

Presenting a structural model of digitalised talent management in a new age: A case study on the mobile telecommunication industry in Iran



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Orientation: Digital transformation has changed the process of talent management. Traditional models embraced activities and processes that guided the right employee towards the right positions or a broad view of talent management.

Research purpose: This study aimed to investigate the mediating impact of digitalised process management on relationship between talent management (TM) and organisational performance.

Motivation for the study: Digitalisation in enhanced industries such as mobile telecommunications emphasises agility required to attract talent in a dynamic environment in terms of marketing, competition, et cetera.

Research approach, design and method: Research data were collected through a quantitative approach. The statistical population of participants in this research included 298 managers and specialists in the field of the mobile Iranian telecommunications industry. Data were collected using a standard questionnaire, the validity of which was assessed based on the validity of content and structure and its reliability through Cronbach's alpha. Obtained model was analysed using SPSS version 26 and Smart PLS version 3.3.3 software.

Practical or managerial implications: Impact of TM on organisational performance through the mediation of digitalised process management is identified. Results show that investments are required to correlate the digitalised process into TM processes to take organisational performance into the digitalisation era.

Contribution or value-add: This study extends the knowledge about future of the TM process, which is enhanced by digitalisation aspects to support company and organisational performance for achieving and adopting in the digital era. The study also extends digitalisation process by using a structural model to investigate the future of process in mobile telecommunication industry in Iran.

Keywords: digital transformation; TM; Industry 4.0 and 5.0; organisational performance; mobile telecommunication industry.

Introduction

Today, more than ever, enterprises and factories are faced with changes in technologies. Digitalisation, the gig economy, digital transformation and Industry 4.0 and 5.0 are popular concepts now. Such terms evoke a kind of shift in all aspects of work. Changes at work require new skills and competencies, so talent management (TM) must be considered to manage expertise and proficiency. Talent management means strategic and end-to-end processes of identifying, getting the right talent onboard and helping them grow to their optimal capabilities while keeping organisational objectives in mind. Digital transformation is less about technology and more about people and culture. The technology can be bought, but the ability to acquire a digital future depends on developing a new set of skills, covering the gap between talent supply and demand and preparing the proper potential of talents (Frankiewicz & Chamorro-Premuzic, 2020).

It is hard to begin any discussion on the future of TM without considering the impact of the digital economy and paradigm shift in technologies. Digitalisation is a kind of disruptive technological achievement that affects business models and operating processes. Organisations seek to reshape their processes in line with on-premise technologies such as digital twins (Annunziata & Biller, 2015), the Internet of Things (IoT) (Gallardo-Gallardo & Collings, 2021), 5G and connected devices (Wang, 2020), artificial intelligence and Big Data (Holwerda, 2021), cyber-physical systems, integration (Kagermann, Hellbig, Hellinger, & Wahlster, 2013), social media and platforms, the

blockchain (Swan, 2015), everything as a service (XaaS), robots and drones, machine learning algorithms (Sibgatullina, Merzon, & Seibgll, 2019), data analytics (Gökalp, 2021) and 3D printing. As these technologies have social, technical and managerial impacts on the organisation, they should be managed by a holistic approach.

Evidently, ongoing technological innovation means that the nature and meaning of work will continue to evolve (Connelly, Fieseler, Cerne, Giessner, & Wong, 2020; Gökalp, Kayabay, & Gökalp, 2021; Li, 2020; Verhoef et al., 2021). On the other hand, the global pandemic of coronavirus 2019 (COVID-19) impacts work, employees and employment; it has, in general, been unprecedented in modern times (Caligiuri, De Cieri, Minbaeva, Verbeke, & Zimmermann, 2020; (Collings, Anthony, Nyberg, & Wright, 2021). There is no doubt that many of the given changes impacting TM will be major as well, and human resource (HR) professionals need to learn how to manage the human-technology interface (Wiblen & Marler, 2021).

This study aimed to investigate the impact of mediating digitalised process management on the relationship between TM and organisational performance. The article structure consists of the following sections: the literature of the research is reviewed and presented hypotheses in the second section. In the third section, the research model is shown. The fourth section provides the research method and results, and the fifth section discusses findings and conclusions. In the final section, the limitations of the research and suggestions for future research are presented.

Literature review

Talent management

In the digital age and knowledge-based economy, organisations are looking for the proper resources to achieve a sustainable competitive advantage, and the theory of the firm based on TM hypothesises that talent is the only asset of firms that may provide a basis for sustainable competitive advantage. Therefore, organisations should focus on talent and the capabilities derived from talent (Rabbi, Ahad, Kousar, & Ali, 2015).

