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Knowledge Management Capabilities Determine Employee Engagement and Job Performance

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Abstract

This Study probes the influence of knowledge management capabilities and their association with employee's engagement and job performance of employees of health department at Rawalpindi District in Pakistan. Data was collected on 5-point Likert scale through simple random sampling technique from a sample of 160 doctors working in rural, urban and teaching hospitals in the selected region. Results showed a significant positive relationship between knowledge management capabilities, employee engagement and employee's job performance and partial mediation of employee's engagement between relationship of knowledge management capabilities and employee's job performance is exhibited in the study. Valuable capabilities of knowledge management leads toward effective employee engagements that motivate and encourage its employees to better perform at workplace in more efficient way, beside it enables to capture and share right kind of knowledge management practices, at right time & at right place ensuring successful and timely retrieval of useful information when needed. Considerable improvement in organizational knowledge management capabilities is suggested to capitalize knowledge management capabilities of technology, structure and culture along with refresher training programs on employee engagements regarding knowledge acquisition, sharing, conversion and protection at workplace to meet competing demands of higher job performance.

Keywords: *Knowledge Management Capabilities, Employee Engagement, Job Performance.*

Introduction

Along countless developments in technology and processes in modern era that has amplified its technological dependency manifolds, knowledge is also becoming a priceless asset and source of competitive advantage because major competence is human mind and his knowledge. For this numerous ways of acquiring, generating, applying, converting, disseminating and protecting knowledge are being pursued. (Ferreira & Fernandes, 2017; Mahdi et al., 2019). 20th century belongs to industrial society, later on it arouse as information society, but beginning of 21st centeury is declared as knowledge society in which knowledge economy appeared as a considerable source of competitive edge in dynamic economy. According to (Nonaka, 2007) knowledge is the most essential factor after factors of production and knowledge management is a process through which firms create capital from intellectual assets(Davenport & Prusak, 2000; Mills & Smith, 2011; Nonaka, 2007;Sher & Lee,2004).

Present study is focused on impact of knowledge management capabilities i.e. knowledge acquisition, application, its conversion and protection regarding organizational behavior i.e. job performance & employee engagement which tell that how organizations take into practice learning from experience in order to capture, apply, convert, share and save knowledge in time that will result in improved employee engagements and better job performance toward achievement of organizational performance. Both success and failures studies are sources of new knowledge that may be lost if not captured and stored (Iazzolino, Laise & Gabriele, 2017; Muhammad et al., 2019; William, Jeffery, & Timothy, 2018).

In particular this research probes the effect of employee engagements in linking knowledge management capabilities with employee's job performance that how employee helps public sector organizations to achieve competitive edge, outcome and sustainability through improving their individual job performance with the help of more employee engagements along with right utilization of knowledge management capabilities i.e. the *rationale* of this study.

So overall job performance of employees can only be achieved if employees are actively engaged in dynamic environment and organization is exercising right kind of infrastructure and process capabilities at workplace.
Besides, the literature also supports that if employees of the organization are well engaged with right capabilities of knowledge, then particular organization will surely have competitive edge over others. The results showed that the degree of knowledge management capabilities was principal criteria for enhancing and determining organizational behavior and job performance of employees.

Knowledge management capabilities and employee's Job performance are identified by various researchers in many ways with different factors, but in most of researches these impacts were investigated in isolation and mediation effect of employee's engagement to enhance employees job performance is not yet evidenced. Moreover, little or no evidence is available to enhance job performance of public sectors in Pakistan, specifically in Punjab health department with regards to knowledge management capabilities and employee's engagement. A GAP exists that develop basis of the present study. So, the Significance of this study is to find out the relationship and to improve job performance with the help of knowledge management capabilities and employee engagement that will contribute to body of knowledge a better understanding of employee's engagement in improving Job performance. Moreover, this article will also benefit to local service sector organization that how employee's engagement can be enhanced with right capabilities of knowledge acquisition and sharing in the in order to enhance job performance & achieve competitive edge and sustainability.

Research Objective

The objective of current study is to investigate the relationship between Knowledge management capabilities, employee engagements and job performance.

