The Influence Of Dynamic Capabilities, Competencies, Motivation, And Information Technology On Innovation Performance For Nursing

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Abstract

This study aims to determine the influence of dynamic capabilities, competencies, motivation, and information technology on innovation performance. The research was conducted at RSST Klaten with the object of nursing staff filling out the gform. The population is 410 people with a sample of 41 respondents or 10%. This is due to various problems such as limited ability of researchers, time and costs in researchers by means of accidental random sampling. The results showed a significant positive influence of dynamic capability variables on innovation performance. Competency had a positive but not significant effect on innovation performance. Motivation has a negative and insignificant effect on the performance of Information Technology innovation has a negative and insignificant effect on innovation performance. The results of the F test show that all independent variables have a significant influence on innovation performance. R² value of 0.359 means that innovation performance is explained by Dynamic Capability, Competence and Motivation, and Information Technology by 35.9% and the remaining 64.1% is explained by other variables outside the research model, such as compensation variables, work discipline and others

Keywords: dynamic capabilities, competencies, motivation, information technology, innovation performance

Introduction

The intense competition of the digital information age makes all organizations must develop innovation and capabilities for the sustainability of the institution (1). This innovation is also needed in health services in hospitals. Hospitals must strive to improve innovation and capabilities to support performance. This needs to be a strategy with a different typology model on human resources (2). Hospitals that want to continue to exist in global competitiveness, require human resources who are able to adapt in the internal and internal environment of the hospital (3).

Today, growth and development are expected to have implications for performance (4,5). Therefore, openness is needed for hospitals for innovation (6). Managed and continuous performance is a performance management. The performance of innovation in hospitals is

intended so that hospitals can continue to exist and be sustainable competitively. The performance of innovation in hospitals will affect hospital performance indicators. In order for hospital innovation to be sustainable and support hospital performance, an innovation strategy is needed (7).

Health workers such as nursing personnel are the spearhead in ensuring the quality of service to inpatients. The abilities possessed by nursing personnel will be explored when serving patients. Nursing personnel include nurses and midwives. Nursing personnel are professionals in carrying out nursing care.

Dynamic capabilities are required within the framework of continuous innovation. This is very necessary to drive the overall innovation performance of hospitals (8). Patient-oriented hospitals have a tendency to reconstitute their capabilities. The aspects of dynamic capabilities that have an influence on innovation performance are: Knowledge Acquisition Capability, Knowledge Creation Capability dan Knowledge Integration Capability (9).

The ability of professional nursing personnel (competencies) will affect the performance of innovation. Mastery and involvement of nursing personnel in science and technology in nursing practice has become imperative. Nursing science and technology as a form of external pressure for nursing personnel. Professional nurses play a role in realizing the health service system according to the needs and demands of public health. Motivation related to work results. Employees who have high motivation will be more energetic and have the opportunity to achieve higher performance than employees who are low motivated. Research related to motivation (10–16) Shows motivation has a significant positive effect on performance, research is being done (17) shows positive results but not significant influence of motivation on performance.

In ensuring the quality of health services, hospitals need information technology. The use of information technology is very necessary related to the quality of health services.

Literature

Innovation Performance

Innovation is a crucial factor in organizations (18). Lack of quality human resources or lack of information related to technology become obstacles in innovation performance (19). The concept of innovation was introduced by Schumpeter in 1934 as a new combination of factors of production created by entrepreneurs. Innovation thinking is an important driving force in economic growth. Innovation management will make an organization excellence (20).

Innovation management is the performance of continuous innovation carried out by the organization. Performance is a record of the results of work carried out in a certain period (21,22). Innovation is a process or result of new or different actions. Performance innovation is the process or result of an act of novelty in an organization.

Dynamic Capability

Dynamic capability is defined as ability to integrate various resources so that they are able to adapt continuously to various changes. Dynamic capability is the integrated ability of internal and external resources to various options in the enterprise environment (23).

Competency

Competence is a fundamental characteristic possessed by a person that directly affects and or can predict excellent performance (24).

Motivation is the essence of someone who is willing and able to do a job well, apart from the existence of one's ability. According to Motivation is defined as the driving force or drive that comes from within humans to do or do something. In addition, this research is based on gap research on the effect of work motivation on employee performance. Research related to motivation was conducted (25) (26).

