

**PERFORMANCE MEASURES OF STRATEGIC  
UNIVERSITY-INDUSTRY COLLABORATIONS IN  
MALAYSIA: DYADIC MULTICASES APPROACH**

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**DOCTOR OF PHILOSOPHY  
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COLLABORATIONS IN MALAYSIA: DYADIC MULTICASES APPROACH

By

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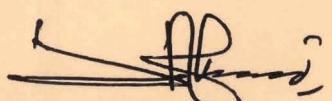
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## ABSTRACT

Collaboration without performance measures is likened to a football game without scoreboard. Traditionally, university operated in isolation to the industry and vice versa. University and industry were formed with different agenda and objectives. Fundamentally, university is a non-profit oriented organization while industry is a profit oriented organization. However, industrialization and egalitarian awakening at early 20<sup>th</sup> century has gradually brought university and industry together. Currently, university and industry are increasingly seeking avenues to collaborate strategically. Nevertheless 50% to 70% of collaborative efforts fail prematurely due to lack of performance measures. In light of that, there is a need to search for a set of holistic performance measures for university-industry collaboration. Therefore, this study is undertaken to determine the performance measures of strategic university-industry collaborations in Malaysia using dyadic multicases approach. The researcher analyzes multiple cases from the perspectives of university and industry within bounded system via qualitative research methodology. Interviews respondents were from university and industry perspectives. From the 68 interviews conducted, university and industry respondents shared their experiences on the needs for performance measures to include trust, commitment, enterprising, communication, complementary, flexibility, commercialization and resources on top of conventional performance measures like agreed objectives, timelines, financial indicators and reporting. With that, a set of holistic performance measures is established from interviews. Hence, the main contributions of the research findings are: (i) contribution to policy-making for the Ministry of Higher Education in Malaysia; and (ii) contribution to the body of knowledge in investigating the performance measures in satisfactory performance of strategic university-industry collaboration.

**Keywords:** Strategic university-industry collaboration, Performance measures, Dyadic, Multicases and Malaysia

## ABSTRAK

Kerjasama tanpa pengukuran prestasi adalah seperti permainan bolasepak tanpa papan angka. Secara tradisi, universiti berfungsi berasingan daripada industri dan sebaliknya. Universiti dan industri ditubuhkan dengan agenda dan objektif-objektif yang berbeza. Asasnya, universiti adalah pertubuhan tanpa keuntungan sementara industri merupakan pertubuhan yang mengutamakan keuntungan. Walaubagaimapun, zaman perindustrian dan egalitarian pada awal abad ke 20an telah menyaksikan kesedaran secara beransur untuk universiti dan industri berkerjasama. Kini, universiti dan industri semakin giat untuk menjalin hubungan secara strategik. Namun begitu, 50% ke 70% usaha berkerjasama tersebut gagal disebabkan tiada pengukuran prestasi yang sesuai. Dengan itu, satu set pengukuran prestasi kerjasama university-industri yang holistik diperlukan. Sehubungan dengan itu, kajian ini dilaksanakan bertujuan menentukan pengukuran prestasi atas kerjasama strategik universiti-industri melalui pendekatan "dyadic multicases". Penyelidik menganalisis pelbagai kes dari perespektif universiti and industri dalam sistem yang disempadani melalui kaedah kualitatif. Daripada 68 wawancara, responden-responden dari universiti dan industri berkongsi pengalaman perlunya pengukuran prestasi termasuk kepercayaan, komitment, keusahawanan, komunikasi, komitmen, fleksibiliti, pengkomersilan, komersil dan sumber-sumber selain daripada pengukuran prestasi yang konvensional seperti objectif yang dipersetujui, tempoh masa, penunjuk kewangan dan laporan hasil koleborasi. Dengan itu, satu set penunjuk prestasi holistik telah dikemukakan melalui wawancara yang dilaksanakan. Sumbangan utama kajian ini adalah : (i) sumbangan kepada pembentukan polisi untuk Kementerian Pengajian Tinggi Malaysia; dan (ii) sumbangan kepada pengetahuan yang sedia ada dalam pengukuran prestasi berhubung kepuasan kerjasama strategik universiti industri.

**Katakunci:** Kerjasama strategik universiti-industri, Pengukuran prestasi, Dyadic, Multicases dan Malaysia

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## **LIST OF ABBREVIATIONS**

|       |   |
|-------|---|
| ABC   | - Activity Based Costing                            |
| ABM   | - Activity Based Management                         |
| APEX  | - Accelerated Program for Excellence                |
| BSC   | - Balanced Scorecard                                |
| EVA   | - The Economic Value Added Model                    |
| FFCM  | - Feedforward/Feedback Control Model                |
| IDPMS | - Integrated Dynamic Performance Measurement System |
| IPM   | - Integrated Performance Meausres                   |
| IPTA  | - Institusi Pengagian Tinggi Awam                   |
| IPTS  | - Institusi Pengagian Tinggi Swasta                 |
| KPI   | - Key Performance Indicator                         |
| MoA   | - Memorandum of Agreement                           |
| MoHE  | - Ministry of Higher Education                      |
| MoU   | - Memorandum of Understanding                       |
| MQA   | - Malaysia Qualifications Agency                    |
| NHESP | - National Higher Education Strategic Plan          |
| PMS   | - Performance Measurement System                    |
| PP    | - Performance Prism                                 |
| R&D   | - Research and Development                          |
| RDC   | - Research, Development and Commercialization       |
| RMC   | - Research Management Centre                        |
| ROI   | - Return on Investment                              |

|         |  |
|---------|--|
| SETARA  | - Sistem Penarafan Institusi Pengajian Malaysia      |
| SMART   | - Strategic Measurement Analysis and Report          |
| SPA     | - Supportive Performance Measure                     |
| UIC     | - University-Industry Collaboration                  |
| VINNOVA | - Swedish Governmental Agency for Innovation Systems |

## CHAPTER ONE: INTRODUCTION

### 1.1 Background of Research

The global structural transformation is changing the conditions that govern the work of universities in various ways and giving rise to new challenges. Besides the aforementioned, according to studies of The World Bank<sup>1</sup> (2007) and Swedish Governmental Agency for Innovation System or VINNOVA<sup>2</sup> (2006), research funding directly available to universities has gradually declined and, thus, there is a greater need to seek for external funding, placing more focus on research environment and greater emphasis on the importance of scientific excellence. It is difficult for any organisation to encompass all resources and capabilities (Hamel, Doz & Prahalad, 2002), hence, collaboration with industry for research funding, ideas generation and research and development (R&D) commercialisation is much sought after. The reduction in national subsidy to universities is in tandem with the Malaysian government policy of encouraging self-reliance among universities to generate their own income (MoHE, 2007a). Perhaps one of the alternatives is to engage industry for funding via research, development, commercialisation and consultancy (RDCC). Thus, strategic university-industry collaboration (UIC) is important as an income stream to expand universities' resources in view of current and future limited funding capability by the Federal Government (Nordin, 2010).

