



اوتو تسيقو ايتكنو لومبارا
UNIVERSITI
TEKNOLOGI
MARA

Borneo Akademika



BORNEO AKADEMIKA

UiTM CAWANGAN SABAH

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Publisher (ISSN: 2462-1641)**

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Preface

In the name of ALLAH, Most Gracious, Most Merciful and Muhammad S.A.W., the last prophet.

First and foremost I would like to congratulate the editorial board and authors of the *Borneo Akademika* journal on their success in producing this journal. This achievement is actually the result of their tireless effort in contributing thoughts and ideas to produce papers on current issues and challenges in multi-disciplinary research. To the best of my knowledge, efforts to produce a home-grown UiTM Sabah journal actually started ten years ago, and today we see the fruits of our labour and patience. This shows us that total commitment from the academic community is required in the journey towards academic publication so that joint research efforts can be enhanced.

This journal consists of twelve peer-reviewed articles based on current research topics of interest. Each topic is unique by way of its research methodology and findings in various related fields. The papers in this journal are useful to fellow researchers who share a similar interest in the field or those who are directly involved in exploring multi-disciplinary research. We hope that this publication can be a reference for academicians and students alike, particularly those in UiTM as well as the general public.

Finally, I would like to take this opportunity to acknowledge the dedication of our editorial board and invited/field editors who have in one way or another contributed to the successful publication of this journal. My gratitude goes out to all the authors who contributed articles to this publication because this journal would not have become a reality without them.

Thank you.

Datuk Dr. Hj. Abdul Kadir Hj. Rosline
Chief Editor

Prakata

Dengan Nama Allah Yang Maha Pemurah Lagi Maha Mengasihani. Salam dan Selawat ke atas Junjungan Besar Nabi Muhammad SAW rasul akhir zaman.

Pertamanya saya ingin mengucapkan setinggi-tinggi tahniah kepada sidang penyunting dan penulis artikel jurnal Borneo Akademika yang menyumbang tenaga dan idea dalam isu dan cabaran terkini kajian pelbagai-bidang. Penerbitan jurnal ini adalah kesinambungan usaha lampau yang kurang aktif semenjak hampir sepuluh tahun lalu. Jurnal ini menggambarkan keperluan komitmen yang jitu daripada warga akademik bagi megembang kesignifikanan usaha-usaha dalam penyelidikan.

Jurnal ini mengandungi dua belas artikel yang dinilai oleh penilai jemputan/bidang berasaskan kajian semasa. Setiap tajuk yang dibincang mempunyai keunikan tersendiri yang metodologi dan dapatannya dikupas berdasarkan bidang kajian yang dibuat. Usaha ini amat memberi manfaat kepada penyelidik-penyelidik terutamanya mereka yang terlibat secara langsung dalam kajian terkini pelbagai-bidang. Tambahan pula, kami berharap agar penerbitan ini akan menjadi sumber rujukan kepada ahli akademik dan pelajar terutamanya di UiTM dan juga kepada orang awam lain.

Akhirnya, kami ingin mengambil kesempatan untuk merakamkan setinggi-tinggi penghargaan kepada semua ahli sidang penyunting dan penyunting jemputan atas sumbangan yang merupakan satu lagi cara menyumbang kepada kejayaan penerbitan jurnal ini. Terima kasih khas ditujukan kepada semua penulis yang menyumbang artikel untuk tujuan penerbitan ini kerana tanpa sumbangan mereka penerbitan ini tidak mungkin dapat dijayakan.

Terima kasih.

Datuk Dr. Hj. Abdul Kadir Hj Rosline
Ketua Penyunting

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Rozita @ Uji Mohammed

HUMAN CAPITAL AND ORGANISATIONAL EFFECTIVENESS: AN ANALYSIS INTO TECHNOLOGY-BASED COMPANIES

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ABSTRACT

This paper attempts to review the literature on the relationship between human capital and organisational effectiveness particularly in technology-based companies. It highlights that attracting human capital is only part of the process of managing human capital. The steps taken to develop and subsequently retain human capital in an organisation is as crucial as attracting them in the first place. Discussion on human capital is based on the model as suggested by Dess et al (2014). This is a conceptual paper and an effort towards extending the theory of Dess et al. (2014).

Keywords: Human Capital; Organisational effectiveness; Knowledge economy; Apple.

