits				
Identifying improvement action	4.38	0,51	4,33	0,81
Higher staff involvement	2.75	1,03	3,66	0,81
Providing knowledge of quality-related issues	3.38	0,74	4,00	1,09
Creating a common improvement approach for the whole service	3.38	0,74	3,83	0,75
Enhancing employees' awareness of the importance of quality	2.13	0,35	4,16	1,16
Promoting the improvement of service quality	3.50	0,53	4,33	0,81
Success factors				
Service leaders' commitment	4.57	0,53	4,16	0,98
Service employees' involvement	4.25	0,70	3,83	0,98
Commitment by UA management	3.63	0,51	4,66	0,51
Availability of information (supplied by the quality unit) to support strengths and weaknesses	3.75	0,70	4,16	0,98
Training provided to team members involved in self-assessment	4.25	0,70	4,00	0,89
Preparing a documented action plan	4.00	0,75	4,00	1,09
Approval of improvement plan by UA management	4.00	0,92	3,83	1,16
Follow-up	4.38	1,06	4,50	1,12

5. CONCLUSIONS

The cases indicated that UA and Jordan universities conducted self-assessment on the basis of an existent and generic model (EFQM), and used the questionnaire approach, with the aim of establishing an action plan to improve performance. The self-assessments were developed successfully in the 15 cases presented here, although with some differences, namely:

- The head of the service department played a much more relevant role in Jordan than in Spain.

- In Jordan the technique of "training for trainers" was used in order to maximize resources.

As a result, these public services in Jordan may follow a process similar to those in the HEIs in Spain, adapting the practices to their context. Based on these case studies, a brief comparison of the two countries is offered considering three issues: the stages of self-assessment; the difficulties and benefits; and the success factors. Then, the following lessons may be suggested:

- The common self-assessment stages are the same for public services in HEIs, but self-assessment practices may be adapted to the reality of each HEIs context.

- The benefits and difficulties of self-assessment are similar for public services in HEIs, but the order of importance may be different. Regarding the difficulties, the relative weight of a difficulty depends on the quality culture existing in the organisation and on the resources available for each institution. In relation to benefits, the existing benefits are similar, the main differences are based on the quality assurance knowledge the universities employees may have prior the self-assessment process and the knowledge they will obtain from the self-assessment.

- The success factors are comparable in Spain and Jordan but real differences exist. The commitment of university manager and the follow up activities in Jordan are considered to be much more important than in Spain.

Based on these ideas, although the cases showed some differences, the EFQM model and self-assessment processes are applicable to the Spanish and Jordanian public services. This does not mean that the methodology is directly exportable, a real adaptation to the specificities of each country and institution may be necessary, but in general the exchange of knowledge has proved to be successful and profitable for both countries. The general contribution of this paper is to present the methodology adapted in the self-assessment questionnaire, presented the results, conclusions and recommendations to managers of other HEIs, which may be searching for practical methodologies and best practices cases.

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