

ACCOUNTING INFORMATION SYSTEM AND INTELLECTUAL CAPITAL SUPPORT SUSTAINABLE DEVELOPMENT OF MANAGEMENT

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ABSTRACT

The purpose of this paper is to recognize the importance of sustainable development of management in firms that is based human resource development activities whereas accounting information system as tools to do data processing with capability of intellectual capital that fit it from certain discipline may drawn quality of life of one country. This study uses meta-analysis as the explanation approach as finding out the performance of accounting information system with capability of intellectual capital both as the bridges to sustainable development of management through human resource development activities whereas automatically quality of life of one country can be drawn and it may necessary be approved by empirical study for the next future research. Accounting Information System and Intellectual Capital both will produce the information standards that will be performed by human resource development activities that result on the sustainable development of management than can be fully implemented. The accounting information system and intellectual capital value to perform knowledge that brings quality of life in one country can be counted through human resource development activities to contribute sustainable development of management and all those characteristics have different kind of situation will affect different information standard that can be proved by empirical study.

Keyword : *accounting information system, intellectual capital, human resource development, sustainable development of management.*

INTRODUCTION

Due to the strong basis of accountability quality of life, achieving of sustainable development management becomes awareness of knowledge development. This writing purpose is to scheme the big picture of the sustainability development of management based on supporting of both accounting information system and intellectual capital as a bridge through human resource development activities. One high motivation reasons for me to write is concerning the poor performance in third world countries and crisis happening in developed countries as the human resource development is not yet working successfully. However, the sustainable development of management that comes out with integrated knowledge may recognize also consciousness and ability to accept any kind of information that is useful for their living everyday. Ironically, nowadays, the sustainable development of management faced the uncertainty for specialized to be predicted remembering the variety of indicator that may influence the system itself considered have difficulty in their measurement which the application of disciplined may have not been found yet. Hereby, I write about the sustainable development of management to support reducing the uncertainty which may put some important basis to be considered based on description data and also may support the practices to contribute the company performance

from time to time for necessity of quality of life around the world, or at least for the countries, primarily for developing countries. Some previous researchers from The Brundtland Report (1989) defined sustainability as the capacity to meet the needs of the present without compromising those of future generation. On the other hand, the meaning of sustainability implies today debated such as from the question of whether growth and sustainability can ever go together (Daly, 1990); and from the creation of concept that can drive real sustainability, such as the BuenVivir (Walsh, 2010), to the urgent of today's crises. Using purchasing power parity exchange rates, Chen and Ravallion (2007) estimated a time series of the number of people in absolute poverty. Their results indicated that people living below the extreme poverty line of USD 1 per day decreased between 1981 and 2004 from 1,470 million to 969 million worldwide. The percentage of extremely poor fell from 40% to 18%.

Collier (2007) proposed different solution for different countries categorized by geographic differences. Resource of rich countries with high ethnic diversity needs strong checks and balances on how governments use their power and distribute funding (YuyaKajikawa, 2007). Nieuwsma (2007) found difficulties in sustainability development projects arising from the conflict among different languages, such as the languages of market economics, technology-science, rural development, and local knowledge, used by different stakeholders in different organizations. Sustainability consumption is becoming a definable area of international environment politics, especially since the Rio Declaration on Environment and Development, which encourages the reduction and elimination of unsustainable patterns of production and consumption (Cohen 2005). Marten (2006) identified the following procedural elements in sustainability science: analysis of deeper-lying structures of the system, projection in to the future, assessment of sustainable and unsustainable trends, evaluation of the effects of sustainable policy, and the design of possible solution through sustainable strategies. The basic components of sustainability science: goal setting, indicator setting, indicator measurement, causal chain analysis, forecasting, back-casting, problem-solution chain analysis (YuyaKajikawa, 2007). Sustainability indicators have been proposed and published around the world, and there are 894 entries in the database of Compendium of Sustainability Development Indicator Initiatives (IISD 2010). Sustainability indicators are developed to represent what is to be sustained, what is to be developed, and for how long (Parris and Kates, 2003).