ABSTRAK

Kertas kerja ini cuba mengkaji hubungan kait di antara sumber manusia dan keberkesanan organisasi terutamanya syarikat berasaskan teknologi. Kertas kerja ini menekankan bahawa proses menarik sumber manusia hanyalah sebahagian daripada proses pengurusan sumber manusia. Pengurusan sumber manusia secara keseluruhan menekankan tentang proses pembangunan sumber manusia serta proses untuk mengekalkan mereka di dalam sesuatu organisasi. Perbincangan tentang pengurusan sumber manusia adalah berdasarkan model yang dicadangkan oleh Dess et al. (2014). Kertas kerja ini adalah merupakan kertas konsep dan langkah pertama untuk mengembangkan teori Dess et al. (2014).

Kata kunci: Sumber manusia, Keberkesanan organisasi, Ekonomi pengetahuan, Apple.

1.0 Introduction

Dess, Lumpkin, Eisner and McNamara (2014) proposed a model of human capital comprising attracting human capital, developing human capital and retaining human capital. According to Dess et al. (2014), when an organisation is able to identify necessary steps to develop its human capital, it will result in retaining its human capital and the outcome is the organisations' effectiveness in developing human capital. This process is very critical to technology-based companies as innovation of its human capital creates values and becomes the source of competitive advantage for the organisation.

The three activities in human capital which are attracting, developing and retaining are equally important and are closely interrelated. The organisation cannot afford to concentrate on one activity and neglect the others. Discussion on human capital is concluded by presenting a case study on the retention issues faced by Apple. The retention issue faced Apple was brought about by the change in corporate culture as a result of the change in leadership style. As proven by Apple, retaining human capital need not be based solely on financial rewards as a vital organisational control mechanism but the non-financial rewards

and incentives like corporate culture prevails. Toward the end of the paper the writer discusses the retention issues faced by Apple and proposes Lewin's change model to address the change in Apple.

2.0 Human Capital and Organisational Effectiveness

The importance of human capital increases tremendously as an economy evolves into a knowledge economy. In a knowledge economy, organisational wealth is created by effective management of knowledge workers and not by efficient control of physical and financial assets (Stewart, 1997). Dess and Picken (1999) argued that managers do not focus on tangible resources such as land, equipment and money as well as intangibles such as brands, image and customer loyalty alone but rather effort is directed more towards the efficient allocation of labour and capital.

On the other hand, The World Economic Survey (1996) reported that more than 50 percent of the gross domestic product (GDP) in developed economies is knowledge-based (intellectual assets and intangible people skills). In the United State of America, for example, intellectual and information processes create most of the value for firms in large service industries which include software, medical care, communications and education which make up 77 percent of the America's GDP (The World Economic Survey, 1996). In the manufacturing sector, intellectual activities such as research and development, process design, product design, logistics, marketing and technological innovation produce the preponderance of value added (Quinn et al., 1996).

As quoted from Hamel and Prahalad (1996, p.238),

"The machine age was a physical world. It consisted of things. Companies made and distributed things (physical products). Management allocated things (capital budget) and management invested in things (plant and equipment). In the machine age, people were ancillary, and things were central. In the information age, things are ancillary, knowledge is central. A company's value derives not from things but from knowledge, know-how, intellectual assets, competencies which are all embedded in people".

2.1 Human capital

The Human Capital Model as suggested by Dess et al. (2014) comprised *Attracting Human Capital, Developing Human Capital and Retaining Human Capital*. Attracting human capital involves recruiting talented people with the proper sets of skills, capabilities and the right values and attitudes. These traits must be continually developed, strengthened, reinforced and must be motivated and their efforts directed towards the accomplishment of organisational goal and objectives. The second activity in the human capital model is the process of developing the human capital. Developing human capital involves training and continuous development activities provided by the organisation. The third activity in the human capital model as suggested by Dess et al. (2014) is the retaining process.

In technology-based companies such as Microsoft, reliance on its human capital to create innovation is substantial and it serves as a basis for the company's competitive advantage. The success of Microsoft which is a technology-based company, is contributed by the people who work for the company. Thus, in order to succeed, it has to manage its talent right. Firms throughout the industrial world are recognizing that the knowledge worker is the key to

success in the marketplace (Dess et al., 2014). There is no doubt that attracting talent is necessary but not sufficient for success. Attracting talent must be complemented with developing the talent and subsequently retaining them. Teece (2000) stated that human capital is part of an organisation's intellectual assets. As an asset, human capital is a key driver of innovation and competitive advantage in today's knowledge-based economy.