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<sup>1</sup> Based on a report commissioned by the Economic Planning Unit of the Malaysian Government.

<sup>2</sup> Based on a report commissioned by the Ministry of Enterprise, Energy and Communications of the Swedish Government and European Union.

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## REFERENCES

Adams, C., & Neely, A. (2000). The Performance Prism to Boost M&A Success. *Measuring Business Excellence*.

Altbach, P. G. (2004). The Costs and Benefits of World-Class Universities. *Academe*, 90(1).

Alter, C. (1990). An Exploratory Study of Conflict and Coordination in Interorganizational Service Delivery Systems. *Academy of Management Journal*, 33(3), 478-502.

Alter, C., & Hage, J. (1993). *Organizations Working Together*. Newbury Park, CA: Sage.

Anderson, E. (1990). Two Firms, One Frontier: On Assessing Joint Venture Performance. *Sloan Management Review*, 31(2), 19-30.

Anderson, E., & Weitz, B. (1992). The Use of Pledges to Build and Sustain Commitment in Distribution Channels. *Journal of Marketing Research*, 29(1), 18-34.

Arino, A. (2003). Measures of Strategic Alliance Performance: An Analysis of Construct Validity. *Journal of International Business Studies*, 34, 66-79.

Aulakh, P. S., Kotabe, M., & Sahay, A. (1996). Trust and Performance in Cross Border Marketing Partnerships: A behavioural Approach. *Journal of International Business Studies*, 27, 1005-1032.

Azhar, Z., & Abdul Rahman, I. K. (2009). Managerial Performance Measures in Management Accounting Practices of Malaysian Institutions of Higher Learning. *Malaysian Accounting Review*, 8(1), 37-61.

Bagchi, P. K. (1996). Role of Benchmarking as a Competitive Strategy: The Logistics Experience. *International Journal of Physical Distribution & Logistic*, 26, 4-22.

Banks, R. I., & Wheelwright, S. C. (1979). Operations versus Strategy: Trading Tomorrow for Today. *Harvard Business Review, May-June*, 112-120.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.

Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating Value through Interorganizational Relationships. *Journal of Management*, 26(3), 367-403.

Bauer, J., Tanner, S., & Neely, A. (2004). Developing a Performance Measurement Audit Template - a Benchmarking Study. *Measuring Business Excellence*, 8(4), 17-25.

Bauer, M. W., & Gaskell, G. (2000). *Qualitative Researching with Text, Image and Sound*. London: Sage.

Beamish, P. W. (1985). The Characteristics of Joint Ventures in Developed and Developing Countries. *Columbia Journal of World Business*, 20(3), 13-19.

Beamon, B. M. (1999). Measuring Supply Chain Performance. *International Journal of Operations & Production Management*, 19(3), 275-292.

Beamon, B. M., & Ware, T. M. (1998). A Process Quality Model for the Analysis, Improvement and Control of Supply Chain Systems. *Logistics Information Management*, 11(2), 105-113.

Bendavid, Y., Lefebvre, E., Lefebvre, L. A., & Fosso-Wamba, S. (2008). Key Performance Indicators for the Evaluation of RFID-enabled B-to-B e-Commerce

Applications: The Case of a Five-layer Supply Chain. *Information System E-Business Management* 7, 1-20.

Berg, B. L. (1989). *Qualitative Research Methods for the Social sciences*. Boston: Allyn & Bacon.

Bhagwat, R., & Sharma, M. K. (2007). Performance Measurement of Supply Chain Management using the Analytical Hierarchy Process. *Production Planning & Control*, 18(8), 666-680.

Bishop, J. W., & Scott, K. D. (1997). How Commitment Affect Team Performance - Employee Commitment. *HR Magazine*.

Blaikie, N. (2000). *Designing Social Research*. Cambridge: Polity Press.

Bleeke, J., & Ernst, D. (2002). Is your Strategic Alliance Really a Sale? *Harvard Business School Publishing Corporation*.

Bourne, M., Mills, J., Wilcox, M., Neely, A., & Platts, K. (2000). Designing, Implementing and Updating Performance Measurement Systems. *International Journal of Operations & Production Management*, 20(7), 754-771.

Brannen, J. (1992). *Missing Methods: Qualitative and Quantitative Research*. Avebury: Brookfield.

Brannick, M. T., Salas, E., & Prince, C. (2008). *Team Performance Assessment and Measurement: Theory, Methods, and Application*. New Jersey: Psychology Press.

Brett, A., Gibson, D., & Smilor, R. (1991). *University Spin-Off Companies: Economic Development, Faculty Entrepreneurs, and Technology Transfer*. Savage, MD: Rowman & Littlefield.

Brewer, P. C., & Speh, T. W. (2000). Using the Balanced Scorecard to Measure Supply Chain Performance. *Journal of Business Logistics*, 21(1), 75-94.

Bruce, M., Leverick, F., & Littler, D. (1995). Complexities of Collaborative Product Development. *Technovation*, 15(9), 535-552.

Busi, M., & Bititci, U. S. (2006). Collaborative Performance Management: Present Gaps and Future Research. *International Journal of Productivity and Performance Management*, 55(1), 7-25.

Byrne, J. A. (1993). The Virtual Corporation. *Business Week*, 8 February, 98-103.

Caglio, A., & Dittilo, A. (2007). Inter-organisational Control. *Financial Management Dec/Jan*, 27-28.

Campbell, T. I. (1997). Public Policy for 21st century: Addressing potential conflicts in University-Industry Collaboration. *The Review of Higher Education*, 20(353-379).

Caplice, C., & Sheffi, Y. (1995). A Review and Evaluation of Logistics Performance Measurement System. *The International Journal of Logistics Management*, 6(1), 61-74.

Carlos, F. G., Mahmoud, M. Y., & Joao, V. L. (2004). A Literature Review of Manufacturing Performance Measures and Measurement in an Organizational Context: A Framework and Direction for Future Research. *Journal of Manufacturing Technology Management*, 15(6), 511-530.

Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied Business Research: Qualitative and Quantitative Methods*. Queensland: John Wiley & Sons Australia Ltd.

Chadwick, B. A., Bahr, H. M., & Albrecht, S. L. (1984). *Social Science Research Methods*. New Jersey: Prentice-Hall.

