

**CHAPTER FOUR**  
**FINDINGS, RECOMMENDATION, & FUTURE**  
**RESEARCH**

## **SECTION ONE**

### **FINDINGS**

This study aims to investigate the impact of activity based costing (ABC) and financial performance enhancement by investigating the effect of some successful factors on adoption of ABC system among SMCs. In addition, the study seeks to identify the difficulties or problems associated with application of ABC system and reasons for non- application. The used a descriptive analytical method to analyze quantitative and qualitative data. Quantitative data were collected from archive accounting data (cost sheets) for the year 2012. Quantitative data analyzed based on “Cooper’ model” to apply ABC system. Qualitative data were collected by using semi-structured interview for the study’s sample. The studies reached to the following findings are as follow:

- a.** A majority of selective sample of manufacturing companies in Sudan used traditional cost and management accounting systems such as absorption costing, budget, and break even point analysis rather than modern systems such as Activity based costing.
- b.** Activity based costing (ABC) is not being applied currently by SMCs.
- c.** SMCs apply or intend to apply ABC system in the near future for the reasons of: ABC system determines the cost of various activities performed in the company easily; the requirement of new manufacturing environment and cost structure to update the existing costing systems for more accurate cost information to support managerial decisions and to give competitive environment.

- d.** The application of ABC system on SMCs determined product cost more accurately which enhanced financial performance through reduced cost and increased profit. In addition, ABC system identified details information about activities costs and cost drivers which provide significant opportunities for improving activities and processes.
- e.** Factors of (cost structure, importance of cost information and competition) have positive impact on the application of ABC system among SMCs; whereas, product diversity has not a positive relationship with application of ABC system
- f.** The main difficulties with ABC application among SMCs are:
  - Lack of adequate resources (ABC skills & ABC knowledge);
  - High costs (including cost of IT) of ABC application;
  - Complexity nature of ABC application;
  - Insufficient support from top management;
  - Increased workload of cost/ management accountants;
  - Satisfaction with current systems; and
  - Resistance to change by the management/ employees.

## **SECTION TWO**

### **RECOMMENDATIONS & FUTURE RESEARCH**

#### **4.1 RECOMMENDATIONS**

According to the above study findings, the following are suggested:

- a.** There is a great need for adopting and implementing ABC system to provide more accurate cost information by manufacturing companies.
- b.** Train employees with courses to enhance their skills and experience in dimensions of activity based costing to meet the work requirements in the new business environment.
- c.** Activate the role of the modern costing systems such as activity based costing more by universities and high educational institutes to raise the level of awareness.

#### **4.2 Future Research**

- a.** The impact of organizational, behavioral, and contextual factors on application of ABC system on a large sample of manufacturing companies.
- b.** The motives, benefits, and difficulties associated with application of ABC system by Sudanese companies.
- c.** The integration of ABC system with other modern cost and management system such total quality management (TQM), Just in time (JIT), target costing (TC) in evaluating manufacturing units performance

## REFERENCES

### 1. القرآن الكريم

### 2. المراجع باللغة العربية- الدوريات

- رياض مصلح ضيف الله، الصعوبات التي تواجه تطبيق نظام التكاليف على اساس النشاط في الشركات الصناعية الاردنية،مجلة المحاسبة والادارة والتأمين، العدد الثامن والستون، السنة السادسة والأربعون، جامعة القاهرة، كلية التجارة، 2007، ص ص. 701-665.
- حاتم محمد عبدالرؤوف الشيشيني، ممارسات المحاسبة الادارية: العوامل المؤثرة عليها وأثرها على مستوى أداء المنشآت، مجلة المحاسبة والادارة والتأمين، العدد الواحد والسبعون، السنة السابعة والأربعون، الجزء الأول، جامعة القاهرة، كلية التجارة، 2008، ص ص. 555-487.
- عدنان بن عبدالله الملحم، تطبيق أساليب المحاسبة الادارية في المنشآت الصناعية في المملكة العربية السعودية، مجلة المحاسبة والادارة والتأمين، العدد الواحد والستون، السنة الثانية والأربعون، جامعة القاهرة، كلية التجارة، 2003، ص ص. 325-297.

