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Research Article

Optimizing organizational success: Matching the right position with the right person

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ABSTRACT

The purpose of this study is to identify the core capabilities required of Information Technology workers working in IT firms. Personal competencies, technical competencies, job-related competencies, interpersonal competencies, knowledge level competencies, and management competencies were all employed in the study, and they are all linked to IT employees' performance and help them thrive in their jobs. The existing study is primary in nature and involves retrieval of responses from IT employees through structured questionnaire ranged from 1–5 Likert scale. The sample size of the study is 176 respondents using purposive random sampling techniques. The study 's findings imply that in order to get a competitive advantage in the business industry, every individual in the company should be involved in improving productivity and efficiency at work. Similarly, the firm faces a difficult task in retaining people and persuading them to stay current in their fields of expertise or critical performance areas. As a result, competency mapping will aid the organisation in finding the expected skills of each employee in relation to the job's actual skill set. Specific training initiatives to overcome the skill shortfall of IT employees should be taken based on the identified gaps.

Keywords: competency; information technology; competency mapping; right fit; critical performance; organizational success

1. Introduction

1.1 Competency model framed for the study

The goal of HR has always been to match the best candidate with the best position (Kaur et al., 2023). The HR team employed several tools and techniques to assess the competency skills of the IT employee, with an emphasis on the technical skills required to complete the job and assigned project (Bocewiz et al., 2023). Technological advancements and new business opportunities in the IT sector have created a demand for skilled people in the workplace. Nowadays, most companies not only choose technical people for job responsibilities, but they also place a priority on behavioural and attitude traits during the recruiting process. As a result, both accomplishing the allocated work and progressing up the career ladder are critical. As a result, the HR team is focusing on mapping the work and job-related behavioural patterns. A careful observation and interviews with diverse IT personnel were conducted for the study in order to establish the traits required for the competency model (Myllymäki et al., 2022). As an outcome, the study's designed model is assessed using important

qualities via a questionnaire, and the sample data is examined. The results of the competency mapping model are vital because they help both the individual and the company understand what knowledge, skills, and abilities are required for a certain position (Kaur & Singh, 2022). The IT employee's competency was evaluated using six elements, including the employee 's knowledge, technical skill, and behaviour patterns required on the job, all of which are related to employee performance. As a result, the approach aids in the training of freshmen and students interested in pursuing an IT profession by focusing on the development of designated competency skill sets in order to achieve career objectives (Archambault & Hapes, 2023).
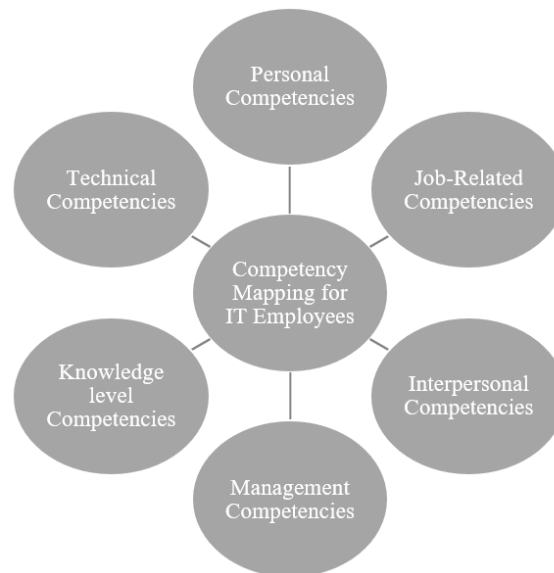

Figure 1. Competency mapping for IT employees (conceptual framework).

The competency model developed for the study is based on IT organisations' expectations and is adapted to the demands of each job profile. Based on interviews and interactions with HR chiefs working in IT organizations, the model is offered to determine the core competence skill required for IT employees (Byars-Winston et al., 2011). The following are the main characteristics that were utilized to identify competency skills in the study:

1) Personal competencies:

Personal competencies are critical for success in the work role for which they have been hired. Employees with the correct potential are more likely to meet the team 's or manager 's expectations at work. There are six key elements to consider when determining an individual 's suitability for the position. Personality, energy level, stress tolerance, self-confidence, recognition, and targets are all factors to consider. The purpose of the survey was to determine the most significant and necessary competency skill for IT workers to have as personal skills. The key aspects of personal competency for an IT employee are determined solely by the parameters listed above.

