



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v11-i6/10125>

DOI:10.6007/IJARBSS/v11-i6/10125

**Received:** 09 April 2021, **Revised:** 10 May 2021, **Accepted:** 30 May 2021

**Published Online:** 11 June 2021

**In-Text Citation:** (Arifin & Jaafar, 2021)

**To Cite this Article:** Arifin, M. A., & Jaafar, W. M. W. (2021). Analysing the Need for the Development of a Robust HR Analyst Competency Model and Instrument for Competency Measurement. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 307–314.

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**Vol. 11, No. 6, 2021, Pg. 307 - 314**

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[www.hrmar.com](http://www.hrmar.com)

ISSN: 2222-6990

## Analysing the Need for the Development of a Robust HR Analyst Competency Model and Instrument for Competency Measurement

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### Abstract

HR analytics refers to the collection, combination, and analysis of HR data and the application of existing data to predict future HR functions. Over the past several years, with more organisations placing emphasis on the importance of existing data management, the demand for competent HR analysts has also increased tremendously. To measure the competence level of HR data analysts, tools such as competency models and instruments need to be developed. A systematic review revealed that to date, there are still no instrument reported which can measure HR analyst competencies, thus this calls for a study towards developing a comprehensive instrument specific for members in the HR profession. This study employs quantitative research methods and data were collected through the conduct of a survey, where a questionnaire served as the main instrument. The findings, based on answers received from 15 respondents, revealed that 90% of the respondents agreed that there was a need to develop an instrument to measure the competence level of HR analysts. This paper examines the need to develop a new instrument to measure the competence level of HR analysts, namely the Ma-HRACM Instrument. This study also offered a few suggestions for future studies towards understanding the required competency elements for HR analysts.

**Keywords:** Need Analysis, Competency, Instrument Development, HR Analyst, Human Resource

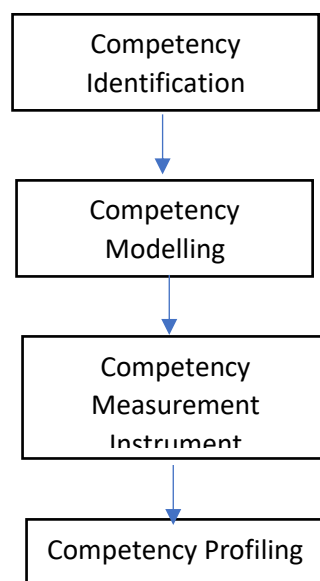
### Introduction

Since 2015, there has been an increasing number of organisations which have started to recognise the importance of data management to predict organisational performance. Thus, the role of HR personnel in the context of data management, also known as HR analytics, has also been significantly highlighted. Despite many organisations now placing a high value on people who can perform data management functions, the competencies of HR analytics (comprising a set of knowledge, skills, and abilities) remain unclear (Huselid, 2018). With the growing demand for HR analysts, the challenge is to ensure that they are competent enough to meet the demands of the organisation. As mentioned by Edwards and Edwards (Edwards, 2016), most of the employees have an understanding of the foundation of HR analytics but are not adequately competent to perform predictive HR analytics.

Previous studies conducted by the Chartered Institute of Personnel and Development (CIPD) and Workday (2018) revealed that less than 30% of HR professionals from the United Kingdom (UK) are able to perform HR analytics. Meanwhile, several companies have reported on how HR analytics have been successful in helping their organisation make important decisions. Companies such as Royal Dutch Shell ensure that successful candidates who are appointed to the position of HR analyst have a sound knowledge of statistics, applied mathematics, psychology, and economics; the candidates must also be able to put together a compelling data story (Van der Togt & Rasmussen, 2017). Therefore, the development of a competency model and a measurement instrument has practical value to be used as tools for competency measurement and professional development. It can also be utilised by the human resource department when designing training and development as well as selection and recruitment activities (Suhairom et al., 2014). Relying on these points, this study makes a contribution both in the form of theory and practice by developing specific and new instrument for members of the HR profession.

Competency based assessment is part of the tools needed to assess an individual employee's knowledge, skills, and abilities (Moore et al., 2002) and it has gained tremendous attention from many researchers across multiple disciplines, including human resource development (Howard et al., 2018; McCartney et al., 2020) in the context of organisations. In the last few years, the concept of 'competence, competency and competencies' has also sparked considerable interest. From the organisation's perspective, this practice is significantly important to identify required competency elements for employees and to develop a specific competency model and a measurement instrument, where the outcome can be used for training and development programmes (Moore et al., 2002). Later, tools such as competency measurement instrument which can measure employee performance can be used for purposes of selection and recruitment of competent employees. Figure 1 below illustrates the competency based assessment concepts in HR.