The TM process is a new approach to HR that allows organisations to focus seriously on hiring, engaging and developing employees who can contribute to the company's growth. In essence, this means that the company's needs are assessed and experts are found who can help with organisational goals to maintain and develop the organisation to meet current and future business requirements. Talent management ensures that the right people with the right skills are located at the right organisational functions (Baba, 2018).

In recent years, with the advent of cloud-based information technology and the TM concept, more terms have emerged, including references to digitalised talent management (DTM), human capital technology, e-talent management and, more broadly, electronic human resource management

(HRM), while there is no significant difference between the concepts (Wiblen & Marler, 2021).

What has been proven in studies (Table 1) is that the use of technology in TM improves the performance of the organisation. Other studies have also confirmed the impact of using technology in TM through talent analysis, which improves strategic HRM and the development of high-performance talent (Sivathanu & Pillai, 2020).

Attracting in talent management

Organisations in the digital era change the traditional way of recruiting, selecting and developing skillsets to acquire a

TABLE 1: Conclusions of related past articles.

Year	Reference	Title of article	Model description
2007	Liu, Combs, Ketchen, and Duane-Ireland (2007)	The value of human resource management for organisational performance	Three factors that impact the effectiveness of human resource management on organisational performance
2008	Katou (2008)	Measuring the impact of HRM on organisational performance	The operational HRM-performance linkage model to organisational performance
2012	Kehinde (2012)	TM: Effect on organisational performance	Talent management impacts and increases ROI
2015	Mensah (2015)	Coalesced framework of TM: and employee performance	Coalesced framework of TM and employee performance
2016	Ratten and Ferreira (2016)	Global TM and Corporate Entrepreneurship Strategy	The theoretical linkages between global TM and corporate entrepreneurship, including organisational performance, human capital, which could develop statistical models that test the relationship
2018	Kweku Otoo (2018)	Human resource management (HRM) practices and-organisational performance the mediating role of employee competencies	Proposed and found a relationship between HRM processes, people competencies and organisational performance
2019	Brijesh and Rajasshrie (2019)	Technology and talent analytics for TM – a game changer for organisational performance	Proposed theoretical model of relation between TM, technology and organisational performance
2020	Saling and Do (2020)	Leveraging people analytics for an adaptive complex TM system	TM processes result in organisational effectiveness
2021	Holwerda (2021)	Big data? Big deal: Searching for big data's performance effects in HR	Big Data is generating value for HR and positively affects organisational performance
2021	Aljbour, French, and Ali (2021)	An evidence-based multilevel framework of TM: A systematic review	Multilevel framework suggests that TM impacts organisational and employee outcomes. Most studies focused on identifying TM perspectives or practices within organisations, while few studies investigated how these perspectives influence practices
2021	Wiblen and Marler (2021)	Digitalised talent management and automated talent decisions: the implications for HR professionals	Impact of technology on TM and role of humans without any model

TM, talent management; ROI, return on investment; HR, human resource; HRM, Human resource management.

new generation of employees (Mihalcea, 2017). The CIPD report for 2020 shows that organisations are increasingly using technology to attract candidates. The top methods they find useful are using corporate website and professional networking sites such as LinkedIn. About 68% of organisations use technology to conduct interviews, and more organisations are applying online tests and assessments (35%, up from 23% in 2017). A significant minority (43%) uses applicant tracking systems but are less absorbed by other technologies. Based on respondents' claims, using technology in the recruitment process brought many benefits for them, including increased accessibility for candidates, an agile recruitment process and improved candidate experience (CIPD, 2020a). This study hypothesised that:

H1: Attracting talent has a positive and significant effect on TM.

Developing in talent management

Most organisations apply at least one form of technology to support learning; however, uptake of more emergent technologies remains low, even in larger organisations. A variety of communication and information technologies called learning technologies can be applied to support learning (such as online or mobile learning). Based on the CIPD report, 79% of organisations apply some form of technology to help with learning and collaboration, the most commonly reported including webinars or virtual classrooms (36%), learning management systems (27%) and open education sources (23%). Uptake remains low for more emergent forms of technology to support learning, such as virtual and augmented reality, mobile apps, chatbots, games and animations (CIPD, 2020a). The new technologies have created an impact on developing HRs. This study hypothesised that:

H2: Developing talent has a positive and significant effect on TM.

