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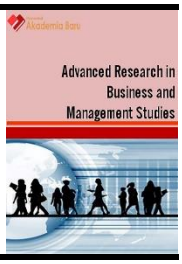

A Review of Talent Adaptive Concept and Conceptual Framework of Accelerated Industry4WRD Talent Adaptation in Malaysia

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ABSTRACT

Effective to current practice in the growth of talent by versatility, the companies require expertise to work in different divisions; subsidiaries; or departments; after three to five years' operating in a specific position, upon request for relocation or promotional activities. Nevertheless, the transfer to work requires specific talent to learn new activities and procedures through adaptation through reading over administrative tasks, as well as to gain technical expertise such as Industry 4.0, which is typically learned by being on the job and takes longer before the talent becomes fully competent to conduct its tasks linked to Industry 4.0 areas. Use eight-dimensional adaptive efficiency as the foundation, this study intends to analysis and to clarify the critical factors in Industry 4.0 job adaptation as well as to create an effective structure that accelerates the cycle of talent adaptation. This framework is expected to contribute to Malaysia Industry4WRD strategy on 'People' shift factor and supplement its two aspects of Personal Competence Growth and Top Management Technology Savviness. The study would examine a case study on Malaysian industries and use a semi-structured interview with selected respondents to establish the accelerated proposed adaptation mechanism for Malaysian industry talent.

Keywords:
Talent management, industry4WRD, industry 4.0

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1. Introduction

In talent management, it has been found that job burnout contributes to high employee turnover whereby transferring out of the organization, the effect of job burnout can be resolved. Following the practice and in order to ensure deliverance of good job performance, talent is allowed to move internally or externally following 3 to 5 years or 8 years following initial job placement. However, following transfer to a new place, the employee needs to go through a series of boarding/orientation and training in order to face new challenges following the change, especially regards to reskilling on Industry 4.0 competencies.

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Job mobility is an important aspect for young employees' career development [1]. In order to ensure that internally and externally mobile talent would be able to perform well in new tasks, development of talent is fundamental to alleviate the effects of job transition. For talent development that fit organizational values, the concept of corporate university has been introduced as a process where employees undergo learning processes to deliver better job performance as well as boost business delivery [2,3]. Other than corporate university, the concept of team learning has also been introduced where it has been proven that team leader coaching and team members' communication helps in group learning [4]. However, having to embark on series of learning takes time and incur cost to some industries where there is more prevailing necessity to have Industry 4.0 talent especially those in junior management level and in small industry to be able to perform their Industry 4.0 duties instantly and this situation necessitates other option in talent development approach.

2. Industry 4.0 Talent and Competencies

In a review by Lee *et al*., [5] there are six clusters relating to career competencies within the field of management studies are highly influential to be studied, namely, international careers, career management, career choice, career adaptation, individual and relational career success and life opportunities. It is also proven that there is a connection between adaptation to work and job performance. Performance of an individual, team or organization on Industry 4.0 cannot just be attained through utilizing a structured performance management system but also through implementing good Industry 4.0 performance management processes [6]. Concentrating on just performance management structure will create work anxiety where the skill application and practice of not clearly giving feedback for identified key areas such as; performance, inconsistencies in performance management implementation, spending insufficient time for performance management, understanding roles in performance management as well as competence of individual talent were found to be underlying problems for performance [7].

Most studies have concentrated on psychological aspects of adaptability in work environment where exploring further, a theory for career adaptability has been proposed where employees are thought to be able to run through job tasks well and experience better transition to changes in work environment [8]. Career adaptability has positively significant impact to job performance [9]. Studies also focus on individual adaptation by establishing adaptive performance to study the underlying behaviour in job adaptation [10,11]. There are also a few studies were carried out in the area of organizational adaptation where, for example, a study has shown that organizational adaptation affects work performance rather than individual's adaptation [12,13]. Findings of this study outlines the issues and factors that can enhance Industry 4.0 talent development in adapting to new work environment in Malaysian industries.