## 3. ENGLISH LANGUAGE REFERENCES

### 3.1 BOOKS

- Arora, M.N, Cost accounting: Principles & Practice, 9<sup>th</sup> ed, Vikas Publishing House PVT Ltd, New Delhi, 2006.
- Atrill, P., & E. McLaney, Management accounting for decision makers, 4<sup>th</sup> ed, FT Prentice Hall, Pearson education, New York, 2005.
- Anthony, A.A., R.D. Banker, R.S. Kaplan, & S.M. Young, Management Accounting, 3<sup>rd</sup> ed, Prentice Hall, New Jersey, 2001.
- Atkinson, A.A., R.D. Banker, R.S. Kaplan, S.M. Young, Management Accounting, 2nd edition, Prentice-Hall, p.264

- Bodnar, G.H., & W.H. Wood, Accounting information systems, 10th ed, Pearson, New Jersey, 2001, p. 30.
- Botten, N., Managerial Accounting – Business Strategy- Strategic level, CIMA’s Official Learning, CIMA Publishing – An imprint of Elsevier, 2008.
- Brock, H.R., & L.A. Herrington, Cost accounting: Principles and Applications, 6th ed, Glencoe/McGraw. Hill, 1999.
- Upchurch, A., Management accounting: Principles & Practice, FT Prentice Hall, Pearson Education Limited, 1998.
- Brewer, P.C, R.H. Garrison, E.W. Noreen, Introduction To Managerial Accounting, McGraw-Hill, 2007.
- Chapman, C.S., A.G. Hopwood, & M.D. Shields, Handbook of Management Accounting Research, ELSEVIER, Vol.3, 2009, p.1272
- Costanzo, C., “ABN AMRO Says Web Will Anchor Its Expansion” American Banker, [www.abnamro.com/profile](http://www.abnamro.com/profile), 1999.
- Cooper, R. & R.S. Kaplan, The Design of Cost Management systems: Text, Cases, and Readings, Harvard Business Review, Prentice- Hall international, Inc., New Jersey, 1991, pp. 3-4.
- Chadwick. L., Management Accounting, Rout Ledge, London & New York, 1993.
- Drury, C., Cost & Management Accounting, 6th ed, Thomson, Australia, 2006.
- Folk, J.M, R.H. Garrison, E.W. Noreen, Introduction to Managerial Accounting, McGraw-Hill/Irwin, New York, 2002.
- Glad, E., H. Becker, Activity-Based Costing and Management, John Wiley & Sons, 1996.

- Gayle, L.R., Cost Accounting: Using a cost management approach, 6th edition, Irwin McGraw- Hill, New York, 1996.
- Hansen, D.R., Management Accounting, PWS-KENT Publishing Company, Boston, 1990.
- Horngren, C. T., Datar, S. M. and Foster G., Cost Accounting: A Managerial Emphasis, 10th ed, Pearson Prentice Hall, New Jersey, 2000.
- Horngren, C.T., G. Suddem & W. O. Stratton, Introduction to Management Accounting, 14th ed, Pearson Prentice Hall, New York, 2005.
- Horngren, C.T., G.L. Suddem, W.O. Stratton, D. Burgstahler,& J. Schatzburg, Introduction To Management Accounting, 14th ed, Pearson Custom Publishing & Pearson Prentice Hall, New York, 2008.
- Horngren, C. T., Datar, S. M. & Foster G., Cost Accounting: A Managerial Emphasis, 11th ed, Prentice Hall, New York, 2003.
- Jones, K. H, M.L. Werner, K.P. Terrel, & R.L. Terrel, Introduction To Management Accounting: A User Perspective, Prentice Hall, New Jersey, 2000.
- Jackson, S., R. Sawyers, G. Jenkins, Managerial Accounting: A focus on Decision Making, Thomson- South- Western, New York, 2006
- Johnson, H. T., & R. S. Kaplan, Relevance lost: The rise and fall of management accounting, Boston: Harvard Business School Press, 1987.
- Nigam, B.M.L., & I.C. Jain, Cost Accounting: An Introduction, Prentice Hall of India, New Delhi, 2001.
- Oowler, L.W.J.& J.L. Brown, Cost accounting and costing methods, 14th ed, Macdonald & Evans,1978
- Taylor, A.H. & H. Shearing, Financial and Cost Accounting for Management: The Fundamentals of modern cost accounting techniques, 4th ed, McDonald and Evans LTD, London, 1965