Retaining in talent management

Retention of high-performing employees is a challenging task for HR managers. Staff should participate in decision-making and be encouraged to execute their duties. The HR managers deploy ideas to retain their employees such as defining competitive pay structures, providing challenging work, preparing future skills training and giving on-time feedback, rewards and recognition. Increasing learning and development opportunities is the most popular step to improve employee retention. Increasing pay and improving benefits also remain among the most common approaches used, although public sector organisations (CIPD, 2020b) were far less likely to adopt either of these tactics (only 19% of the public sector increased pay and 16% improved benefits). The survey of all sectors has seen a significant increase in the proportion of organisations taking steps to promote retention through revising the way employees are rewarded so their efforts are better recognised (2019: 50%; 2016: 25%). (CIPD, 2020b). Fewer organisations take steps to improve retention through improving their recruitment and selection processes to ensure the suitability of the candidates they recruit, although 42% took steps to improve their induction and onboarding process (Beluchi & Nwanisobi, 2020). This study hypothesised that:

H3: Retaining talent has a positive and significant effect on the TM.

Transition in talent management

Talent management is done with the aim of changing the overall staff to achieve the organisational vision. It can be through applying technology to identify and meet the needs of retirees and retirement benefits for employees, conducting exit interviews to identify the causes and analyse the results of organisational exit and staff experience and, finally, applying attention to replacement programmes and internal promotions (Legner et al., 2017). This study hypothesised that:

H4: Transitioning talent has a positive and significant effect on the TM.

Digitalisation and digital transformation

Digitalisation is entirely distinct from digital transformation. An organisation might engage in digitalisation activities and projects, including automating processes over IT solutions, but digitisation describes the transformation of information into a digital representation (Gökalp & Veronica, 2020). Digital transformation, in fact, is not something that an organisation can implement as a project. Instead, this term addresses the special business strategic transformation that requires organisational changes in all aspects through the implementation of digital technologies.

In practice, digital transformation depends on the way the organisation copes with change. The organisation should consider change as a core competency because the company evolves towards end-to-end management of its operational processes.

The TM Forum's Digital Maturity Model and Rabbi et al. (2015) offer a practical approach to transformation. It has been designed over the course of many months by industries as follows:

- **Strategy:** Concentrates on the way the business changes or performs to grow its competitive advantages by using digital initiatives; it has been implanted within the whole business strategy.
- **Technology:** Assures the successful implementation of digital strategy through assistance to produce, process, preserve, protect and exchange data to satisfy customers' needs at minimum expense and low overhead.
- **Operations:** Apply digital technologies to perform and improve processes and tasks to motivate strategic management and increase business efficiency and effectiveness.
- **Culture, people and organisation:** Determine and promote an organisational culture by governance and talent processes to advocate progressing according to the digital maturity curve and being flexible enough to grow and reach its innovation goals.

The main objective of every organisational strategy is to achieve the effectiveness and efficiency of the operation, which could lead the organisation to its mission (Dzimbiri & Molefi, 2021). In culture, people and organisational approach, TM is one of the pivotal aspects that mainly focuses on how digital transformation views TM and what actions should be undertaken to cover strategy planning, workforce planning, talent acquisition, talent development, digital learning and employee engagement to improve organisational performance. The issue is that digital technology may be the enabler, but it is people and their inherent need to connect that really speed things up.

Industry 4.0 and 5.0

Industry 4.0 is a gradual set of traditional products and industrial practices within the growing world of information technology. This includes using M2M and the IoT to help manufacturers and buyers alike to increase automation and improve communication and monitoring, along with self-diagnosis and new levels of analysis for future supply of production loads. Service providers and factories are typically increasingly automated and self-monitoring. The fifth generation of mobile infrastructure is a gateway to the digital era, which introduces a new capability to manage everything over the mobile network. The rapid change caused by Industry 4.0 resulted in a considerable gap between the existing ability of staff and the evolving necessities of their roles, so the need to find a more innovative approach to TM has become vital (Maisiri & Van Dyk, 2021; Schultz, 2021). Are machines able to analyse and communicate with their human and colleagues? Simultaneously, Industry 5.0 predicts the potential of quantum computing that brings humans and machines closer together in the workplace. The Fifth Industrial Revolution is about the use of unique features of artificial intelligence (Xun, Yuqian, Birgit, & Lihui, 2020) by employers and employees, who will have more equipment for sensible and well-informed decisions. The Fourth and Fifth Industrial Revolutions release HR teams from the bulk of day-to-day management as well. This freedom gives them enough time to adapt to the needs of talent identification and also allows them to focus on the growth and productivity of their organisation. The study hypothesised that:

H5: 5G has a positive and significant effect on digitalised process management.

H6: Artificial intelligence has a positive and significant effect on digitalised process management.

H7: IoT has a positive and significant effect on digitalised process management.

H8: Machine learning has a positive and significant effect on digitalised process management.