Figure1. Competency based assessment approach



Source: Prepared by researchers

In line with the competency based assessment approach, the objectives of this study are as follows:

- (1) To identify the required competencies for HR analysts
- (2) To develop a competency measurement model for HR analysts
- (3) To develop and validate a competency measurement instrument for HR analysts
- (4) To develop a competency profile for HR analysts

From a systematic review, there appears to be no study reported on the development and validation of an instrument to measure HR analysts. There is only one study conducted on competency model for HR analysts (McCartney et al., 2020). Hence, there is a need for members of the HR profession to understand the required competency elements, which are deemed important to be practiced and developed in the future. As mentioned by (Huei et al., 2019; Nornazira et al., 2015), towards the development of competency measurement instrument, a needs analysis should be conducted before the development stage to check the study feasibility, to examine the issues and challenges, and to provide suggestions on how to overcome them. The purpose of this study is to discuss the need to develop a new instrument to measure HR analysts' competencies. This paper contains a few sections; the first section describes the methodology used for this study. Second, it presents the results and a discussion of the findings. Third, a conclusion is drawn up and finally the researcher discusses recommendation for future perspectives.

### **Methodology**

This study has adopted a quantitative approach using a descriptive survey to achieve its objectives. Via an online survey, a set of questionnaires was prepared and randomly distributed among conference participants. The participants in the study come from various backgrounds, many of them academics and practitioners working in selected organisations. There are 12 items in the questionnaire designed to measure the need towards developing a new instrument for competency measurement. The researcher adapted the instrument using the study by (Nornazira et al., 2015) which focused on the development of competency model and instrument for measuring chef competencies. The respondents in the study comprised 15 experts, some of whom are academics whilst some others are directly involved in data management and analyst work. The questionnaire consists of two sections. Section A focuses on the respondents' background (demographic information) while section B contains closed-ended questions that identify the need for the development of new instrument to measure HR Analysts competencies.

### **Results and Discussion**

Findings from the study are discussed in three sections, namely (1) respondents' demographic information, (2) classification of the respondents based on their job position, and (3) institutions as well as their level of perception regarding the development of instrument for competency measurement comprising 12 items with 40 respondents.

### **Survey Findings**

Overall, the instrument comprises 12 items reflecting the need for a competency measurement instrument, with the reliability value of Cronbach's alpha being 0.85. In this preliminary study, only 15 questionnaires which were completed and returned by the

respondents were selected for further analysis. The first section analyses and describes the respondents' background (gender, age, experience and institutions) as set out in Table 1 below.

Table 1: A Summary of the Study Respondents' Demographic Information

Demographic Factors	Characteristics	Frequency (f)	Percentage (%)
Gender	Male	10	66.6
	Female	5	33.4
Age	31-40 years old	3	20.0
	41-50 years old	7	46.6
	Over 50 years old	5	33.3
Experience	5-10 years	1	6.66
	11-15 years	7	46.6
	Over 15 years	7	46.6
Working background	University (Academics)	5	33.4
	HR Practitioners (Industry)	10	66.6

Note:  $n = 15$

Based on their backgrounds, the respondents who have participated in the survey are further classified as either having worked in university or industry. Table 2 and Table 3 below summarise the classification of respondents of this study representing the population of expert panels in Malaysia.

Table 2: Classification of the respondents according to type of institution

Sectors	Criteria	f	%	Total %
1. Education	University	5	33.4	100.0
2. HR Practitioners	Industry	10	66.6	

### Perceptions towards Instrument for Competency Measurement

As shown in Table 3 below, the findings of the survey conducted by the researchers revealed that most of the respondents have positive perception regarding the need for the development of a new instrument to measure HR Analysts.