Information Technology Information technology is defined as a technology used to process data, including processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, namely relevant, accurate and timely information, which is used for personal, business, and government purposes and is strategic information for decision making (27).

Research related to the role and influence of several types of Information And Communication Technologies / ICT is carried out (28–30). Yannis Charalabidis, Euripidis Loukis, and Aggeliki Androutsopoulou (31) researching related to social innovation support through the use of various social media. Information and Communication Technologies have great potential in supporting the improvement of collection, storage, management, of several innovations as knowledge that ultimately has an impact on innovation performance.

Method

The research was conducted at RSST Klaten with the object of nursing staff filling out the gform. The population is 410 people with a sample of 41 respondents or 10%. This is due to various problems such as limited ability of researchers, time and costs in researchers by means of accidental random sampling.

Results and Discussion

Table 1 Result of Analysis					
	Model	Standardized Coefficients Beta	t	Sig.	
1	(Constant)		4.235	.000	
	KD	.596	3.224	.003	
	KOM	.182	.810	.423	
	MOT	.070	.271	.788	
	TI	207	580	.565	

source : Data processed, 2023

Multiple linear regression KI = 0,596 KD + 0,182 Kom + 0,070 Mot – 0,207 TI + $\ensuremath{\mathbb{C}}_3$

Dynamic capability has a regression coefficient of 0.596 and a count of 3.224 and significance 0,003<0,05. This means that dynamic capabilities have a significant positive effect on innovation performance. Competence has a regression coefficient

0,182 and t-test as 0,810 as well as significance 0,423>0,05. Motivation has a regression coefficient of 0.070 and a count of 0.271 as well as significance 0,788>0,05. This suggests that competence and motivation have a positive but not significant influence on innovation performance. Information technology with regression coefficient -0,207 and t-test _0, 580 as

well as significance 0,565>0,05. This means that information technology has a negative and insignificant effect on innovation performance.

F-test

Table 2 Result F-test

F-test	Sig
5.038	.002 ^b

The joint test shows that dynamic capability variables, competence and motivation as well as information technology have a significant positive effect on innovation performance.

Table 3. Coefficient of Determination (R²)

			Adjusted R	
Model	R	R Square	Square	Std. Error of the Estimate
1	.599 ^a	.359	.288	6.086

a. Predictors: (Constant), TI, KD, KOM, MOT

b. Dependent Variable: KI

The coefficient of determination of 0.359 means that the variability of dynamic capabilities, competence, motivation and information technology can only explain the rest due to other factors outside the model.

Analysis Results Based on the test results, the following data can be compiled:

Table 4. Recapitulation Results

No	Effect	Beta	t-test	sig	Conclusion
1	Dynamic Capability \rightarrow	0,596	30,224	0,003	significant
1	Innovation performance				
2	Competence \rightarrow	0,182	0,810	0,423	Insignificant
2	Innovation performance				
3	Motivation \rightarrow Innovation	0,070	0,271	0,788	Insignificant
	performance				
4	Information Tecknology	-0,207	-0,580	0,565	Insignificant
	\rightarrow Innovation performance				

Classic Assumtion

Normality



Auto Correlation

Model Summary ^b					
			Adjusted R	Std. Error of	Durbin-
Model	R	R Square	Square	the Estimate	Watson
1	.599 ^a	.359	.288	6.086	2.305
-					

a. Predictors: (Constant), TI, KD, KOM, MOT

b. Dependent Variable: KI

Multi Collinierity

Coefficients^a

		Collinearity Statistics			
Model		Tolerance	VIF		
1	(Constant)				
	KD	.522	1.916		
	KOM	.352	2.841		
	MOT	.265	3.775		
	TI	.141	7.110		

a. Dependent Variable: KI

Heteroskedasticity

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Conclusion

Dynamic Capability has a significant positive effect on innovation performance Competency has a positive but not significant effect on innovation performance Motivation has a negative and insignificant effect on Information Technology innovation performance has a negative and insignificant effect on innovation performance. The results of the F test show that all independent variables have a significant influence on innovation performance. Value R² as 0,359. This means that innovation performance is explained by Dynamic Capability, Competence and Motivation, and Information Technology by 35,9 % and the rest is 64,1 % Explained other variables outside the research model, such as compensation variables, work discipline and others.