Performance of organisation

Different definitions of organisational performance have been proposed in the previous studies, which applied the construct. Through a meta-analysis, it has been suggested that

organisational performance should be assessed in financial and operational terms (Luo, Ying, & Stephanie, 2012). Organisational performance is sophisticated, empowering the organisation to execute strategies to meet institutional objectives (Frank & Kweku, 2018). Economic performance primarily has financial and market outcomes that assess the profits, sales, return on investment (ROI) for shareholders, Earning Per Share (EPS) and other financial metrics. Operational performance, on the other hand, focuses on customer satisfaction (Gong & Yi, 2018) and the firm's HR indexes like retention (Maake, Harmse, & Schultz, 2021), productivity and ROI of HR.

As can be investigated in the given studies (Table 1), most articles address the issues of TM processes with organisational performance in a fragmented manner or assess digitalisation's impact on TM without a conceptual model. On the other hand, because of the digital evolution in the present age, it is possible to examine new variables that play a key role in the discussion of process management that influence the administration of TM processes. Thus, to fill the existing gap, the relationship between TM and organisational performance through digitalisation mediation can be highlighted with several dimensions. Therefore, the hypotheses are as follows:

H9: Organisational performance has a positive and significant effect on decreasing HR leaving.

H10: Organisational performance has a positive and significant effect on increasing EPS.

H11: Organisational performance has a positive and significant effect on increasing ROI.

H12: Organisational performance has a positive and significant effect on improving customer experience.

H13: Organisational performance has a positive and significant effect on increasing revenue.

H14: TM has a positive and significant effect on organisational performance.

H15: TM has a positive and significant effect on digitalised process management.

H16: Digitalised process management has a positive and significant effect on organisational performance.

H17: TM has a positive and significant effect on the overall performance of the organisation by considering the mediating role of digitalised process management strategy.