2.2 Organisational effectiveness

The effectiveness of an organisation in technology-based companies can be indicated by applying the ratio of market-to-book value. The ratio of market-to-book value for some well-known companies is as follows:

Table 1: Ratio of market-to-book value

Company	Annual Sales (\$ billions)	Market Value (\$ billion)	Book Value (\$ billion)	Ratio of Market to Book Value
Apple	157.0	510.0	117.2	4.4
Google	47.3	237.8	58.1	4.1
Microsoft	73.7	229.4	66.4	3.5
Southwest Airlines	17.0	7.9	6.9	1.1

Source: *finance.yahoo.com* and Dess et al. (2014)

It can be seen from the above table that the gap between a firm's market value and book value is huge for knowledge intensive corporations (Apple, Google and Microsoft) than for firm (Southwest Airlines) with strategies based primarily on tangible assets (Lashinsky, 2007).

In firms where knowledge and the management of knowledge workers are important to developing products or services and physical resources are less critical, the ratio of market-to-book value tends to be higher. Firms such as Apple, Google, and Microsoft recorded high market-to-book value ratios because of their high investment in knowledge resources and technological expertise (Dess et al., 2014). The effectiveness of these organisations as indicated by the high ratio of market-to-book value relates to its heavy reliance on its human capital as a source for innovation and competitive advantage.

On the other hand, firms in more traditional industry sectors such as Southwest Airlines has relatively low market-to-book ratios. This reflects its greater investments in physical resources and lower investment in knowledge resources.

3.0 Case Study on Apple

Apple was founded by Steve Jobs, Steve Wozniak, and Ronald Wayne on 1 April 1976 and initially Apple was engaged in the development of personal computers. It was incorporated as Apple Computer Incorporation on 3 January 1977 and was renamed as Apple Incorporation on 9 January 2007 to better reflect its shifted focus towards consumer electronics.

Business Insider dated 15 April 2013 reported that Apple's employees were on the move. This information came as a surprise because Apple has a reputation for low staff turnover even though it offered lower pay and fewer perks than other companies (Carson, 2013). This reputation is changing as other technology companies such as Google, LinkedIn, Facebook

and Hewlett Packard are starting to receive more resumes from Apple's employees. When investigated, the employees gave two reasons. The first reason given by Apple's employees was that start-up companies paid more and the second reason given was that the corporate culture at Apple was changing due to the change in leadership.

Tim Cook, the Chief Executive Officer (CEO) of Apple, who took over from the visionary Steve Jobs in 2011 has different style of leadership. The previous CEO of Apple, Steve Jobs was a visionary leader and creator of innovative products. He held bi-weekly meetings about the product-line and he made it possible for his employees to achieve the impossible. That was the culture under Steve Jobs and Apple's turnover was low. Tim Cook, however, is a business man who has given the company a more traditional direction and he believes in delegation, spread sheets and consensus. He does not attend product-line meetings and has not yet created anything revolutionary or innovative (Greenfield, 2013).

Apparently Apple is undergoing change as a result of a change in leadership. Different leaders have different styles of managing an organisation. The inability of Apple to retain its talent could be attributed to the failure of the new leader to address change in the organisation. Change needs to be managed diligently. According to Lewin's Change Model, change should be managed in three phases, unfreeze, freeze and refreeze. As suggested by Lewin, unfreezing is the process of preparing the organisation to accept change and it is necessary to break down the existing status quo before building up a new way of operating. This can be achieved through communication and convincing the employees that the new style of leadership will create a new corporate culture.

The second phase is freezing which is accepting change and starting to act in ways that support the new direction. The transition from unfreeze to freeze does not happen overnight but rather people take time to embrace the new direction and participate proactively in the change. Steps suggested by this model include communication and involving people rigorously in the process. The third step is refreezing which requires the people and the organisation to institutionalize the changes. The model suggests that change should be anchored into the culture, and the organisation should develop ways to sustain the change and provide support and training.

4.0 Conclusion

The business environment has changed from the machine age to the information age. Under the new climate, organisational effectiveness is greatly influenced by its capability to manage its human capital. As proposed by Dess et al. (2014) human capital (attracting, developing, retaining) is a three-legged stool - if one leg is weak or broken, the stool collapses. The model is critical to technology-based companies where competitive advantage is based on innovation of its human capital. To measure the effectiveness of technology-based companies, the ratio of market-to-book value was proposed. If the ratio of market-to-book value for technology-based companies is high, it indicates that the ability of the companies to generate sales are high because their products are innovated and the organisation embraces innovation. Innovation in an organisation is contributed by its human capital.

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