ENTREPRENEURIAL OPPORTUNITY RECOGNITION AMONG BUMIPUTERA SMEs ENTREPRENEURS IN MALAYSIA: THE INFLUENTIAL FACTORS OF SOCIAL NETWORK, ENTREPRENEURIAL ALERTNESS AND CREATIVITY

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ABSTRACT

The main purpose of this study is to investigate factors that influence entrepreneur in recognizing entrepreneurial opportunities. Specifically, it aims at investigating the influence of social network, entrepreneurial alertness and creativity towards entrepreneurial opportunity recognition and the moderating effect of prior knowledge of procedural and customer and prior knowledge of business operation on the relationship between social network, entrepreneurial alertness and creativity among the Bumiputera entrepreneurs in Malaysia. The motivation of this study is driven by the fact that Bumiputeras' achievement and performance in business is low and far below the target. Although Malaysian Government has implemented various initiatives and programs to fully develop Bumiputera in business, the achievement has not truly to be proud of. The overall framework for this study is theoretically underpinned by Resource-based View Theory. The study utilized a survey questionnaire which was distributed to 500 Bumiputera entrepreneurs from five states in the Peninsular Malaysia. Out of the 232 returned questionnaires, 204 were usable for further analysis. Correlation and hierarchical regression analysis were used to analyse the direct and indirect relationship between the related variables in the study. The results reveal that entrepreneurial alertness and creativity are positive determinants of the entrepreneurial opportunity recognition. However, there is no significant relationship found between the social network and the entrepreneurial opportunity recognition. This study also found that there is no moderating effect of prior knowledge of procedural and customer and prior knowledge of business operation on the relationship between the social network, entrepreneurial alertness, creativity and entrepreneurial opportunity recognition. Finally, theoretical and managerial implications as well as directions for future research are discussed.

Keywords: Entrepreneurial opportunity, entrepreneurial opportunity recognition, entrepreneurial alertness, creativity, Bumiputera entrepreneurs
ABSTRAK


Kata kunci: Peluang keusahawanan, mengenal pasti peluang keusahawanan, kepekaan keusahawanan, kreativiti, usahawan Bumiputera.
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<td>Bumiputera Commercial and Industrial Community</td>
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<td>C</td>
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<td>EA</td>
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<td>Social Network</td>
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<td>VRIN</td>
<td>Valuable, rare, inimitable, and non-substitutable</td>
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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background of the study, the problem statement, research questions, research objectives, significance of the study, scope and limitations of the study, operational definitions of the terms and the organization of the thesis.

1.2 Background of study

The development of entrepreneurship has been growing in importance and become the central contributor to economic growth in many developing countries. It is apparent that most developing countries are now giving more consideration to include entrepreneurship as one of the agenda to help the poor to increase living standard (Norziani, Mastura, & Siti Asma, 2015). This has also been claimed by Jaafar and Aziz (2008) that entrepreneurship development may transform Malaysia to become a leading developing country in the next few decades. Schorr (2008) even stated that entrepreneurship is not only an important developmental factor but also the economic driver since the economy is truly reliant on entrepreneurship and it is believed that with every occurrence of economic downturn, it is the entrepreneurial determination and perseverance that balance the economy. Same goes to Malaysia, the development of entrepreneurship, as both concept and activity, has been growing in importance. This
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REFERENCES


transfer of knowledge: implications for the diffusion of innovations”, University 
of the Sunshine Coast Faculty of Business Working Paper Series, Vol. 7 No. 1, 
pp. 3-25.

recognition of entrepreneurs: the implications for the productivity of non-social 

entrepreneurs’ decision-making about collaboration accepted with revisions”, 
*Journal of Small Business Management*, in press.

of public and private sector service employees. *Intl Journal of Public 
Administration*, 29(8), 619-638.

*Journal of Business Venturing*, 16(2), 165-180.

Burt, R. S. 1992. Structural holes: The social structure of competition. Cambridge, MA: 
Harvard University Press.

Busenitz, L. W. & Barney, J. B. 1997. Differences between entrepreneurs and managers 
in large organizations: Biases and heuristics in strategic decision-making. 

Management*, 34(4), 35.

Busenitz, L. W. (1999). Entrepreneurial risk and strategic decision making it’s a matter 


London: Routledge Falmer.

learning and innovation. Administrative science quarterly, 128-152.


Companys, Y. E., & McMullen, J. S. (2007). Strategic entrepreneurs at work: the nature,
discovery, and exploitation of entrepreneurial opportunities. Small Business
Economics, 28(4), 301-322.


and cognitive characteristics predict entrepreneurial orientation?. Journal of
Small Business Strategy, 18(2), 23.

range planning, 14(5), 39-45.


Journal of Business Venturing, 10(2): 107-120.

capital as predictors of new venture performance. Journal of Business

McGraw Hill.


Donald S. Siegel, Maija Renko, (2012),"The role of market and technological knowledge in recognizing entrepreneurial opportunities", Management Decision, Vol. 50 Iss 5 pp. 797-816 http://dx.doi.org/10.1108/00251741211227500


Kay, C. J. (1986). The identification of catalysts preceding decision making as described by innovators and entrepreneurs. University of San Francisco.


Kirton, M. (1978). Have adaptors and innovators equal levels of creativity?

   Psychological reports, 42(3), 695-698.

Kirzner, I. M. (1973). Competition and entrepreneurship. Chicago, IL: University of

   Chicago Press.

Kirzner, I. M. (1980). The primacy of entrepreneurial discovery: In prime mover of

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   Economic Affairs.


   Economics: Tensions and New Directions, Boston, MA: Kluwer Academic


   entrepreneurship. Chicago, IL. University of Chicago Press.

Kirzner, Isreal (1997), "Entrepreneurial Discovery and the Competitive Market Process:


   University of Technology.


   survey technologies in operations management. Journal of Operations

   Management, 79(6), 713-728.


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Reitan, B. (1997, June). Where do we learn that entrepreneurship is feasible, desirable, and/or profitable. In *ICSB World Conference* (pp. 21-24).


Usahawan Sukses (Januari 2002), Datuk Maznah Unggul Terajui Perniagaan, Pustaka Wira Sdn Bhd.

Usahawan Sukses (Januari 2002), Haji Mohammad Noor Ariff, Pasarkan Makanan Ringan dari Timur Tengah Berkat Sabar dan Gigih, Pustaka Wira Sdn Bhd.


Weick, K. E. 1979. The social psychology of organizing. Reading, MA: Addison-Wesley