- Weygand, J.J., D. E. Kieso, P.D. Kimmel, Managerial Accounting: Tools for business Decision Making, 3rd ed, John Willy & Sons, New York, 2005.
- Warren, C., J. Reeve, P. Fees, Managerial Accounting, 8th ed, Thomson South-Western, 2005, p.133
- Webster, W. H., Accounting for Managers, McGraw-Hill, New York , 2004

### **3.2 Theses & Dissertations**

- AL-Nieel, A.H., Assessment Of The Effectiveness And Efficiency Of Modern Cost Accounting Methods In The Petroleum Production Companies In The Sudan, PhD, Dissertation in cost &management accounting ,SUST, Khartoum, 2011.
- Abusalama, F.A., Barriers to Adopting Activity Based Costing Systems (ABC): An Empirical Investigation Using Cluster Analysis, Dublin Institute of Technology, PhD, Thesis in accounting, 2008.
- Krumwiede, K.R, An Empirical Examination Of Factors Affecting The Adoption And Infusion Of Activity-Based Costing, Ph.D., The University of Tennessee, UMI company, 1996.
- Lado, J.W.J, The Adoption& Implementation Of Activity-Based Costing Techniques In Sudanese Sugar Industry, PhD, Thesis in Accounting, University of Juba, Khartoum, 2010.
- Nancy, M.M.A, Organizational and Environmental Determinants of Costing Systems and Its Impact on Corporate Performance: An Empirical study, Cairo University, Faculty Of Commerce, MSc, Thesis in accounting, 2011.



- Sanford, R.A., The Impact Of Activity-Based Costing On Organizational Performance, Nova Southeastern University, PhD, Dissertation in business Administration, ProQuest LLC, 2009.

### **3.3 Periodical**

- Al-Omiri, M., A Survey Study of The Organizational and Behavioural Factors Influencing The Adoption and Success of ABC In KSA Companies, Cost Management, Boston: 2011, Vol. 25, No. 2, pp. 38-48.

- Ayvaz, E & D. Pehlivanl, The Use of Time Driven Activity Based Costing and Analytic Hierarchy Process Method in the Balanced Scorecard Implementation, International Journal of Business and Management & Published by Canadian Center of Science and Education, Vol. 6, No. 3, 2011.

- Al-Basteri, H. and S. Ramadan: A survey of Activity-based costing practices in Bahraini manufacturing firms, JKAU: Ecom & Adm, Vol.11, 1998, pp.17-29.

- Al-Omiri, M, & C. Drury, Organizational and Behavioural Factors Influencing The Adoption And Success Of ABC In UK, Cost Management, Vol. 21, No. 6, 2007, pp. 38-48.

- Anderson, S.W., A framework for assessing cost management system changes: the case of activity-based costing implementation at General Motors, 1986-1993, Journal of Management Accounting Research, Vol. 7, 1995, pp. 1-51.

- Akyol, D. E., G. Tuncel, & G. Bayhan, A comparative analysis of activity-based costing and traditional costing, World Academy of Science, Engineering and Technology, Vol. 3, 2005.