Chakrabarti, A. K., & Santoro, M. D. (2004). Building Social Capital and Learning Environment in University-Industry Relationships. *International Journal of Learning and Intellectual Capital*, 1(1), 19-36.

Chandler, G. N., & Hanks, S. H. (1994). Market Attractiveness, Resource Based Capabilities, Venture Strategies, and Venture Performance. *Journal of Business Venturing*, 9(4), 331-349.

Christensen, C. M., & Raynor, M. E. (2003). Why Hard-Nosed Executives Should Care About Management Theory. *Harvard Business Review*, 1-10 pages.

CIMA. (2009). *Finance Transformation : The Evolution to Value Creation*. United Kingdom: Chartered Institute of Management Accountants (CIMA).

Cohen, W. M., Nelson, R. R., & Walsh, J. P. (2002). University Industry Research Collaboration in the UK: Bibliometric Trends. *Science and Public Policy*, 30(2), 85-96.

Cooper, R., & Kaplan, R. S. (1988). Measure Costs Right: Make the Right Decisions. *Harvard Business Review, September-October*.

Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Technique and Procedures for Developing Grounded Theory* (3rd ed.). California: SAGE.

Cousins, P. D., Lawson, B., & Squire, B. (2008). Performance Measurement in Strategic Buyer-Supplier Relationships: The Mediating Role of Socialization Mechanisms. *International Journal of Operations & Production Management*, 28(3), 238-258.

Cravens, D., Cravens, K., & Piercy, N. (2000). Assessing the Performance of Strategic Alliances: Matching Metrics to Strategies. *European Management Journal*, 18, 529-541.

Cravens, D. W., Shipp, S. H., & Cravens, K. S. (1994). Reforming the Traditional Organization: The Mandate for Developing Networks. *Business Horizons*, 37(4), 19-26.

Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approach*. California: Sage.

Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. United States: SAGE Publication Inc.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. California: SAGE Publication Inc.

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3 ed.). California: SAGE Publication Inc.

Cross, K. F., & Lynch, R. L. (1988). The SMART Way to Define and Sustain Success. *National Productivity Review*, 9(1), 23-33.

Cross, R., Borgatti, S. P., & Parker, A. (2004). Making Invisible Work Visible: Using Social Network Analysis to Support Strategic Collaboration. (*The Network Roundtable*), Charlottesville: University of Virginia.

Cullen, J. B., Johnson, J. L., & Sakano, T. (1995). Japanese and Local Partner Commitment to IJVs: Psychological Consequences of Outcomes and Investments in the IJV Relationship. *Journal of International Business Studies*, 26(1), 91-115.

Cyert, R., & Goodman, P. (1997). Creating Effective University-Industry Alliances: An Organizational Learning Perspective. *Organizational Dynamics*, 25(4), 45-57.

Das, T. K., & Teng, B.S. (1999). Managing Risks in Strategic Alliances. *The Academy of Management Executives*.

Das, T. K., & Teng, B.S. (2000). A Resource-Based Theory of Strategic Alliances. *Journal of Management*, 26(1), 31-61.

Day, G. S. (1995). Advantageous Alliances. *Journal of the Academy of Marketing*, 23(4), 297-300.

Denzin, N. K., & Lincoln, Y. S. (1994). Introduction to Entering the Field of Qualitative Research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 1-17). Thousand Oaks, California: Sage.

Dickson, D. (1984). *The New Politics of Science*. New York: Pantheon.

Dill, D. D. (1995). University-Industry Entrepreneurship: The Organization and Management of American University Technology Transfer Units. In (Vol. 29, pp. 369-384). US: Higher Education.

Dixon, J. R., Nanni, A. J., & Vollman, T. E. (1990). *The New Performance Challenge: Measuring Operations for World-Class Competition*: Dow Jones-Irwin, Homewood, IL.

Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence and Implications. *Academy of Management Review*, 20(1), 65-92.

Doutriaux, J. (1991). University Culture, Spin-off Strategy, and Success of Academic Entrepreneurs at Canadian Universities. *Frontiers of Entrepreneurial Research*, 406-421.

Drago, R., & Garvey, G. T. (1998). Incentives for Helping on the Job: Theory and Evidence. *Journal of Labor Economics*, 16, 1-25.

Drucker, P. F. (1967). *The Effective Executive*. Great Britain: MPG Books Ltd, Bodmin, Cornwall.

Dyer, J., & Singh, H. (1998). The Relational View: Cooperative Strategies and Sources of Interorganizational Competitive Advantage. *Academy of Management Review*, 23(4), 660-679.

Dyer, J. H., & Chu, W. (2003). The Role of Trustworthiness in Reducing Transaction Costs and Improving Performance: Empirical Evidence from the United States, Japan and Korea. *Organization Science*, 14, 57-68.

Dyer, J. H., Kale, P., & Singh, H. (2001). How to Make Strategic Alliances Work. *MIT Sloan Management Review*, 42(4), 37-43.

Eccles, R. G. (1991). The Performance Measurement Manifesto. *Harvard Business Review, January - February*, 131-137.

Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review*, 14(1), 57-74.

Ekanayake, S. (2008). The Role of Trust in Joint Venture Control: A Theoretical Framework. *Journal of American Academy of Business, Cambridge*, 12(2), 120-126.

Elmuti, D., Abebe, M., & Nicolosi, M. (2005). An Overview of Strategic Alliances between Universities and Corporations. *The Journal of Workplace Learning*, 17(1/2), 115-129.

Elmuti, D., & Kathawala, Y. (2001). An Overview of Strategic Alliances. *Management Decision*, 39(3), 205 - 218.

Fama, E., & Jensen, M. (1983). Separation of Ownership and Control. *Journal of Law & Economics*, 26, 301-325.

Filstead, W. (1970). *Qualitative Methodology*. Chicago: Markham.

Fitzgerald, L., Johnston, R., Brignall, T. J., Silvestro, R., & Voss, C. (1991). *Performance Measurement in Service Business*. London: CIMA.

Fontana, R., Geuna, A., & Matt, M. (2005). Factors Affecting University–Industry R&D Collaboration : The Importance Of Screening And Signalling" Working Papers Of Beta 2005-07, Bureau D'economie Théorique Et Appliquée, Uds, Strasbourg.

Foote, E. T., & Borsting, J. R. (2001). Will Corporate Research Strangle University Independence? *Business and Society Review*, 15-19.

Frankel, R., & Wipple, J. (2000). Strategic Alliance Success Factors. *Journal of Supply Chain Management*, 36, 21-28.

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman.