3. Challenges of Talent Adaptive for Malaysia Industry4WRD

To bolster this, the Ministry of International Trade and Industry (MITI) has crafted the National Industry 4.0 Policy Framework to provide a concerted and comprehensive transformation agenda for the manufacturing sectors in Malaysia [14]. The policy highlights five national strategies which cover funding, infrastructure, regulations, skills and talent; and technologies; and it aims at attracting stakeholders towards the Industry 4.0 technologies and processes and elevating Malaysia's attractiveness as a preferred manufacturing location. It is expected that this policy will create the

right ecosystem for Industry 4.0 to be adopted and would align the existing and future development initiatives; ultimately transforming Malaysia's manufacturing capabilities in a holistic and an accelerated manner [15].

In Figure 1, the Industry4WRD readiness model developed by MITI is focus on three main shift factors, technology, process and people, to helps industries to elevate their performance in Industry 4.0 adoption. Under the 'People' shift factor, there are two pillars as subcategories that focus on human capital development and transformation initiative [14]. The differences between subcategories are the focal point for human capital development is more towards developing competencies for skill workers and top management, and for transformation initiative is focus on the development of Industry 4.0 program in the organization. The subcategory for each pillar is called dimensions. These dimensions are critical for Industry4WRD readiness assessment because it is entirely depending on the human intervention as skill workers or top management. They are the enabler for industry revolution and innovation in their organization. Therefore, talent development for the two groups of human capital needs to be enhanced, especially in talent adaptive characteristics [14].

