

Increasing Competitiveness in the Textile Industry: A Focus on the Accounting Benefits of ERP Systems by Exploring Cases from the UK & Greece

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Abstract

Due to the competitive marketplace environment, production companies need to increase efficiency. ERP systems can significantly increase profitability, while decreasing operational costs. This paper is focusing on the accounting benefits of ERP systems in the production sector, and more specifically the textile industry. It also explores cross-cultural differences regarding ERP use by looking into two cases from the UK and Greece. The information gathered from the HQ and production plants influences managerial decision-making and efficiency at an organizational and operational level. However, differences in handling and acting upon the generated accounting information are noticed between the two cases.

Keywords

ERP Systems, Accounting Benefits, Textile Industry, Case Study

1. Introduction

For businesses who aim for growth and increase in competitiveness, Enterprise Resource Planning (ERP) systems are nowadays essential for all types of businesses. Enterprise Resource Planning is the process of integrating all operations of a company in a unified manner, to coordinate and manage resources, while keeping track of financial data and other business activities. Data regarding operations and corporate activities need to be collected, managed and utilized to the company's advantage, over its competition.

ERP systems evolved from Accounting Information Systems (AIS). These sys-

tems focused solely on storage and process of financial data and accounting transactions. Yet, for managerial decisions in large companies to be made, the accounting information generated from AIS, had to be associated with and examined in comparison with the company's resources and processes. Consequently, ERP systems managed and coordinated all resources and processes, and integrated all financial and non-financial activities in an automated system [1].

Regarding the textile industry, Yang [2] argues that the fast moving nature of the business requires accelerated collection and exchange of information. Additionally, Bertolini *et al.* [3] identify the shift towards outsourcing for textile and apparel manufacture in Eastern Europe and the Far East in an attempt to reduce production costs. However, the distribution from foreign countries is a costly and time-consuming procedure, which impacts the supply chain. Thus, local companies use ERP systems to improve efficiency and promote effectiveness, while reducing production costs, in order to be trusted and preferred over overseas vendors. The evolution of ERP systems has transformed them into indispensable strategic tools when it comes to distribution, as they integrate all business functions while sharing information from production to the client. Given the geographical closeness between European countries, new links facilitating production and distribution are created. This significantly reduces overhead costs by at least 10% [1]. It is clear that ERP has a positive influence of a company; yet, the overall performance is measured in financial terms. Hence, it is important to investigate the accounting benefits of ERP use.

In the UK context, the textile industry is worth 9 billion GBP of the National economy, and by 2020 a total of 20,000 jobs will be created, as part of the post-recession growth plan [4]. Interestingly, in Greece the two branches of clothing—footwear manufacturing, and textile that were almost non-existent during the economic crisis, experienced an increase by 16.7% and 6.3% respectively in 2017 [5]. This increase in investment in the textile and apparel industry implies that the market will become even more competitive. Thus, investing in ERP systems to improve efficiency and reduce uncertainty is crucial.

This paper is investigating the accounting benefits deriving from ERP implementation in the complex and fast moving textile industry. Two case studies, one from the UK and one from Greece are examined in order to find similarities and differences regarding the use of an ERP system in textile and apparel manufacture.

2. Literature Review

2.1. ERP in the Textile Industry

As fashion is a fast-moving industry, quick reactions to environmental changes are important. With ERP systems, financial and other resources, such as and time, are saved, while maintaining the stability, accuracy and high quality of processes [6]. ERP systems increase responsiveness and competitive advantage over competitors is achieved [7]. Huang *et al.* [8] argue that the use of ERP and

the general electronization of processes in the textile industry reduces cost, time and supply chain related risks, while enhancing corporate value by emphasizing research and development, as well as innovation.

Scherrer-Rathje and Boyle's [6] findings of their study on ERP systems in the apparel industry indicate that ERP systems provide flexibility in terms of connectivity, process and hierarchical integration, consistency and user-friendliness due to its customizability. They also note that flexibility in information generation and real-time data access reduces uncertainty and enables reliable forecasting. However, they warn, along with Bertolini *et al.* [3] that too much flexibility and customization of the ERP environment may interfere with standardized business processes.

Furthermore, the interconnectivity between departments of the textile manufacturing or apparel company facilitated by ERP systems, has many advantages. For example, since stock and inventory status can be found on the system, marketing activities, production planning and replying to customers' queries, is done without complications [9]. Moreover, as Bertolini *et al.* [3] note, the fashion industry is now focused on "pull supply chains", which cut down inventories as these are perceived as "inefficiencies" in the supply chain. Maintaining accurate ERP databases regarding inventory creates a sense of control in the textile industry [2] [8] [10] [11] [12].

