# Improving Employees Retention Rate Through Knowledge Management and Business Intelligence Components

### Herison Surbakti<sup>1</sup>, and Azman Ta'a<sup>2</sup>

<sup>1</sup>Universitas Respati Yogyakarta (UNRIYO), Indonesia, herisonsurbakticc@gmail.com <sup>2</sup>Universiti Utara Malaysia (UUM), Malaysia, azman@uum.edu.my

#### ABSTRACT

The fundamental thrust of this paper is to uncover certain dimensions of organizational context through Knowledge Management (KM) and Business Intelligence (BI). KM is identified as important antecedent of employee retention that leads to direct their positive attitude toward work place. The structural model indicates that KM and BI strategies integer worker instant to retain. For data collection, the unbiased sources have been used i-e., past literature, journals, and secondary data of discussions with top management and employee's feedback. An analysis of the big data serves as the basis for determining the impact of KM trough BI and using employee retention scale. This paper discusses some reasons for turnover to include components of BI. The problems with so much data from sensors, social media, and online applications often flow and accumulate much faster than humans could possibly analyze or act on it. Further, the lack of analytical system drives organizations to a lot more depends to their employees. Most significant findings for this study demonstrate that the needs of the good analytical system in BI could generalize the training sets of data so that can help the organizations to improving their employees' retention rate.

**Keywords**: Knowledge Management, Business intelligence, Employee retention rate, Analytical Systems

#### I INTRODUCTION

Knowledge Management (KM) is opted as strategic tool by executives to keep their team motivated. These teams consist of employees who have higher level of inspiration and competency. In modern era, worker turnover rate is crucial issue for businesses to attain competitive advantage. Employee's retention can be measured by their level of motivation and task orientation in work environment. No organization can compromise for loss of skilled employee because it is much essential than any other source of development. The KM is platform that supports strategic business decisions with people, process, and technology aspects. It is widely believed that job satisfaction is wholly dependent upon leadership integrity and justified processes of decisions within organization. Thus, intelligence has been a significant factor in managing human capital. It covers all aspects of customer, competitor, markets, technological and environmental intelligence (Surbakti, 2015b). Business Intelligence (BI) is process that generates valuable information with DSS (Decision Support System), data mining and advanced analytics for corporate strategic decisions. It is constant approach for creating and enriching significant information in the managerial context. For knowledge based organizations BI is considered as backbone in organizational structure. It turns data into actionable intelligence for executives to make strategies for work environment stability (Pirttimäki, 2007). Business are keen interested to use latest technology for meeting external and internal competition. BI adopts an effective aid to intelligence practitioners for realizing complete picture of resources in form of humans.

Many past studies have verified that utilizing high practices "can association work boost firm competitiveness" (Nwokocha & Iheriohanma, 2012; Pirttimäki. 2007: Ranibar & Amiri. 2015). Competitive advantage on the basis of employees is the most focused strategic goal for firms. Executive do believe that it is not so easy to imitate human mind. Skills and abilities take time to reach to a stage where employee's intellectual worth even crosses tangible assets.

Moreover, the use of BI applications for knowledge is the major portion of the enterprise software consists of business intelligence, big data, and data analytics (Chen, Chiang, & Storey, 2012). Most recent example is of the acquisition of WhatsApp for a worth of USD 20 billion by Facebook. WhatsApp has only 32 engineers with 450 million active users. The 72% users are active everyday and its users share 500m photos a day, which is almost certainly more than Facebook (Evans, 2014). This considering as one of the small example of the rising of big data to analyze. For instance, with the rise of big data, the data accumulated from different sources such as; social media and online applications often stream in bulk and are much faster than a human could conceivably analyze or act on it.

Within firms, KM is the heart of progression planning. Businesses that properly manage the alteration of new employees by replacing old ones allow job and industrial information to be transferred through the organization to ensure that such particulars are not lost. Either employees leave organization voluntarily or involuntarily.

As mentioned above, that there's a problem in analyzing the data and act on it, especially the big data, which is with the rise of big data, the data accumulated from different sources such as; social media and online applications often stream in bulk and are much faster than a human could conceivably analyze or act on it.