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder Theory and The Corporate Objective Revisited. *Organization Science*, 15(3), 364-369.

Frick, B., Prinz, J., & Winkelmann, K. (2003). Pay Inequalities and Team Performance: Empirical Evidence from the North American Major Leagues. *International Journal of Manpower*, 24(4), 472-488.

Friedman, A. L., & Miles, S. (2001). Developing Stakeholder Theory. *Journal of Management Studies*, 39(1), 1-21.

Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and Practice*. New York: Oxford University Press.

Frooman, J. (1999). Stakeholder Influence Strategies. *Academy of Management Review*, 24(2), 191-205.

Gajda, R. (2004). Utilizing Collaboration Theory to Evaluate Strategic Alliances. *American Journal of Evaluation*, 25(1), 65-77.

Gajda, R., & Koliba, C. (2007). Evaluating the Imperative of Intraorganizational Collaboration: A School Improvement Perspective. *American Journal of Evaluation*, 28(26), 26-44.

Gautam, R., & Singh, A. (2010). Critical Environmental Indicators Used to Assess Environmental Performance of Business. *Global Business and Management Research: An International Journal*, 2(2 & 3), 224-236.

Gelderman, C. J., & Van Whele, A. (2003). Handling Measurement Issues and Strategic Directions in Kraljic's Purchasing Portfolio Model. *Journal of Purchasing & Supply Management Accounting*, 9, 207-216.

Geringer, J. M. (1988). *Joint Venture Partner Selection: Strategies for Developed Countries*. New York: Quorum Books.

Geringer, J. M., & Hebert, L. (1991). Measuring Performance of International Joint Ventures. *Journal of International Business Studies*, 22(2), 249-263.

Ghalayini, A. M., Noble, J. S., & Crowe, T. J. (1997). An Integrated Dynamic Performance Measurement System for Improving Manufacturing Competitiveness *International Journal of Production Economics*, 48(3), 207-225.

Gibbs, G. R. (2002). *Qualitative Data Analysis: Explorations with NVivo*. Berkshire: McGraw-Hill Education.

Glaister, K. W., & Buckley, P. J. (1998). Measures of Performance in UK International Alliances. *Organization Studies*, 19, 89-118.

Glaister, K. W., & Buckley, P. J. (1999). Performance Relationships in UK International Alliances. *Management International Review*, 39(2), 123-147.

Glaistera, K. W., & Buckleyb, P. J. (1998). Management–Performance Relationships in UK Joint Ventures. *International Business Review*, 7, 235-257.

Glaser, B., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597-607.

Gomes, C. F., Yasin, M. M., & Lisboa, J. o. V. (2004). A Literature Review of Manufacturing Performance Measures and Measurement in an Organizational Context: A Framework and Direction for Future Research. *Journal of Manufacturing Technology Management*, 15(6), 511-530.

Gottschalk, L. (1968). *Understanding History: A Primer of Historical Method*. New York: Knopf.

Grantovetter, M. S. (1992). Economic Institutions as Social Constructions: A Framework for Analysis. *Acta Sociologica*, 35(1), 3-11.

Graser, F., Jansson, K., & Eschenbacher, J. (2005). *Toward Performance Measurement in Virtual Organization: Potential, Needs and Research Challenges*. Paper presented at The International Federation for Information Processing (IFIP) TC5 WG 5.5 Sixth IFIP Working Conference on virtual enterprises, Valencia, Spain.

Gregory, W. D., & Sheahan, T. P. (1991). Technology Transfer by Spin-Off Companies versus Licensing. In A. Brett, D. Gibson & R. Smilor (Eds.), *University spin-off Companies: Economic Development, Faculty Entrepreneurs, and Technology Transfer* (pp. 133-152). Savage, MD: Rowman & Littlefield.

Griffin, A., & Hauser, J. R. (1996). Integrating R&D and Marketing: A Review and Analysis of the Literature. *Journal of Product Innovation Management*, Vol. 13 Issue 3, p191-215.

Grudzewski, W. M., Sankowska, A., & Wantuchowicz, M. (2005). *Virtual Scorecard as Decision Making Tool in Creating Virtual Organization* Paper presented at the The International Federation for Information Processing (IFIP) TC5 WG 5.5 Sixth IFIP Working Conference on virtual enterprises, Valencia, Spain.

Gulati, R., Nohria, N., & Akbar, Z. (2000). Strategic networks. *Strategic Management Journal*, 21(3), 199-201.

Gunasekaran, A., & Kobu, B. (2007). Performance Measures and Metrics in Logistics and Supply Chain Management: A Review of Recent Literature (1995–2004) for Research and Applications. *International Journal of Production Research*, 45(12), 2819-2840.

Gunasekaran, A., & Patel, C. (2001). Performance Measurement and Metrics in a Supply Chain Environment. *International Journal of Operations & Production Management*, 21, 71-87.

Gunasekaran, A., Patel, C., & McGaughey, R. E. (2004). A Framework for Supply Chain Performance Measurement. *International Journal of Production Economics*, 87, 333-347.

Gunasekaran, A., Patel, C., & Tirtiroglu, E. (2001). Performance Measures and Metrics in a Supply Chain Environment. *Journal of Operations & Production Management*, 21(1/2), 71-87.

Hacker, M. E., & Lang, J. D. (2000). Designing a Performance Measurement System for a High Technology Virtual Engineering Team - A Case Study. *International Journal of Agile Management Systems*, 2(3), 225-232.

Hagedoorn, J. (1993). Understanding the Rationale of Strategic Technology Partnering: Inter-organizational Modes of Cooperation and Sectoral Differences. *Strategic Management Journal*, 14, 371-385.

Hagedoorn, J., & Schakenraad, J. (1990). Strategic Partnering and Technological Cooperation.

Hamel, G. (1991). Competition for Competence and Inter-partner Learning within International Strategic Alliances. *Strategic Management Journal*, 12, 83-103.

Hamel, G., Doz, Y. L., & Prahalad, C. K. (2002). *Collaborate with Your Competitors - and Win*. United States: Harvard Business School Publishing Corporation.

Handfield, R. B., & Nichols, E. L. (2004). Key Issues in Global Supply Base Management. *Industrial Marketing Management*, 33, 29-35.

Harland, C.M.. (2006). Supply Chain Management: Relationships, Chains and Networks. *British Journal of Management*, 7, Special Issue, 63-80

Hayes, R. H., & Garvin, D. A. (1982). Managing as if Tomorrow Mattered. *Harvard Business Review*, 70-79.

Herriott, R. E., & Firestone, W. A. (1983). Multiside Qualitative Policy Research: Optimizing Description and Generalizability. *Educational Researcher*, 12, 14-19.