Associated research objectives are:

1. To probe relationship between knowledge management capabilities and employee engagement.
2. To probe relationship between employee engagement and job performance.
3. To probe relationship between knowledge management capabilities and job performance of employees.
4. To probe mediating effect of Employee engagement between knowledge management capabilities and employees job performance.

Problem Statement

According to (Grant, 1996) firms achieve their objectives through specialization and specialization needs process of knowledge acquiring sharing, converting and protecting. The pursuit to go further than information management into area of knowledge management is a complicated task so capability of organization can be observed in term that how well it integrates its infrastructure capabilities (technology, structure and culture) along with process capabilities (knowledge acquisition, conversion, application and protection)(Gold,2001).(Mikkawi et al., 2017; Kovačić et al., 2006) says that firms don't take on uniform approach toward knowledge management activities. Unlike tangible assets of land, labor and capital, which are transferable, intangible assets are not so if individual employee abandons the job, whole knowledge individual is drained and vanish permanently.

Most of the time senior management overlook knowledge management capability practices because middle or low level management lacks potential to convince top management about infrastructure and process capability as their major emphasis is on technology rather human capital. According to (Bhatti, Zaheer, & Rehman, 2011; Reinhardt, 2012) without assistance of intellctual capital ,technlogy can't analyze information. Scholars are striving for detriming correlations between employee's job engagement and performance but little or less studies elucidates empoyee engagement as a an essence due to which organization can have competitve edge over other (e.g. Harrison & Leitch, 2000;Schaufeli, Bakker, & Salanova, 2006)
Ample of researches have been carried out to probe the association of KM capabilities and job performance with different other variables but mediation analysis of employee's engagement between KM capabilities and job performance specifically in public sector is not yet evidenced. So a GAP exists that form foundation of the study to investigate, at what extent job performance may be enhanced or not, through proper application of KM capabilities with active mediation of employee engagement.

Review of Literature

Knowledge Management Capabilities

In order to achieve competitive advantage in dynamic economy, it necessitates organizations to leverage their new knowledge along existing knowledge that auspiciously place them in their target markets (Ferreira & Fernandes, 2017). This can be accomplished through 'absorptive capacity of a firm' that enables an organization to use existing knowledge in order to capitalize the value of new information, its integration and proper application at workplace in pursuit of creation of new knowledge & capabilities (Suzana & Kasim, 2008).Firms are becoming conscious about capabilities of knowledge management as core strategic assets in terms of its infrastructure & processes and ruminate mandatory to revive their strategies on maximization of knowledge assets and its sustainability in efficient and effective manner at workplace. According to (Alavi & Leidner, 2001)knowledge management is practice of ongoing activities on handling knowledge of all categories that helps a firm to encounter its achievable and evolving requirements and opportunities through new and existing knowledge .

According to Gold et al., (2001) Knowledge management capabilities are classified as (1) infrastructure capabilities that enable an organization to use existing knowledge and capabilities for successful transition and its application as desired in terms of technology, culture and structure, (2) process capabilities, that enable an organization not only to manage its knowledge and capabilities internally but externally as well like how to capture, create, use, classify, assemble, integrate, exploit and transfer knowledge. So knowledge infrastructure and knowledge processes are part & parcel for accomplishment of successful transition toward knowledge creation , sharing, conversion, application and protection(Davenport & Prusak, 2000)

Infrastructure Capabilities

Technology infrastructure consists of mechanical facets that marshal social capital toward creation of new knowledge and enables to cope with impediment of time and space (Harter, Schmidt, & Hayes, 2002). Structural dimension are referred as job assigned to an individual that influence its behavior in terms of firm's expectation and exhibits organization's norms, reward system and corporate policies (Tseng, 2014). culture represents a unique and complex whole that is comprised of organizational laws, values, beliefs customs and other capabilities that an individual obtain as a member of organization(Zheng, 2005).

Process Capabilities

Process capabilities are fundamental to exercise infrastructure capabilities of KM and must be carried out in flexible and efficient way (Chua, 2004).knowledge acquisition process relates to accumulation of knowledge either new or through existing source but this process take place simultaneously instead sequentially. Various nomenclatures for these process have been described like seek, generate, collaborate, attain, develop and capture (Moon & Lee, 2014). Conversion process is referred to as building current knowledge useful(Nonaka & Takeuchi,1995).timely and needful utilization of required knowledge is key to conversion process. Application process of KM capabilities means actual utilization of knowledge at workplace (Horwitch & Armacost, 2002).while protection process denotes security related knowledge management processes.

