

E-ISSN: 2469-4339

Management and Economics Research Journal, Vol. 6, Iss./Yr. 2020, Pgs. 14

Original Research Article

Knowledge Transfer: An Empirical Study on Factors Yielding the Effectiveness of the Academia-Industry Interface (With Special Reference to Moradabad City)

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Knowledge Transfer: An Empirical Study on Factors Yielding the Effectiveness of the Academia–Industry Interface (With Special Reference to Moradabad City)

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Received: Aug 8, 2019; Accepted: Dec 8, 2019

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Citation: Sharma A, Garg A. 2020. Knowledge transfer: An empirical study on factors yielding the effectiveness of academia-industry interface (with special reference to Moradabad City). Management and Economics Research Journal, Vol. 6, Article ID 961567, 14 pages. <https://doi.org/10.18639/MERJ.2020.961567>

Abstract

In the era of globalization and making headway in innovation, educational establishments and industries are confronting new difficulties as well as openings in the zone of transferring knowledge. The stipulation for students and lecturers has changed significantly and they anticipate becoming competent enough to use new technology for researching. With the growing pace of technology, the faculty, students, and managers are becoming more hi-tech-oriented as never before, which is resulting in more demand for research and training. Training will help the academia–industry to compete in the global environment as well as cater to international students and fulfill their needs too. However, to remain competent globally, knowledge transfer has become the need of the hour to disseminate knowledge and provide inputs to solve business problems. Knowledge transfer between educational institutions and industry is considered as an important driver of innovation and economic growth, as it eases the commercialization of new scientific knowledge within firms. Knowledge transfer denotes facilitating the sharing of the mentioned knowledge with one another. The paper will emphasize on a methodical literature review of the academia–industry interface in order to identify various factors contributing to their effectiveness. The primary data was collected through a questionnaire survey done on a sample of 100 employees working in various educational institutions and industries of Moradabad city, Uttar Pradesh, India and analyzed with the help of various statistical tools. The study also aims to identify the impact of key success factors on employee compliance with knowledge transfer. The researcher also evaluates the impact of employee compliance with knowledge transfer on organizational effectiveness. The contribution of this study will help both educational institutions and industry to better understand the knowledge transfer systems.

Keywords: Knowledge transfer; Academia–industry interface; Key success factors; Organizational effectiveness; Employee compliance.

1. INTRODUCTION

The gamut of Knowledge Transfer (KT) activity includes figuring out what data is required, finding the asset, disseminating the resource in a helpful manner so that the knowledge can be effectively applied, and finally following up with the result, activity, and experience associated with that information. KT comprehends information as a sensible asset and people as a data medium. The procedure emphasizes on creating interfaces between people, and building connections between data researchers and their leadership with their goal that knowledge as a verifiable design (i.e., group debriefings, discussion) can be dependably shared and gained from.

As per Nonaka and Takeuchi (1995), knowledge, rather than information, revolves around the activities, convictions, and responsibilities of people and it is subjective and based on the differing points of

view or expectations of people. Knowledge always needs to be seen in a specific context as it depends on particular situations and evolves dynamically through the various social interactions of individuals (Nonaka and Takeuchi, 1995). The major difference between information and knowledge is that an individual's knowledge is specific to the individual while information can be independent of people. As indicated by the *Social Life of Information* (Brown and Duguid, 2002), knowledge alludes to a knower who can then offer it to his/her immediate aspirant team, network, and other surroundings). Figure 1 shows the process of converting data into knowledge. It shows that the data turns into information when it is placed in a contextual framework, whereas knowledge evolves when a metacognitive view is given to the information.