- Al-kadash, H. & M. Feridum, The Impact of Strategic Initiatives in Management Accounting on Corporate Financial Performance: Evidence from Amman Stock Exchange, *Managing Global transitions*, Vol. 4, No.4, 2006, pp. 299-312.
- Askarany, D., M. Smith, & H. Yazdifar, Technological Innovations, Activity Based Costing And Satisfaction, *Journal of Accounting – Business & Management*, Vol. 14, 2007, pp.53-63
- Buys, P., K. Green, Strategic Costing Techniques: Activity-based Budgeting, *Accountancy SA, Accounting & Tax Periodicals*, 2007, pp. 38-40.
- Banker R.D., I.R. Bardhan & T.Y. Chen, The role of manufacturing Practices in mediating the impact of activity-based costing on plant Performance, *Accounting, Organizations & Society*, Vol. 33, 2008, pp. 1–19.
- Bjørnenak, T., Diffusion and Accounting: the Case of ABC in Norway, *Management Accounting Research*, and Academic Press limited, Vol.8, No.1, 1997, pp.3-17.
- Baird, K.M., G.L. Harrison, & R.C. Reeve, Adoption of Activity Management Practices: A Note on the Extent of Adoption and the Influence of Organizational And Cultural Factors, *Management Accounting Research*, Vol.15, No.4, 2004, pp. 383-399.
- Balakrishnan, R., E. Labro, & K. Sivaramakrishnan, Product Costs as Decision Aids: An Analysis of Alternative Approaches (Part 1), *Accounting Horizons*, American Accounting Association, Vol. 26, No. 1, 2012, pp. 1–20
- Byrne, S., E. Stower, P. Torry, Is ABC Adoption a Success in Australia?, *Journal of Applied Management Accounting Research*, Clayton North, 2009, Vol. 7, No. 1, pp.15-37.

- Buys, P., K. Green, Strategic Costing Techniques: Activity-based Budgeting, Accountancy SA, Accounting & Tax Periodicals, 2007, pp. 38-40.
- Balakrishnan, R., E. Labro, & K. Sivaramakrishnan, Product Costs as Decision Aids: An Analysis of Alternative Approaches (Part 1), Accounting Horizons, American Accounting Association, Vol. 26, No. 1, 2012, pp. 1–20
- Cagwin, D.,& Bouwman, M.J., The association between activity-based costing and improvement in financial performance, Management Accounting Research, Vol.13, No. 1, 2002, pp. 1-39.
- Cohen,S., G.Venieris, E. Kaimenaki, ABC: adopters, supporters, deniers and unawares, Managerial Auditing Journal, Vol. 20, No. 9, 2005, pp.981 – 1000.
- Cinquini, L., P. Collini, A. Marelli, A. Tenucci, An Exploration of The Factors Affecting The Diffusion of Advanced Costing Techniques: A Comparative Analysis of Two Surveys (1996-2005), The 31st Annual Congress of the European Accounting Association Campus of the Erasmus University, Rotterdam (NL) April, 23rd to 25th, 2008, pp.1-17.
- Cooper, R., R. Slagmulder, Activity-based budgeting: Part 1, Strategic Finance, Vol. 82, No. 3, 2000, ABI/INFORM Global, pp. 84-85.
- Cooper, R., R. S. Kaplan, Activity-Based Systems: Measuring the Costs of Resource Usage, Accounting Horizons, Vol. 6, No. 3, Sarasota: 1992, pp. 1-12.
- Cooper, R., & R.S. Kaplan, Profit priorities from activity-based costing, Harvard Business Review, Vol. 69, No.3, 1991, pp. 130-137.
- Cooper, R., & Kaplan, R., From ABC to ABM, Management Accounting, 1992, pp. 54–57.