Finally, a recent trend in the fashion industry is the sensibility towards healthy work conditions, and also environmentally friendly processes [13]. Many legal and technical rules and regulations have to be followed during the production process, as many global and environmental issues arise. According to White *et al.* [14], textile production is associated with non-respected human rights, lower than average wages and poor labor conditions. Furthermore, pollution during production and transport, and waste of materials is opposing the Corporate Social Responsibility (CSR) mentality. Likely, through ERP use more sustainable practices are encouraged. With functions, such as materials management, production planning and control, product development and quality control, there is a reduction of wasted raw materials, energy, machinery and manpower [9].

2.2. The Impact of ERP Systems on Accounting Processes

The general expectations of ERP systems according to Poston and Grabski [11] were, first, the reduction of costs, as the computerized system would provide efficiency, and second, the enhancement of decision-making. Over a decade ago, academics started to provide empirical evidence regarding the accounting benefits of ERP systems, as a result of Sutton's [15] call for further investigation on the specific matter.

Complexity resulting from the large volume of data in manufacturing companies has a negative impact on the overall performance of the businesses [16]. Thus, the increased number of financial information and accounting processes encourages the digitalization and electronisation of accounting, making the in-

formation more manageable [8] [11] [17]. Accuracy when processing financial information and producing financial reports is ensured when using ERP systems [18] [19] [20]. However, attention needs to be paid during information input, as the generation of inaccurate and incorrect financial reports can lead to unsuitable decision-making [21]. Cost and profitability reporting is based on information gathered from the production line. However, under real-life circumstances, errors are made and what is considered “unimportant” information is ignored, resulting in false reports [22].

As far as time is concerned, the interconnectivity, synchronization and real-time information sharing, reduces delays [9] [23]. Sayankar and Kale [24] argue that the flow of information within companies is facilitated through ERP use, which enhances all business processes. They also note that the complex and expensive communication between departments that never cooperated with each other is reduced, creating a unified system promoting effectiveness and efficiency across all departments and production plants. Moreover, the standardized and automated ERP processes have the ability to generate high quality accounting reporting, significantly decreasing the time needed for statements of accounts and other financial reports. The time saved from the production of financial reporting, is used by accountants in a more productive and efficient way, by analyzing and interpreting the data produced, aiding decision-makers [15]. Hence, a corporate environment with continuous reporting and auditing is created [15] [25] [26], giving top management all the necessary financial information needed to take important decisions.

Finance, Financial Accounting, Financial Control, Investment Management, Treasury, and Human resource management are some of the modules included in ERP systems that have a direct link to accounting. Contrarily, Production Planning and Control, Materials Management and Quality Control constitute ERP modules that generate information indirectly linking to accounting [9]. Antero and Riis [27] noted that the implementation of ERP systems in manufacturing companies, that are used in their full potential monitoring and recording of all production stages and procedures, improve the overall business performance. Detailed analytics have a positive influence on production planning, logistics, plant maintenance, human resources and integration of activities [9] as inefficiencies are easily spotted and resources are allocated accordingly. And as corporate performance is measured in financial terms using special metrics, it is important that all processes are carried out in the most efficient way possible [28]. As mentioned in section 2.1, enhancement in performance and responsiveness results in the maintenance of a competitive advantage over other businesses [2] [7] [8] [29].

In conclusion, there is no doubt that ERP systems have a positive effect on corporate accounting in all businesses. As the needs of each industry vary, the study of the different benefits in each is essential. However, as the cost of implementing such a system is high, it is important to identify the specific benefits

deriving from the system [12] [13] [30], especially in the fast-moving and fully competitive textile and apparel manufacturing sector.

3. Methodology

3.1. Purpose and Methodological Approach

This study is focusing on the differences in usage of ERP systems for management control purposes in the textile and apparel manufacturing companies in Greece and in the UK. A quantitative approach was followed, in order to classify the benefits according to their impact on the company. A qualitative approach may have provided more in-depth analysis and a better understanding using specific cases as examples from the real life business environment, however, their findings cannot generalize [31] and contribution to the existing literature would not be as meaningful as if a quantitative methodology was followed.

