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#### Talent management as a facilitator of organizational intelligence

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#### CHRONICLE

Article history:
Received: February 14, 2019
Received in revised format: February 30, 2019
Accepted: March 6, 2019
Available online:
March 6, 2019

Keywords:
Talent management
Organizational intelligence
Talent identification and development
Talent retention
Food industry

#### ABSTRACT

Talented workforce is a main key to survive in challenging surroundings and quickly volatile business circumstances. This paper examines the fostering effect of talent management on organizational intelligence at food companies in Jordan through a quantitative approach. Both reliability and validity of measurement scale are evaluated. The paper demonstrates that talent management acts as a significant antecedent to organizational intelligence. Findings confirm the importance of enjoying talented employees and recommend practitioners and executives to develop and retain their talent pool through a strategic human resource management system in order to better capitalize on intellectual capital and drive it towards realizing the organizational missions.

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#### 1. Introduction

There are different knowledge resources and fast developing technological aspects that increase environmental changes and call for perceptible and discernible competitive capabilities within organizations. The main key to face such challenges is to enjoy talented workforce (Zadeh & Ahmadi, 2017) working within intelligent organization. The matter of talent management (TM) became salient in 1990 (Niedzwiecka, 2016), and currently has a great attention of a wide range of practitioners and academics as well as of stakeholders (Collings & Mellahi, 2009). However, TM is not formalized yet and a lot of executives do not have awareness of how to perform TM (Machado, 2017). Talent is a natural skill possessed by an individual in performing a task, and that is quite difficult for other people to imitate. War for talent does not end (Guthridge et al., 2008). Only few organizations make big efforts to search for and retain talented individuals of their staff (Ayquipa et al., 2018), therefore a lot of organizations have lost the talent and potentials of their smart persons (Nasabee et al., 2009). Any industry without talent is destined to fail (Grobler & Diedericks, 2009), because organizational success relies on the brain power of a few distinct and capable employees (Albrecht, 2003a). Personnel departments do not have enough

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perception into how to utilize human capital for better business consequences (Snell, 2011). TM provides the ability to anticipate correct human capital requirement of an organization and make correct plans on needs of those human capital. Therefore, TM plays a major role in the renewal and refreshment of HR practices (Lewis & Heckman, 2006) and assures a better workflow and high quality production.

Within current competitive business market, firms are strongly required to match their practices of TM with their goals (Sareen & Mishra, 2016). We have little empirical research on consequences of TM practices on organizational prosperity and development (Salau et al., 2018). More research is needed to investigate on how talent may contribute to organizational intelligence (OI) as a prosperity gate. Furthermore, despite having a wide range of previous research demonstrating the influence of OI on organizational outcome in different industries, relatively few studies direct their attention on the factors that affect OI in food industry. Studying the enhancing factors of OI in food industries would provide professionals and executives with an illustrative framework that assist them in capitalizing on these OI enhancers. Enhancing OI would lead them to implement decisions at the right time (Staskeviciute & Ciutiene, 2008) and to increase competitive advantage and possibilities of survival and success of their businesses. High intelligence indicates an organization's ability to deliver outstanding outcomes in the business environment (Davis et al., 2007). Private firms which depend on intelligence in their work seek to be harmonious with the modern patterns, instruments, and methods of management (Matin et al., 2010) such as TM. Future research should consider TM with other dependent constructs such as BI (Al-Qeed et al., 2018) and OI. Human beings are the foundation of transformations within organizations. With TM and being rich with talented workforce, an organization would better handle and transform information and be more skillful and systematic in collecting and communicating knowledge throughout the corporate, which in turn would reflect higher OI. Proceeding from previous, and due to the leading position Jordanian food industry occupies as one of the most important sectors on the basis of national investment and foreign direct investment (Al-Mahasneh, 2009), this research aims to find the role TM plays in creating better work environments and assuring organizational growth in near future through providing an empirical evidence on the relationship between TM and OI at food industry in Jordan.