Hill, R. C., & Hellriegel, D. (1994). Critical Contingencies in Joint Venture Management: Some Lessons from Managers. *Organization Science*, 5, 594-607.

Holmberg, S. (2000). A System Perspective on Supply Chain Measurement. *International Journal of Physical Distribution & Logistics*, 30(10), 847-868.

Hsieh, T. Y. (1997). Prospering Through Relationship. *Corporate Finance*, 8(3), 21-22.

Hsu, C. C., Kannan, V. R., Tan, K. C., & Leong, G. K. (2008). Information Sharing, Buyer-Supplier Relationships, and Firm Performance: A Multi-region Analysis. *International Journal of Physical Distribution & Logistics Management*, 38(4), 296-310.

Ibrahim, A. S. (2005). 11 Dimensi dan Petunjuk: Ke Arah Universiti Bertaraf Dunia, *Institute of Quality and Knowledge Advancement, Universiti Teknologi MARA, Shah Alam, Malaysia*.

Ingram, H., & McDonnell, B. (1996). Effective Performance Management – the Teamwork Approach Considered. *Managing Service Quality*, 6(6), 38-42.

Ireland, R., & Bruce, R. (2000). CPFR: Only the Beginning of Collaboration. *Supply Chain Management Review, September/October*, 80-88.

Irvine, H., & Gaffikin, M. (2006). Getting in, Getting on and Getting out: Reflections on a Qualitative Research Project. *Accounting, Auditing and Accountability Journal*, 17(3), 361-381.

Ismail, N., & Abas, Z. (2010). *Strategic Enhancement Plan for University Industry/Community Collaboration*. Putrajaya: Ministry of Higher Education of Malaysia.

Isobe, T., Makino, S., & Montgomery, D. B. (2000). Resource Commitment, Entry Timing and Market Performance of Foreign Direct Investments in Emerging Economies: The case of Japanese International Joint Ventures in China. *Academy of Management Journal*, 43, 468-484.

Jawahar, I. M., & McLaughlin, G. L. (2001). Toward a Descriptive Stakeholder Theory: An Organizational Life Cycle Approach. *Academy of Management Review*, 26(3), 397-414.

Jensen, M., & Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure. *Journal of Financial Economics*, 3(4), 305-360.

Johnson, H. T., & Kaplan, R. S. (1987). *Relevance Lost The Rise and Fall of Management Accounting*. Boston, MA.: Business School Press Harvard

Kajuter, P., & Kulmala, H. I. (2005). Open-book Accounting in Networks, Potential Achievements and Reasons for Failures. *Management Accounting Research*, 16 (Jun)(2), 179-204.

Kamm, J. B., & Nurick, A. J. (1993). The Stages of Team Venture Formation; A Decision-making Model. *Entrepreneurship Theory and Practice*, 17(2), 17-27.

Kanter, R. M. (2002). Collaborative Advantage: The Art of Alliances. *Harvard Business School Publishing Corporation*.

Kaplan, R. S. (1983). Measuring Manufacturing Performance: A New Challenge for Managerial Accounting Research. *Accounting Review*, 58(4), 686-703.

Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard: Measures that Drive Performance. *Harvard Business Review*, 71-79.

Kaplan, R. S., & Norton, D. P. (1993). Putting the Balanced Scorecard to Work. *Harvard Business Review, September - October 1993*, 134-147.

Kaplan, R. S., & Norton, D. P. (1996). *Translating Strategy Into Action: the Balanced Scorecard*. Boston: Harvard Business School Press.

Kaplan, R. S., Norton, D. P., & Rugelsjoen, B. (2010). Managing Alliances with the Balanced Scorecard. *Harvard Business Review, January - February 2010*, 114-120.

Keegan, D. P., Eiler, R. G., & Jones, C. R. (1989). Are your performance Measures Obsolete? *Management Accounting* (June), 44-50.

Kelvin, L. (1889). Electrical Units of Measurement. *Popular Lectures and Addresses*. 1, 73. Quoted in American Association for the Advancement of Science, *Science (Jan-Jun 1892)*, 19,127. From, a lecture delivered at the Institution of Civil Engineers, London (3 May 1883). Retrieved on 10 June 2011, from [http://www.todayinsci.com/K/Kelvin\\_Lord/KelvinLord-Quotations.htm](http://www.todayinsci.com/K/Kelvin_Lord/KelvinLord-Quotations.htm).

Killing, J. (1983). *Strategies for JV success*. New York:raeger.

Kirby, S. L., & Davis, M. A. (1998). A Study of Escalating Commitment in Principal-Agent Relationships: Effects of Monitoring and Personal Responsibility. *Journal of Applied Psychology*, 83(2), 206-217.

Kirk, J., & Miller, M. L. (1985). *Reliability and Validity in Qualitative Research*. California: Sage.

Krishnan, R., & Martin, X. (2006). When does Trust Matter to Alliance Performance? *Academy of Management Journal*, 49(5), 894-917.

Lambe, C., Spekman, R. E., & Shelby, D. H. (2002). Alliance Competence, Resources, and Alliance Success: Conceptualization, Measurement, and Initial Test. *Journal of Academy of Marketing Science*, 30(2), 141-158.

Lambert, R. (2003). *Lambert Review of Business University Collaboration*. United Kingdom: HM Treasury.

LeBoeuf, M. (1986). *The Greatest Management Principle in the World*: Berkley Books.

Lee, W. B., Cheung, H. C. W., Choy, L., & Choy, K. L. (2003). Development of a Web-Based Enterprise Collaborative Platform for Networked Enterprises. *Business Process Management Journal*, 9(1), 46-58.

Lendrum, T. (2000). *The Strategic Partnering Handbook: the Practitioners' Guide to Partnerships and Alliances* (4th ed.). North Ryde, New South Wales, Australia: McGraw-Hill Australia Pty Ltd.

Li, K. (2005). Successful Academia-Industry Collaboration Research Project. *IEEE Review*.

Lim, K. O. (2010). *Rangka Kerja Bagi Sistem Pengiktirafan Dan Ganjaran Adademia IPTA*. Putrajaya: Ministry of Higher Education of Malaysia.

Lin, X., & Germain, R. (1998). Sustaining Satisfactory Joint Venture Relationship: The Role of Conflict Resolution Strategy. *Journal of International Business Studies*, 29, 179-196.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hill, CA: SAGE Publication.

Little, J. C., Cooper, L. J., Davis, B. C., Alexander, J., Joyce, P., & Schmitt, C. J. (1988). An Industry/Academic Partnership Experiment: A course in Artificial Intelligence. *ACM Sigcse Bulletin* 20(1), 171-175.