Together these KM processes and infrastructure capabilities are preconditions for successful knowledge utilization at workplace if properly exercised by individual at job, the right person acquires the right information timely with active engagement than overall job performance of particular organization will outperform.

H 1: Knowledge management capabilities have significant positive association with employee's engagement.
H 3: Knowledge management capabilities have significant positive association with job performance.

Employee Engagement

According to (Buttner & Billings, 2012)) engagement means the psychological presence of an employee while accomplishing his organizational task. Further he attempted to ascertain the psychological state of affairs critical to justify moment of individual engagements and disengagements accomplished by employees in varied conditions at workplace.

According to (Blattner & Walter, 2015) strategy of engaging employees from top level effects in better employee engagement at work place and if organizations understand and appreciate their employee that how much important they are for their organization , then employees are dedicated ,self-motivated and actively engaged in permissive way on task resulting in overall improved performance .Evaluating demographic characteristics of employees also lead toward more employee engagement as engaging young workers toward monetary compensation would seek to retain their loyalty with organization(Butler, Brennan-Ing, Wardamasky, & Ashley, 2014).

Study by Council, (2004) explains that companies have competitive advantage in term of better employee engagement activities and if an organization wants to improve its overall organizational performance it must focus on individual job performance that is possible only when employees are better engaged at work place.

Ample of researchers have been carried out by scholars in order to find out correlations between employee engagement (Andrew & Sofian, 2012; Anitha, 2014; Eldor & Harpaz, 2015) but lack of empirical evidence and investigation that can help top management to engage employee in order to achieve competitive advantage.

Particularly researchers have not yet investigated the function of engagement as a method that associates characteristics of employee and knowledge management capabilities in improvement of individual job performance that ultimately will lead toward overall organizational progress.

According to Bakker et al., (2005) engagement of employee is defined as an individual engrossment and contentment along with eagerness and passion for work. Basically employee engagement is a practice through which organizations enhance their assurance and allegiance of its manpower to attain organizational objectives and mission in larger perspective under pursuits of individual job performance. Moreover researchers have countless arguments in literature of management that strong organizational commitment enhances employee engagement and if the employees are more engaged at workplace, organizational performance significantly increases along with individual job performance. So if better capabilities of knowledge sharing within the organization are applied, outcome will be better employee engagement both individual and organizational with high moral or engaged employees toward achievement of organizational performance.

H4: Employee engagement mediates the relationship between knowledge management capabilities and employee's job performance.

Job Performance

According to (Hakan & Sigal, 2016) Job performance is a sort of result after work is over and is characterized by the degree of accomplishment of each job and the execution of organization's regulations, prospects, and requirements designated for an official role. According to (Korman, 2007)) performance is a tool to measure firm's goals in response to employee's activities done efficiently and effectively at workplace. Efficacy may be related to money, productivity or operational activities.

According to (Shannak, 2009) job performance is explained through two distinct facets (1) task performance, that denote when individual is assigned some specific task relating to job or when employee has to meet certain targets at work place assigned by higher level and it mostly relates to internal instinct in the individual which derive increases overall organizational performance (2) contextual performance entails when individuals in a firm is self-motivated, actively engaged and deliberately perform any task with true spirit and enthusiasm without any internal control system. In observation of Asumeng,(2013) when organizations are knowledgeable and cares about its knowledge worker than both task and contextual performance are enhanced resulting in motivation, loyalty and confidence building among employees. Moreover knowledge management capabilities are strongly related with employee's task and contextual performance. Organizations that have strong infrastructure and process capabilities are more inclined toward contextual performance (Borman and Motowidlo ,1993). Job performance is a blend of skills & competencies and can be categorized in three dimension that acts as a source of motivation for individual to execute his task at workplace. These are sense to execute, ability to execute and readiness to execute (Inkinen, 2016). So keeping in view all three individual characteristic in organization may boost employee motivation and moral, resulting in overall organizational success. In nutshell organizational success vests in analysis of individual's capacity and capability to perform specific task at workplace, so if organizations manage to engage its employee in a positive way, individual job performance enhances resulting in overall performance of organization.