With the move of advanced economies from resource-based to knowledge-based production, many educational institutions have increasingly considered 'knowledge' and 'innovation' as dynamic strengths of economic growth, social development, and job creation. In this context, the endorsement of KT has progressively become a subject of public and economic policy. On the basis of a number of literature works, the increased collaboration between industry and educational institutions also emphasizes much on current innovation. From research it can be seen that the open innovation approach of developing business value is precisely based on the fact that these institutions are serving as important sources for accessing external ideas. Industrial companies are progressively facing more pressure from mounting competition, a curbing product life cycle, and increased intricacies. On the other hand, educational institutions have been considered to be a great, largely unknown, and certainly underexploited resources contributing to the creation of wealth and economic competitiveness. The open innovation approach exhibits the need to develop internal and external knowledge and KT pathways in order to remain ready for the cutthroat competition at the marketplace. There is a developing pattern to find out hotspots for procuring new thoughts, growing new capacities, and accessing the most recent academic research. Besides, organizations partnering with the academia is enabling organizations to use government financing and decrease the expenses for their research and development (R&D) (Perkmann *et al.*, 2011). Similarly, educational institutions are encountering pressure to move from an ivory tower attitude to an entrepreneurial mentality and to add to the nation's development (Etzkowitz *et al.*, 2000). They are in fact uncovering the appetite to exploit their insight and market their protected innovation and advancements. At the strategy level, governments are actively influencing the academia–industry interface through public–private partnerships, supporting open innovation, and creating the dynamic micro-, small-to-medium enterprises (MSME) sector to accelerate technology commercialization. Potential advantages from the triple helix (academia–industry–government) improvement methodology, which appears in Figure 2, are turning this into a ground-breaking national device to help build an advancement system and form more grounded connections among private and public research divisions (Etzkowitz *et al.*, 2000; Ranga *et al.*, 2008).

Figure 1. Process of Knowledge Transfer.

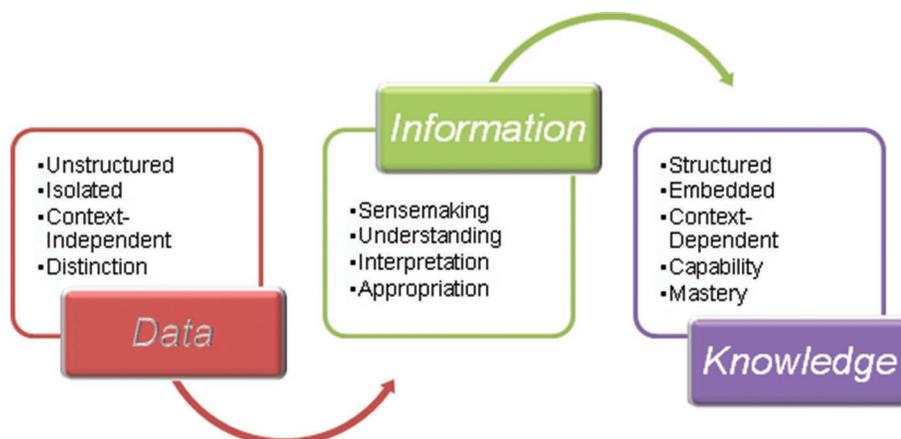
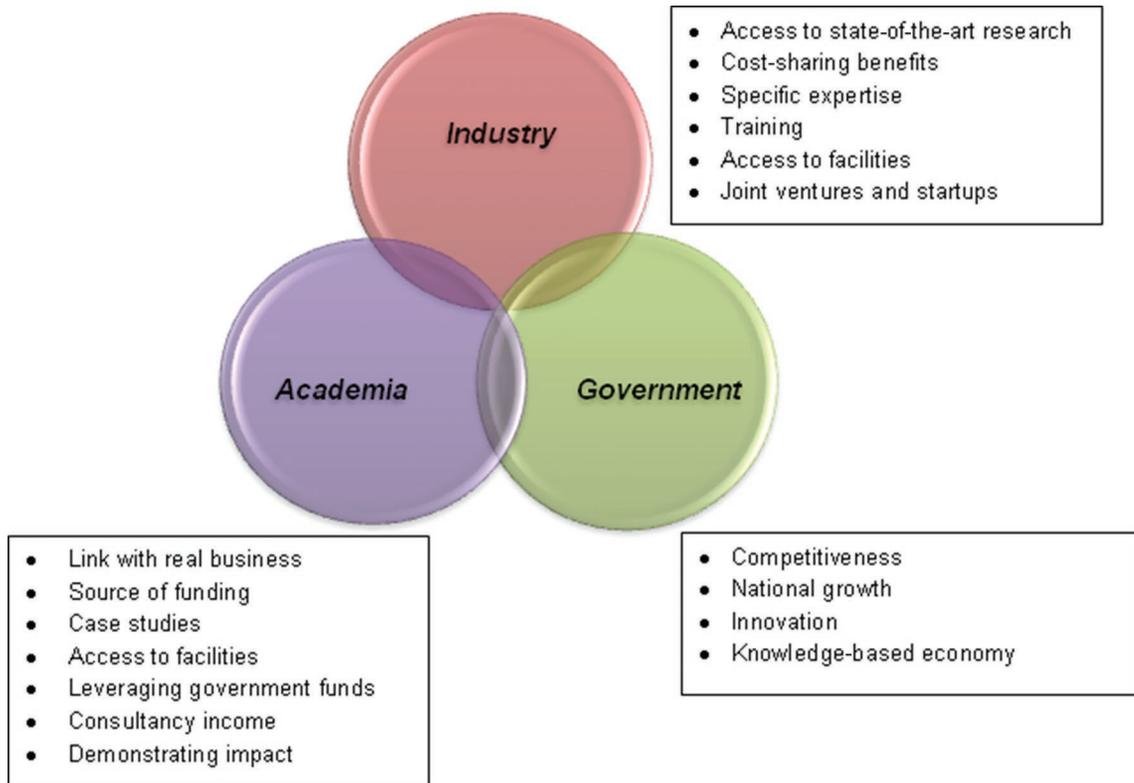