## 2. Theoretical Background and Conceptual Model

#### 2.1 Talent Management

Talent is the possession of an extraordinary capability and distinct knowledge. Talent is labeled as rare, valuable, and hard to be imitated (Lewis & Heckman, 2006). TM is an individual and unit-level construct (McCracken et al., 2017), and considered as an essential aspect of human resource management as it affects hiring, deployment, and retention of employees within an organization. TM is a multiple practices phenomenon (Jyoti & Rani, 2014), which focuses on employees with undeniable skills and abilities as well as on processes that search for those distinct employees (Chikumbi, 2011). Abilities of employees can be strengthened by training, staffing, compensation practices, and performance appraisal (Delery & Gupta, 2016). There is no consensus on a single definition of TM construct (Aston & Morton, 2005). Lockwood (2006) found that TM is an undertaking by which integrated systems are enforced to rise productivity in workplace. It is concerned with enforcement of mechanisms that enhance development by luring, developing, and deploying skills and abilities to achieve present and future objectives. Tansley et al. (2006) considered TM as a complicated combination of skills, knowledge, potentiality and cognitive ability. A successful TM is achieved by selecting a workforce from a pool of talent (Lyria et al., 2017). Chaubey and Gupta (2013) defined TM as a process conducted to attract, develop and retain employees with the competency and capability to realize the organization's demands and goals. However, TM was best defined as:

activities and processes that involve the systematic identification of key positions which differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organization (Collings & Mellahi, 2009, p. 304).

TM is a source of competitive advantage (Al Nsour & Abu Tayeh, 2018; Michael et al., 2001), and having talented human capital is essential for the organization's success (Daneshfard et al., 2016). TM promotes organizational performance (Kehinde, 2012) and workforce productivity (Zadeh & Ahmadi, 2017), and helps the organization to solve problems more effectively (Poorhosseinzadeh & Subramaniam, 2012). TM helps fims to be more adaptable and proactive within the fast changing environment (Sareen & Mishra, 2016), and assists in sustaining business growth (Mwila & Turay, 2018). TM relates to leadership programs in that a talent can be merged with leadership roles, hence guides an organization to better production and business levels in terms of employee relations (Unseem, 2011). TM should be included in business plans of any organization, and the whole top and middle level management should participate in TM practices (Puvitayaphan, 2008). Therefore, talent mindset should be established within the whole firm (Kehinde, 2012). Managerial talent requires liberation from old methods and enjoying an open mind and a vigorous creative thinking skills (Goodman, 2000). Implementing and matching together the correct processes, structures, and practices of talent creation and management is much more important than only having talented personnel within an organization (Grobler & Diedericks, 2009). TM is the application of reliable HR practices, processes, and activities (Lewis & Heckman, 2006) such as recruitment and selection, development, retention, appraisals, and rewards (Ueno, 2014; Winfield, 1994). Since acquisition and retention of talent is the strategic goal of HRM (Niedzwiecka, 2016), firms implement strategies which deal with factors that attract talent and factors that retain talent (Elegbe, 2010). Identification and development of talented labor are needed by organizations, and TM is not possible without talent retention and low turnover rates (Hartmann et al., 2010). There is still debate and ambiguity around the intellectual and conceptual frontiers of TM (Whelan et al., 2010), and previous studies investigate TM through a wide range of elements and practices. This paper, through adopting the study of Singh & Sanjeev (2017), combines TM practices together and classifies them into two main elements which considered as the foundation of construct under study.

## 2.1.1 Potential Identification & Talent Development (PI-TD)

Acquiring talent is crucial for organizational success (Richardson, 2009). Employers should identify their best talented workforce (Jyoti & Rani, 2014), and this identification is conducted through analyzing the employees' performance and potential (Puvitayaphan, 2008). Talent identification embraces the concept of talent attraction. Talent attraction involves planning, finding, supplying, and recruiting talents (Zadeh & Ahmadi, 2017). Identification and attraction of talented employees represent the first step in TM process (Daneshfard et al., 2016; Puvitayaphan, 2008). Top firms look for talent constantly and recruit whenever they reach that talent (Poorhosseinzadeh & Subramaniam, 2012). As Collings & Mellahi (2009) emphasized, any TM system should begin with identifying substantial talent positions and develop a talent pool to fill those talent positions. Talent identification leads to more effective practices of talent development (Golik & Blanco, 2014). Organizations have to use development programs for achieving a sufficient supply of suitable talent (Conger & Fulmer, 2003). In order to stay at the forefront, organizations should acquire new skills and techniques through learning and development (Auranzeb & Bhutto, 2016). Continuous training is a tool of talent development (Zamcu, 2014). Providing employees with daily job descriptions is also a talent developmental program (Salau et al., 2018). The process of matching and communicating job descriptions to employees is important for creating feedbacks and appraising performance (Chikumbi, 2011). Developmental feedback as a tool of performance appraisal can promote employees' skills and abilities (Delery & Gupta, 2016). Standing information on performance is needed to enable development programs attain their objectives (Golik & Blanco, 2014). Developing talented employees includes providing training programs and challenging assignments (Puvitayaphan, 2008), granting educational courses, and promoting talented personnel according to their educational backgrounds (Zadeh & Ahmadi, 2017). Employee development strategies help employees to acclimate to the organization's values and culture (Chaubey & Gupta, 2013). Therefore, talent identification and development are determinants of successful TM (Poorhosseinzadeh & Subramaniam, 2012).