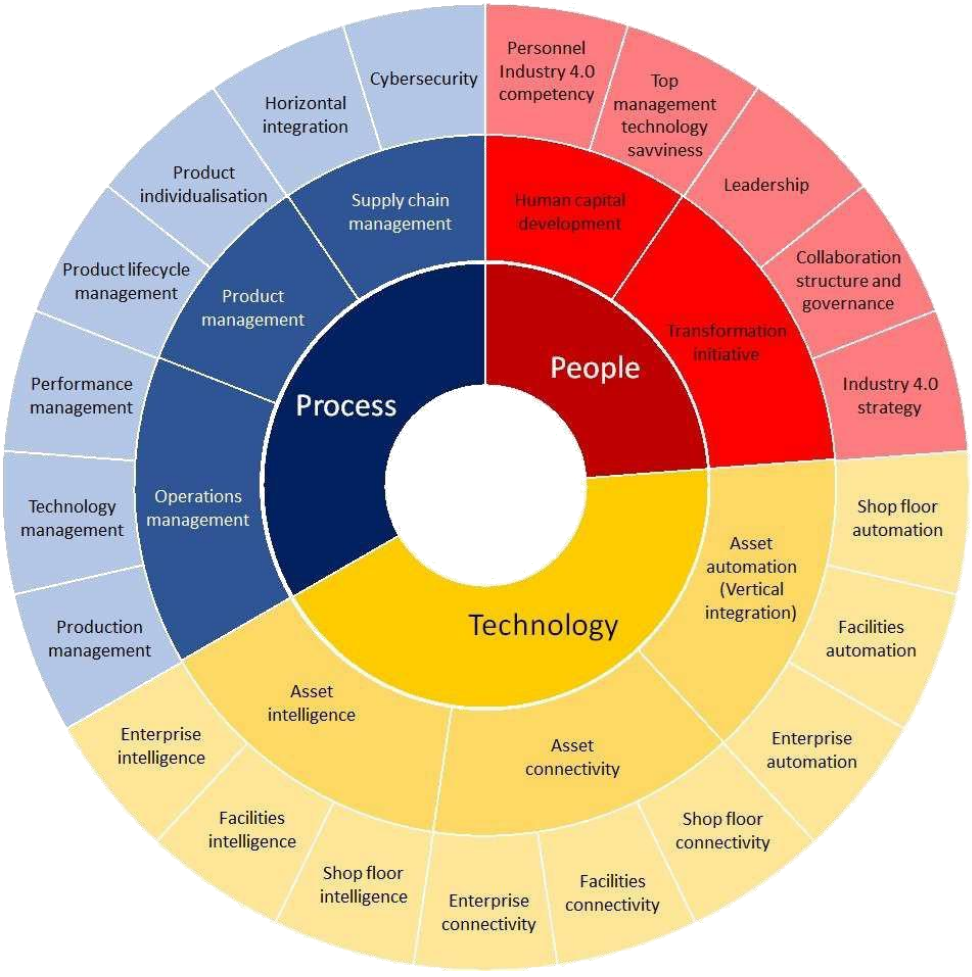

Fig. 1. Industry4WRD Readiness Assessment Model [15]

4. A Review of Conceptual Framework of Talent Adaption Performance

Campbell *et. Al* [16] has proposed and tested job performance models containing eight factors. Performance in this study are perceived as individuals' behaviors and actions that mostly related to achieving the goal of the organization and must be at least able to be observed [17]. The model proposed is as in the following Table 1.

Table 1
Taxonomy of Performance [17]

No	Taxonomy
1.	Job-specific task proficiency Degree of core substantive or technical tasks which are the principal to employee's job that have been carried out.
2.	Non-job-specific task proficiency Degree of tasks that are not core to job description
3.	Written and oral communication Written and oral presentations carried out when performing job
4.	Demonstrating effort Consistency in employee's effort throughout employment including spending extra time to finish tasks and willingness to work under unfavorable work conditions
5.	Maintaining personal discipline Abiding by the rules and avoidance of negative behaviors including absenteeism
6.	Maintaining peer and team performance Supporting colleagues including helping with work and training as well as able to work and lead a team
7.	Supervision/ leadership Influencing subordinates to perform in work, setting goals for subordinates, coaching and being role model
8.	Management/ administration Other elements not directly related to supervision such as sharing set goals with organization, managing employees and resources, monitoring progress, solving problems and overcome crisis.

Based on theory by Campbell *et. al.*, [16], there is eight-dimensional model of adaptive performance. Furthermore, Campbell argued that this model focus on cognitive or behavioural processes is different though complementary to those models that define performance as "a set of substantive content factors" [17]. Ployhart and Bliese [18] developed Individual ADAPTability (I-ADAPT) theory as a widely applicable measure of individual adaptability construct for various research and development use, as shows in Figure 2. Following the theory, the authors defined individual adaptability as "individual's ability, skill, disposition, willingness, and/or motivation, to change or fit different task, social, and environmental features." The study also established that adaptability is not the same as adaptive performance when regarded as adaptive performance.