Table 3: Perception regarding the need for the development of a measurement instrument to measure HR Analysts

Statement	SD	D	SWA	A	SA	M	Sd
Currently, there is limited framework for HR Analyst competency modeling	0 0	0 0	4 26.6	7 46.6	4 26.6	4.00	0.758
There is a need to develop a framework for HR Analyst competency modeling	0	0	6 40.0	5 33.3	4 26.6	3.87	0.834
Currently, there is no instrument for measuring HR Analyst competencies particularly in Malaysia	0	0	2 13.3	5 33.3	8 53.3	4.47	0.743
Having an instrument for measuring HR Analyst competencies will help HR Analysts in their profession	0 0	0 0	2 13.3	5 33.3	8 53.3	4.40	0.737
Having an instrument for measuring HR Analyst competencies will guide HR Analysts towards effective job performance in their profession	0 0	0 0	3 20.0	6 40.0	6 40.0	4.20	0.775
Having an instrument for measuring HR Analyst competencies will help HR Analysts to be aware of their essential competencies in their profession	0 0	0 0	4 26.6	7 46.6	4 26.6	4.20	0.756
An instrument for measuring HR Analyst competencies is important for HR Analysts self-assessment	0 0	0 0	2 13.3	4 26.6	9 60.0	3.87	0.834
Having an instrument for measuring HR Analyst competencies will help organisations to maintain the performance of HR Analysts	0 0	0 0	1 6.66	5 33.3	9 60.0	4.47	0.743
Having an instrument for measuring HR Analyst competencies will help HR departments to identify which areas of knowledge, skills, and abilities need to developed to meet the demands of the profession	0 0	0 0	2 13.3	5 33.3	8 53.3	4.53	0.640
Having an instrument for measuring HR Analyst competencies will help the HR department in shaping the initial and in-service HR Analysts especially in professional courses in order to support their career development.	0 0	0 0	2 13.3	5 33.3	8 53.3	4.40	0.737
Both job and personal competencies are necessary for HR Analysts to become competent.	0 0	0 0	1 6.66	10 66.6	4 26.6	4.20	0.561
Having a comprehensive instrument measuring job and personal competencies is vital for the current HR Analyst profession.	0 0	0 0	2 13.3	4 26.6	9 60.0	4.47	0.743
Total						4.25	0.738

**SA=Strongly Agree, A=Agree, SMA=Somewhat Agree, D=Disagree, SD=Strongly Disagree  
M=Mean, Sd= Standard Deviation**

**Note: n = 15**

Table 3 summarises the distribution of the level of importance based on the survey responses. A majority of the experts on the expert panel (90.0%) agreed that there is currently no comprehensive instrument available for measuring HR analyst competencies. The expert panel was also asked the significance of having the new instrument, which can be a tool to ensure that all HR analysts understand the importance of both job and personal competencies and to be more effective in their profession. The availability of the instrument should also help to produce competent HR analysts who can meet the demands of the industry. With regards to all of these items, more than 80% of the experts agreed to support the development of a new instrument to measure HR analyst competencies. All of the experts on the expert panel (100%) agreed that having an instrument to measure HR analysts' competencies is important for their self-assessment. Employee self – assessment becomes one of the practical ways to measure the current levels of employee performance (Borg & Edmett, 2018) and significant tools to be used as an input for an employee training and development initiatives (Ross & Bruce, 2007).

### **Conclusion**

As an increasing number of organisations are focusing on data management to predict future HR functions and improve future performance, the role and competencies of HR Analysts need to be developed and more clearly defined. With the right set of knowledge, skills and abilities, HR analysts are able to conduct analysis of management data to help top management with the positioning of future strategy for an organisation to achieve internal and external benefits. It is important for top management to implement a competency-based approach to tailor to specific career development programmes designed to enhance their competency levels, thus contributing to the future success of the organisation.

### **Future Study Perspectives**

Although this study is considered to be a preliminary study of this topic, it contributes to our understanding regarding the need to develop a new and comprehensive instrument to measure the competency of HR analysts. This stage is important especially in dealing with high stakes study, including in developing a measurement model as well as an instrument for competency measurement. Whilst this study involved only a small number of samples, future study can be conducted across various job levels to better understand the importance of a HR Analyst's role. A comparative study between two countries, for example between an eastern country and a western country, would give valuable insights regarding competency elements which are deemed necessary for HR Analysts to perform in their profession. Future researchers can also explore other types of assessment towards developing a 360-competency measurement instrument, in order to give more solid output in terms of employee performance management. From methodological perspectives, it is expected that more research will use mixed method study and qualitative study to arrive at new findings regarding the required competency elements. It is also hoped that the researchers will put in effort to publish recent studies related to instrument development, including the psychometric properties that can serve as evidence for future references, especially among model and instrument developers who are specifically focused on the HR analyst profession.

### **Acknowledgements**

The researchers are grateful for the support provided by the expert panel through participating in this study.

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