#### 2.1.2 Employee Retention & Rewards (ER-R)

Retention is useful to the organization's prosperity through maintaining commitment and setting healthy relationships (Salau et al., 2018). Losing talent needed to achieve corporate objectives is considered as waste (Benn et al., 2014). Successful acquisition and retention of talented employees within an organization can be assured by effective TM strategy (Hughes & Rog, 2008). Organizations should not fail to retain the individuals of their talent pool and should avoid loss due to turnover (Collings & Mellahi, 2009). Therefore, they are required to allocate a budget for talent retention and continuously search for the reasons of high turnover (Grobler & Diedericks, 2009). Competitive remunerations may decrease the turnover of employees (Ma & Trigo, 2008). Retention means encouraging employees to stay in the organization as long as possible through monetary and non-monetary incentives and rewards (Lyria et al., 2017). Compensation models, which connect individual development with future salary increases, are important for strengthening retention (Hartmann et al., 2010). Reward systems represent a recognition of the employees' contribution (Real et al., 2014). Incentives can motivate and induce talents for more efficiency and innovative ideas (Chaubey & Gupta, 2013), and therefore talented employees who have better pay can produce outstanding work (Puvitayaphan, 2008). The way of administering the incentives and rewards may improve TM drive or depress it (Chikumbi, 2011). There are different strategies that create and grant employee value in order to retain talents (Poorhosseinzadeh & Subramaniam, 2012). Empowerment and work autonomy influence employees to stay with current corporation (Chaubey & Gupta, 2013). The 360-degree feedback and performance assessment, skills and competency identification, and competency-based compensation are tools of talent retention (Zadeh & Ahmadi, 2017). The firm would retain the majority of its workers if it meets their needs through remuneration and benefits. When a company keeps its skilled employees, it would be able to become innovative and reach its target in the market. Therefore, talent retention is a significant predictor of successful TM (Poorhosseinzadeh & Subramaniam, 2012).

## 2.2 Organizational Intelligence

Organizations should be agile and response quickly and effectively to the environmental changes they may face. OI and utilization of organization's intellectual capital are crucial for coping and responding to these changes and uncertainties (Khanghahi & Jafari, 2013). OI is an evolving, non-static aspect (Prejmerean & Vasilache, 2007). This aspect is definitely new to the market and popularizing the concept of OI, at both organizational level and individual level, should be the first to be taken into consideration (Lefter et al., 2008). Albrecht (2003a) defined OI as the enterprise's ability to capitalize on all its brain power, and to assemble, drive, and direct that brain power towards realizing its own goals, while Wilensky (2015) defined OI as a measure of the total intellectual capacity of an organization to handle its objectives timely with the available resources. OI is the capacity and capability of an organization to create knowledge and use it for strategic adaptation to the environment (Daneshfard et al., 2016). In the same context, OI is the ability to think effectively about an organization from a business point of view or, in other words, to have a business way of thinking (Silber & Kearny, 2009), in order to creatively integrate and unify knowledge existing within people and interrelationships (Prejmerean & Vasilache, 2007). OI is a social-nature process (Nasiri et al., 2013) that contains an aggregate of experience, information, and knowledge within the organization (Staskeviciute & Ciutiene, 2008).

Being a more intelligent organization leads us to be more productive and effective (Albrecht, 2003b) and increases our capacity to learn (Lefter et al., 2008). Studies show that organizations making use of their intelligence engage in processes of learning that use tactics of intuitive knowledge. Furthermore, performance can be determined and strengthened by achieving fit between OI and its environment (Matin et al., 2010). OI enhances competitiveness and organizational agility (Bahrami et al., 2016), increases effectiveness (Staskeviciute & Ciutiene, 2008), promotes personal creativity (Nasabee et al., 2009), and strengthens competitive advantage (Nasiri et al., 2013). At the moment, there is an increase in organizational learning and use of knowledge and information to make management of assets in an industry more

efficient (Nobre et al., 2012). The relation between performance and improvement strategies in a way that knowledge is effectively handled has become an emerging issue (Morris et al., 2014). The way that knowledge and information are disseminated in an organization creates a managerial role of making sure all departments have access. OI emphasizes on operating information in order to get knowledge (Lefter et al., 2008). Creating knowledge and having the ability to strategically use this knowledge to make a better environment for workflow is one of the roles of a manager (Liebowitz, 2006). A manager should then use this knowledge to understand the talents and abilities of employees. In this manner, a manager is at a better position in terms of embracing OI and using the data for a good course. Albrecht (2003b) proposed seven predictors of OI; strategic vision, shared fate, tendency to change, heart, alignment, knowledge deployment, and performance pressure. A wide range of scholars and researchers have followed and validated OI model of Albrecht, such as Prejmerean &Vasilache (2007), Lefter et al. (2008), Nasabee et al. (2009), Matin et al. (2010), Khanghahi & Jafari (2013), Kord et al. (2013), Nasiri et al. (2013), and Bahrami et al. (2016).