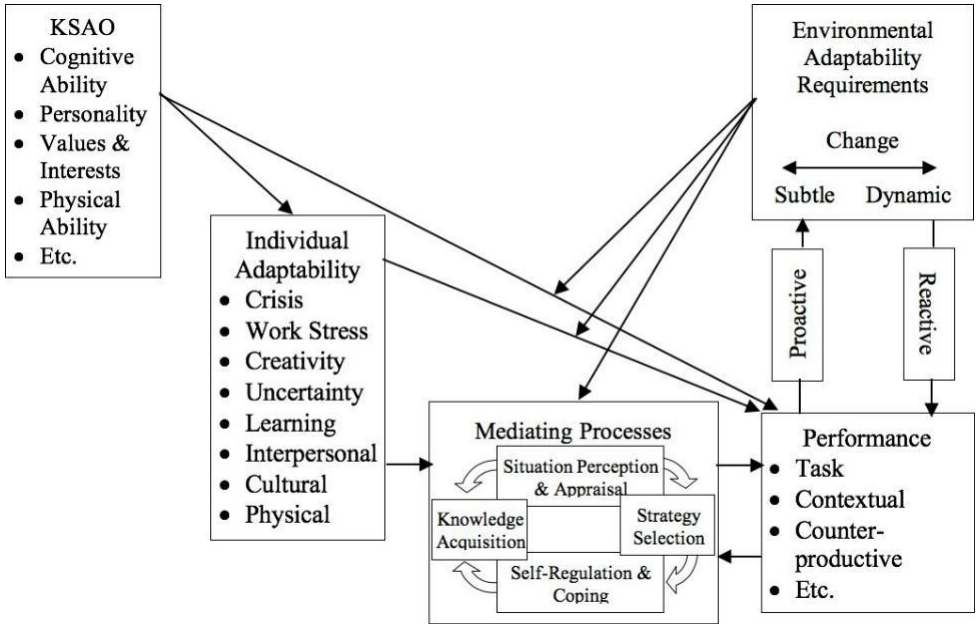

Fig. 2. I-ADAPT Conceptual Model [18]

Savickas developed career construction theory that is useful in adaptation of individuals with environment where it underlines social expectation to prepare for, enter and participate in work environment as well as handling career transitions, as shows in Figure 3. It consists of three components; life themes, vocational personality and career adaptability. Life themes addressed the vocational behavior, as of the theme that matters to the individual and other people from the individual work and contribution. Vocational personality concerned the action that the individual wants to do and this related to career related abilities, needs, values and interests. Career adaptability laid out orientation, exploration, establishment, management, and disengagement as principal types of behaviors that is during transition in a new work environment. These behaviors can be modeled as a cycle. Career adaptability also consists of attitude, beliefs and competencies or ABCs of career construction which are grouped into four dimensions of adaptability that are concern, control, curiosity and confidence (4Cs).

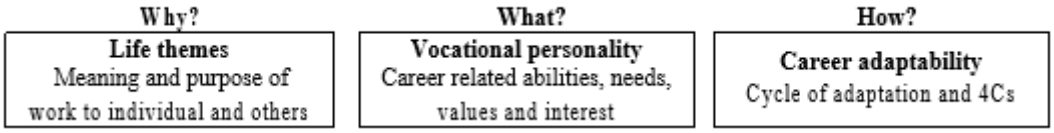

Fig. 3. Career Construction theory [19]

Although not implicitly addressing adaptive performance, Figure 4 shows a framework integrating adaptability as a principle of high-performance industry has been established [20]. The framework was established to guide performance management process implementation at organizational or sub-organizational levels where the framework is formed to consider roles of individual, team, organization and governance to overcome the hurdles with current practices in performance management.