Certain business concerns included complexity, references to the increasing pace of change, globalization, information flow, economy, networking and proactively. Massive development in the information technology and communications demand to adopt BI applications in order to deal with business mechanisms, staying at the marketplace, rivalry, customer control, and retention.

# **II LITERATURE REVIEW**

In this segment, we present an analysis of the existing literature along with critical assessment of the earlier presented techniques encompassing BI and KM components for most valuable assets of organization.

## A. Knowledge Management

Fleig-Palmer & Schoorman (2011) recognized that in future KM linked strategies will operate as a basis of competitive intensity for any business. Knowledge Management is the most influential factor for strategic management of Business Intelligence (Fleig-Palmer & Schoorman, 2011). Knowledge management also closely associates with employee's attitude and behavior toward the job. They will stay with firms where their views and suggestions are given importance.

Knowledge management speaks to strategies, policies, and techniques intended at sustaining an organization's competitiveness by optimizing the environment needed for efficiency enhancement, modernization, and teamwork among employees (Iqbal & Mahmood, 2012).

## **B.** Business Intelligence

BI is recognized as managerial tool used to produce up to date information for strategic decision making (Pirttimäki, 2007).

According to Kanaan, Masa'deh, & Gharibeh (2013), BI is combination of data, knowledge about company's operational environment that leads to creating competitive advantage for business. BI is viewed as a way and process of improving company performance by giving influential assistance for executive decision maker to allow them to have actionable data and information at hand (Kanaan, Masa'deh, & Gharibeh, 2013). The basic quality for BI tool is that it is talent to collect data from diverse source, to acquire advance analytical methods, and the skill to assist multi user's demands (Ranjan, 2009).

# C. Employee Retention

Retention is an intentional move by an organization to build an environment which holds employees for long term (Samuel & Chipunza, 2009). Most of the time when these employees apart, they move to competing organizations with the knowledge and internal secrets obtained from their former organizations (Curado & Bontis, 2007). The improvement has significantly changed human resource performance in the area of attracting accomplished employees into organizations, and most significantly is the strategy for their retention in organization (Yarbrough, Martin, & Alfred, 2016).

If organization gets fail to retain employees then from the outlook of remaining employees, high turnover rates raise their normal workload (Guha & Chakrabarti, 2015).

Such extra burdens increase the stress level of the rest of the team members, employee retention is also defined as loyalty depicted from worker side and fulfillment of satisfaction from employer side (Yarbrough et al., 2016). Employer must care about psychological contracts. Once these contracts are broken employees motivational level is badly effected (Ibrahim, 2015). Their attitude toward the work also starts diminishing (Roblek, Štok, Meško, & Erenda, 2013). There are five reasons for employee not willing to retain in organization (Roblek et al., 2013):

- 1. Poor recruitment practices
- 2. Management style
- 3. Lack of appreciation
- 4. Lack of competition in the
- 5. Stressful workplace environment.

# **D.** Turnover

Branham (2005) affirmed that turnover rate can be in brief described as how quick the employers hire and lose employees.

The involuntary turnover refers to the firing of employees, while voluntary turnover occurs when employees resign. While many studies have compared these two divergent classifications, this study is aiming to examine voluntary turnover specifically (Branham, 2005). It is found that a continually high turnover rate demotivate the remaining employees by inspiring training obligation to them. Motivation and attitude of employees are key factors toward success. Goals and objectives not require systems and machinery but the people who run both (Ranjan, 2009). Hence, organization opt for downsizing, outsourcing etc. instead of turnover (Ranjbar & Amiri, 2015).

#### **III METHODOLOGY**

For this empirical research, qualitative research technique is practiced for collection of adequate facts and figures. It included secondary data of self-interviews to executives and managers in corporate sector, evaluation of existing literature and comparison with previous, past researches, journal, and articles and proposed models of BI to empowering KM. Employee's feedback is also considered by secondary data resources while analyzing corporate practical strategies. Past data is also preferred as proof to their performance management activities within organization as financial reports, market share and customer service data bases. All those data are collected trough secondary data for this paper purposes.