On the other hand, at the very basic of **14 principles of management** – fundamental rules of management that could be applied to all organizational situations stated as following :

1. *Division of work. Specialization increases output by making employees more efficient*
2. *Authority. Managers must be able to give orders, and authority gives them this right.*
3. *Discipline. Employees must obey and respect the rules that govern the organization.*
4. *Unity of command. Every employee should receive orders from only one superior.*
5. *Unity of direction. The organization should have a single plan of action to guide managers and workers.*
6. *Subordination of individual interests to the general interest. The interests of any one employee or group of employees should take not take precedence over the interests of the organization as a whole.*
7. *Remuneration. Workers must be paid a fair wage for their services.*
8. *Centralization. This term refers to the degree to which subordinates are involved in decision making.*

9. *Scalar chain.* The line of authority from top management to the lowest ranks is the scalar chain..
10. *Order.* People and materials should be in the right place at the right time.
11. *Equity.* Managers should be kind and fair to their subordinates.
12. *Stability of tenure of personnel.* Management should provide orderly personnel planning and ensure that replacements are available to fill vacancies.
13. *Initiative.* Employees who are allowed to originate and carry out plans will exert high levels of effort.
14. *Esprit de corps.* Promoting team spirit will build harmony and unity within the organization.

Based on Mintzberg, Henry, The nature of Managerial Work, 1980, pp. 93-94:

- Interpersonal roles are ones that involve people (subordinates and persons outside the organization) and other duties that are ceremonial and symbolic in nature. (figurehead, leader, liaison)
- Informational roles involve collecting, receiving, and disseminating information. (monitor, disseminator, spokesperson)
- Decision roles entail making decisions or choices. (entrepreneur, disturbance handler, resource allocator, negotiator).

Previous research discussed how a newly appointed CEO of the Fosters Brewing Group reversed a decline in performance by adopting, among other initiatives, the balanced scorecard approach to management (Sanjoy Bose, Keith Thomas, 2007). Another researcher provides that sustainability Balanced scorecard is a strong tool for an integrated sustainability management (Frank Figge, Tobias Hahn, Stefan Schaltegger and Marcus Wagner, 2002).

Previous researcher compares balances scorecard and intellectual capital and finds important differences between their theoretical underpinning, which suggest that the breath of indicators will work differently in organizations (J. Mouritsen, H. Thorsgaard Larsen, P.N. Bukh, 2005).

In subject related Intellectual capital, one researcher provided the framework of intellectual capital that is compared and measurement of intellectual capital is examined (Niamh Brennan and Brenda Connell, 2000). Previous research also estimated of intellectual capital in European Union using knowledge model (José Luis Alfaro Navarro, Víctor Raúl López Ruiz, Domingo Nevado Peña, 2011).

In other subject related Accounting Information System, previous researcher mentioned that information system as a reference discipline based on the theories and methods of these disciplines serve to set the standards by which the quality and maturity of IS researched should be measured (Richard L. Baskerville, Michael D. Myers, 2002). Another researcher investigates assessing the impact from information system quality with the objectives of exploring the system quality based on test integrative model, which includes system quality as a determinant of the extent of system usage, the benefits derived from the system and the system impact on the user's jobs (Tor Guimares, D. Sandy Staples and James McKeen, 2007). Previous researcher also examines the need for IS assessment and suggests a comprehensive IS assessment framework linked to the organizational performance using existing IS assessment theory as a base and incorporating measurement concepts from other disciplines (Barry L. Myers, Leon A Kappelman, Victor R. Prybutok, 1997). More, previous study provides the first empirical test of an adaptation of DeLone and MCLean's Model in the user-developed application domain. The model provided strong support for the relationships between perceived system quality and user satisfaction, perceived information quality and user satisfaction, user satisfaction and intended use, and user satisfaction and perceived individual impact. (Tanya McGill, Valerie Hobbs, Jane

Klobas, 2003); also, study using DeLone-McLean Model to show that perceived system quality and perceived information quality are significant predictors of user satisfaction with the system, but not of system use. User satisfaction was found to be strong predictor of individual impact, whereas the influence of system use on individual impact was insignificant (Juharni Livari, 2005). Previous research describes the information system effectiveness to senior management (Mary C. Iacoby, Rudy Hirschheim, 1994); Information System (IS) function support in evaluating performance in one organization (Ahmad A. Rabaa'I, Guy G. Gable, Wasana Bandara, Erwin Fieft, 2010).

More, The uncontrollable human resource development has the highest value to do the controlling not the machine. The brain development to control the resources may involve the economy system cycle that automatically will perform the balancing of the quality of life in one nation.