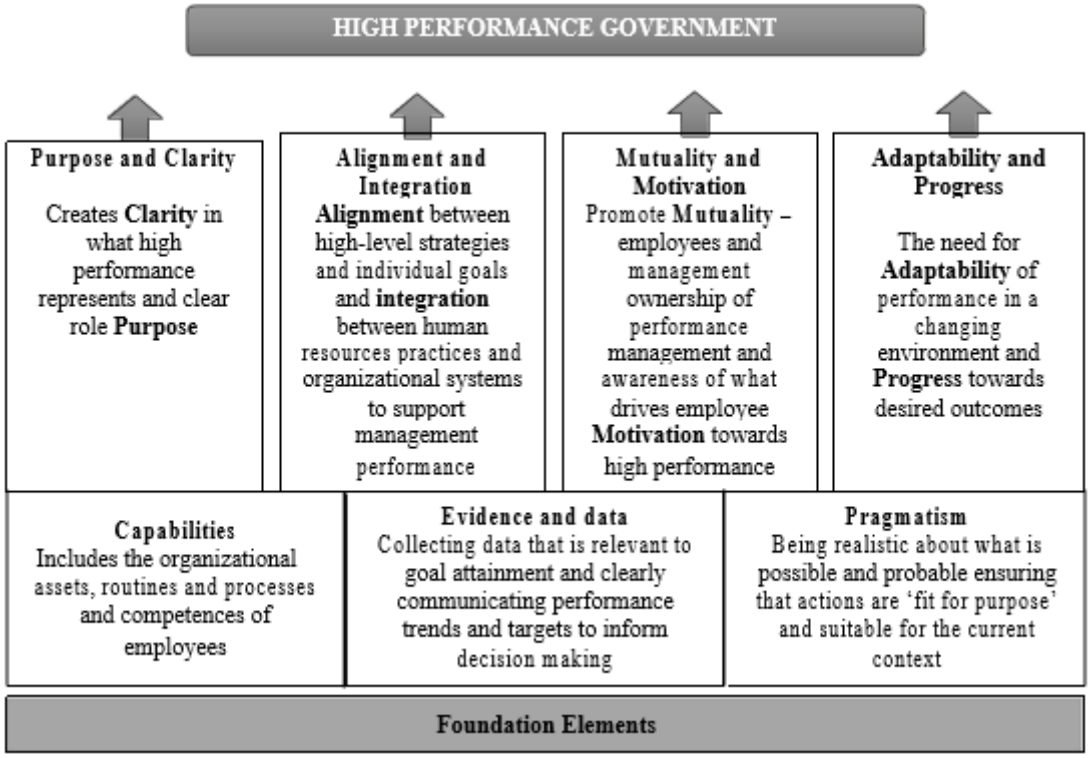

Fig. 4. Framework for high performance government

The objective of the framework is high performance as performance management outcome. The principles of purpose and clarity, alignment and integration, mutuality and motivation, as well as adaptability and progress are the principles that the framework should achieve and the three foundation elements of capabilities, evidence and data, and pragmatism are the critical factors to be implemented. The authors also considered high performance governance as one of the levels in its high-performance management model in the study on top of the existing literatures on individuals, teams and organizations to establish the connection of high-performance systems encompassing all players in public service.

Blackman *et al*. [20] further clarify the four principles to enabler of high performance. "Clarity and purpose" are to addressed ambiguity with performance management implementation where there should be shared understanding, clear and simple goals, understanding each employer's role and contribution as well as meaning of high performance. "Alignment and integration" answer the question to why each individual and group work is important to organization's goals as well as making use of HR and management practices to attain alignment and high performance of industry 4.0. "Mutuality and motivation" outline the need of a shared view of beneficial outcomes to the individual and organization while maintaining alignment and ensuring the importance of each individual's work is known. "Adaptability and progress" represent the ability of the individual, team and organization to adapt to change and keep check on their progress against a simple and clear performance measures.

5. Proposed Framework of Industry4WRD Talent Accelerated Adaptation

Following the critical factors in adaptability and review of the existing adaptive performance framework, the following framework is proposed in addressing learning tasks, technologies and procedures for Industry 4.0 talent. Considering Pulakos *et. Al* [10] eight-dimensional model of adaptive framework [10], Ployhart and Bliese I-ADAPT [18], Savickas cycle of adaptation [19] and Blackman *et. al* [7] framework for high performance [20], the following framework was proposed, as shows in Figure 5.