# 2.3 Relation between Talent Management and Organizational Intelligence and Development of Hypotheses

Study of Daneshfard et al. (2016) illustrated that OI has an impact on TM as well as on talent attraction, retention, and development. Study of Al-Qeed et al. (2018) showed that TM has a significant effect on emotional intelligence in the Jordanian pharmaceutical industry, while Castellano (2014) indicated that firms should reassess their strategies of TM when dealing with emotional intelligence in order to achieve performance. Snell (2011) explained talent intelligence concept and illustrated that it needs delivery and timely access to the right and relevant information required for strategy implementation. Business intelligence (BI) helps managers to make right decisions in the field of staff management and human talent (Ayguipa et al., 2018) and to increase sustainability of the organization's talent pool (Dias et al., 2016). Cultural intelligence influences teamwork quality which is a team-based TM interaction, and thus firms are supposed to search for and attract culturally intelligent people for the creative jobs in order to better perform TM (Scholz, 2012). OI is the organizational capacity to manage and capitalize on knowledge in order to cope with marketplace (Halal, 1997). A successful organization is the one that uses the thinking power of its staff effectively (Matin, et al., 2010). Knowledge includes the employees' thinking capital which is a distinguishable organizational asset (Liebowitz, 2000). Human capital management includes managing employees and their knowledge and applying this knowledge when practicing work (Feijoo, 2011). TM depends on sharing and using organizational knowledge (Crane & Hartwell, 2018), and key talented individuals can stir knowledge flow and be creative in attaining and disseminating precious knowledge throughout the organization (Whelan et al., 2010). Systems of talent staffing facilitate knowledge creation, transmission and utilization (Vaiman & Vance, 2008). Simic (2005) stated that organizational knowledge is of OI components. Knowledge deployment and platforms creating more knowledgeable and competent employees considered as an important enabler of OI (Albrecht, 2003b). The employees' skills, knowledge, and capabilities (the intellectual capacity) are the organization's foundational asset (Elegbe, 2010) that is used to enforce OI. According to Bhattacharya et al. (2005), human resources benefiting from features such as value creation, play a significant role in improving organization potentials and capabilities. OI which means the capability to create and utilize brain power in achieving organizational goals and missions represents the organization's talent (Nasiri et al., 2013). Therefore, TM potential is best revealed through measures of intelligence (Mwila & Turay, 2018).

In another context, talented individual is the one who enjoys distinguishable, rare, and unique aptitude or skill. Through investing in TM, talented employees would be provided the power to learn, prosper, promote their skills, and think outside the box, and thus produce powerful innovative and creative solutions that may reform the company's business strategies and tactics (Shermon, 2014). In order to achieve higher OI, organizations should identify, encourage, develop, and recruit effective persons who have distinct skills and views that enable them to think deeper than the rules and roles forced by the organiza-

tion's common structures and manners (Albrecht, 2003b). Human capital contains the employees' intelligence and skills (Barney & Wright, 1998). Therefore, utilizing smart personnel and proper technology makes organizations enjoy higher intelligence and agility (Bahrami et al., 2016). Through using TM, we compare specific roles of employees to their abilities and how they work through certain hurdles in the organization. Therefore, through TM, we increase OI by making sure all employees are at a role that is well fitted to their abilities. Furthermore, learning is necessary to be involved in talent improvement (Areigat et al., 2010). Having opportunities for creativity and learning new skills and works would promote OI (Khanghahi & Jafari, 2013). Organizational learning enhances OI (Khanghahi & Jafari, 2013). Simic (2005) stated that organizational learning is of OI components. Intelligence requires individuals who are talented and have mental capabilities in solving organizational problems. Therefore, this paper proposes that TM with its two dimensions may enhance OI and hypothesizes that H1: there is a significant and positive effect of TM (PI-TD and ER-R) on OI.