2) Knowledge level competencies

Individuals working in IT firms should keep their knowledge up to date and enhance it in relation to the project they are working on or the work requirements, as this will help them advance in their careers. The following aspects are crucial in helping them increase their knowledge level competencies: Organizational awareness, Empathy, Trainings, Learning, Routine work, and Operating knowledge.

3) Job-related competencies:

To be competitive in their job function, every individual in the organisation should study and build job-

related competencies. Because each position has its own set of obstacles and competencies, HR departments in diverse IT firms should assess the prospective skill sets. As a result, the following essential variables for job-related competences have been identified: Information, Analytical skills, Creativity, Expertise, Experience, and Presentation Skills.

4) Interpersonal competencies:

Individuals with interpersonal competences are better able to develop productive relationships at work, avoiding confrontations and ego clashes. This allows people to focus on the work and projects they 've been assigned while also ensuring that everyone is on the same page. As a result, the employees have the support and advice of others in developing a positive work culture. The knowledge and skills required for communication, motivation, appraisal, teamplayer, mentoring, and leadership are all examples of interpersonal skills.

5) Management competencies:

Nowadays, personnel must meet their managements' expectations, which are communicated to IT experts during their time in the firm. Handling Criticism, IT-Preneur, Multitasking, Listening, Ethical Judgement, and Time Management are the essential characteristics that are very important for an IT professional in terms of management competences. If IT employees possess the skills listed above, they can easily advance to positions such as technical director or CEO of an IT company.

6) Technical competencies:

To perform well in their assigned job or project, every employee in an IT organisation needs to have experience and understanding of the software coding/programming languages listed below. Software knowledge is a major criterion in the hiring process, and every IT employee should stay current in order to meet the industry 's standards. Every day, new discoveries and creative concepts in the IT field arise to simplify and easy the process, such as IoT, Cloud computing, ERP, Robotics, SAP advanced versions, Payroll process, and Business analytics. As a result, in order to handle the challenges and remain competitive, IT professionals must have substantial technical skills.

The bulk of IT job qualifications were also identified to be related to Software, Hardware and Networking skills, all of which will be essential in acquiring an IT job at a Dream Company (Shi et al., 2020). As a result, IT employees should have a solid understanding of or build experience in the aforementioned technology disciplines.

As a result, the aforementioned proficiency level possessed by IT Employees and requirements are clearly understood, assisting in the establishment of a benchmark in the IT field. This will also assist HR in identifying talents during the recruitment process so that only the desired skill sets are selected. All HR tasks and functions will be automated or performed by HR software in the future, lowering HR 's position in the business (Minbaeva, 2021). This identified skill will be beneficial due to the automation process and the ability to identify the competency through the assessment exam. Individuals are classified as performers or non-performers at work based on the scoring pattern. As a result, the entire training programme should be focused on the individual competency assessment and needs of the employees."

2. Review of literature

"Growing market demands drive businesses to innovate their products and services through adaptation (Baxter & Matear, 2004; Bontis, 1998; Inkinen et al., 2015; Wang et al., 2014). A plan that includes recurring employee mapping is required in order to provide the business with a talent pool—a grouping of qualified applicants organised by firm. These applicants perform above and beyond expectations, setting an example or

serving as a mirror for other staff members to follow the company's values (Collings & Mellahi, 2009; Gallardo-Gallardo & Thunnissen, 2016; Garavan, 2012; Lewis & Heckman, 2006; Sparrow & Makram, 2015; Tarique & Schuler, 2010).

Potential and competency components are combined to create a matrix on which mapping is done in order to find talents (Prahalad & Hamid, 2007). A number of other components are evaluated as well, such as qualifications, experience, and profile. Potential, competency, and prior performance are all taken into account (O 'connor & Lages, 2004). Using a matrix of employee mapping in nine quadrants, known as quadrants I to IX, the dimensions of competence and potential are evaluated and grouped into more focused groups according to particular criteria (Rony et al., 2020). The best group was represented by the good group candidates in quadrants VI, VII, VIII, and IX. One that is primed for promotion is the finest group. The talent availability matrix, which affects organisational development planning, is shown above the vertical and horizontal axes (Yasin, 2017). The outcomes of this mapping are applied to a variety of purposes, such as techniques for nurturing gifted persons and those with areas of weakness in need of development (Bersin et al., 2016).