Advancing sustainability will require choice and decision making, and values are a fundamental part of this process (Lockwood, 2005). Values may be defined as broad preferences concerning appropriate course of actions or outcomes (Wood et. al., 1998, p. 107). Values in practice represent a person's sense of right and wrong, or what ought to be. We must also keep in mind that concepts of the future may depend upon ethnicity, linguistic background, lifestyle, and life expectancy (Crabbe, 2006).

LITERATURE REVIEW

Both Accounting Information System and Intellectual Capital are as bridge to achieve sustainable development of management and human resource development activities.

Based on Al Qur'an, Ibrahim 24 :

See you not how Allah sets for a parable? A goodly word as a goodly tree, whose root is firmly fixed, and its branches (reach) to the sky (i.e. very high)

Based on Al Qur'an, Ibrahim 25 :

Giving its fruit at all times, by the leave of its Lord, and Allah sets forths parables for mankind in order that they may remember.

The example words above from Ibrahim 24, and Ibrahim 25 involved such big pictures of good quality of life and the proof of sustainable development of management with using intellectual capital and accounting information system as bridge through human resource development activities, and the capability of information standard to be processed brings the sustainability development of management from time to time in well manner. To be remembered that variety of human being activities in organization sized can be categorized on different knowledge generation and information requirement.

According to K.P Tripathi, Information requirements consists of source, scope, level of aggregation, time horizon, currency, required accuracy, and frequency of use. On the other side knowledge generation assuming on certainty, transferable, beneficial, usefulness, applicable, change from time to time, continuously, and growth.

In general, the pictured cycle consist activities as following:

1. Acknowledgement : when certain knowledge can be adopted
2. Observation : when the samples may represent of information standardization
3. Integrated : when the purpose of the living standard may achieved the appropriate performance
4. Assessment : when life expectancy strictly performed
5. Controllable : when the highest value goes to brain development appreciation
6. Sustainable : when the cycle growth on and on
7. Development : when education in charge in appropriate manner

Firstly, subject related to sustainable development has been defined as the Brundtland Report:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- *the concept of **needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and*
- *the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs."*

The essence of sustainable development is simply this : to provide for the fundamental needs of humankind without doing violence to the natural system of life on earth (Pim Martens, 2006). This idea arose in the early 1980s and came out of a scientific look at the relationship between nature and society. The concept of sustainable development reflected the struggle of the world population for peace, freedom, better living conditions, and a healthy environment (NRC, 1999).

Previous studies have been, and are being conducted that develop and use sets of indicators for measuring sustainability (Bell & Morse, 2003; Bossel, 2001; Gustavson, Lonergan & Ruitenbeek, 1999; Schultink, 2000; Walker & Reuter, 1996).

Further research is needed to keep the knowledge base growing and to ensure that sustainable development becomes ever more effective (Wilderer, 2007).

Secondly, subject related to intellectual capital of mankind as the dominant factor for controlling matters. Example, for some reasons, the crises may come from the wrong-interpretation and mismanagement intellectual of mankind that supporting only certain entities that conflict with public interest that may cause the injury of the economy system that supposed to be implemented. The mankind intellectual as the most important controller may bring about sustainable development of management talks about the precise accounting information and watching the existing environment to perform higher future profit. The mankind intellectual is building the foundation of the sustainable development of management may involve such as knowledge management, Risk management, Property management, .and strategies management.

Mankind intellectual may provide best assumption as long as the restricted implementation of ruled based does not become the power of expenditure for numbers of property. For example, Entities have to concern between the long lasting of natural resources that are provided and the number of property that have been managed. The Number of property is not supposed to be performed only in financial accounting report for investors but also it is necessary to assess the entities activities in giving environment protection as the result of the entities activities.

Thirdly, subject related Accounting information system contain of five components :

1. People that operate the system and do the tasks
2. Procedures, manual and automatic that involve collecting, process and saving file of the organization activities
3. Data of business organization processes
4. Software that is used to process the organization data
5. Information technology infrastructure, including computer, peripheral device and communication networking

Three functions of Accounting information system in organization are as following:

1. Collecting and saving data of organization activities, resource that influenced by those activities, and the people that involve in those activities so that management, employees other side can review the event that have occurred
2. Changing the data become useful information for management for decision making in planning, implementation and monitoring activities

3. To provide the right controlling to keep up the organization assets, including organization data to ensure that data are provided is needed, accurate, and accountable

First, Accounting information system (AIS) can identify any situation that needs management actions. For example, cost report with different variance could be stimulated the management to investigate, to take the correction actions. Second, with reducing the uncertainty, accounting information give basic thought for choosing the alternative actions. For example, accounting information can be used for dispute price and credits. Third, information that brings the decision give valued feedback that can be used to recovery the next decision making.