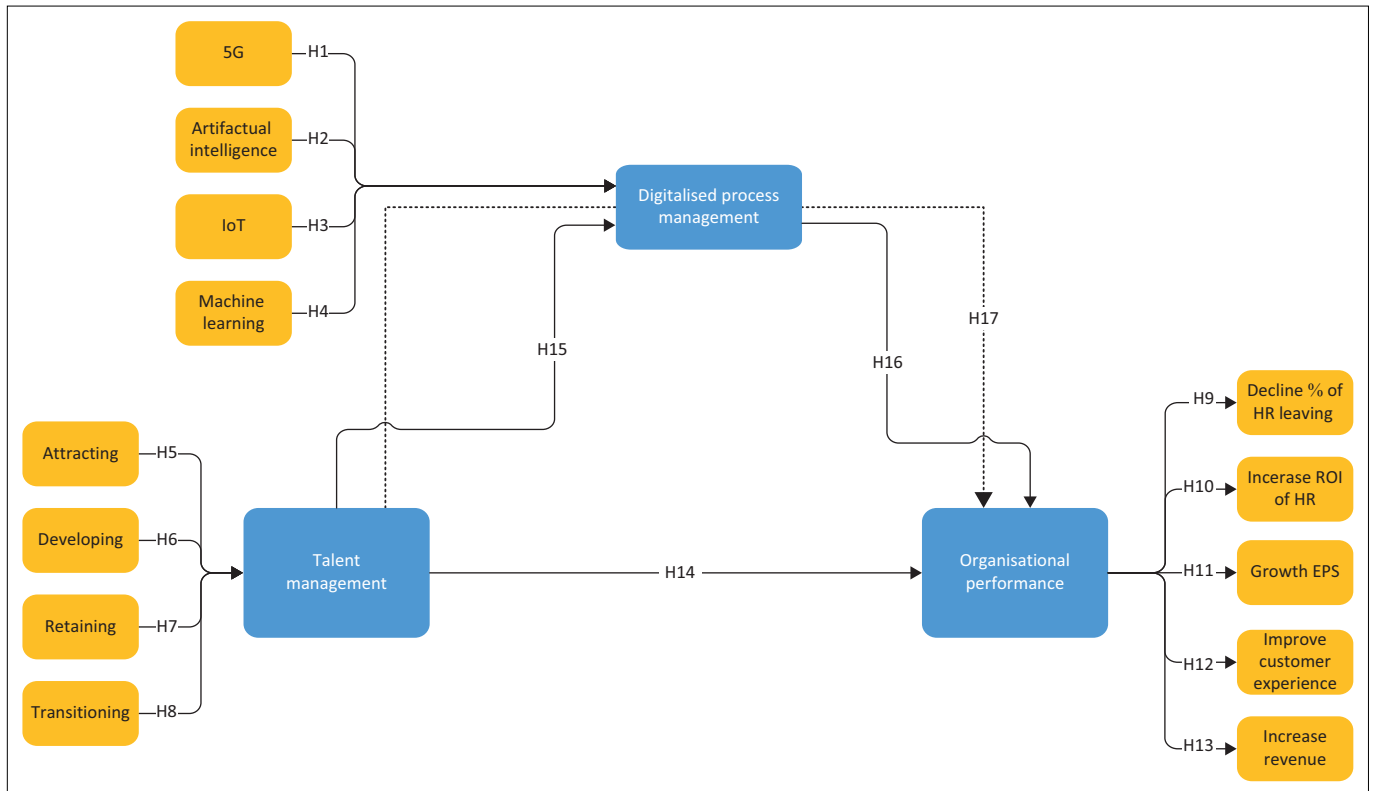
Structural model

Based on the preceding hypotheses, a conceptual model is proposed (Figure 1).

Research methodology

Research method

In this research, in the design stage of the initial conceptual model, a quantitative research strategy has been used. In later stages, by using the method of quantitative content analysis, the conceptual model of the impact of intellectual capital on organisational performance has been determined.



ROI, return on investment; HR, human resource; EPS, Earning Per Share.

FIGURE 1: Structural model of the research.

The field method has been used to collect data related to the confirmation or refutation of research hypotheses. In the first stage, data collection was performed by tools including books, scientific journals and articles published in this field, and in the second stage, the data were collected through a questionnaire.

Research design

Using a quantitative design, this research investigated the mediating impact of digitalised process management on the relationship between TM and organisational performance.

Research participants

The statistical population of the study comprises managers and experts of mobile telecommunication companies. As this article examines the impact of TM on organisational performance with the mediating role of digital process management with a quantitative approach, samples of experts and managers of mobile phone companies in Iran (Tehran offices) were randomly selected. The demographic information of the research participants is summarised in Table 2.

Measuring instruments

In the questionnaire, the first seven questions were about demographic information, and the rest of the questions were associated with model constructs. The questionnaires were designed in the Farsi language, and data were collected in the summer of 2021. The respondents

TABLE 2: Demography of the research.

Attribute	Class	Quantity	%
Gender	Women	121	41
	Men	177	59
Age	28–35	86	29
	35–45	138	46
	> 45	74	25
Experience (in years)	5–10	81	27
	15–20	131	44
	20–30	74	25
	> 50	12	4
Position	Higher-level manager	18	6
	Middle manager	72	24
	Experts	208	70
Education	PhD	33	11
	Master's	167	56
	Bachelor	98	33

were asked to indicate their opinions on a five-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). With respect to the validity of the questionnaire, the researchers relied on previous research (Phillips & Roper, 2009) conducted in the same field of study to confirm its validity. Concerning the reliability of the questionnaire, Cronbach's alpha was applied.

Research procedure and ethical considerations

Before starting the research, the authorities of the companies allowed the study to be conducted. The questionnaires were distributed electronically and the confidentiality of the respondents was maintained at all times.

Sampling

To determine a suitable sample size, the Cochran formula was helpful:

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)} \quad [\text{Eqn 1}]$$

where n is sample size, N is statistical population, z is percentage error of acceptable reliability coefficient, p is the proportion of population with a certain trait, $q = (1-p)$ is the proportion of population without a certain trait and d is optimal degree of certainty or accuracy.

According to the formula, to estimate the sample size from a statistical population of 1330 with a population gap of 0.5 (i.e. half of the population has a certain trait and the other half do not have it), instead of p and q , it is considered 0.5 and for z at the level 90% confidence is replaced by the number 1.645. The value of d is a number between 0.01 and 0.1, which is assumed to be 0.05 in this study. Therefore, according to the assumptions, the minimum required statistical sample size can be estimated at 298 people (Cronbach, 1951).

Results

Out of the 338 distributed questionnaires, 298 were fully completed and reviewed by researchers. The analysis involves a measurement model (outer model) and structural model (inner model) to examine the quality of the constructs for evaluating validity and reliability and to investigate the relationships between different model constructs for hypothesis analysis (Hair, Sarstedt, & Hopkins, 2014).