In order to expedite the availability of exceptional personnel, it is imperative that all stakeholders have a shared understanding of the organization's future and prioritise employee development. This includes developing future leaders and providing employees with specialised training and programmes such as coaching and mentoring (Rolfe, 2010). Furthermore, expedited advancements such as project assignments and action learning are employed as substitute programmes to hasten the availability of exceptional personnel (Hagel et al., 2017). They receive help and training that is both explicit and quantifiable, enabling appropriate monitoring and efficient implementation of competency improvement (Z. T. Rony, 2020).

(Velayudhan & Maran, 2009) determined the gap between the current capabilities and expected competencies of the employees. The study conclusively indicated a favourable association between male and female employees in all parts of competency mapping, as well as a good relationship between the three groups' qualifications and all fifteen variables studied. The t-test study also found that there is a substantial difference in personal performance between the two groups of employees. In HCL, significant differences in functional competence, innovation, customer service, analytical thinking, and motivation were discovered between married and unmarried personnel.

(Mily, 2011) conducted a pilot study to analyse the competencies possessed by employees in an unbiased manner, as well as to determine the gap between current and expected competencies of employees at HCL Technologies. The study concluded that there is a favourable association between qualifications and the three categories, as well as all fifteen aspects examined.

(Mani, 2013) discussed about Companies ' performance is largely determined by the quality of their human resources. Organizations have always been concerned about the competency of their personnel for obvious economic and financial reasons. The purpose of this article is to explore more into the notion of competency, outlining its history and current role. It describes how the notion has grown over time, how it is used in human resource management, and where it is headed in the future. It also intends to examine its long-term possibilities in light of other burgeoning fields such as talent management. The study continues with case studies of businesses that have successfully integrated competency-based systems into their HR strategies.

(Chaudhuri & Mondal, 2020) suggested human resource management is the process of bringing individuals and organisations together to achieve mutual goals. High-skilled and knowledge-based jobs are increased as a result of adequate competency mapping. Human resource development aims to constantly assess the competency requirements of different individuals in order to effectively perform their respective job roles and to provide opportunities for these competencies to be developed in order to prepare them for challenging

future roles in the organisation as part of organisational succession planning. As a result, an investigation of the relationship between competency mapping and human practise in the organisation has been undertaken. Further efforts have been made to determine the impact of competency mapping on individuals and teams, as well as the influence on employee training.

(Yedama et al., 2021) documented competency - is collection of knowledge, abilities, and attitudes that indicate what must be done in order to do a job effectively and efficiently. In the field of human resources, a new age has begun. Human resource development seeks to continuously assess the competency requirements of various personnel in order to effectively do the job allocated to them and to provide opportunities for them to enhance these abilities in order to prepare them for future roles in the business.

(Kumar & Bhanu, 2022) claims that there are no specific lists of competencies for doing the job, but that the competencies vary from person to person depending on the role of their job. Human resources are regarded to be the most valuable and scarce resource available for any organization across the globe. Today when we measure the organization's performance, it is not with its material resources, but it is their human resources how they are acquired, maintained, used and how well those resources are retained. It is a known fact contemporary multinational organizations and other businesses require employees with desired competencies that would enable their employees to do their jobs in ever-changing competitive business environment. One cannot clearly define that these are the list of competencies needed, because competencies differ from job to job. It should be noted that there exists a wide range of definitions of competency and their acquisition.