AIS subsystems process financial transactions and nonfinancial transactions that directly affect the processing of financial transactions. For example, changes customers' names and addresses are processed by the AIS to keep the customer file current.

AIS is composed of three major subsystems :

1. The transaction processing system (TPS) is central to overall function of the information system by converting economic events into financial transactions; recording financial transactions in the accounting records (journals and ledgers); and distributing essential financial information to operations personnel to support their daily operations. The TPS consists of three transaction cycles : the revenue cycle, the expenditure cycle, and the conversion cycle.
2. The general Ledger /financial reporting system (GL/FRS), which produces the traditional financial statements, such as the income statement, balance sheet, statement of cash flows, tax returns, and other reports required by law.
3. Management Reporting System (MRS), which provides internal management with special purpose financial reports and information needed for decision making such as budgets, variance reports, and responsibility reports.

Fourthly, the quality of mankind (human resource) to be develop in term of reaching the sustainable development of management has dominant activities because the key success factor of the sustainable development of management is to perform the better quality of life expectancy that may involved the each country's mankind intellectual.

LITERATURE REVIU

Urgency of Financial

The human intellectual may involve for many assumptions for providing the financial reporting and minimize the loss as much as they try to reach higher profitability without having damage of the environment.

Urgency of Information

The content of information standard would never end as the human being recognizes the number of profit that needs reducing the environmental damage by its costs and reducing the loss that may cause mismanagement in the future through the number of profit that is accounted. The sustainability of environment damage recovery is the way to perform sustainability profit for the next generation. The environment has to be protected and to be avoided from ruin.

Urgency of Policy development

The law enforcement to perform firm activities through human resource development is implicitly to reach their profit goals. Entities have to be guided by rules and so does the environment management. When the policy goes to low enforcement, the high risk organization may return injured and the entities reputation in public.

Urgency Society measurement

The appropriate measurement involve the good corporate governance indicators may bring the better society environment through not only the society culture supporting the entities but also providing the entities system as the prototype of society environment in measurement so that the life expectancy can be fulfilled.

Urgency of Human ecology

Environmental quality system is built by human being. The environment quality system will be upgrading from time to time related to its influence to human resource development as the environmental changed based on sustainability development management that may discover and accounted for the power of firm profitability and performed good quality of life.

A starting point in Intellectual Capital and Accounting Information System are as the bridge between Sustainable Development of Management and Human Resource Development.

Preliminary – Human resource development activities that supported by Intellectual Capital and Accounting Information System are essentially to do decision making.

In related to this, the management has to know how to choose varieties of information system which each plays a different role in organizational hierarchy and decision making process (Asefeh Asemi, PhD, Ali Safari, PhD., Adeleh Asemi Zavareh, PhD., 2011).

To support the observation above, Sustainable Development of Management is doing by management level know how well whereas the management using the existing and available information in order to perform his or her organization by having beneficial through Accounting Information system that it is supporting growth of the quality of information itself.

As a key consideration, Sustainable Development of Management used by management may necessarily evaluate the expert of human resource who used the accounting information system in order to do decision making in term of management control activities. Management control system influences the behavior of organizational resource to implement organizational strategies (Dr. Habibollah Salarzahi, Dr, Baqer Kord, 2010).

Essentially, the sustainable development of management who used the system has to be established their system in getting information in Accounting Information System for management to be controlled. Previous researcher presented research model that examined the relationship between the design and use of management control systems and their direct or indirect impact on IT performance (Son Sertac, Wietzel, Tim, Gladyszewski).

Furthermore, Accounting Information System with good quality information is very crucial in helping business checked and balanced in order to keep management control system properly. The researcher provides a framework to estimate the perceived value of management control in IT organizations. (Son Sertac, Wietzel, Tim, Gladyszewski).

In addition, most Accounting Information System will do updating of the occurrences in company or system. Still, Accounting information system (AIS) is very easy to be improved and programmed by the owner to conduct certain actions in certain times. Every organization needs their complete and comprehensive system for all organizations (Dr. Habibollah Salarzahi, 2010).