3.2. Sample

A homogenous purposive sampling approach was used, focusing on textile and apparel companies, studying the accounting effects after ERP adoption, from the standpoint of accountants. As ERP systems are widely used in this sector, online questionnaires were sent directly to a list of 357 textile and apparel manufacturing companies operating in Greece (172) and in the UK (185), based on secondary online research. From that initial sample, 158 responses were collected. The sample size (Total 158: UK = 82, Greece = 76) was acceptable, as it fell within the acceptable range of >40% (44.2%) response rate for businesses (Dillman, 2007). The sample consisted of 86.1% male participants and 13.9% female. 39.9% of the total sample had accounting experience 10 - 15 years, whereas 26.6 had 15 - 20 years. The size of the companies varied across the sample, with larger companies being located in the UK. There were also variations between the classification of textile company (32.9% textile, 41.1% textile product and 25.9% apparel manufacturing) An analytical overview of the sample can be found in **Appendix A**.

3.3. Procedure and Measures

The design of the questionnaires was done on Google Forms, as it is compatible with the majority of the operating systems and there was a minor chance to get blocked by spam and virus software. The companies were contacted in advance by e-mail about the study. Using online questionnaires, where all fields are required, minimizes the number of incomplete responses compared to the traditional hand-filled questionnaires, which increases the credibility of the study. The purpose of the study on the landing page of the hyperlink that was sent to the companies, was introduced as “ERP systems in the textile and apparel industry” instead of “benefits of ERP systems”, to avoid participants’ response bias.

The online questionnaire was comprised of four sections. Three yes/no screening questions were posed, (“Does the company you work for has an ERP system?”, “Does the ERP system of the company you work for includes ac-

counting functions?”, “Is the ERP system operating for more than one year?”, “Is your job title related to accounting?”). Section two focused on demographic information, accounting experience and company information such as industry (textile, textile product and/or apparel manufacturing) and number of employees. The third section focused on ERP systems and their accounting benefits. From a list consisting of 19 benefits that were alphabetically sorted, participants had to rate each on 7-point agreement Likert scale, where 1 indicating “Strongly disagree” and 7 indicating “Strongly agree”.

4. Results

The findings from the study about the accounting benefits of ERP systems in the textile industry can be found on **Table 1** as a whole, and on **Appendix B & Appendix C** analyzed by country.

At a first glance, we note that overall, the mean scores of the different accounting benefits categories varied. Variation is also noticed between the different types of textile industry (textile, textile products and apparel manufacture). More specifically, the total mean of the operational accounting benefits regarding the time was the highest (5.42), followed by organizational accounting benefits (5.22). IT and managerial benefits with total mean scores 5.05 and 4.99 respectively, were average scored, whereas, the operational accounting benefits concerning the reduction of accounting personnel was significantly lower than the rest with mean score 4.18. Operational accounting benefits (time) seem to have a significant importance; the reduction of time for issuing financial statements (5.53), for closure of monthly accounts (5.49), closure of quarterly accounts (5.47) and closure of annual accounts (5.20) were all highly rated by the accountants. This is because of the unified and organized manner in which financial data is collected and processed through ERP systems.

In the IT accounting benefits, regarding the communication of the accounting department, the scores are the lowest, with total mean score 4.27, while all other values within that benefit category varied between 4.98 (reduction of time for transaction entry) and 5.34 (gathers data easier, more quickly and processes results easier). Transaction entry time was not scored as highly in comparison with the rest of time related accounting benefits. This is justified, as new information takes the same amount of time to be entered into the systems, whereas the time needed for processing larger volumes of financial data is reduced by using ERP systems. Moreover, regarding the organizational benefits deriving from ERP use, we notice that the “improved internal audit function” score was almost 1 point (0.98) from the highest scored organizational benefit (improved quality of reports = 5.7). Improved quality of reports was rated highly as one of the basic advantages of ERP systems is the standardization and consistency of reporting.

Variations are also apparent within the different types of textile industry. Most of them are minor, especially the ones regarding the time related operational accounting benefits (textile = 5.44, textile products = 5.41 and apparel

Table 1. Means of ERP accounting benefits.