2.1. Research gap

The above reviews of literature showed that the studies were carried in the other sectors, none of them covered the competency mapping among Information Technology Employees. The IT services industry is estimated to grow by over two times from pre-pandemic levels in fiscal year 2019, to $227 billion, and have a total workforce of 5 million, NASSCOM reported in its yearly stock-taking exercise. Most of the studies documented that recruitment and selection have been earlier discussed in generic sense only. Traditionally, the Human resource team would employ a set of tools and techniques to find the competency skills of the Information Technology employees', but with the technological changes and remote working challenges introduced by the pandemic, the focus has shifted to involve a set of behavioural attributes along with the IT expertise. The competencies are mapped as per the technical skillset and the behavioural characteristics of an employee. This research will attempt to analyse the recruitment and selection process of Information Technology Companies through mediation of competency mapping parameter into consideration. The above reviews of literature showed that the studies were carried for Information Technology Employees working in either Bangalore or Delhi NCR. The Rajiv Gandhi Chandigarh Technology Park (RGCTP) has proven to be a watershed moment in the Tricity 's economic transition (Chandigarh, Panchkula, and Mohali). It has attracted a large number of information technology/information technology enabled services (IT/ITeS) companies and aided in the expansion of IT operations. This has resulted in significant job creation in the region, with the IT/ITeS sector employing about 2 lakh people in these cities, as well as the rapid expansion of technical institutions. There is no study that tried to conduct the quantitative investigation of recruitment and selection process in Tricity region."

3. Objectives
- "To identify core competencies that influence the recruitment and selection decisions prevailing in the Information Technology sector.
- To provide suggestive measures for the future growth of recruitment and selection process through competency mapping."

4. Hypothesis of the study

"H_{01}: There is no significant factors influencing the recruitment and selection practices prevailing in the Information Technology sector in Tricity region."

"H_{a1}: There is significant factors influencing the recruitment and selection practices prevailing in the Information Technology sector in Tricity region."

5. Research methodology

The present study is primary in nature also exploratory. Responses retrieved from 176 IT employees as respondents of the study. The responses collected through structured questionnaire. The quantitative analysis tools were applied, namely, Cronbach's Alpha, Descriptive statistics, correlation analysis, Regression analysis and *t* test. The variables for research selected for the study are personal competencies, technical competencies, management competencies, job-related competencies, interpersonal competencies, knowledge level competencies."

6. Results and discussions

Table 1. Reliability statistics.

Reliability statistics	
Cronbach 's Alpha	0.768
N of Items	6

"The outcome of the present research carried out the Cronbach Alpha test (reliability statistics) to analyse the internal consistency among the variables. The reliability statistics results stated the estimated value to be 0.786 (n = 6) which is more than the acceptable threshold limit of 0.60. Therefore, internal consistency among the variables is present."

Table 2, documented the descriptive statistics of the study and analysed mean and standard deviation of all six variables, namely, technical competencies, management competencies, personal competencies, job-related competencies, interpersonal competencies, knowledge level competencies. The mean of impact of management competency mapping (mean = 4.34, std dev = 0.639) found to be highest among all the factors followed by job-related competency mapping (mean = 4.33, std dev = 0.705) and personal competencies (mean = 4.08, std dev = 0.774) found to be least among all the factors of competency mapping.

Table 2. Descriptive satistics.

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
personal competencies	176	1	5	4.08	0.774
job-related competencies	176	2	5	4.35	0.641
technical competencies	176	1	5	4.17	0.796
interpersonal competencies	176	1	5	4.23	0.752
knowledge level competencies	176	1	5	4.33	0.705
management competencies	176	2	5	4.34	0.639
Valid N (listwise)	176				

Table 3. Correlations between different factors of competencies.

Correlations

		Personal competencies	Job-related competencies	Technical competencies	Interpersonal competencies	Knowledge level competencies	Management competencies
personal competencies	Pearson Correlation	1	0.186*	0.182*	0.175*	0.109	0.210**
	Sig. (2-tailed)		0.013	0.016	0.020	0.151	0.005
	N	176	176	176	176	176	176
job-related competencies	Pearson Correlation	0.186*	1	0.477**	0.429**	0.366**	0.393**
	Sig. (2-tailed)	0.013		0.000	0.000	0.000	0.000
	N	176	176	176	176	176	176
technical competencies	Pearson Correlation	0.182*	0.477**	1	0.584**	0.378**	0.413**
	Sig. (2-tailed)	0.016	0.000		0.000	0.000	0.000
	N	176	176	176	176	176	176
interpersonal competencies	Pearson Correlation	0.175*	0.429**	0.584**	1	0.548**	0.468**
	Sig. (2-tailed)	0.020	0.000	0.000		0.000	0.000
	N	176	176	176	176	176	176
knowledge level competencies	Pearson Correlation	0.109	0.366**	0.378**	0.548**	1	0.523**
	Sig. (2-tailed)	0.151	0.000	0.000	0.000		0.000
	N	176	176	176	176	176	176
management competencies	Pearson Correlation	0.210**	0.393**	0.413**	0.468**	0.523**	1
	Sig. (2-tailed)	0.005	0.000	0.000	0.000	0.000	
	N	176	176	176	176	176	176

*. Correlation—significant at the 0.05 level (2-tailed).
**. Correlation—significant at the 0.01 level (2-tailed).