H 2: Employee engagement has significant positive association with job performance.

Theoretical Framework

Knowledge management capabilities have strong and positive association with employee engagement and job performance as they direct concerning accomplishment of organizational goals.(Gold et al.,2001) also reveal the considerable importance of knowledge management capabilities in improving overall organization's performance.

According to (Blattner & Walter, 2015) constructive and optimistic work experience enhances self-control and enables employee to work in more accommodating & efficient way resulting in individual job performance. So if employees mediate or exercises high level of commitment for engagement toward knowledge infrastructure and process capabilities, there will be improved job performance both in task and contextual performance with a high moral resulting in overall enhanced organizational performance toward achievement of organizational objective.

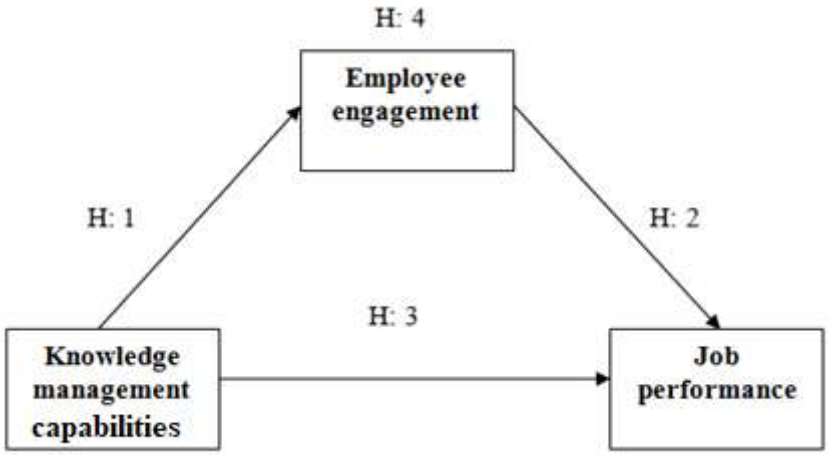

Figure No 1: Theoretical framework

Hypothesis

H1: Knowledge management capabilities have significant positive association with employee's engagement.
H2: Employee engagement has significant positive association with job performance.
H3: Knowledge management capabilities have significant positive association with job performance.
H4: Employee engagement mediates the relationship between knowledge management capabilities and employees job performance.

Methods

Sampling Procedure

Data was collected using a survey questionnaire from a randomly selected Sample of doctors (N=160) working in rural and urban government hospitals; Basic Health Units (BHUs), Tehsil Headquarters (THQs), Rural Health Centers (RHCs) and District Headquarter Hospitals (DHQs) in district Rawalpindi –a densely populated city of Punjab (Pakistan). Systematic sampling technique of probability sampling was used for data collection. Sample was drawn using simple random approach by selecting every 4th doctor from the list obtained from the office of Executive District Officer Health, Rawalpindi.

Measures

Knowledge Management Capability Scale.

Independent variable knowledge management capabilities were measured through eight item scale of (Nahapiet & Ghoshal, 1998) that was further extended and developed by (Gold et.al., 2001). All items were measured through 5-point Likert scale, ranging from 1(strongly disagree) to 5 (strongly agree). Statistical package for social sciences 21 was used moreover process by *Andrew F.Hayes* was used for regression analysis and better explanation of mediation effect of independent variable on dependent variable. The scale indicates a good reliability in this study (chronbach Alfa value 0.762).

Employee Engagement Scale

Employee engagement is a mediating variable which comprised of 11 items of (Maertz & Campion, 2004) also used by (Saks & Koehler, 2005). The scale showed a good level of reliability (chronbach alpha value =0.752).

Job Performance Scale

Job performance of public sector doctors were measured through combination of overall job performance scale i.e. 3 items of empathy by(Zeithaml, Berry & Parasuraman, 1993) & 3 from service provider performance by(Price, Arnold & Tierney, 1995) . Chronbach Alfa value for this scale was (0.729).