| Acc. benefit category | Variables | Total cases | | | |
|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|---------------------|------------------------------|------------------------------------|
| | | Total Mean (N = 158) | Textile (N = 52) | Textile products (N = 65) | Apparel manufacture (N = 41) |
| IT acc. benefits | ERP gathers data easier | 5.34 | 5.37 | 5.28 | 5.41 |
| | ERP gathers data more quickly | 5.34 | 5.21 | 5.26 | 5.63 |
| | ERP processes results easier | 5.34 | 5.48 | 5.29 | 5.24 |
| | Reduction of time for transaction entry | 4.98 | 4.79 | 5.14 | 4.98 |
| | The accounting department communicates easier | 4.27 | 4.12 | 4.34 | 4.34 |
| | Total Mean IT acc. benefits | 5.05 | 4.99 | 5.06 | 5.12 |
| | Managerial acc. benefits | Improved working capital control | 4.65 | 4.77 | 4.45 |
| Increased use of financial ratio analysis information | | 5.06 | 5.13 | 4.97 | 5.12 |
| Reduction of time for issuing payroll | | 5.26 | 5.46 | 5.14 | 5.2 |
| Total Mean Managerial acc. benefits | | 4.99 | 5.12 | 4.85 | 5.05 |
| Operational acc. benefits (cost) | Reduction of personnel of accounting department | 4.18 | 4.23 | 4.09 | 4.24 |
| | Total Mean Operational acc. benefits (cost) | 4.18 | 4.23 | 4.09 | 4.24 |
| Operational acc. benefits (time) | Reduction of time for closure of annual accounts | 5.20 | 5.17 | 5.15 | 5.32 |
| | Reduction of time for closure of monthly accounts | 5.49 | 5.56 | 5.55 | 5.29 |
| | Reduction of time for closure of quarterly accounts | 5.47 | 5.48 | 5.4 | 5.56 |
| | Reduction of time for issuing of financial statements | 5.53 | 5.56 | 5.52 | 5.51 |
| | Total Mean Operational acc. benefits (time) | 5.42 | 5.44 | 5.41 | 5.42 |
| | Organizational acc. benefits | Improved decisions based on timely and reliable | 5.34 | 5.31 | 5.4 |
| Improved internal audit function | | 4.72 | 4.94 | 4.62 | 4.61 |
| Improved quality of reports statements of account | | 5.7 | 5.79 | 5.63 | 5.71 |
| Increased flexibility in information generation | | 5.19 | 5.35 | 5.06 | 5.2 |
| Increased integration of accounting applications | | 5.18 | 5.17 | 5.14 | 5.27 |
| ERP is user friendly with other departments | | 5.17 | 5.19 | 5.08 | 5.29 |
| Total Mean Organizational acc. benefits | | 5.22 | 5.29 | 5.16 | 5.23 |

manufacture = 5.42). However, the one that stands out is with regards the managerial accounting benefits, where results vary between 4.85 (textile products) and 5.12 (textile). The rest of the variations are consistent, meaning that there are not major differences between the different types within the textile sector.

When the results were analyzed on a country level, we notice some further variations. First, for textile companies in Greece and the UK, time related operational accounting benefits are scored the highest, with mean scores 5.42 and 5.44 respectively. However, in Greece, IT benefits followed (mean = 5.22), whereas for the UK organizational benefits came second with mean score 5.24. Surprisingly, operational benefits (time) of ERP systems in Greece have the same mean

scores across all three textile industry classifications (5.42), while in the UK the textile industry had a higher mean score (5.46), when compared to textile products (5.39) and apparel manufacture (5.43).

Moreover, in Greece, IT benefits seemed to play a more significant role than in the UK (5.11), where the values for easy and fast collection of data were higher. As far as easiness in communication with the accounting department is concerned, cases from the UK, scored higher, especially in the textile sector, with mean score 4.29, as opposed to the corresponding value from the Greek textile sector, which was 3.86. Cost related operational benefits regarding reduction in accounting personnel, were overall higher for companies in the UK, again in the textile sector. Similarities and consistency is noticed for managerial accounting benefits and time related operational benefits, which seem to have the same effect on the whole industry. Lastly, with regards to organizational benefits, textile companies in Greece have more improved decisions based on timely and reliable information (mean = 5.42). However, UK companies demonstrated a higher score in improved internal audit function especially in the textile industry (5.03).

5. Conclusions

ERP systems are known for the advantages that they bring businesses. The purpose of this study was to identify the accounting benefits derived from ERP systems in the textile, textile product and apparel industry. This sector faces a lot of competition and there is global pressure for efficiency. ERP systems are the necessary tools to gain control over the company and plants, by integrating multiple functions, including finances. The real-time and constant sharing of information is the key to corporate success.

After reviewing the results from cases in Greece and the UK, regarding ERP system use, we noticed various differences and similarities. Consistency in time related operational accounting benefits was noticed throughout the dataset. Organizational benefits were also significant, as well as IT accounting benefits. Greek companies however, seemed to have overcome most IT related challenges, encouraging the uninterrupted and highly reliable flow of information.