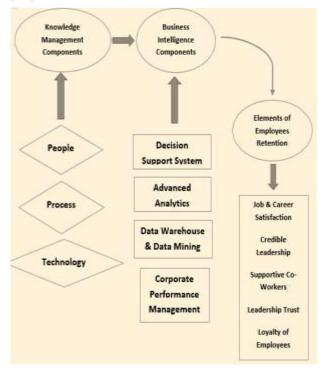


Fig I: Building relationship between components of BI and KM to maximize Employee Retention Rate: Proposed Framework

The question session covers all aspects of BI to empowering the KM significance for organizational competitiveness in market place. Therefore, the following key research questions are proposed:

- 1. What is the relationship between business intelligence, knowledge management, and employee retention in organizational context?
- 2. How business intelligence ensure to reduce employees turnover rate?
- 3. How business intelligence empowering the knowledge?
- 4. To what extent are BI and KM being used in influencing retention and increase competitiveness?
- 5. How does Business intelligence control internal and external operations in competitive environment?
- 6. How efficiently Knowledge management build relation between employee and workplace?

With superior tools of BI, now employees can also easily convert their business information via the systematic intelligence to solve many business issues with technological advancement. In the light of multiple views and arguments, the model is proposed for KM and BI integration. Open ended questions facilitated individuals to openly share their views.

Everyone was welcomed to participate and share his knowledge and experiences. Thus, the role of both fundamental elements are appreciable if practiced effectively but to some extent organizations seem fail to adopt them. People functioning in business intelligence have developed tools that simplify the work, particularly when the intelligence task involves assembly and assessing large quantities of unstructured data.

To obtain desired position in market without effective BI to target process-oriented organizations is not possible. Various problems on re-engineering in business process are being focused. According to Surbakti (2015), enterprises are on track of building BI systems that support in analysis and decision making to better recognize their operations and compete in the marketplace (Surbakti, 2015a).

Further, we examined from certain sources of data that companies still feel that BI has technical complexities and serviceable only by technically specialists. They also feel that BI is costly. BI takes a long time to yield accurate analysis. However, Business Intelligence is becoming need of the organizations who have to handle big data (Gupta, Goul, & Dinter, 2015). Hence, in this research different models regarding data warehouse and data mining.

Data mining is component of BI that is heavily inclined toward traditional statistical techniques and even most data-mining methods reveal a strong base of statistical and data analysis methods. DSS also come with results of valued processed information that assist management to take business long term decisions. Hence, Employees can treated in best manners by adopting such strategic tools and can be retained as valuable tangible assets.

### IV CONCLUSION AND DISCUSSION

Today's business environment has become very competitive thus making skilled employees the major differentiating factor for most organizations. The present study assumed that managers in the organizations have responsibility to properly recognize and apply motivational variables that can manipulate employees to stay in an Organization.

Replacing existing employee is expensive to organizations and critical to competitiveness. These key (termed knowledge workers) are particularly risky since their value to the organization is fundamentally intangible and not easily simulated. This is why senior management must avoid more loss by codifying intellectual assets in a deliberately planned knowledge management system. By applying a knowledge management strategy, the business can protect them from knowledge erosion. This state of affairs demands corporate executives to consider the consequences of voluntary turnover to create contingent plans.

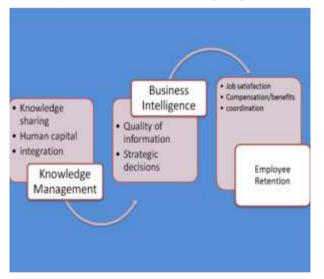


Fig II: Implementation phase of Proposed Model: KM & BI role for employee retention

The above model illustrates that integration of good BI in analyzing big data can improve and empowering the knowledge in organizations. Thus, make possible retention of employee on long term basis. Lack of knowledge sharing among employees and management causes frustration leading to confusion and inefficiencies. Knowledge management and business intelligence emphasize for employees empowerment. Empowered employees have the freedom to participate in decisions within organization. Employment contract highlights the significance of attracting and maintaining skilled assets as the key to strategic employment in the modern workplace. A lot of firm talent can be lost if the employees experience attentive in dead-end positions.