References

- Berraies S. Employee Empowerment and Its Importance for Trust , Innovation and Organizational Performance. Bus Manag Strateg. 2014;5(2):82–103.
- Martin G, Farndale E, Paauwe J, Stiles PG. Corporate governance and strategic human resource management: Four archetypes and proposals for a new approach to corporate sustainability. Eur Manag J [Internet]. 2016 Feb;34(1):22–35. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0263237316000049
- Tariq MR, Aslam M. Impact of Employee Adaptability to Change Towards Organizational Competitive Advantage. 2011;11(7).

- Hernández V, Nieto MJ. Inward–outward connections and their impact on firm growth. Int Bus Rev [Internet]. 2016 Feb;25(1):296–306. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0969593115300020
- Saeed A, Ziaulhaq HM. The Impact of CEO Characteristics on the Internationalization of SMEs: Evidence from the UK. Can J Adm Sci / Rev Can des Sci l'Administration [Internet]. 2019 Sep 7;36(3):322–35. Available from: https://onlinelibrary.wiley.com/doi/10.1002/cjas.1497
- Zhao S, Sun Y, Xu X. Research on open innovation performance: a review. Vol. 17, Information Technology and Management. Springer New York LLC; 2016. p. 279–87.
- Terziovski M. Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view. Strateg Manag J [Internet]. 2010;n/a-n/a. Available from: https://onlinelibrary.wiley.com/doi/10.1002/smj.841
- Sudrajat D. Kapabilitas Dinamik, Kinerja Inovasi, dan Kinerja Perusahaan Jasa Logistik di Indonesia (Suatu Kerangka Penelitian). Binus Bus Rev [Internet]. 2013 Nov 29;4(2):798–811. Available from: https://journal.binus.ac.id/index.php/BBR/article/view/1396
- Gao Y, Zhu Y. Research on Dynamic Capabilities and Innovation Performance in the Chinese Context : A Theory Model-Knowledge Based View. 2015;(October):364–70.
- Amiroso J, Mulyanto. Influence of Discipline, Working Environment, Culture of Organization and Competence on Workers' Performance through Motivation, Job Satisfaction (Study in Regional Development Planning Board of Sukoharjo Regency) [Internet]. Vol. 7, European Journal of Business and Management www.iiste.org ISSN. Online; 2015. Available from: www.iiste.org
- Elqadri ZM, Priyono P, Suci RP, Chandra T. Effect of Leadership Style, Motivation, and Giving Incentives on the Performance of Employees—PT. Kurnia Wijaya Various Industries. Int Educ Stud. 2015;8(10).
- Mokodompit MZ, Pangemanan SS, Pandowo M. INFLUENCE OF LEADERSHIP STYLE, WORK MOTIVATION AND DISCIPLINE ON EMPLOYEES PERFORMANCE CV SUMBER REJEKI. PENGARUH GAYA KEPEMIMPINAN, MOTIVASI KERJA, DAN DISIPLIN TERHADAP KINERJA KARYAWAN CV. SUMBER REJEKI.
- Kasim D, Rantetampang AL, Lumbantobing H. Relationships of Work Discipline, Leadership, Training, and Motivation to Performance of Employees Administration Abepura Hospital Papua 2015. Int J Sci Basic Appl Res Int J Sci Basic Appl Res [Internet]. 2016;26(1):154–64. Available from: http://gssrr.org/index.php?journal=JournalOfBasicAndApplied
- Hartono BD, Zubaidah. The influence of leadership, organizational culture and work discipline on teacher performance regarding work motivation as interverning variable (a case study of yayasan pendidikan pondok pesantren al kholidin). Int J Econ Bus Manag Res [Internet]. 2017;1(01):69–95. Available from: www.ijebmr.com
- Kusworo, Armanu, Rahayu M, Sumiati. Influence of Motivation, Organizational Culture and Working Environment with Organizational Commitment As Mediator. Int J Soc Sci [Internet]. 2012;35(1):1–15. Available from: https://www.tijoss.com/35th Volume/fajer-Kusworo1.pdf