Logan, M. S. (2000). Using Agency Theory to Design Successful Outsourcing Relationships. *The International Journal of Logistics Management*, 11(2), 21-32.

Lorenz, A. (2002). *Kumar Bhattacharyya: The Unsung Guru*. London: Random House Business Books.

Louis, K. S., & Anderson, M. S. (1998). The Changing Context of Science and University-industry Relations. In H. Etzkowitz, A. Webster & P. Healey (Eds.), *Capitalizing knowledge: New intersections of industry and academia* (pp. 73-94). New York: State University of New York Press.

Louis, K. S., Blumenthal, D., Gluck, M. E., & Stoto, M. A. (1989). Entrepreneurs in Academe: An Exploration of Behaviors Among Life Scientists. *Administrative Science Quarterly*, 34, 110-131.

Luo, Y. (1999). Entry and Cooperative Strategies in International Business Expansion.

Lynch, R. L., & Cross, K. F. (1991). *Measure Up! Yardsticks for Continuous Improvement*. Oxford: Basil Blackwell.

MacBryde, J., & Mendibil, K. (2003). Designing Performance Measurement Systems for Teams: Theory and Practice. *Management Decision*, 41(8), 722-733.

Mahdjoubi, D. (2004). *Knowledge, Innovation and Entrepreneurship: Business Plans, Capital, Technology and Growth of New Ventures in Austin, Texas*. Unpublished Doctor of Philosophy, University of Texas at Austin, Texas.

Mahdjoubi, D., & Tomak, K. (2001). *Using Gray Box Model to Explore the Relationships Between Knowledge Management and E-Business*. Paper presented at the International Conference on Intellectual Capital and E-Business, Hamilton, Canada.

Maister, D. (2003). *Managing the Professional Service Firm*. London: Simon & Schuster UK Ltd.

Marshall, C., & Rossman, G. B. (1989). *Designing Qualitative Research*. California: Sage.

Mason, D., Thibault, L., & Misener, L. (2006). An Agency Theory Perspective on Corruption in Sport: The Case of the International Olympic Committee. *Journal of Sport Management*, 20(1), 52-73.

McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an Organizing Principle. *Organization Science*, 14, 91-103.

McFarlan, F. W., & Nolan, R. L. (1995). How to Manage an Outsourcing Alliance. *Sloan Management Review*, 36(2), 9-23.

Melnyk, S., Stewart, D., & Swink, M. (2004). Metrics and Performance Measurement in Operations Management: Dealing with the Metrics Maze. *Journal of Operations Management*, 22, 209-217.

Mendibil, K., & MacBryde, J. (2006). Factors that Affect the Design and Implementation of Team-Based Performance Measurement System. *International Journal of Productivity and Performance Management*, 55(2), 118-142.

Merriam, S. B. (2009). *Qualitative Research : A Guide to Design and Implementation*. San Francisco: Jossey-Bass.

Meyer, C. (1994). How the Right Measure Help Team Excel. *Harvard Business Review*(May-June).

Michael, J. V., & Andrea, V. (2006). An Integrative Marketing Channel Performance Measurement Framework. *Journal of Database Marketing & Customer Strategy Management*, 14(1), 17-28.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2 ed.). California: Sage.

Miles, M. B., & Huberman, A. M. (2002). *The Qualitative Researcher's Companion*. California: Sage.

Miller, D. (1981). Toward a New Contingency Approach: The Search for Organizational Gestalts. *Journal of Management Studies*, 18, 1-26.

Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management Review*, 22(4), 853-886.

MoHE. (2007a). *National Higher Education Strategic Plan: Laying the Foundation Beyond 2020* (No. 978-983-3663-10-1). Putrajaya: Ministry of Higher Education Malaysia.

MoHE. (2007b). *The National Higher Education Strategic Plan Beyond 2020*. Putrajaya: Ministry of Higher Education of Malaysia.

MoHE. (2010). *Dasar Pembangunan Keusahawanan*. Putrajaya: Ministry of Higher Education, Malaysia.

Mohr, J., & Spekman, R. (1994). Characteristics of Partnership Success: Partnership Attributes, Communication Behavior and Conflict Resolution Techniques. *Strategic Management Journal*, 15, 135-152.

Montiel-Overall, P. (2005). *Toward a Theory of Collaboration for Teachers and Librarians*.Unpublished manuscript.

Moore, G. E. (1986). Entrepreneurship and Innovation: The Electronic Industry. In R. Landau & N. Rosenberg (Eds.), *The Positive Sum Strategy: Harnessing Technology for Economic Growth* (pp. 423-435). Washington DC: National Academy Press.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification Strategies for Establishing Reliability and Validity in Qualitative Research. *International Journal of Qualitative Methods*, 1(2), 1-19.

Mouritsen, J., Hansen, A. Ø., & Hansen, C. (2001). Inter-organizational Controls and Organizational Competencies: Episodes Around Target Cost Management/Functional Analysis and Open Book Accounting. *Management Accounting Research*, 12(2), 221-244.

Mudacumura, G. M. (2001). Networking Development Organizations to Foster Global Sustainable Development. *International Journal of Economic Development*, 3(1), 1-22.

Munday, M. (1992). Accounting Cost Data Disclosure and Buyer-supplier Partnerships: A Research Note. *Management Accounting Research*, 3(3), 245-250.

Nanni, J., Alfred, J., Dixon, J. R., & Vollmann, T. E. (1992). Integrated Performance Measurement: Management Accounting to Support the New Manufacturing Realities. *Journal of Management Accounting Research*, 4, 1-19.

Neely, A. (1994). *Performance Measurement System Design – Third Phase: Performance Measurement System Design Workbook*.

Neely, A. (2002). *Business Performance Measurement*: Cambridge University Press.

Neely, A., Adams, C., & Crowe, P. (2001). The Performance Prism in Practice Measuring Excellence. *The Journal of Business Performance Management*, 5(2), 6-12.

Neely, A., Gregory, M., & Platts, K. (1995). Performance Measurement System Design. A Literature Review and Research Agenda. *International Journal of Operations & Production Management*, 15(4), 80-116.

Neely, A., Gregory, M., & Platts, K. (2005). Performance Measurement System Design: A Literature Review and Research Agenda. *International Journal of Operations & Production Management*, 25(12).

Niederkofler, M. (1991). The Evolution of Strategic Alliances: Opportunities for Managerial Influence. *Journal of Business Venturing*, 6, 237-237.

Nielsen, B. B. (2007). Determining International Strategic Alliance Performance: A Multidimesional Approach. *International Business Review*, 16, 337-361.