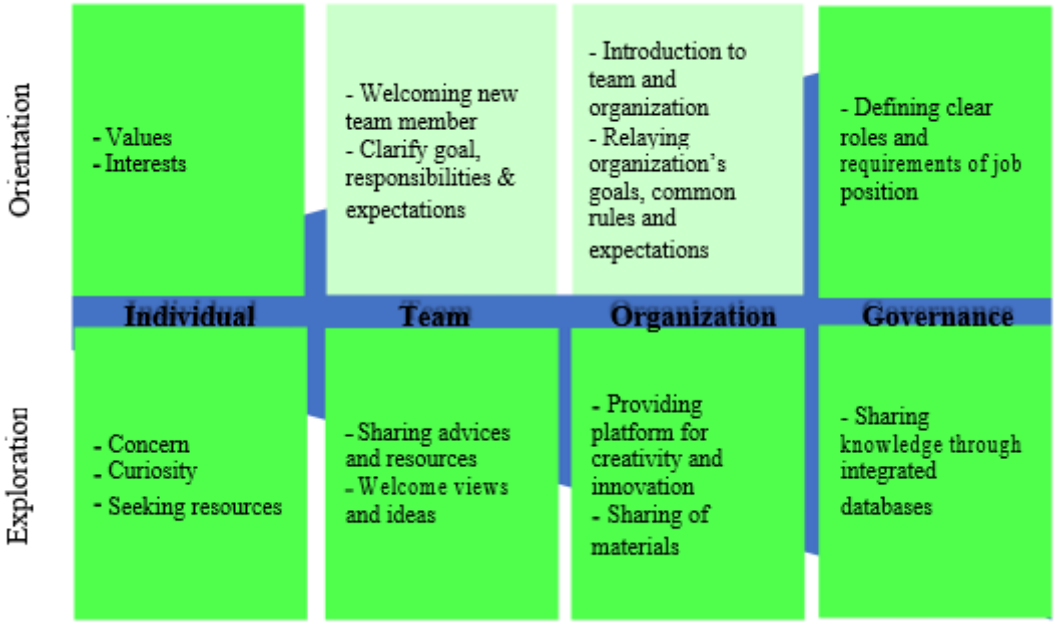

Fig. 5. Proposed Accelerated adaptation framework for Industry4WRD talent

The proposed framework investigates further one of dimensions in eight-dimensional adaptive performance model, namely learning new tasks, technologies and procedures [10]. By focusing on the dimension, the framework focuses in the first two phase of Savickas' cycle of adaptation namely orientation and exploration since this is when Industry 4.0 talent should have learnt about their new job skills. The elements in every stage and level of adaptation framework is attained from previously describe in I-ADAPT theory, Demerouti *et. al* have critical element of job skill crafting as well as Savickas 4Cs for individual level, Christian et. al model for team level and Ployhart and Turner model for organizational adaptation framework [20-22]. Blackman *et. al* [7] framework is also included to add in the elements and industrial level. The framework is design such that it will help each individual to adapt quickly to new challenges that related to Industry 4.0.

Orientation here includes introducing organization to the industrial talent either through onboarding process or periodical briefings. The stage also includes the role of the organization to introduce the new talent to the team he or she will be working closely with and the organization that he or she is working for, as well as letting them adjust their personal career goals with the organization's goals. This need to be done by clearly stating the goals of the engagement process so that the talent is aware of what they can contribute during the engagement process. In order to learn about the team and organization, industry 4.0 talent as individuals should be open and embrace the current culture. The team will then need to be welcome the new member to their team in order to

work in harmony. Governance is also important since they have to perform industry 4.0 tasks based on set up by the industry where the roles pertaining to the industry 4.0 talent need to be stated clearly as not to create confusion.

6. Conclusions

The organizations of developing Industry4WRD program are always developing individual's talent by transferring them with new project and exposed to changes from embracing industry 4.0. One of the major challenges for the Industry 4.0 talent in a new environment to adapt quickly with the changes and performance accordingly at new working condition. The industry 4.0 talent needs to go through a series of reskilling and tasks in order to face new challenges of industry 4.0 efficiently. Therefore, this paper explored the critical connection between adaptation to work and job performance for industry 4.0 talent. The talent adaptation process needs to be supported by structured performance management system and implementing good performance of industrial processes. The literature also discussed about the research focus in the form of framework with the purpose of guidance in the process in performance management. The significant impact of having the implementation framework helps talent to overcome the hurdles with current practices in performance management. The proposed framework support Industry 4.0 talent to progress and contribute to their team, organization and the government as well as learning what they will get back in return for achieving the organizational goals. The recommendation of the next step of research is to test and fine tune the proposed framework at human resource department on managing and supporting talent adoption in new job transfer as case study approach.

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