Business intelligence (BI) leads to a more efficient implementation of talent identification (Caracol & Dias, 2015). Similarly, identification of internal talent pool can be reinforced through BI systems (Dias et al., 2016). Performance assessment and analysis, as a tool of potential identification, and provision of feedbacks on employees' works, as a tool of talent development, can promote OI (Matin et al., 2010). Creating clear understanding of jobs and responsibilities through using job descriptions as a tool of talent development is also of the enhancers of OI (Nasabee et al., 2009). Since training, as a tool of talent development, promotes knowledge and skills (Zamcu, 2014), talent development involves building and learning vigorous knowledge (Al-Qeed et al., 2018). Organizations provide employees with opportunities for development and growth such as encouraging learning through workshops and practicing job rotation (McCracken et al., 2017). Since organizational knowledge is of OI components (Simic, 2005) and organizational learning is an enhancer of OI (Khanghahi & Jafari, 2013), talent development may enhance OI. Proceeding from literature, this paper proposes that talent identification and development may promote OI and hypothesizes that H11: there is a significant and positive effect of PI-TD on OI.

Empowerment including participation in decision making (Chikumbi, 2011) and delegation of authority to the other levels within an organization, as a tool of talent retention, can increase OI (Matin et al., 2010). Further, provision of feedback and having management-participated and effective staff, as tools of talent retention, are of the enhancers of OI (Nasabee et al., 2009). Failure of retention means high employee turnover. Losing talents through turnover may result in more turnover of other talents and lead the organization to a deficiency or even deprivation of organizational knowledge and memory (McCracken et al., 2017). Since knowledge is of OI components (Simic, 2005), losing talents would negatively affect OI. Proceeding from literature, this paper proposes that talent retention and rewards may promote OI and hypothesizes that H12: there is a significant and positive effect of ER-R on OI.

#### 2.4 Proposed Conceptual Model

The conceptual model of current study proposes that TM and its two dimensions have an impact on OI. Fig. 1 illustrates proposed research model.

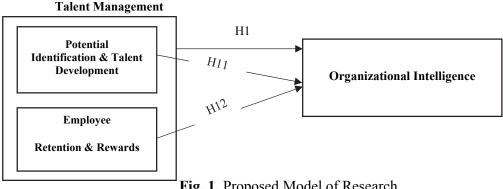


Fig. 1. Proposed Model of Research

## 3. Methodology

This paper conducted an analysis based on the data collected from food companies in Amman. Descriptive method was used for analysing demographic variables. Confirmatory Factor Analysis (CFA) was conducted for assessing validity and reliability of measurement instrument and for testing the relationships between latent variables and their observed variables. Inferential statistical method was used to test the strength of relationships between variables under study. Finally, simple and multiple regression analyses were conducted in order to test hypotheses within the proposed model.

#### 3.1 Data Collection

Study population was the entire Jordanian food industry, while study sample was composed of food companies located in Amman the capital of Jordan. The study used a questionnaire to collect the data from employees of top and middle level managements working within the food companies in Amman. After distributing (300) questionnaires, a total of (277) answered questionnaires were retrieved and valid for study. Five Likert Scale was used in the questionnaire, ranging from 1 (strongly disagree) to 5 (strongly agree). At the beginning, and as shown in Table 1 below, demographic variables of study sample were analyzed through descriptive analysis.

**Table 1** Descriptive analysis of characteristics of study sample (N=277)

Variables	Categorization	Frequency	Percentage
	25 Years or less	20	7.2
A	26 – less than 35 Years	96	34.7
Age	35 – less than 45 Years	101	36.5
	45 Years or more	60	21.6
Candan	Male	159	57.4
Gender	Female	118	42.6
	Diploma	32	11.6
Qualification	Bachelor	167	60.3
	High Diploma	13	4.7
	Master	51	18.4
	Doctorate	14	5
	5 Years or less	30	10.8
Ermanianaa	6 – less than 15 Years	109	39.4
Experience	15 – less than 25 Years	94	33.9
	25 Years or more	44	15.9
	Manager	61	22
Managerial level	Assistant Manager	56	20.2
	Head of Division	160	57.8
	Total	277	100.0