- Cooper, R., & Kaplan, R., How cost accounting distorts product costs, *Management Accounting*, Vol. 69, 1988a, pp. 20–27.
- Cooper, R., Kaplan, R. S., Lawrence, S.M., E. Morrissey, R.M., Oehm, From ABC to ABM, *Management Accounting*, Vol. 74, No. 4, 1992, ABI/INFORM Global, pp. 54- 57.
- Cooper, R., R. Slagmulder, Activity-based budgeting-part 2, *Strategic Finance*, Vol. 82, No. 4, 2000, ABI/INFORM Global, pp. 26- 28.
- Cooper, R., R. Slagmulder, Activity-based budgeting-part 1, *Strategic Finance*, Vol. 82, No. 3, 2000, ABI/INFORM Global, pp. 85- 86.
- Cobb, I., Innes, J. & F.Mitchell, Activity-Based Costing: Problems in Practice, *CIMA*, 1992, p.30.
- Coulter, D., G. McGrath, A. Wall, Time-Driven Activity-Based Costing, *Accountancy, Ireland*, Vol. 43, No. 5, 2011, ABI/INFORM Global, pp. 12- 15.
- Dosch, J., & M. Wilson, Are you satisfied with your company’s ABC system? *Cost Management*, Vol.21, No. 12, 2007, ABI/Inform Global, pp. 40-44
- Dhu, R., T.W. lin, W.Y. Wang, & G.C.H. Hung, The Design And Implementation Of Activity Based Costing (ABC): A Case Study Of A Textile Company, *International Journal Of Accounting And InformationManagement*, [www.Emeraldinsght.Com/18347649.Htm](http://www.Emeraldinsght.Com/18347649.Htm), Vol.17, No.1, 2009, pp. 27-52.
- Dimitropoulos, P., Activity -based costing in Sport organizations: Theoretical Background & Future Prospects, *XOPHIA (Sport Management International Journal (SMIJ))-CHOREGIA (Scientific Fourm in Sport Management)*, Vol.3, No.2, 2007, pp.17-25.

- Dalci, I., V. Tanis, & L. Kosan, Customer profitability analysis with time-driven activity-based costing: a case study in a hotel, *International Journal of Contemporary Hospitality Management*, Vol. 22, No. 5, Emerald Group Publishing Limited, [www.emeraldinsight.com/0959-6119.htm](http://www.emeraldinsight.com/0959-6119.htm), 2010.
- El temsahi, A., & D. Fadaly, Investigation of the in-firm contingent factors to the adoption of recent management accounting practices, *Accounting, Management & Insurance Review*, No. 12, Cairo University Press, 2009, pp.53-96.
- Everaert, P, G. Cleuren, S. Hoozée, Using Time-Driven ABC to Identify Operational Improvements: A Case Study In A university Restaurant, *Cost Management*, Vol. 26, No. 2, 2012, ABI/INFORM Global, pp. 41- 48.
- Fei, Y., Z. & C.R.Isa, Factors Influencing Activity-Based Costing Success: A Research Framework, *International Journal of Trade, Economics and Finance*, Vol. 1, No. 2, 2010, pp.144-150.
- Garg, A., A. Rafiq, Using activity-based costing to improve performance, *Bank Accounting & Finance*, Riverwoods, Vol. 15, No. 6, 2002.
- Granof .M. H., D.E. Platt and I.Vaysman, Using Activity-Based Costing to Manage More Effectively, *The PricewaterhouseCoopers Endowment for the Business of Government, Grant Report*, 2000, pp.1-31.
- Gupta, M., K. Galloway, Activity-based costing/management and its implications for operations management, *Technovation*, Vol. 23, 2003 pp.131–138
- Innes, J., F. Mitchell, & D. Sinclair, Activity-based costing in the U.K.'s largest companies: a comparison of 1994 and 1999 survey results, *Management Accounting Research*, <http://www.idealibrary.com>, Vol. 11, No.3, 2000, pp. 349-362