The current study contributes to the literature of ERP systems in the textile industry, by giving insight into the accounting benefits derived from ERP use, with findings from two different countries. Both countries were impacted by the global economic recession, but on different levels, and on this day, they are trying to reduce outsourcing and encourage national and international manufacture of textiles and apparel, by promoting competitiveness and responsiveness through ERP systems. The findings of these two countries could also be of interest of managers in the textile, textile production and apparel sector. The accounting benefits of ERP systems are explored in two different cultural contexts, which may influence top management into adapting to such a system.

However, certain limitations exist. Generalisability and validity is could be questioned, due to the small sample size. Future study could include more cases,

or even a qualitative approach assessing the findings of this present study, for in-depth analyses of the accounting benefits and challenges.

References

- [1] Holland, C.P., Light, B. and Gibson, N. (1999) A Critical Success Factors Model for Enterprise Resource Planning Implementation. *Proceedings of the 7th European Conference on Information Systems*, **1**, 273-287.
- [2] Yang, X.K. (2010) Research on Informatization Evaluation and Development Strategy of Textile Industry in Shandong Peninsula. *Information Science and Engineering (ICISE)*, 2010 2nd International Conference, 501-504. <https://doi.org/10.1109/ICISE.2010.5690989>
- [3] Bertolini, M., Bevilacqua, M., Bottani, E. and Rizzi, A. (2004) Requirements of an ERP Enterprise Modeller for Optimally Managing the Fashion Industry Supply Chain. *Journal of Enterprise Information Management*, **17**, 180-190. <https://doi.org/10.1108/17410390410531434>
- [4] New Economy (2017) Investment in Textile Manufacturing to Create 20,000 Jobs in the UK by 2020 According to the Alliance Report. New Economy. <http://www.neweconomymanchester.com/news-events/news/investment-in-textile-manufacturing-to-create-20-000-jobs-in-the-uk-by-2020-according-to-the-alliance-report>
- [5] Manifava, D. (2017) More Investments from Manufacturing 2017. Kathimerini.gr. <http://www.kathimerini.gr/940523/article/oikonomia/ellhnikh-oikonomia/perissote-res-ependyseis-apo-th-viomhxania-to-2017>
- [6] Scherrer-Rathje, M. and Boyle, T.A. (2012) An End-User Taxonomy of Enterprise Systems Flexibility: Evidence from a Leading European Apparel Manufacturer. *Information Systems Management*, **29**, 86-99. <https://doi.org/10.1080/10580530.2012.660820>
- [7] Choi, T.M., Chow, P.S. and Liu, S.C. (2013) Implementation of Fashion ERP Systems in China: Case Study of a Fashion Brand, Review and Future Challenges. *International Journal of Production Economics*, **146**, 70-81. <https://doi.org/10.1016/j.ijpe.2012.12.004>
- [8] Huang, Y.T., Chan, S.H. and Liu, F.Y. (2014) An Investigation of Electronic Logistics Management in the Taiwanese Textile Industry: Using Everest Textile as an Example. *Applied Mechanics and Materials*, **599**, 2063-2065.
- [9] Chiplunkar, C., Chattopadhyay, R. and Deshmukh, S.G. (2001) Development of an Integrated Information Management Model: A Case of Textile Industry. *Production Planning & Control*, **12**, 629-645. <https://doi.org/10.1080/09537280010016026>
- [10] Napolitano, M. (2017) GUESS' Distribution Evolution. Scmr.com. http://www.scmr.com/article/guess_distribution_evolution
- [11] Poston, R. and Grabski, S. (2001) Financial Impacts of Enterprise Resource Planning Implementations. *International Journal of Accounting Information Systems*, **2**, 271-294. [https://doi.org/10.1016/S1467-0895\(01\)00024-0](https://doi.org/10.1016/S1467-0895(01)00024-0)
- [12] Xue, M. and Zhu, C. (2009) The Development and Implementation of Household Textile Industry ERP System Based on B/S. *Control, Automation and Systems Engineering, CASE 2009. IITA International Conference*, 655-658.
- [13] Cebeci, U. (2009) Fuzzy AHP-Based Decision Support System for Selecting ERP Systems in Textile Industry by Using Balanced Scorecard. *Expert Systems with Applications*, **36**, 8900-8909. <https://doi.org/10.1016/j.eswa.2008.11.046>
- [14] White, C.L., Nielsen, A.E. and Valentini, C. (2017) CSR Research in the Apparel