Nordin, K. (2008). Amanat Tahun 2009 "Meneraju Kegemilangan Ilmu". *Berita*.

Nordin, K. (2010). Strengthening University Industry Relations. In M. Z. Modh Izani & H. Harshita Aini (Eds.), *Pengajian Tinggi dan Jaminan Masa Depan Negara* (pp. 148-150). Putrajaya: Kementerian Pengajian Tinggi Malaysia.

Okunoye, A., Frolick, M. C., & Crable, E. (2008). Stakeholder influence and ERP implementation in higher education. *Journal of Information Technology Case and Application Research*, 10(3), 9-38.

Olk, P. (2002). Evaluating Strategic Alliance Performance. In F. J. Contractor & P. Lorange (Eds.), *Cooperative Strategies and Alliances* (pp. 119-143). Oxford: Elsevier.

Olson, D. E. (2000). Agency Theory in the Not-for-profit Sector: Its Role at Independent Colleges. *Nonprofit and Voluntary Sector Quarterly*, 29(2), 280-296.

Orr, J. (1996). *Talking About Machines: An Ethnography of a Modern Job*. Ithaca, NY: Cornell University Press.

Owen-Smith, J., Riccaboni, M., Pammolli, F., & Powell, W. W. (2005). A Comparison of U.S. and European University-Industry Relations in the Life Sciences. *Management Science*, 48(1), 24-43.

Park, S. H., & Ungson, G. R. (2001). Interfirm Rivalry and Managerial Complexity: A Conceptual Framework of Alliance Failure. *Organization Science*, 12(1), 37-53.

Parkhe, A. 1993. Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, 36 ( 4 ), 794-829.

Patton, M. Q. (1990). *Qualitative Evaluation and Research Method* (2 ed.). California: Sage.

Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource Based View. *Strategic Management Journal*, 14(3), 179-191.

Philbin, S. (2008). Process Model for University-Industry Research Collaboration. *European Journal of Innovation Management*, 11(4), 488-521.

Plewa, C. & Quester, P. (2008). A Dyadic Study of "Champions" in University-Industry Relationships. *Asia Pacific Journal of Marketing and Logistics*. 20(2), 2008, 211-226.

Porter, M.E. (1980). Competitive Strategy. New York. *The Free Press*.

Porter, M. E. (1985). Competitive Advantage. New York. *The Free Press*.

Porter, M.E. (1990). The Competitive Advantage of Nations. New York. *The Free Press*.

Powers, J. B. (2000). *Academic Entrepreneurship in Higher Education: Institutional Effects on Performance of University Technology Transfer*. Indiana University, Indiana.

Purbey, S., Mukherjee, K., & Bhar, C. (2007). Reflective Practice Performance Measurement System for Healthcare Processes. *International Journal of Productivity and Performance Management*, 56(3), 241-251.

Quince, T. (2001). *Entrepreneurial collaboration: Terms of Endearment or Rules of Engagement?* Cambridge: Centre of Business Research, University of Cambridge.

Rackham, N., Friedman, L., & Ruff, R. (1996). *Getting Partnering Right*. New York: McGraw-Hill Companies, Inc.

Rappaport, A. (1981). Selecting Strategies That Create Shareholder Value. *Harvard Business Review May-June*, 139-149.

Reuer, J. (1998). The Dynamics and Effectiveness of International Joint Ventures. *European Management Journal*, 16(2), 160-168.

Rey-Marston, M., & Neely, A. (2010). Beyond Words: Testing Alignment among Inter-organizational Performance Measures. *Measuring Business Excellence*, 14(1), 19-27.

Reynolds, S. J., Schultz, F. C., & Hekman, D. R. (2006). Stakeholder Theory and Managerial Decision-Making: Constraints and Implications of Balancing Stakeholder Interests. *Journal of Business Ethics*, 64(3), 286-301.

Richards, L., & Morse, J. M. (2007). *Readme First for a User's Guide to Qualitative Methods* (2nd Edition ed.). United States of America: SAGE Publications Inc.

Robert, E. B., & Malone, D. E. (1996). Policies and Structures for Spinning Off New Companies from Research and Development Organizations. *R&D Management*, 26, 17-48.

Roberts, E. B. (1991). *Entrepreneurs in High Technology: Lessons from MIT and Beyond*. New York: Oxford University.

Rosenthal, R. (1966). *Experimenter Effects in Behavioral Research*. New York: Appleton-Century-Crofts.

Roussin Isett, K., & Provan, K. G. (2005). The Evolution of Dyadic Interorganizational Relationships in a Network of Publicly Funded Nonprofit Agencies. *Journal of Public Administration Research and Theory*, 15(1), 149-165.

Rynes, S. L., Bartunek, J. M., & Daft, R. I. (2001). Across the Great Divide, Knowledge Creation and Transfer between Practitioners and Academics. *Academy of Management Journal*, 44(2), 340-355.

Ryu, I., So, S., & Koo, C. (2009). The Role of Partnership in Supply Chain Performance. *Industrial Management & Data Systems*, 109(4), 496-514.

Said, A. A., Hassab Elnaby, H. R., & Wier, B. (2003). An Empirical Investigation of the Performance Consequences of Nonfinancial Measures. *Journal of Management Accounting Research*, 15, 193-223.

Sakar, M. B., Eschambadi, R., Cavusgil, S. T., & Aulakh, P. S. (2001). The Influence of Complementarity, Compatibility and Relationship Capital on Alliance Performance. *Journal of Academy of Marketing Science*, 29(4), 358-374.

Sako, M. (1992). *Prices, Quality and Trust: Inter-firm Relations in Britain and Japan*. Cambridge University Press.

Sampson, R. C. (2007). R&D Alliances and Firm Performance: The Impact of Technological Diversity and Alliance organization on Innovation. *Academy of Management Journal*, 50(2), 364-386.

Santoro, M. (2000). Success Breeds Success: The Linkage between Relationship Intensity and Tangible outcomes in Industry-University Collaborative Ventures. *The Journal of High Technology Management Research*, 11(2), 255-273.

Santoro, M. D., & Gopalakrishnanb, S. (2000). The Institutionalization of Knowledge Transfer Activities within Industry-University Collaborative Ventures. *Journal of Engineering and Technology Management*, 17(3-4), 299-319.

Santoro, M. D., & Saparito, P. A. (2005). Self-Interest Assumption and Relational Trust in University-Industry Knowledge Transfers. *IEEE Transactions on Engineering Management*, 53(3), 335-347.

Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. (1991). Strategies for Assessing and Managing Organizational Stakeholders. *Academy of Management Executive*, 5(2), 61-75.