- Innes, J., & Mitchell, F., A survey of activity-based costing in the U.K. 's largest companies, *Management Accounting Research*, Vol. 6, 1995, pp. 137–153
- Innes, J., & F. Mitchell, *Activity Based Costing, A Review with Case Studies*, CIMA, 1990.
- Innes, J. & G. Norris, The use of activity-based information: A managerial perspective, *CIMA Publishing Picks a Topic, Management Accounting*, December 1999, pp.80-81.
- Ittner, C. D., W. N. Lanen, & D. F. Larcker, The Association Between Activity-Based Costing and Manufacturing Performance, *Journal of Accounting Research*, University of Chicago on behalf of Institute of Professional Accounting, Vol.40, 2002, pp.711-726.
- Kennedy, T. and J. Affleck-Graves: The Impact of Activity-Based Costing Techniques on Firm Performance, *Journal of Management Accounting Research*, Vol.13, 2001, pp.19-45.
- Krumwiede, K. R., The implementation stages of activity-based costing and the impact of contextual and organizational factors, *Journal of Management Accounting Research*, Vol.10, 1998, pp. 239–278.
- King, A. M., The Current Status of Activity-Based Costing: An Interview with Robin Cooper & Robert S. Kaplan, *Management Accounting*, Vol. 73, No. 3, 1991.
- Krumwiede, K.R., & W. G. Jordan, Fewer Companies Believe ABC is Necessary, *New Survey Findings, Cost Management Update*, No.83, 1998, pp.1-3.
- Kennedy, T.: The impact of activity-based costing techniques on firm performance, Henley business school at university of

Reading,<http://www.henleymc.ac.uk/elibrary/theses02.nsf/papers/361731>,  
1997.

- Kaplan, R. S. & S.R. Anderson, Time-Driven Activity-Based Costing, 2004, pp.1-18.

- Kaplan, R. S. & Steven R., Anderson, The Speed-Reading Organization, Business Finance, [www.searchfinance.com](http://www.searchfinance.com), 2007, pp. 39- 42.

- Kaplan, R.S., The Four-Stage Model of Cost Systems Design, Management Accounting, Vol. 71, No.8, 1990, pp. 22-26.

- Kaplan, R. S. & S. R. Anderson, The Speed-Reading Organization, business finance, [www.searchfinance.com](http://www.searchfinance.com), 2007, pp. 39-42.

- Lawson, R.A., The Use Of Activity-Based Costing In the healthcare Industry: 1994 vs. 2004, Research in Healthcare financial management (RHF.M. Ltd), Vol. 10, No. 1, pp. 77-94.

- Liu, L.Y.J.L. & F. Pan, The Implementation Of Activity-Based Costing In China: An Innovation Action Research Approach, The British Accounting Review, [www.sciencedirect.com](http://www.sciencedirect.com), Vol. 39, No.3, 2007, pp. 249-264.

- Liu, L.Y J, J. J. Robinson; J. Martin, An application of activity-based budgeting: A UK experience, Cost Management, Vol.17, No. 5, 2003, ABI/INFORM Global, pp. 30- 36.

- Lin, Z.J., and Yu, Z., Responsibility Cost Control System in China: A Case of Management Accounting Application”, Management Accounting Research, Vol. 13, No. 4, 2002, pp. 447-467.

- Malcolm, S., Managing your ABC system, Management Accounting, 1994, Vol. 75, No. 10, pp. 46- 47.

- Majid, J. A., & M. Sulaiman,, Implementation of activity-based costing in Malaysia: A case study of two companies, Asian Review of Accounting, 2008, Vol. 16, No.1, pp.39-55.