- Industry: A Quantitative and Qualitative Review of Existing Literature. *Corporate Social Responsibility and Environmental Management*, **24**, 382-394. <https://doi.org/10.1002/csr.1413>
- [15] Sutton, S. (2006) Enterprise Systems and the Re-Shaping of Accounting Systems: A Call for Research. *International Journal of Accounting Information Systems*, **7**, 1-6. <https://doi.org/10.1016/j.accinf.2006.02.002>
- [16] Kanellou, A. and Spathis, C. (2013) Accounting Benefits and Satisfaction in an ERP Environment. *International Journal of Accounting Information Systems*, **14**, 209-234. <https://doi.org/10.1016/j.accinf.2012.12.002>
- [17] Castells, M. and Himanen, P. (2002) *The Information Society and the Welfare State: The Finnish Model*. No. 250, Oxford University Press, Oxford. <https://doi.org/10.1093/acprof:oso/9780199256990.001.0001>
- [18] Cheng, M., Dhaliwal, D. and Zhang, Y. (2013) Does Investment Efficiency Improve after the Disclosure of Material Weaknesses in Internal Control over Financial Reporting? *Journal of Accounting and Economics*, **56**, 1-18.
- [19] Colmenares, L. (2009) Benefits of ERP Systems for Accounting and Financial Management. In: *Allied Academies International Conference, Academy of Management Information and Decision Sciences*, Vol. 13, Jordan Whitney Enterprises, Inc., Tus-tin, 3.
- [20] Velcu, O. (2007) Exploring the Effects of ERP Systems on Organizational Performance: Evidence from Finnish Companies. *Industrial Management & Data Systems*, **107**, 1316-1334. <https://doi.org/10.1108/02635570710833983>
- [21] Biddle, G.C., Hilary, G. and Verdi, R.S. (2009) How Does Financial Reporting Quality Relate to Investment Efficiency? *Journal of Accounting and Economics*, **48**, 112-131. <https://doi.org/10.1016/j.jacceco.2009.09.001>
- [22] Teittinen, H., Pellinen, J. and Järvenpää, M. (2013) ERP in Action—Challenges and Benefits for Management Control in SME Context. *International Journal of Accounting Information Systems*, **14**, 278-296. <https://doi.org/10.1016/j.accinf.2012.03.004>
- [23] Granlund, M. (2011) Extending AIS Research to Management Accounting and Control Issues: A Research Note. *International Journal of Accounting Information Systems*, **12**, 3-19. <https://doi.org/10.1016/j.accinf.2010.11.001>
- [24] Sayankar, V.N. and Kale, M.K. (2012) To Study Implementation of Enterprise Resource Planning-Quality Management Module in Textile Industry. *Research Journal of Engineering and Technology*, **3**, 207-210.
- [25] Chapman, C.S. (2005) Not Because They Are New: Developing the Contribution of Enterprise Resource Planning Systems to Management Control Research. *Accounting, Organizations and Society*, **30**, 685-689. <https://doi.org/10.1016/j.aos.2005.02.002>
- [26] Stoel, D., Havelka, D. and Merhout, J. (2012) An Analysis of Attributes That Impact Information Technology Audit Quality: A Study of IT and Financial Audit Practitioners. *International Journal of Accounting Information Systems*, **13**, 60-79. <https://doi.org/10.1016/j.accinf.2011.11.001>
- [27] Antero, M. and Riis, P.H. (2011) Strategic Management of Network Resources: A Case Study of an ERP Ecosystem. *International Journal of Enterprise Information Systems*, **7**, 18-33. <https://doi.org/10.4018/jeis.2011040102>
- [28] Rom, A. and Rohde, C. (2007) Management Accounting and Integrated Information Systems: A Literature Review. *International Journal of Accounting Information Systems*, **8**, 40-68. <https://doi.org/10.1016/j.accinf.2006.12.003>

- [29] Ruivo, P., Oliveira, T. and Neto, M. (2014) Examine ERP Post-Implementation Stages of Use and Value: Empirical Evidence from Portuguese SMEs. *International Journal of Accounting Information Systems*, **15**, 166-184.
<https://doi.org/10.1016/j.accinf.2014.01.002>
- [30] Cebeci, U. (2005) Selecting the Suitable ERP System: A Fuzzy AHP Approach. *35th International Computers & Industrial Engineering Conference*, İstanbul, 19-22 June 2005, 393-398.
- [31] Flyvberg, B. (2011) Case Study. In: Denzin, N.K. and Lincoln, Y.S., Eds., *The Sage Handbook of Qualitative Research*, 4th Edition, Sage, London, 301-316.