#### 3.2 Measures

TM is a multidimensional construct comprising two main dimensions. First dimension is potential identification and talent development (Auranzeb & Bhutto, 2016; Chikumbi, 2011; Collings & Mellahi, 2009; Hartmann et al., 2010; Jyoti & Rani, 2014; Lyria et al., 2017; Puvitayaphan, 2008; Salau et al., 2018; Sareen & Mishra, 2016; Singh & Sanjeev, 2017), while second dimension is employee retention and rewards (Auranzeb & Bhutto, 2016; Collings & Mellahi, 2009; Hartmann et al., 2010; Jyoti & Rani, 2014; Lyria et al. 2017; Poorhosseinzadeh & Subramaniam, 2012; Puvitayaphan, 2008; Salau et al. 2018; Sareen & Mishra, 2016; Singh & Sanjeev, 2017). Measurement scale of Singh and Sanjeev (2017) was adopted in this paper for analyzing construct under study. A total of 8 items for first dimension and 7 items for second dimension were employed. Regarding OI, this construct has seven dimensions or indicators as proposed by (Albrecht, 2003b). A scale of 49 statements constructed by Albrecht (2002) for assessing IO was used. This measurement scale was used by scholars and researchers on a wide range and had an acceptable validity and reliability. This paper examined the reliability and validity of this scale for further confirmation. Cronbach's alpha was used to examine the reliability and level of internal consistency among the items of the four constructs in the measurement model, as recommended by

Gregory (2004). Reliability should be  $\geq 0.60$  to indicate internal consistency or adequate convergence (Sekaran & Bougie, 2010: 184). Results of scale reliability test were at the acceptable levels as shown in Table 2.

**Table 2**Reliability Test

Variable Name	Number of Items	Cronbach's Alpha
PI-TD	8	0.841
ER-R	7	0.817
TM	15	0.881
OI	49	0.934
Total	64	0.947

## 4. Data Analysis and Findings

CFA was conducted for testing construct validity of each scale. Afterward, inferential statistical test and regression analyses were conducted for testing hypotheses and estimating the relationships between variables under study.

## 4.1 CFA for Instrument Validation

A scale of 64 items was developed from literature. A further validation of measurement scale of each variable was made using CFA.

#### 4.1.1 CFA and Measurement Model of TM

CFA was conducted for each dimension of TM. Factor loadings of all items were higher than 0.50 and all critical ratios were over 1.96. The model of each dimension showed a good fit for all indices. Afterward, CFA was conducted for testing the validity of TM measurement model as a one unit. The measurement model was run with its two latent variables. Factor loadings of all items were higher than 0.50 and critical ratios were over 1.96. Janssens et al. (2008) indicated that factor loading of each variable must be  $\geq 0.50$ , and must be significant (C.R. > 1.96). The measurement model showed a good fit among all indices. Estimates of TM model fit indices were at the acceptable levels as follows; RMSEA=0.078, CMIN/DF= 2.659, GFI, AGFI, CFI, and NFI were 0.921, 0.981, 0.924, 0.986 respectively. Regarding construct reliability and convergent validity, Average Variance Extracted (AVE) must be  $\geq 0.50$  in order to validate a construct (Malhotra & Stanton, 2004). Estimates of AVE for TM dimensions within the measurement model were 0.74 and 0.67 respectively. Additionally, composite reliability (CR) should be > 0.70 in order to have a satisfactory internal consistency (Hair et al., 2010). CR indexes of TM dimensions within the measurement model were 0.89 and 0.85 respectively.

## 4.1.2 CFA and Measurement Model of OI

CFA was conducted for each dimension of OI. All factor loadings were higher than 0.50, except one item of shared fate, one item of apetite for change, one item of heart, one item of alignment, one item of knowledge deployment, and two items of performance pressure which had loadings < 0.50. After running the second analysis, all factor loadings were > 0.50 and all critical ratios were > 1.96. The model of each dimension showed a good fit for all indices. After testing validity of each OI factor, CFA was estimated for the measurement model of OI as a one unit. The measurement model was run with its seven latent variables. All loadings were > 0.50 and critical ratios > 1.96. The measurement model showed a good fit among all indices. Estimates of OI model fit indices were at the acceptable levels as follows; RMSEA=0.053, CMIN/DF= 1.776, GFI, AGFI, CFI, and NFI were 0.935, 0.904, 0.908, 0.916 respectively. Estimates of AVE for OI dimensions within the measurement model were 0.74, 0.65, 0.78, 0.66, 0.58, 0.59, 0.71 respectively, which confirmed the convergent validity of the construct. Indexes of CR for OI dimensions within the measurement model were 0.80, 0.87, 0.79, 0.81, 0.81, 0.78, 0.80 respectively, which confirmed a satisfactory construct reliability.

#### 4.2 Correlation Analysis (Inferential Statistical Test)

Pearson Correlation Coefficients between all variables under study were estimated in order to reveal the relationships between them. Results demonstrated that each variable was significantly correlated with the other variables at p-value ( $\alpha \le 0.05$ ). Results illustrated that both PI-TD and ER-R (dimensions of TM) as well as TM were significantly related with OI. These results are summarized in Table 3.