It is only a comprehensive blend of knowledge management (KM) and business intelligence (BI) motivational variables that can increase retention and diminish the high rate of employee turnover in various organizations.

The paper explored the concepts of BI, its components, concepts of KM, turnover causes and consequences, technology requirements, designing and implementing business intelligence, and various BI tools for competitiveness.

#### REFERENCES

- Branham, L. (2005). The 7 Hidden Reasons Employees Leave. Concentrated Knowledge™ for the Busy Executive, 27(6).
- Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business Intelligence And Analytics: From Big Data To Big Impact. MIS Quarterly, 36(4), 25.
- Curado, C., & Bontis, N. (2007). Managing intellectual capital: the MIC matrix. Int. J. Knowledge and Learning, 3(2/3), 13.
- Evans, B. (2014). Whatsapp and \$19bn.
- Fleig-Palmer, M. M., & Schoorman, F. D. (2011). Trust as a Moderator of the Relationship Between Mentoring and Knowledge Transfer. *Journal of Leadership & Organizational Studies*, 18(3), 334-343. doi:10.1177/1548051811408615
- Guha, S., & Chakrabarti, S. (2015). Effects of Intrinsic and Extrinsic Factors on Voluntary Employee Turnover : An Alternative Exposition. *Anvesha*, 8(3).
- Gupta, B., Goul, M., & Dinter, B. (2015). Business Intelligence and Big Data in Higher Education: Status of a Multi-Year Model Curriculum Development Effort for Business School Undergraduates, MS Graduates, and MBAs. *Communications of the Association for Information Systems*, 36(23).
- Ibrahim, D. (2015). An Overview of Work-Life Management Practices from a Malaysian Perspective. *International Business Management*, 9(4), 10.
- Iqbal, J., & Mahmood, Y. (2012). Reviewing Knowledge Management Literature. Interdisciplinary Journal Of Contemporary Research In Business, 4(6), 22.
- Kanaan, R., Masa'deh, R. e. M. d. T., & Gharibeh, A. a. H. (2013). The Impact Of Knowledge Sharing Enablers On Knowledge Sharing Capability: An Empirical Study On Jordanian Telecommunication Firms. *European Scientific Journal*, 9(22).
- Nwokocha, I., & Iheriohanma, E. B. J. (2012). Emerging Trends in Employee Retention Strategies in a Globalizing Economy: Nigeria in Focus. Asian Social Science, 8(10). doi:10.5539/ass.v8n10p198
- Pirttimäki, V. H. (2007). Conceptual analysis of business intelligence. South African Journal of Information Management, 9(2), 14.
- Ranjan, J. (2009). Business Intelligence: Concepts, Components, Techniques And Benefits. *Journal of Theoretical and Applied Information Technology*, 9(1), 11.
- Ranjbar, M., & Amiri, N. (2015, 16th Aug. 2015). The Relationship Between Knowledge Management And Employee Retention. Paper presented at the TheIRES 7th International Conference, Kuala Lumpur.
- Roblek, V., Štok, Z. M., Meško, M., & Erenda, I. (2013). Factors of Knowledge Management and the Impact of Employee Turnover in Activity and Performance in Scientific and Technological Parks in Slovenia. *JIOS*, 37(1).

Knowledge Management International Conference (KMICe) 2016, 29 – 30 August 2016, Chiang Mai, Thailand http://www.kmice.cms.net.my/

- Samuel, M. O., & Chipunza, C. (2009). Employee retention and turnover: Using motivational variables as a panacea. *African Journal of Business Management*, 3(8), 7. doi:10.5897/AJBM09.125
- Surbakti, H. (2015a). Integrating Knowledge Management and Business Intelligence Processes for Empowering Government Business Organizations. International Journal of Computer Applications, 114(5), 8.
- Surbakti, H. (2015b). WEB TECHNOLOGY KNOWLEDGE MANAGEMENT AND ITS PRIVACY AND SECURITY CHALLENGE. Paper presented at the TheIIER International Conference, Singapore.
- Yarbrough, S., Martin, P., & Alfred, D. (2016). Professional values, job satisfaction, career development, and intent to stay. *Nursing Ethics, I-II*. doi:10.1177/0969733015623098