- Maelah, R., & Ibrahim, D. N, Activity based costing (ABC) adoption among manufacturing organizations - the case of Malaysia, *International Journal of Business and Society*, 2006, Vol.7, No.1, pp. 70-101.
- McGowan, A. S., & T. P. Klammer, Satisfaction with activity-based cost management implementation, *Journal of Management Accounting Research*, Vol. 9, 1997, ABI/INFORM Global, pp 217–238.
- Maelah, R., & D.N. Ibrahim, Factors Influencing Activity-Based Costing (ABC) Adoption in Manufacturing Industry, *Investment Management and Financial Innovations*, Vol. 4, No.2, 2007, pp.113-148.
- Myers, J. K , Traditional versus Activity-based Product Costing Methods: A Field Study In A Defense Electronics Manufacturing Company , *Proceedings Of ASBBS*, Vol. 16 No. 1, ASBBS Annual Conference: Las Vegas , 2009, pp.
- Ning, Y., The Development of Costing Systems: A Historical Perspective, *Journal of Modern Accounting and Auditing*, ISSN1548-6583, USA, 2005, Vol.1, No.2, pp. 16-29.
- Narong, D.K., Activity-based Costing and Management: Total Quality Management Solution to Quality Cost Shortcomings of The Traditional Cost Accounting Systems, MSc of Accounting, California State University, 2008.
- Pike.R.H, M.E.Tayles, N. N. Abu Mansor, Activity-based costing user satisfaction and type of system: A research note, *The British Accounting Review*, [www.elsevier.com/locate/bar](http://www.elsevier.com/locate/bar), Vol. 43, 2011, pp.65–72
- Popesko, B., Activity-Based Costing Application Methodology For Manufacturing Industries, *E+M Ekonomie a Management* , ABI/INFORM Global, No. 1, 2010, pp.103-114.



- Rasiah, D., Why Activity Based Costing (ABC) is Still Tagging Behind The Traditional Costing In Malaysia?, *Journal of Applied Finance & Banking*, Vol.1, No.1, 2011, pp.83-106
- Ralph, B.F., Activity-based costing and the theory of constraints: Using time horizons to resolve two alternative concepts of product cost, *Journal of Applied Business Research*, 1998, Vol.14, No.1, pp. 83-89.
- Sartorius, K., C. Eitzen, & P. Kamala, The design and implementation of Activity Based Costing (ABC): a South African survey, *Meditari Accountancy Research*, Vol. 15, No.2, 2007, pp. 1-21.
- Shevasuthisilp, S., & K. Punsathitwong, Analysis of ABC in the after Press Services Industry, *Proceedings of the International Multi Conferences of Engineers and Computer Scientists*, 2009, pp. 18-20.
- Scroute, M., Determinants of the adoption and use of Activity-Based Costing, *Research Memorandum (RM)*, Amsterdam Research Center in Accounting (ARCA), Vrije university, 2004.
- SAP AG, White Paper - Business Intelligence – Aiming for the Strategic Costing System, <http://www.sap.com/contactsap>, 2009.
- Turney, P.B.B., Activity-based management, *Management Accounting*, Vol. 73, No.7, 1992a.
- Tucel, G., D.E. akyol, G. M. bayhan, U. koler, Application of Activity-Based Costing in a Manufacturing Company: Comparison with Traditional Costing, *Computer science CCS*, <http://www.springerlink.com/content/978-3-540-26044-8/>, 2005, pp. 1-1
- UYAR, A., Cost and Management Accounting Practices: A Survey of Manufacturing Companies, *Eurasian Journal of Business and Economics* 2010, Vol.3, No.6, pp. 113-125.

- Wijewardena, H., A. D. Zoysa, a Comparative Analysis of Management Accounting Practices in Australia and Japan: An Empirical Investigation, the International Journal of Accounting, Vol. 34, No.1, 1999, pp. 49-70.
- Wegmann, G., The Activity-Based Costing Method: Development and Applications, The IUP Journal of Accounting Research, Vol. VIII, No. 1, 2009, pp. 7- 23.
- Zaman, M., The impact of Activity-Based costing on firm' performance: The Australian Experience, International Review of Business Research Papers, Vol. 5, No. 4, 2009, pp.200-208.

## **INTERVIEW QUESTIONS**

**Please provide answers to all following questions:**

**Section One: Profile of interviewees**

**Please indicate the following information:**

1. Work Position.....
2. Academic Qualifications.....
3. Professional Qualifications.....
4. Experience Years.....

**Section Two: Company Characteristics**

5. No. of employees work in your company.....
6. No. of cost/management accountants work in your company .....
7. No. of products does company provide.....
8. The percentage of overhead cost to total costs.....
9. The type of industry in which your company operates.....