"Personal competencies" are positively correlated with technical competencies, management competencies, job-related competencies, interpersonal competencies, knowledge level competencies. "Technical competencies" are positively correlated with personal competencies, management competencies, interpersonal competencies, job-related competencies, knowledge level competencies. "Management competencies" are positively correlated with technical competencies, job-related competencies, interpersonal competencies, knowledge level competencies, Personal competencies. "Job-related competencies" are positively correlated with technical competencies, management competencies, personal competencies, interpersonal competencies, knowledge level competencies. "Interpersonal competencies" are positively correlated with technical competencies, management competencies, job-related competencies, Personal competencies, knowledge level competencies. "Knowledge level competencies" are positively correlated with technical competencies, management competencies, interpersonal competencies, job-related competencies, personal competencies. Therefore, there is strong interrelationship among the variables understudy.

Regression analysis of chosen variables is shown in **Table 4** as having a R square of 0.416 (41.6%) and an adjusted R square of 0.399, which is close to R square and also has a F significance value of 0.000. The results of this regression analysis are shown in **Table 5**. A dependent variable that is impacted by independent factors is the effect of competency mapping, such as management skills, personal characteristics and skills

connected to a job, interpersonal characteristics and skills related to technical skills.

Table 4. Model summary.

Model summary									
Model	**R**	**R Square**	**Adjusted R Square**	**Std. error of the Estimate**	**Change statistics**				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.645[a]	0.416	0.399	0.617	0.416	24.204	5	170	0.000

a. Predictors: (Constant), technical competencies, management competencies, personal competencies, job-related competencies, interpersonal competencies, knowledge level competencies

Table 5. ANOVA analysis.

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	46.112	5	9.222	24.204	0.000[b]
	Residual	64.774	170	0.381		
	Total	110.886	175			

a. Dependent Variable: impact of competencies mapping

b. Predictors: (Constant), management competencies, personal competencies, job-related competencies, interpersonal competencies, knowledge level competencies, technical competencies

Table 5, described the ANOVA analysis of the selected variables and outcome documented that F value estimated at 24.204 and significance value is be at 0.000. Therefore, impact of competencies mapping as dependent variable influenced by all selected independent variables, namely, management competencies, personal competencies, job-related competencies, interpersonal competencies, knowledge level competencies, technical competencies."

Table 6. One-sample test.

One-Sample Test						
	Test Value = 0					
	t	**Df**	**Sig. (2-tailed)**	**Mean Difference**	**95% Confidence Interval of the Difference**	
					Lower	**Upper**
personal competencies	69.908	175	0.000	4.080	3.96	4.19
job-related competencies	89.988	175	0.000	4.347	4.25	4.44
technical competencies	69.506	175	0.000	4.170	4.05	4.29
interpersonal competencies	74.596	175	0.000	4.227	4.12	4.34
knowledge level competencies	81.516	175	0.000	4.330	4.22	4.43
management competencies	90.067	175	0.000	4.341	4.25	4.44

Table 7, documented the *t* test statistics of the study and analysed *t* test of all six variables, namely, technical competencies, management competencies, personal competencies, job-related competencies, interpersonal competencies, knowledge level competencies. The mean of impact of management competency mapping ($t = 90.067$) found to be highest among all the factors followed by knowledge level competency

mapping (t = 81.516) and personal competencies (t = 69.908) found to be least among all the factors of competency mapping.

7. Hypothesis testing

By applying ANOVA and t test the findings of the study stated that all the factors selected understudy are significantly correlated to each other. Therefore, null hypothesis which is there are no influencing factors in recruitment and selection practices prevailing for the Information Technology sector in Tricity region is rejected and alternative hypothesis which is there are influencing factors in recruitment and selection practices prevailing for the Information Technology sector in Tricity region is accepted.