Measurement model analysis (outer model)

Reliability and validity must be considered for outer model evaluation. In exploratory researches, all factor loadings are higher than 0.5, which are acceptable, and the value of the alpha coefficient should be 0.7 or more (Moazenzadeha & Hamidi, 2018). The alpha coefficient values for all variables are above 0.7. Similarly, the composite reliability (CR) should be more than 0.7 to be acceptable (Mohammadi, 2018). All constructs have a CR of 0.7 or more, which means this condition is satisfied in this study. To check average variance extracted (AVE), if each construct has an AVE value greater than 0.5, this condition will pass (Fornell & Larcker, 1981). It has been suggested that the CR value should be greater than the AVE to corroborate convergent validity (Chavoshi & Hamidi, 2019). The AVE values for all constructs are greater than 0.5, and for all of them, the CR value is greater than the AVE value. Based on the results, the convergent validity and reliability of the questionnaire constructs have been concluded.

In the next step, discriminant validity was tested through the heterotrait–monotrait (HTMT) ratio of correlation and the Fornell–Larcker criterion by Smart PLS by using the Fornell–Larcker method; the square root of the AVE compares with

the correlation of latent variables. Based on this method, the square root of each construct's AVE needed to be greater than the correlations with other latent variables (Ab Hamid, Sami, & Sidek, 2017). It has been shown that this condition is met in this research. To confirm the discriminant validity of the model, all ratios inside the HTMT matrix should be less than 0.9, and if HTMT has a value near 1, there will be a lack of discriminant validity. All ratios in the HTMT matrix had a value of less than 0.9.

Structural model analysis (inner model)

It has been suggested that β (path coefficient), R^2 (determination coefficient), f^2 (effect size) and Q^2 (predictive relevance) should be assessed to evaluate the structural model. The path coefficients (β) between the constructs, calculated by Smart PLS, are summarised in Table 3. The existence of a relationship, intensity and the direction of the relationship between two latent constructs is determined through the path coefficient. The bootstrapping method was performed using Smart PLS 3.2.6 to analyse the path correlations, and based on Table 3, all t -statistics range from ± 1.96 and p -values are less than 0.05, which means all research hypotheses are confirmed.

TABLE 3: Structural model's hypotheses.

#	Hypothesis	Path Coefficient	Standard Deviation	t-Statistics	p-Values	Status
1	Attracting -> Talent Management	0.206	0.053	3.926	0	Yes
2	Developing -> Talent Management	0.089	0.023	3.833	0	Yes
3	Retaining -> Talent Management	0.444	0.071	6.209	0	Yes
4	Transitioning -> Talent Management	0.287	0.05	5.752	0	Yes
5	5G -> Digitalised Process Management	0.154	0.057	2.663	0.008	Yes
6	AI -> digitalised Process Management	0.195	0.064	2.998	0.003	Yes
7	IOT -> digitalised Process Management	0.145	0.032	4.504	0	Yes
8	ML -> digitalised Process Management	0.278	0.065	4.341	0	Yes
9	Organisational Performance -> Decrease HR leaving	0.865	0.011	78.659	0	Yes
10	Organisational Performance -> Increase EPS	0.708	0.024	28.766	0	Yes
11	Organisational Performance -> Increase ROI	0.492	0.041	11.755	0	Yes
12	Organisational Performance -> Increase Customer Experience	0.475	0.045	10.532	0	Yes
13	Organisational Performance -> Increase Revenue	0.707	0.023	30.558	0	Yes
14	Talent Management -> Organisational Performance	0.325	0.052	6.253	0	Yes
15	Talent Management -> digitalised Process Management	0.283	0.039	7.299	0	Yes
16	digitalised Process Management -> Organisational Performance	0.563	0.046	12.321	0	Yes

ROI, return on investment; HR, human resource; AI, artificial intelligence; IoT, Internet of Things; ML, machine learning; HR, human resource; EPS, Earning Per Share; TM, talent management.

In the literature review, the R^2 value application is to make a connection between the measurement and structural components of structural equation modelling, which demonstrates the effect of an independent variable on a dependent variable. The R^2 should have a value between 0 and 1, and the higher R^2 value indicates the more accurate prediction of the independent variable for the dependent one. If R^2 has the value of 0.75, 0.5 and 0.25, the model,

respectively, is called substantial, moderate and weak. The R^2 values greater than 0.35 indicate a substantial model as well (Hair, 2011). Figure 2 demonstrates values of β and R^2 , which imply that the proposed model is substantial. The next step after assessing the hypothesis is to calculate the influence of every independent variable on the dependent ones. The effect of an independent variable on a dependent variable can be computed through the f^2 criterion. If f^2 takes the