**Table 3** Pearson Correlations between variables

Variable	PI-TD	ER-R	TM	OI
PI-TD	1			
ER-R	0.577**	1		
TM	0.909**	0.866**	1	
OI	0.634**	0.515**	0.652**	1

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed)

#### 4.3 Regression Analysis for Testing Hypotheses

Regression analyses were conducted to investigate and analyze the relations between constructs under study. Multiple regression analysis was performed to explore the effect of TM with its two dimensions (PI-TD and ER-R) on OI. Correlation coefficient (R) of 0.660 reflected a positive relationship between variables, while coefficient of determination (R<sup>2</sup>) of 0.435 indicated that TM with its dimensions (PI-TD and ER-R) could explain 43.5% of the variance in OI. Analysis of variance (ANOVA) with F value of 105.522 at p-value of 0.000 ( $\alpha \le 0.05$ ) indicated that regression model was statistically significant and fit among the Jordanian food companies. Further, T value was 9.084 for PI-TD and 4.010 for ER-R at P-value  $\le 0.05$ . The  $\beta$  coefficients of PI-TD and ER-R were 0.505 and 0.223 respectively, suggesting that a one-unit increase in TM with its two dimensions could lead to an increase in OI by 0.505 for PI-TD and 0.223 for ER-R. Results demonstrated a stronger significant effect of PI-TD on OI than of ER-R. Results indicated that TM (PI-TD and ER-R) contributed to the model and had a statistically significant and positive effect on OI among Jordanian food companies. Results are summarized in Table (4) below.

**Table 4**Results of multiple regression analysis for the effect of TM (PI-TD & ER-R) on IO

Model	Model Summary ANOVA Results			Coefficients					
R	$\mathbb{R}^2$	F calculate	DF	Sig*	_	β	}	T calculate	Sig*
0.660	0.435	105.522	2 274	0.000		PI-TD	0.505	9.084	0.000
0.000	0.433	103.322	276	0.000		ER-R	0.223	4.010	0.000

Dependent Variable: OI

Simple regression analysis was conducted to test the first sub-hypothesis and estimate the relationship btween PI-TD as an independent variable and OI as a dependent variable. Correlation coefficient (R) was 0.634, while coefficient of determination (R<sup>2</sup>) was 0.402 indicating that PI-TD could explain 40.2% of the variance in OI. Analysis of variance (ANOVA) with F value of 184.824 at p-value of 0.000 ( $\alpha \le 0.05$ ) indicated that regression model was statistically significant and fit. Furthermore, T value was 13.595 at p-value  $\le 0.05$ , while  $\beta$  coefficient was 0.634 suggesting that a one-unit increase in PI-TD could lead to an increase in OI by 0.634. Results indicated that PI-TD contributed to the model and had a statistically significant and positive effect on OI among Jordanian food companies. Results are shown in Table 5.

**Table 5**Results of simple regression analysis for the effect of PI-TD on IO

Model S	Summary ANOVA Results Coefi			Coefficients	efficients		
R	$\mathbb{R}^2$	F calculate	DF	Sig*	β	T calculate	Sig*
0.634	0.402	184.824	1 275-276	0.000	0.634	13.595	0.000

Dependent Variable: OI

Results of simple regression analysis conducted to test the second sub-hypothesis are shown in table (6). Correlation coefficient (R) was 0.515, while coefficient of determination (R²) was 0.265 indicating that ER-R could explain 26.5% of the variance in OI. Analysis of variance (ANOVA) with F value of 99.140 at p-value of 0.000 ( $\alpha \le 0.05$ ) indicated that regression model was statistically significant and fit. Further, T value was 9.957 at p-value  $\le 0.05$ , while  $\beta$  coefficient was 0.515 suggesting that a one-unit increase in ER-R could lead to an increase in OI by 0.515. Results indicated that ER-R contributed to the model and had a statistically significant and positive effect on OI among Jordanian food companies.