Saxton, T. (1997). The Effects of Partner and Relationship Characteristics on Alliance Outcomes. *Academy of Management Journal*, 40(2), 443-461.

Seager, M., & Gorda, B. (2009). A Collaboration and Commercialization Model for Exascale Software Research. *International Journal of High Performance Computing Applications*, 23(4), 395-397.

Segil, L. (1998). Strategic Alliances for the 21st century. *Strategy and Leadership*, 26, 12-16.

Segil, L. (2004). *Measuring the Value of Partnering: How to use metrics to plan, develop and implement successful alliances*. New York: American Management Association (AMACOM).

Seidman, I. (2006). *Interviewing as Qualitative Research* (3rd ed.). United States of America: Teachers College Press.

Senior, B. (1996). Team Performance: Using Repertory Grid Technique to Gain a View from the Inside. *Journal of Managerial Psychology*, 11(3), 26-32.

Shankar, R., & Barrett, R. L. (2005). *On Building a Long Term University-Industry Collaboration*. Paper presented at the IEEE International Engineering Management Conference 2005.

Shaw, D. G., & Schneier, C. E. (1995). Team Measurement and Rewards: How Some Companies are Getting it Right. *HR. Human Resource Planning*, 18(3), 34-50.

Simatupang, T. M., & Sridharan, R. (2005). The Collaboration Index: A Measure for Supply Chain Collaboration. *International Journal of Physical Distribution & Logistics Management*, 35(1), 44-62.

Sink, D. S., & Tuttle, T. C. (1989). Planning and Measurement in Your Organization of the Future. In (pp. 170-184). Norcross, GA: Industrial Engineering and Management Press.

Slaughter, S., & Rhoades, G. (1990). Re-norming the Social Relations of Science: Technology Transfer. *Educational Policy*, 4, 341-361.

Solomon, J., & Solomon, A. (2004). *Corporate Governance and Accountability*. England: John Wiley & Sons, Ltd.

Spitzer, D. R. (2007). *Transforming Performance Measurement*. United States of America: American Management Association.

Stanek, M. B. (2004). Measuring Alliance Value and Risk: A Model Approach to Prioritizing Alliance Projects. *Management Decision*, 42(2), 182-204.

Stank, T. P., Dougherty, P. J., & Autry, C. W. (1999). Collaborative Planning: Supporting Automatic Replenishment Programs. *Supply Chain Management*, 4(2), 75-85.

Stewart, S. (1980). The Economic Value Added Model (EVA). from <http://www.sternstewart.com>

Stuart, I. (1997). Supplier Alliance Success and Failure: A Longitudinal Dyadic Perspective. *International Journal of Operations & Production Management*, 17(6), 539-557.

Suarez, M. V., & Garcia-Canal, E. (2003). Complementarity and Leverage as Drivers of Stock Market Reactions to Global Alliance Formation. *Long Range Planning*, 36(6), 565-578.

Sudman, S., & Bradburn, N. M. (1982). *Asking Questions: A Practical Guide to Questionnaire Design*. San Francisco: Jossey-Bass.

The World Bank. 2007. "Malaysia and the Knowledge Economy: Building a World-Class Higher Education System". Report commissioned by the Economic Planning Unit of the Malaysian Government.

Tosi, H. L., Katz, J. P., & Gomez-Mejia, L. R. (1997). Disaggregating the Agency Contract: The Effects of Monitoring, Incentive Alignment, and Term in Office on Agent Decision Making. *Academy of Management Journal*, 40(3), 584-603.

Ueda, K. (2006). On the Failure of University-Industry Research Collaboration to Stimulate High Quality research in Japan.

Varadarajan, P. R., & Cunningham, M. H. (1995). Strategic Alliances: A Synthesis of Conceptual Foundation. *Journal of the Academy of Marketing Science*, 23(4), 282-296.

Swedish Governmental Agency for Innovation Systems -VINNOVA. (2006). In search of Innovation Systems. Report commissioned by the Ministry of Enterprise, Energy and Communications of Swedish Government and European Union.

Waldner, R. L. (2006). *Collaboration Among Teachers and Teacher Librarians: Working Towards Full Implementation*. University of Alberta, Edmonton, Alberta.

Weber, M. (1949). *The Methodology of the Social Sciences*. New York: The Free Press.

Wernerfelt, B. (1984). A Resource-based View of the Firm. *Strategic Management Journal*, 15, 171-180.

Whipple, J. M., & Roh, J. (2010). Agency Theory and Quality Fade in Buyer-supplier Relationships. *The International Journal of Logistics Management*, 21(3), 338-352.

Wikipedia. *Collaboration*. Retrieved 28 January, 2009, from <http://en.wikipedia.org/wiki/Collaboration>

Wilkinson, I.F. and Young, L. (1994), Business dancing - the nature and role of inter-firm relations in business strategy. *Asia-Australia Marketing Journal*, 2(1), 67-79.

Wolff, M. F. (1994). Building Trust in Alliances. *Industrial Management & Data Systems*, 95(3), 4 pages.

Wright, R. (2008). How to Gets Most from University Relationships. *MIT Sloan Management Review, Spring*, 75-81.

Yan, A., & Gray, B. (1994). Bargaining Power, Management Control, and Performance in United States- China Joint Ventures: A Comparative Case Study. *Academy of Management Journal*, 37(6), 1478-1517.

Yang, A., & Zeng, M. (1999). International Joint Venture Instability: A Critique of Previous Research, a Reconceptualization, and Directions for Future Research. *Journal of International Business Studies*, 30(2), 397-414.

Yee, S. V., Liew, Y., Neo, P. Y., Long, M. M., & Ooi, S. C. (2008). *Examining elements that motivate SMEs to collaborate with universities to gain competitive advantage*. Paper presented at the ECER Regional Conference, Kota Bahru.

Yin, R. K. (2003). *Case Study Research: Design and Methods* (3<sup>rd</sup> Edition). United State of America: Sage.

Zailan, M. (2007). *50 years of Higher Education Development in Malaysia (1957-2007)*. Penang: Universiti Sains Malaysia.

Zhao, F. (2000). University Industry Partnerships in Australia: A Strategic Perspective. *Pacific Asian Education Journal*, 12(2), 57-66.

Zhao, F. (2002). Performance Measures for Inter-organizational Partnerships. from <http://www.cmqr.rmit.edu.au/publications/fzicit02.pdf>

Zucker, L. G., Darby, M. R., & Armstrong, J. (1998). Geographically Localized Knowledge: Spillovers or Markets? *Economic Inquiry*, 36, 65-86.