- Habba D, Modding B, Bima MJ, Bijang J. The Effect of Leadership, Organisational Culture and Work Motivation on Job Satisfaction and Job Performance among Civil Servants in Maros District Technical Working Unit. IRA-International J Manag Soc Sci (ISSN 2455-2267). 2017 May 3;7(1):52.
- Hersona S, Sidharta I. MOTIVATION AND WORK DISCIPLINE ON EMPLOYEES ' PERFORMANCE. J Appl Manag. 2017;15(3):528–37.
- Novitasari D, Hutagalung D, Amri LHA, Nadeak M, Asbari M. Kinerja Inovasi Di Era Revolusi Industri 4.0: Analisis Knowledge-Oriented Leadership Dan Kapabilitas Manajemen Pengetahuan. Edukatif J Ilmu Pendidik [Internet]. 2021;3(4):1245–60. Available from: https://edukatif.org/index.php/edukatif/article/view/520
- Suroso S, Novitasari D, Nugroho YA, Chidir G, Asbari M. Managing MSME Innovation Performance: Analysis of Knowledge-Oriented Leadership and Knowledge Management Capability. Edukatif J Ilmu Pendidik. 2021;3(6):4541–55.
- Komara E. Kompetensi Profesional Pegawai ASN (Aparatur Sipil Negara) di Indonesia. Mimb Pendidik. 2019;4(1):73–84.
- Opatha HHDNP. The Case for Teaching Human Resource Management in Management Education: 13 Common Reasons. Sri Lankan J Hum Resour Manag. 2019;9(2):15.
- Kurniawan IS, Pratiwi YI. Memperkuat Kinerja Inovasi: Peran Budaya Organisasi, Motivasi Intrinsik, Dan Berbagi Pengetahuan. Ekon Bisnis. 2021;20(1):21–30.
- Rahardjo S. The effect of competence, leadership and work environment towards motivation and its impact on the performance of teacher of Elementary School in Surakarta City, Central Java, Indonesia. Int J Adv Res Manag Soc Sci [Internet]. 2014;3(6):59–74. Available from: www.garph.co.uk
- Sriekaningsih A, Setyadi PD. The Effect of Competence and Motivation and Cultural Organization towards Organizational Commitment and Performance on State University Lecturers in East Kalimantan Indonesia. Eur J Bus Manag. 2015;7(17):208–20.
- Wang P, Mo Y, Wang Y, Fei Y, Huang J, Ni J, et al. Macadamia germplasm and genomic database (MacadamiaGGD): A comprehensive platform for germplasm innovation and functional genomics in Macadamia. Vol. 13, Frontiers in plant science. 2022. p. 1007266.
- Vinet L, Zhedanov A. A "missing" family of classical orthogonal polynomials. J Phys A Math Theor [Internet]. 2011;44(8):41–57. Available from: http://www.ghbook.ir/index.php?name=ئەر ئو كەنەر ف =khsahkhc&37=egap&05631=di_koob&enilnodaer=ksat&koobd_moc=noitpo& i epyC9491B4&Itemid=218&lang=fa&tmpl=component%0Ahttp://www.albayan.ae% 0Ahttps://scholar.google.co.id/scholar?hl=en&q=APLIKASI+PENGENA
- Setyowati L, Isthika W, Pratiwi RD. Faktor-Faktor Yang Mempengaruhi Kualitas Laporan Keuangan Pemerintah Daerah Kota Semarang. Kinerja. 2016;20(2):179.
- Setiawan daryanto. Dampak Perkembangan Teknologi Informasi dan Komunikasi Terhadap Budaya Impact of Information Technology Development and Communication on. J Pendidik. 2017;X(2):195–211.
- Burhan AB. Pemanfaatan Teknologi Informasi dan Komunikasi untuk Pengembangan Ekonomi Pertanian dan Pengentasan Kemiskinan. J Komun Pembang. 2018;16(2):233–

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47.

- Sulistiawati S, Kusumah YS, Dahlan JA. Penggunaan Information Communication and Technology (Ict) Tools Dalam Mendukung Pembelajaran Matematika Interaktif. JPMI (Jurnal Pembelajaran Mat Inov. 2021;4(5):1033–54.
- Charalabidis Y, Loukis E, Androutsopoulou A. Fostering Social Innovation through Multiple Social Media Combinations. 2014;225–39.