Reliability & Validity

According to (Sekaran, 2006) alpha value higher than 0.6 indicates about authenticity and reliability of any research instrument .Alpha value of our variables is knowledge management capabilities, Employee engagements and job Performance is .762, .752 and .729 are respectively.

Table-1: Reliability Analysis

Variables	Cronbach's Alpha	No of items
1-Knowledge management capabilities	.762	8
2-Employee Engagement	.752	11
3-Job performance	.729	6

Respondent Characteristics

The selected participants received 25 items self-administered questionnaire designed to investigate the influence of Knowledge management capabilities on Job performance and employee engagements. Out of total 160 sample size 152 filled questionnaires were received having response rate of 95%. All respondents had 6 year degree in medicine and surgery .Most of the them were male i.e. 57% and 85% of total population had more than five year work experience in public sector. Demographic characteristics of the respondents are sown in table 2:

Table 2: Descriptive Statistic of (N=152)

Categories	*Frequency*	*% Percentage*
Gender		
Male	87	57
Female	65	43
Age		
20-25 years	6	4
26- 30 years	19	13
31 -35 years	74	49
36 - 40 years	5	3
41 & above	48	31
Qualification		
MBBS	80	53
MBBS +Higher	72	47
Marital Status		
Single	10	7
Married	142	93
Current Experience		
1 to 5 years	22	15
6 to10 years	82	54
10 years and above	48	31
Present place of posting		
BHU	53	35
RHC/THQ	69	45
BBH/HFH/DHQ	30	20

Results

Co-relation

Co-relation matrix exhibits about the existence of any relationship between independent variable i.e. knowledge management capabilities mediating variable employee engagements and dependent variables job performance.

Table-3: Correlation Matrix (N=152)

	1	2	3
	Mean KMC	**Mean EE**	**Mean JP**
Mean KMC	1	.964**	.407**
Mean EE	.964**	1	.470**
Mean JP	.407**	.470**	1

**. Correlation is significant at the 0.01 level (2-tailed).

From above table 3 it is exhibited that there is a positive and strong co-relation between independent variable, mediating variable and dependent variables but P-Value of Employee Engagements i.e. (0.964) demonstrates that significant and strong co-relation exists between Knowledge management capabilities and Employee Engagements. Job performance has also significant correlation with knowledge management practice i.e. (0.407). Moreover employee engagement also has a significant relationships between and job performance i.e. (0.470).

Regression

In determining the proper explanation of interdependencies between variables we use regression analysis. Regression analysis results as shown in Table 4, 5, 6 and 7 are as under:

Table-4: Coefficients of Knowledge management capabilities, job performance

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.502	.203		12.342	.000
	KMC	.362	.066	.407	5.465	.000

a. Dependent Variable: JP
b. R square value= .166

Table-5: Coefficients of knowledge management capabilities, employee's egagement

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.773	.056		13.902	.000
	KMC	.802	.018	.964	44.176	.000

a. Dependent Variable: EE
b. R square value = .929

Table-6:Coefficients of Employee engagement & Job performance

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.994	.247		8.073	.000
	EE	.502	.077	.470	6.528	.000

a. Dependent Variable: JP
b. R square value = .221

Table-7:Coefficients of knowledge management capabilities, employee engagement & job performance

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.604	.292		5.501	.000
	KMC	-.570	.236	-.642	-2.417	.017
	EE	1.161	.283	1.089	4.101	.000

a. Dependent Variable: JP
b. R square value = .251

From the above regression analysis shown in table 4 Knowledge management capabilities have significantly and positively affected employee job performance ($\beta = 0.362$, p less than 0.001), Table 5 tells