8. Implications of the study

This research centered on "Optimizing Organizational Success: Matching the Right Position with the Right Person" within the realm of competency mapping carries profound social implications. By strategically aligning individuals with roles that best leverage their competencies, this research can enhance overall job satisfaction, fostering healthier work-life balances and improved mental well-being, with ripple effects on interpersonal relationships and community dynamics (Barr & Nathenson, 2022). Furthermore, reducing employee turnover through better alignment can contribute to social stability, curbing the disruptive impact of workforce churn on communities and families. Competency mapping, when executed equitably, can also promote inclusivity and diversity in organizations, mitigating social inequalities and biases by ensuring that individuals from diverse backgrounds receive fair opportunities based on their abilities (Woods & Tharakan, 2021). It additionally has the potential to reshape education and skills development, leading to more precisely tailored training programs, enhancing employability, and stimulating economic productivity, which can, in turn, be channeled into corporate social responsibility initiatives, benefiting local communities and society at large (Sanghi, 2016). Lastly, ethical considerations surrounding competency mapping underscore the importance of fair, transparent practices that combat discrimination, setting ethical benchmarks for the broader business landscape and contributing to a just and equitable society. In sum, this research not only holds the promise of enhancing individual and organizational success but also carries the potential to foster positive societal well-being, stability, inclusivity, education, economic prosperity, and ethical conduct in the corporate world."

9. Conclusion and recommendations

"IT employees should be given enough training in information and network security, digital technologies, and big data analytics to improve their technical expertise (Nguyen et al., 2020). In the above domain, more IT jobs are projected to become accessible in the future (Majid, 2020). IT employees should be given enough training in information and network security, digital technologies, and big data analytics to improve their technical expertise. In the above domain, more IT jobs are projected to become accessible in the future. The research highlights the general competency skills that IT employees require to execute their given jobs. The goal of the assessing competency was to determine the requisite KSA and behaviour of IT employees for a certain position. Based on the abovementioned outcome, the strategy for the IT business 's subsequent HR operations, such as staff recruitment, retention, and succession planning, is framed. Competence mapping for all positions must be completed in order to recruit suitable people who meet the job requirements."

10. Future scope of the study

The research article lays the groundwork for a vast and exciting field of study in the future. Understanding the changing abilities needed in this profession is becoming more and more important as the IT sector continues

to play a significant role in defining the modern world. Subsequent investigations may explore further the creation of a more sophisticated and flexible competency framework that takes into consideration the constantly broadening range of IT positions and specialisations. Given the quickly evolving technological landscape, the growing significance of interpersonal and problem-solving abilities, and the continuously changing technological landscape, this framework can cover both technical and soft skills. Furthermore, the development of novel assessment techniques that may incorporate AI and machine learning has the potential to transform the assessment of IT competencies by offering more accurate and current insights. Analysis of skill gaps will continue to be a key area of study, allowing businesses and academic institutions to customise their curricula to the unique requirements of the IT workforce. Examining the direct influence of competencies on the success and performance of organisations can establish a stronger connection between the enhancement of competencies and observable business results. It will be essential to comprehend how competency development affects output, creativity, and worker satisfaction. Research on the efficacy of mentorship programmes, digital learning platforms, and competency development programmes will also advance best practises for developing IT talent. Regional differences in workforce preparation and competitiveness will be addressed by comparative worldwide studies that highlight regional differences in IT competencies. Additionally, when cutting-edge technologies like blockchain, quantum computing, and artificial intelligence continue to upend the industry, studies can concentrate on how these developments alter job descriptions and competency criteria, guaranteeing that IT workers can adjust to automation. Research can investigate how competency development can provide fair access to opportunities for people from different origins by delving into concerns of diversity and inclusion. Lastly, research aiming to align competencies with ethical standards and environmentally sustainable practises will make ethical and sustainability considerations in the IT sector a central theme. This is in line with the growing societal emphasis on responsible and eco-conscious technology development. To summarise, the future study on skills in the IT sector is broad and diverse, with the potential to improve the IT sector 's adaptability, inclusivity, and ethical integrity while meeting the needs of a quickly evolving technological landscape."

Conflict of interest

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