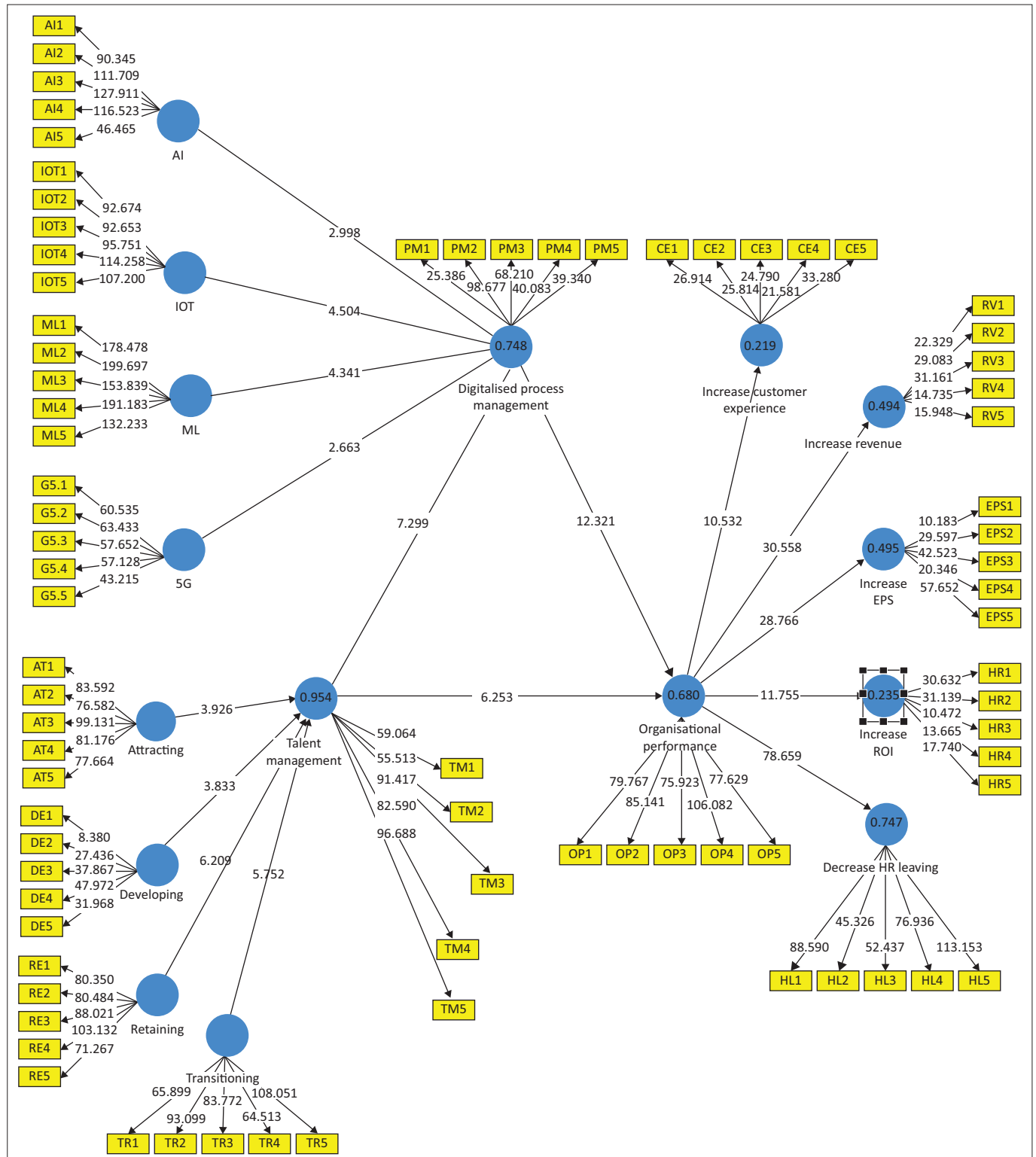


FIGURE 2: Values of β and R^2 through SmartPLS estimation.

values of 0.02, 0.15 and 0.35, the effect size is, respectively, small, medium and large. The Q^2 criterion, which evaluates the predictiveness power of model relationships, is computed through the blindfolding process of Smart PLS. The values of 0.02, 0.15 and 0.35 for Q^2 reveal that the predictive relevance is, respectively, low, medium and high. The value of Q^2 larger than zero implies the dependent variable has predictive relevance (Hair et al., 2014). Based on Table 4, all predictive relationships are higher than zero.

Mediating effect analysis

The Sobel test is used to test the effect of a mediating variable. In the Sobel test, a Z-value is obtained through the following formula: if this value is greater than 1.96, it can be confirmed at a 95% confidence level that the mediating effect of a variable is significant (Sobel, 1982). The results are summarised in Table 5:

$$Z - value = \frac{a \times b}{\sqrt{(b^2 \times s_a^2) + (a^2 \times s_b^2) + (s_a^2 \times s_b^2)}} \quad [\text{Eqn 2}]$$

a = The value of the path coefficient between the independent variable and the mediator.

b = The value of the path coefficient between the mediator and the dependent variable.

s_a = Standard error for the path between the independent and mediator variables.

s_b = The standard error for the path between the mediator and the dependent variable.