As fundamental point, Sustainable Development of Management will help managers to do more accurate actions with multitask that will increase efficiency in a company or organizations.

On another level, Accounting information system gives huge contributing to manage information that is very useful for the company in order to do decision making when the management level implement sustainable development of management for achieving the good quality of life in general, and the company performance specifically.

Again, Accounting information system is supporting sustainable development of management with its operation on systematic methods of operations. Accounting Information System (AIS) tends to be more practical business tools and well performed to do decision making.

Finally, Intellectual Capital in operation method while using Accounting information system will supporting sustainable development of management activities daily based on the human resource development activities and based on playing all role and operate all the system in order to take decision making.

Suggestion and Discussion

When the sustainable development of management is fully implemented, it becomes the issued to apply the recognizing of the certain discipline such as accounting performance that is supported by technology uses; the better the management, it will automatically had been implemented in its performance in the terminology of increasing not only the value of entities but also to have better profitability performance. Other concern that counted as most influence issue is how to perform the sustainability mankind intellectual through knowledge transfer in human resource development activities as the key factor of sustainability firm performance.

Conclusion

However, numbers of property becomes high interesting information among the mankind intellectual. Since then the differences point of view to find the assumption must result to such as numbers of accuracy, continuously, growth, etc., in intellectual capital and also showing the re-engineering of reporting on accounting performance itself. Hereby, the mankind intellectual has tasks to perform the best assumption in providing information at all costs as well as they earned including to show the certainty of future prediction through their reporting.

REFERENCES

- Al Quran Al Qur'an : Ibrahim 24, Ibrahim 25.
- Ahmad A. Rabaa'i, Guy G. Gable, Wasana Bandara, Erwin Fieft, 2010, Re-conceptualising IS function's support performance : a preliminary Model", <http://www.pacis-net.org/file/2010/S13-01.pdf>
- Ajay Kumar Singh, Accounting Information System for Human Response Management, Delhi Business Review, Vol. 1 No. 2, July-December 2000.
- Alan D. Hecht, William H. Sanders III, 2007, How EPA research, policies, and programs can advance urban sustainability, sustainability: Science, Practice & policy, <http://ejournal.nbii.org>
- Anastasia Diana, Lilis Setiawati, Sistem Informasi Akuntansi, Penerbit ANDI Yogyakarta, 2011.
- Asefeh Asemi, Ph.D, Ali Safari, Ph.D., Adeleh Asemi Zavareh, Ph.D., The Role of Management Information System (MIS) and Decision Support System (DSS) for manager's decision making process, International journal of Business and Management, Vo. 6 No.7, July 2011.