that Knowledge management capabilities have significantly & positively affected employee engagement (β =0.802, p less than 0.001), Table 6 explains that employee job performance has significant and positive effect due to employee engagement (β =0.502, p less than 0.001). The results show that first three hypotheses i.e. *H1; H2 and H3* are justified. In analysis of Table 7, knowledge management capabilities and employee engagement have significant effect on employee job performance. Moreover the study pursued Baron and Kenny's (1986) propositions to confirm whether employee engagement mediates the association between knowledge management capabilities and employee job performance. First, KM capabilities have significant & positive effect on employee job performance (β =0.362, p less than 0.001). Second, Knowledge management capabilities have significant & positive effect on employee engagement (β =0.802, p less than 0.001). Third both knowledge management capabilities and employee engagements has significant justification for job performance (β = -0.570, p less than 0.001and β =1.1609, p less than 0.001) respectively when knowledge management capabilities are controlled. Subsequent to instigating the above mentioned analysis, research revealed that the strength of relationship between the independent variable (knowledge management capabilities), and dependent variable (job performance) is reduced from 0.362 to -0.570 when mediating variable (employee engagement) is added in the study. So after mediation analysis, H 4 also validates and supports our hypothesis which justifies that partial mediating effect exists and the magnitude of indirect effect is 0.9313. Moreover value R square in Table 7 also suggests that 25% variability in job performance is due to knowledge management capabilities and employee engagement. P-Values of all ANOVA tables 4, 5, 6 & 7 are significant and also validate the goodness of fit for the model.

Discussion

Organization capture knowledge to achieve competitive edge. Valuable capabilities of knowledge management leads toward effective employee engagements that motivate and encourage its employees to better perform at workplace in more efficient way. Moreover it enables to capture and share right kind of knowledge management practices, at right time & at right place ensuring successful and timely retrieval of useful information when needed resulting in better job performance that is a key to overall organizational success.

In pursuit of excellence and achieving competitive advantage, organization have overlooked or paid less attention toward employee engagements. Difference of opinion is always there, about what organizations presumes about their employees to perform and what in return employee expect from organization.

Specifically in public sectors due to centralized chain of command, employees believe that their contribution or active participation at workplace will not be recognized or encouraged, instead they keep on working through conventional way of following job performance through standard operating procedure & priorities. As a result low individual job performance is exhibited that leads toward less employee engagement at work. So if organization is capitalizing its knowledge infrastructure capabilities of technology, culture and structure along knowledge process capabilities of knowledge acquisition, conversion, application and its protection where knowledge is promptly obtainable to its individuals in more mechanistic and structured way, easily retrievable when necessary and updating this knowledge will lead toward better employee engagement that result in improved job performance.

Finding of the study denotes that in order to improve employee engagements in public sectors, it is must for them to exercise right kind of knowledge management practices in terms of its capabilities, through active participation of their employees, give them confidence and motivating & encouraging them at workplace because technology alone without human capital can't bring success(Blattner & Walter, 2015).Results uncovers that employee engagement partially mediates between knowledge management capabilities and employee's job performance i.e. So if better capabilities of knowledge sharing within the organization are applied, outcome will be better employee engagement both individual and organizational with high moral or engaged employees toward achievement of organizational performance.

In order to better perform, health department Rawalpindi should be deeply concerned about how good, public sector doctors are carrying out their job, the better they are engaged in knowledge sharing and exchange activity the more inclination toward executing their on-job tasks resulting in better job performance . That's why improvement in organizational performance with valuable knowledge may be a part of an organization's knowledge management strategy as it attempts to encourage its employees to share their knowledge.

Limitations and Future Indications

Use of longitudinal data for more reliability and focusing on various other important variables that researcher has ignored in accessing employee's job performance. Instrument could be further enhanced to include other techniques such as observations and interview for better quality of output.

Conclusions

The study contribute to body of knowledge as it reveals the importance of knowledge worker in public sector organization that if employees specifically doctors leave the organization than knowledge in human mind will also drain along with employee so in order to capitalize that knowledge and sustainability organizations should mange refresher trainings and programs on regular basis to let their employees know how to acquire, share, retrieve utilize and apply right kind of knowledge management capabilities at right place and right time that will encourage toward more employee engagement at workplace resulting in better individual job performance as evidenced in our research that showed strong correlation between knowledge management capabilities and employee engagements.

Results of partial mediation also exhibits that there are other several variables that increase employee motivation such as employee's moral, motivation, compensation, recognition and performance appraisal etc. in improving individual job performance of the employees.

As this research is carried out on public sector doctors of Rawalpindi district only, so for better results and understanding more sample size from over all Punjab or Pakistan doctors could be included along with other various public sectors.

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