Discussions

This study showed the effectiveness of digitalised process management as a mediator between TM and organisational performance. The new technologies such as 5G, AI, IoT, ML, etc., play a significant role in the digital era to manage HR by changing the traditional way of talent management. The

sampled managers and staff in this study were accurate in their agreement about the importance of digitalisation in TM. In addition, with the digitalisation of processes, the performance indicators of the organisation, both financial and non-financial, including increasing EPS, ROI, revenue and customer experience and decreasing HR attrition, have improved, which indicates the impact of digitalisation in TM processes. Mobile companies are affected by new technologies, especially digitalisation. Relevant companies in Iran are no exception. Therefore, this article discussed the positive impact of new technologies on process management, TM and organisational performance.

Practical implications

In this research, the authors examined the effectiveness of DTM in organisational performance. Managers and the employees who engage in talent processes that explain digital TM helped them to hire the right people in a more quantified, timely and precise manner. In fact, digitalisation removed the communication gap between various departments such as technical, financial, etc., and the HR department, and they understood each other's processes clearly. Digitalised talent management may be used to run customised offerings, including learning and job opportunities, personalised information intelligence and artificial intelligence that predict what an individual needs: performance monitoring, training, development, etc.

Besides this, in practice, DTM integrated with mobile telecommunication organisation to understand the related data, which make up a competitive advantage for the organisation. This shows the relationship between TM and organisational performance with mediating digitalised process management.

Limitations and recommendations

- The first limitation of this research is the companies under study. The concentration of this research was on managers and staff of offices in Tehran. In terms of cultural point of view, attitude, etc., of the people who participated in this research, conducting a comparative study on other mobile companies in other countries or other cities could achieve different results. Thus, future research could explore this topic in other companies and other areas and industry sectors.
- The second limitation was about the complexed questionnaire, which could not show the results from reality. Furthermore, respondents may answer questions according to their concerns. So, applying up-to-date methods of data collection such as data mining in future research can result in more accurate outputs. Moreover, the number of distributed questionnaires was 338 copies, out

TABLE 4: Indicator of model's predictive relevance.

Dependent variable	Q^2
TM	0.742
Digitalised process management	0.498
Organisational performance	0.515
Increase customer experience	0.128
Increase revenue	0.252
Increase EPS	0.286
Increase ROI	0.111
Decrease HR attrition	0.571

ROI, return on investment; HR, human resource; TM, talent management; EPS, Earnings Per Share.

TABLE 5: Analysis of the mediator estimation.

Independent variable	Mediator variable	Dependent variable	Effect Independent on mediator			Effect mediator on dependent			Soble test	Status	Intensity of impact	Type of mediation
			Path coefficient	t-Statistics	p-Values	Path coefficient	t-Statistics	p-Values				
Talent management	Digitalised process management	Operational performance	0.284	7.519	0	0.562	12.450	0	4.189	Approve	0.488	Complete mediation

of which 298 were analysed. Logically, a greater number of questionnaires and consequently the collected data can increase the consistency and validity of the output.

In future research, the newer and more effective variables can be considered in the suggested conceptual model and their impact can be examined on other variables. For example, other dimensions of digitalisation can be added to the model as new variables. Moreover, it is better to study this structural model in different industries.

Conclusion

The relationship between TM structures and organisational performance is confirmed by the output of the articles listed in Table 1. Also, the relationship between digitalised process management and organisational performance was proved. It is also mentioned in Martínez-Morán, Urgoiti, Díez, and Solabarrieta (2021), and the outcome of this study confirms the impact of digitalised process management as a mediator between TM and organisational performance.

In the present century and in recent years, digital transformation has caused a great change in working processes, employee competencies and these issues in the mobile telecommunications industry; given these factors and considering how the new generations of telecommunications are opening the door to digitalisation, these companies need to take action to adapt to rapid changes in the ratio of review and digitalisation of TM processes. Therefore, considering the approval of digitalised process management as a mediator in the relationship between TM and organisational performance, it can be seen that companies operating in this industry in Iran can update the relevant processes.

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Competing interests

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Authors' contributions

M.R.S. developed the idea, methodology, formal analysis, investigation, original draft, visualisation, data curation, theoretical formalism, analytic calculations and numerical simulations. M.D. reviewed and edited the article and Dr Safaie checked the final draft.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

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Data availability

The data that support the findings of this study are openly available as reference and within the article.

Disclaimer

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