Appendix A

Table A1. Descriptive statistics of sample (N = 158).

| Variables | | Total cases | | Greece (N = 76) | | UK (N = 82) | |
|--------------------------------------|------------------------------|-------------|------|-----------------|------|-------------|------|
| | | Frequency | % | Frequency | % | Frequency | % |
| Gender | Male | 136 | 86.1 | 67 | 88.2 | 69 | 84.1 |
| | Female | 22 | 13.9 | 9 | 11.8 | 13 | 15.9 |
| Age | 25 - 34 | 19 | 11.4 | 9 | 11 | 9 | 11.8 |
| | 35 - 44 | 88 | 55.7 | 47 | 57.3 | 41 | 53.9 |
| | 45 - 54 | 35 | 22.2 | 15 | 18.3 | 20 | 26.3 |
| | 55 - 64 | 15 | 9.5 | 9 | 11 | 6 | 7.9 |
| | 65+ | 2 | 1.3 | 2 | 2.4 | - | - |
| | 0 - 5 | 9 | 5.7 | 3 | 3.9 | 6 | 7.3 |
| | 5 - 10 | 30 | 19 | 16 | 21.1 | 14 | 17.1 |
| Accounting experience (years) | 10 - 15 | 63 | 39.9 | 24 | 31.6 | 39 | 47.6 |
| | 15 - 20 | 42 | 26.6 | 26 | 34.2 | 16 | 19.5 |
| | 20+ | 14 | 8.9 | 7 | 9.2 | 7 | 8.5 |
| | 0 - 5 | 99 | 62.7 | 45 | 59.2 | 54 | 65.9 |
| Current position (years) | 5 - 10 | 35 | 22.2 | 19 | 25 | 16 | 19.5 |
| | 10 - 15 | 19 | 12 | 10 | 13.2 | 9 | 11 |
| | 15 - 20 | 5 | 3.2 | 2 | 2.6 | 3 | 3.7 |
| | 10 - 20 | 10 | 6.3 | 5 | 6.6 | 5 | 6.1 |
| Number of employees | 20 - 50 | 29 | 18.4 | 18 | 23.7 | 11 | 13.4 |
| | 50 - 100 | 56 | 35.4 | 33 | 43.4 | 23 | 28 |
| | 100 - 500 | 59 | 37.3 | 18 | 23.7 | 41 | 50 |
| | 500 - 1000 | 4 | 2.5 | 2 | 2.6 | 2 | 2.4 |
| Classification | Textile | 52 | 32.9 | 21 | 27.6 | 31 | 37.8 |
| | Textile product | 65 | 41.1 | 32 | 42.1 | 33 | 40.2 |
| | Apparel manufacturing | 41 | 25.9 | 23 | 30.3 | 18 | 22 |

Appendix B

Table B1. Means of ERP accounting benefits by country (Greece).

| Acc. benefit category | Variables | Greece (N = 76) | | | |
|---------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|------------------|---------------------------|------------------------------|
| | | Total Mean | Textile (N = 21) | Textile products (N = 32) | Apparel manufacture (N = 23) |
| IT acc. benefits | ERP gathers data easier | 5.35 | 5.29 | 5.25 | 5.52 |
| | ERP gathers data more quickly | 5.35 | 5 | 5.28 | 5.78 |
| | ERP processes results easier | 5.16 | 5.52 | 5 | 4.96 |
| | Reduction of time for transaction entry | 5 | 4.76 | 5.19 | 5.04 |
| | The accounting department communicates easier | 4.09 | 3.86 | 4.19 | 4.22 |
| | Total Mean IT acc. benefits | 5.22 | 4.89 | 4.99 | 5.1 |
| Managerial acc. benefits | Improved working capital control | 4.8 | 4.9 | 4.53 | 4.96 |
| | Increased use of financial ratio analysis information | 5.17 | 5.33 | 5 | 5.17 |
| | Reduction of time for issuing payroll | 5.32 | 5.57 | 5.13 | 5.26 |
| | Total Mean Managerial acc. benefits | 5.1 | 5.27 | 5.89 | 5.13 |
| Operational acc. benefits (cost) | Reduction of personnel of accounting department | 4.11 | 4 | 4.06 | 4.26 |
| | Total Mean Operational acc. benefits (cost) | 4.11 | 4 | 4.06 | 4.26 |
| Operational acc. benefits (time) | Reduction of time for closure of annual accounts | 5.42 | 5.48 | 5.31 | 5.48 |
| | Reduction of time for closure of monthly accounts | 5.31 | 5.24 | 5.47 | 5.22 |
| | Reduction of time for closure of quarterly accounts | 5.39 | 5.24 | 5.31 | 5.61 |
| | Reduction of time for issuing of financial statements | 5.55 | 5.71 | 5.59 | 5.35 |
| | Total Mean Operational acc. benefits (time) | 5.42 | 5.42 | 5.42 | 5.42 |
| | Organizational acc. benefits | Improved decisions based on timely and reliable | 5.42 | 5.48 | 5.38 |
| Improved internal audit function | | 4.65 | 4.81 | 4.63 | 4.52 |
| Improved quality of reports statements of account | | 5.66 | 5.62 | 5.53 | 5.83 |
| Increased flexibility in information generation | | 5.2 | 5.19 | 5.03 | 5.39 |
| Increased integration of accounting applications | | 5.23 | 5.29 | 5.19 | 5.22 |
| ERP is user friendly with other departments | | 5.04 | 5 | 4.94 | 5.17 |
| Total Mean Organizational acc. benefits | | 5.2 | 5.23 | 5.12 | 5.25 |
| Total | Total Mean of benefits | 5.17 | 5.12 | 5.05 | 5.18 |