- Baiq Anggun Hilendry Lestari, SE, M.SI, AK, DRA. Zulaikha, MSI, AKT, Pengaruh information technology relatedness terhadap capability sebagai variabel intervening, Simposium Nasional Akuntansi X, Unhas Makassar 26-28 Juli 2007.
- Bambang Juanda, Upik Rosalina Wasrin, Selection and modeling of sustainable development indicators : Indonesian Case
- Barry L. Myers, Leon A. Kappelman, Victor R. Prybutok, A Comprehensive Model For Assessing the Quality and productivity of the Information System Function: Toward a theory for Information Systems Assessment, Information Resources Management Journal, Winter 1997; 10,1; ABI/INFORM Global.
- Bossel, H., 2001, Assessing viability and sustainability : a systems-based approach for deriving comprehensive indicator sets, 2001, Ecology and society
- Bruce Warburton, Jin D. Coleman and Mark Fuglestad, JensDietrich, Developing a decision support system for improving possum control planning, 2007
- David Otley, Performance Management : A framework for management control system research, Management accounting research, 1999, 10, 363-382.
- Dean Nieusma, 2007, Challenging knowledge hierarchies : working toward sustainable development in Sri Lanka's energy sector, Sustainability: Science, Practice & Policy, <http://ejournal.nbii.org>
- Debal Deb, 2006, Development Against Freedom and Sustainability, Capitalism, Nature, Socialism, 17,4, ProQuest Sociology, p. 49
- Dody Radityo, Zulaiha, Pengujian Model DeLone and McLean dalam sebuah Pengembangan Sistem Informasi manajemen, Simposium Nasional Akuntansi X, Unhas Makassar 26-28 Juli 2007.
- Fikret K. Turan, Natalie M. Scala, Mary Besterfield-Saere, Kim LaScola Needy, An Analytic Network Process (ANP) approach to the project portfolio management for Organizational Sustainability, Industrial Engineering Research Conference 2009.
- Frank Figge, Tobias Hahn, Stefan Schaltegger and Marcus Wagner, The sustainability balanced Scorecard linking sustainability management to business strategy, Business strategy and the environment, Bus. Strat. Env, 11, 269-284 (2002).
- Gianfranco Bologna, 2008, Global Environment Change and the Challenge of Sustainability, Society for International Development, 51 (338-343)
- Hamed Armesh, Dr. habibollah Salarzehi, Dr. Baqer Kord, Management Control System, Interdisciplinary Journal of Conteporary Research In Business, Vol. 2, No.6, October 2010.
- Herman E. Daly, 2002, Reconciling the Economics of Social Equity and Environmental Sustainability, Population and Environment, 24,1, ProQuest Sociology p. 47
- Istianingsih, Setyo Hari Wijanto, Analisa Keberhasilan Software Akuntansi Ditinjau dari persepsi Pemakai (studi Implementasi Model Keberhasilan Sistem Informasi), Jurnal Akuntansi dan Keuangan Indonesia, Vol. 5 No.1 Tahun 2008.
- J. Mouritsen, H. Thorsgaard Larsen, P.N. bukh, Dealing with the knowledge economy : intellectual capital versus balanced scorecard, Journal of Intellectual Capital, 2005; 6,1, 1; ABI/INFORM Complete.
- James A. Hall, Accounting Information System, 6th edition, South Western.
- Jap Effendi, Elizabeth Vallery Mulig, L. Murphy Smith, Information Technology and systems Research Published in major Accounting Academic and Professional Journal, Journal of emerging technologies in Accounting, Vol. 3, 2006 pp. 117-128.
- JariKaivo-oja, JyrkiLuukkanen, PenttiMalaska, 2001, Sustainability evaluation frameworks and Alternative Analytical Scenarios of National Economies, Population and environment, 23,2; ProQuest Sociology p 193

José Luis Alfaro Navarro, Víctor Raúl López Ruiz, Domingo Nevado Peña, Estimation of Intellectual capital in the European Union using a knowledge model, *Zb. rad. Ekon. fak. Rij.* • 2011 • vol. 29 • sv. 1 • 109-132.

Joseph F. Brazel (accounting Dept.; College of Management North Carolina State University), Li Dang (Accounting Dept.; College of Business Oregon State University), The Effect of ERP System implementations on the Usefulness of Accounting Information.

Juhari Livari, An Emprical Test of the DeLone-McLean Model of Information System Success, *Database for Advances in Information Systems*; Spring 2005; 36,2; ABI/INFORM Global.

Kevin O'Toole, Anne Wallis, Brad Mitchell, 2006 Local perceptions of sustainability indicators: issues of scale and implications for management, *Rural Society*, 16,1, ProQuest Sociology, pg 25

KP Tripahi, A study of Information System in Human Resource Management (HRM), *International Journal of Computer Application*, (0975-8887), Vol. 22 No. 8, May 2011.

Kyung-Kwon Hong, Young-Gul Kim, The critical success factors for ERP implementation: an organizational fit perspective, *Information & Management* 40 (2002) 25-40, Elsevier.

Lili Sugeng Wiyantoro, Arifin Sabeni, Hubungan antara sistem pengendalian manajemen dengan perilaku *dysfunctional*: Budaya Nasional Sebagai Variabel Moderating, Simposium Nasional Akuntansi X, Unhas Makassar 26-28 Juli.

Luis M. A. Bettencourt, Jose Lobo, Dirk Helbing, Christian Kuhnert, Geoffrey B. West, 2007, Growth innovation, scaling, and the pace of life in cities, *PNAS*, volume 104, No. 17

Mahesh S. Raisinghani, Laura L. Meade, 2005, Strategic decisions in supply chain intelligence using knowledge management : an analytic network process framework, *Supply Chain management*, 2005; 10,2; ABI/INFORM Complete p. 114

Management Information System, 1995, Comptroller Handbook, Comptroller of currency administrator of National Banks

Mary C. Iacety, Rudy Hirschheim, The Role of Benchmarking services in demonstrating I.S. effectiveness to senior management, <http://60.88.dyn.lse.ac.uk/asp/aspecis/199940007.pdf>.