**Table 6**Results of simple regression analysis for the effect of ER-R on IO

Model	Model Summary ANOVA Results		Coefficients				
R	$\mathbb{R}^2$	F calculate	DF	Sig*	β	T calculate	Sig*
0.515	0.265	99.140	1 275 276	0.000	0.515	9.957	0.000

Dependent Variable: OI

## 5. Conclusions, Implications, & Future Research

Successful TM involves identifying, recruiting, training, deploying, developing, and retaining the best talents in the market. This paper finds that performing TM may lead organizations to enjoy higher intelligence. Talent means owning a mixture of abilities, skills, and knowledge, with a high capacity to fulfill an action effectively and efficiently (Al-Qeed et al., 2018). Talented employees working within an organization can increase the organizational ability to direct knowledge flow and to communicate and deploy this knowledge in alignment with the organization's mission and objectives. In the same context, having talented personnel with their distinguishable skills would increase opportunities of organizational learning and creativity and allow workplaces to utilize this unique brain power in solving critical problems, which in turn would lead organizations to enjoy higher intelligence. Furthermore, this paper reveals the existence of a positive association of the two initiatives of TM with OI. Through TM, firms would identify and develop fundamental skills and competencies required in the workforce (Sareen & Mishra, 2016). Organizations which constantly use tools of talent identification and development, such as training programs, clear job descriptions, techniques of performance appraisal, and job rotations, would be able to enhance their knowledge and learning opportunities and thus raise their intelligence level. In the same context, successful retention of talented workforce within organizations, through low turnover rates, competency-based remuneration systems, work autonomy, and provision of feedback on work, would lead these organizations to keep the scarce source of knowledge and brain capital with them, which in turn would assist them in promoting OI. Findings provide an empirical justification for current conceptual model using quantitative approach. This paper, through CFA, provides an empirical support for the two initiatives of TM operationalized in Singh and Sanjeev (2017).

Jordanian food industry, in 2008, represented 15.4% of the national industrial sector and its exports represented 13% of total industrial exports (Al-Mahasneh, 2009). Jordan looks forward to promoting growth especially in the export of manufactured products (Soliman & Mashhour, 2012). Jordanian food processing industry contributes by 7.4% of national GDP and 8% of total employment according to Social Accounting Matrix 2006 (Figueroa et al., 2018). Human beings are the foundation of transformations within organizations. Although Jordan enjoys an intellectual capacity to provide skillful workforce which could lead the country to be a regional center for development of agro-food industries (Al-Mahasneh, 2009), public and private firms in Jordan experience both a deficiency in talented workforce and a low level of performance (Al-Qeed et al., 2018). Findings may provide food manufacturers and other sectors within Jordan with an important guidance in the field of HRM and intelligence, in order to achieve higher levels of performance and competitive advantage. Talented workforce should be embraced in order to attain the desired level of development and create new knowledge that assist the company in achieving its goals. Practicing and performing TM regularly is one of the best ways for a food company to be

intelligent. In food industry, OI lies in the companies' ability to work with the economy to produce highquality products and find solutions for a wide range of production problems. The potential value of products made and released into markets depends on OI which guides the decision-making process of employees. Talent is a scarce resource (Feijoo, 2011) that represents a main driver of any successful firm (Kehinde, 2012), and TM is extremely necessary to sustain any firm (Machado, 2017). Although TM term is prevalent and its importance is perceived (Whelan et al., 2010), talents are often subjectively evaluated (Machado, 2017) and firms do not make enough effort for managing and retaining the talent they have (Elegbe, 2010). In addition, many talents have gone to wastes and organizations have failed to realize their goals due to poor techniques adopted in TM. Therefore, organizations should see TM as a fundamental part of their comprehensive strategies (Niedzwiecka, 2016), and managers should reassess their firms' plans of employee attraction and retention continuously (Guthridge et al., 2008). Findings call for the need to establish an effective human resource management strategy that would enhance identification and development of best talents within the market and direct them towards fulfilling the goals. Organizations should invest more in TM, provide the best training to their employees, and implement competency-based compensation and benefits system in order to avoid turnover. TM is applied in production processes as well as in management. A manager with creative and core skills is able to guide employees on their roles in relation to their strengths and weaknesses.

TM helps in creating, disseminating, and applying new knowledge within the organization. Some forms of technology help an organization to make more use of knowledge it possesses (Schiemann, 2009). Future research has an opportunity to seek the effect of IT systems on the relation between TM and OI. This study was only among the Jordanian food companies which may limit external validity. In order to extent the model applicability, other industries within Jordan or even other countries can be taken into consideration for future research. Further, TM topic lacks cohesion and thoroughness and more clarity is required to be braught to this topic (Lewis & Heckman, 2006). There is still debate and ambiguity around the intellectual and conceptual frontiers of TM (Whelan et al., 2010). Therefore, further research might assess constructs under study through using other measurement scales and conceptual models. A more reliable, valid, and theoretically significative measurement scale of TM is required to be developed. Future research may empirically investigate the effect of TM practices on workforce intelligence, competitive intelligence, cultural intelligence, and manufacturing intelligence.

#### Acknowledgement

No funding sources had involved in conducting this research.

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