**Section Three: General Information about Company' costing systems**

10. Does your company's have a department for costing system?
11. Does your company's costing system incorporated in financial accounting system or separated?
12. What types of cost/management accounting systems being used by your company?

Job Costing	
Process Costing	
Absorption Costing	
Variable Costing	
Standard Costing	
Cost-Volume-Profit analysis (CVP)	9

Budgeting	9
Target Costing (TC)	
Total Quality Management (TQM)	
Activity-Based Costing (ABC)/ Management (ABM)	
Balanced Scorecard (BSC)	
Just in Time (JIT)	
Theory of Constrains (TOC)	
Other tools/ techniques (please specify)	

**13. What are main purposes for using costing systems in your company?**

Cost reduction	
Cost control	
Preparing financial statements (stock valuation)	
Performance measurement	
Cost planning	
Budget	
Variance analysis	
Product profitability analysis	
Customer profitability analysis	
Making decisions such as: <ul style="list-style-type: none"> <li>• Pricing</li> <li>• Make or buy</li> <li>• Producing new products</li> <li>• Product redesign</li> <li>• Adding and dropping products, product line or department</li> <li>• Introducing new market</li> </ul>	

Any other purposes ( please specify)	
--------------------------------------	--

**Section Four: Status of adoption of activity based costing system and reasons for adoption**

**14.**What is the current status of activity based costing adoption in your company?

a. The company has not adopted or implemented ABC system	
b. The company adopted (not implemented) ABC system and then rejected	
c. The company has currently implemented ABC system	
d. The company has begun or plans to adopt and implement ABC system	
e. The company plans to adopt and implement ABC system in the near future	

**15.**What are main reasons does your company adopt or intend to adopt ABC system in the future?

The existing costing system was not reliable and useful information for managerial decision.	
The existing costing system did not provide information to determine the cost of various activities performed in the company easily.	
The changing manufacturing environment and cost structure created the need to improve and update the existing costing systems to support managerial	
Our competitors were using ABC	
Pressure from government or other regulatory authorities	
ABC system improves product cost information which give the company competitive advantage.	
Others (please specify)	

**Section Five: Factors influence the adoption of activity based costing  
and difficulties and problems associated with activity based costing**

**16.** What does your company use cost information?

a. Product costs information must be highly reliable for competition purposes	
b. Operating costs data is extremely important in cost reduction efforts	
c. Product costs are very important for the purpose of cost control	
d. Cost information is the most important factor when making decisions such as Pricing , Make or buy, Producing new products, Product redesign, Adding and dropping products, product line or department, Introducing new market	
Other (please specify)	

**17.** What are aspects of the manufacturing process of your company?

a. Product lines are more quite different	
b. Most products are different in product volumes or lot sizes	
c. Most products require similar resources to be manufactured, designed, and distributed	
d. The costs of support departments (e.g., engineering, purchasing, marketing) are about the same for each product line)	

**18.** To what extent does your company face competition?

a. The level of competition for your products has significantly increased over the past 10 years	
b. Price competition within this industry is extremely intense	
c. The level of competition in the market for the major products of your products is extremely intense.	

19. What are main difficulties and problems associated with ABC adoption or reasons for non adoption of ABC system in your company? (Tick as appropriate)

High costs (including cost of IT) of ABC implementation	
Complexity nature of ABC system with regard to determining activity cost pools and suitable cost drivers	
Insufficient support from top management	
No special cost accounting department	
Lack of adequate resources to effectively implement ABC (training, ABC skills or experts....etc.)	
No consultants and guidance center to develop costing systems in your company	
Lack of ABC knowledge by most of the accounting & employees staff skills in designing and operating ABC system	
Increased workload of cost/ management accountants	
Lack of training in advanced costing system by company	
Satisfaction with current costing system	
Lack of acceptance by managers	
Resistance to change by the management/ employees	
Pricing decision based on other economic factors (supply, demand, competition) than cost	
Our competitors are not introducing ABC	
The company does not operate in a very competitive environment , so an ABC system is not required	
Other difficulties (Please specify)	