Matthew W. Ford. & Bertie M. Greer, The relationship between Management Control System Usage and Planned Change Achievement: An Exploratory Study, *Journal of change management* Vol 5, No.1, 29-46, March 2005.

Niamh Brennan and Brenda Connell, Intellectual capital : current issues and policy implications, Published in *Journal of Intellectual Capital* 1(3) (2000): 206-240

Nicholas APergis, George Artikis, Sofia Eleftheriou, John Sorros, Accounting information, the cost of capital and excess stock returns: The role of Earnings Quality-Evidence from Panel Data, *International Business Research* Vol5 No.2 : February 2012.

Nicholas APergis, George Artikis, Sofia Eleftheriou, John Sorros, Accounting information and Cost of Capital A theoretical Approach, *Modern Economy*, 2011, 2, 589-596.

Ovidia Doinea Gheroghe Lepadat, Vasile Tomita, Ionela Daniasa, The Role of Accounting Information in Decision making strategies and processes, *Economics, Management, and Financial Markets*, Vol. 6(2), 2011 pp. 188-193, ISSN 1842-3191.

Paul Collier, 2007, Poverty reduction in Africa, *Social sciences, economic sciences*

Pim Martens, 2006, Sustainability : Science or fiction?. Sustainability: science, practice & policy, <http://ejournal.nbii.org>

Raymonc McLeod, Jr, *Management Information System*, 1986, Science Research Associates, Inc.

Richard L. Baskerville, Michael D. Myers, Information Systems as a reference discipline, *MIS quarterly*, Mar 2002; 26,1; ABI/INFORM Global.

Rini Handayani, Alisis Faktor-faktor yang mempengaruhi minat pemanfaatan sistem informasi dan penggunaan sistem informasi, Simposium Nasional Akuntansi X, Unhas Makassar 26-28 Juli 2007.

Robert D Buzzell, The PIMS program of strategy research a retrospective appraisal, *Journal of Business Research* 57 (2004) 478-483, Elsevier.

Sanjoy Bose, Keith Thomas, Applying the balanced scorecard for better performance of intellectual capital, *Journal of intellectual capital*, Vol. 8 No.4, 2007.

Shaohua Chen, Martin Ravallion, 2007, Absolute poverty measures for developing world, 1981-2004, Vol. 104 No. 43

Son Sertac, Weitzel, Tim, Gladyszewski, Thomas, Assessing the influence of Management Control on it performance, an empirical analysis.

Srinivas Nowduri, Bloomsburg University of Pennsylvania, Management Information System and business decision making: review, analysis, and recommendation, *Journal of Management and Marketing Research*.

Stephen P. Robbins, Mary Coulter, *Management* 11th

Subrata Chakrabarty, Swayne Whitten, Ken Green, Understanding Service Quality and Relationship Quality in IS outsourcing: Client Oreintation & Promotion, Project Management Effectiveness, and the Task-Technology-Structure Fit, Winter 1007-1008, *Journal of Computer Information Systems*, 48(2): 1-15.

Supatra Boomak, The influence of Management information system and information technology on management performance and satisfaction, *The global conference on Business and Economics*, ISBN: 978-0-9742114-9-7.

Tanya McGill, Valerie Hobbs, User-Developed Applications and Information Systems Success : A test of DeLone and McLean's Model, *Information Resource Management Journal*, Jun-Mar 2003; 16,1: ABI/INFORM Global.

Thomas M. Parris, Robert W. Kates, 2003, Characterizing a sustainability transistion: Goals, Targets, trends, and driving forces, *Sciences*, www.pnas.org/cgi/dio/10.1073/pnas.1231336100

Tor Guimaraes, D. Sandy Staples and James McKeen, Assessing the Impact from Information Systems Quality, *The Quality Management Journal*; 2007; 14,1; ABI/INFORM Global.

YuyaKajikawa, 2008, Research core and framework of sustainability science, *Sustainability Science* 3:215-239

YuyaKajikawa, Toshihiro Inoue, Thong NgeeGoh, 2011, Analysis of Building environment assessment frameworks and their implications for sustainability indicators, *Sustainability Science*, 6:233-246

Zulkarnain Mohamad Sori, Accounting Information Systems and Knowledge Management : A case study, *American journal of scientific research*, ISSN 1450-223X, issue 4, 2009, pp. 36-44.