Appendix C

Table C1. Means of ERP accounting benefits by country (UK).

| Acc. benefit category | Variables | UK (N = 82) | | | |
|----------------------------------|-------------------------------------------------------|-------------|---------------------|------------------------------|---------------------------------|
| | | Total Mean | Textile (N = 31) | Textile products (N = 33) | Apparel manufacture (N = 18) |
| IT acc. benefits | ERP gathers data easier | 5.33 | 5.42 | 5.3 | 5.28 |
| | ERP gathers data more quickly | 5.34 | 5.35 | 5.24 | 5.44 |
| | ERP processes results easier | 5.55 | 5.45 | 5.58 | 5.61 |
| | Reduction of time for transaction entry | 4.93 | 4.81 | 5.09 | 4.89 |
| | The accounting department communicates easier | 4.42 | 4.29 | 4.48 | 4.5 |
| | Total Mean IT acc. benefits | 5.11 | 5.06 | 5.14 | 5.14 |
| Managerial acc. benefits | Improved working capital control | 4.57 | 4.68 | 4.36 | 4.67 |
| | Increased use of financial ratio analysis information | 5 | 5 | 4.94 | 5.06 |
| | Reduction of time for issuing payroll | 5.22 | 5.39 | 5.15 | 5.11 |
| | Total Mean Managerial acc. benefits | 4.93 | 5.02 | 5.82 | 4.95 |
| Operational acc. benefits (cost) | Reduction of personnel of accounting department | 4.24 | 4.39 | 4.12 | 4.22 |
| | Total Mean Operational acc. benefits (cost) | 4.24 | 4.39 | 4.12 | 4.22 |
| Operational acc. benefits (time) | Reduction of time for closure of annual accounts | 5.03 | 4.97 | 5 | 5.11 |
| | Reduction of time for closure of monthly accounts | 5.6 | 5.77 | 5.64 | 5.39 |
| | Reduction of time for closure of quarterly accounts | 5.54 | 5.65 | 5.48 | 5.5 |
| | Reduction of time for issuing of financial statements | 5.57 | 5.45 | 5.45 | 5.72 |
| | Total Mean Operational acc. benefits (time) | 5.44 | 5.46 | 5.39 | 5.43 |
| | Improved decisions based on timely and reliable | 5.26 | 5.19 | 5.42 | 5.17 |
| Organizational acc. benefits | Improved internal audit function | 4.79 | 5.03 | 4.61 | 4.72 |
| | Improved quality of reports statements of account | 5.73 | 5.9 | 5.72 | 5.56 |
| | Increased flexibility in information generation | 5.16 | 5.45 | 5.09 | 4.94 |
| | Increased integration of accounting applications | 5.17 | 5.1 | 5.09 | 5.33 |
| | ERP is user friendly with other departments | 5.32 | 5.32 | 5.21 | 5.44 |
| | Total Mean Organizational acc. benefits | 5.24 | 5.33 | 5.19 | 5.19 |
| Total | Total Mean of benefits | 5.15 | 5.19 | 5.1 | 5.14 |