Figure 2. Potential Benefits from Academia–Industry Interactions.



Source: Adapted from Link and Tassey (1989), Lambert (2003), Landry *et al.* (2007), Etzkowitz and Dzisah (2008).

2. LITERATURE REVIEW

Despite the fact that till date, extensive research studies and empirical works are being performed on KT on an international basis, very few studies have been conducted in the Indian context. This is the major research gap, which needs to be studied. The rationale of this literature review is to identify, evaluate, and compare current best practices in KT. The literature is collected from various research studies, dissertations, articles published in journals, etc. It summarizes various researches that have been great relevance to the vicinity of KT and various factors related to it. There is a thorough dialog about KT typology, procedure, and determinants pertinent to the examination, which is fundamental to comprehend KT systems (Landry *et al.*, 2007; Barbolla and Corredera, 2009). Various authors join in a discussion on KT effectiveness referring to authority, individual, and institutional components engaged with knowledge trade. Few of the studies that are relevant to the research are as follows:

- 2.1. Kedia and Bhagat (1988) contend that with regards to KT from a developed to a developing economy, societal culture is the most significant component in deciding KT achievement. The key finding from the authors' theoretical model for understanding social requirements on worldwide KT collaborations is that KT to developing nations relies upon the social similarity between the receiving and transferring countries.
- 2.2. In one of the doctoral dissertations presented by Szulanski (1996), his research points out that KT inside a firm is delayed somewhere by the components other than an absence of incentives. The nature of the KT depends upon how well the knowledge about best practices is broadly available within a firm or from where it comes, who gets it, and the organizational context within which it occurs.

- 2.3. In one of the investigations, Landry *et al.* (2007) expressed that the social angle is critical to fabricate certainty and trust between accomplices. The KT between academia and industry relies upon adjusting push and force factors and aligning different goals. The challenge with this procedure is the asymmetry of data where the industry may encounter trouble in assessing results and their potential appropriateness. In this way, a social perspective is a critical measurement to cultivate trust, certainty, and linkages between accomplices.
- 2.4. Anderson *et al.* (2007) distinguish culture contrasts, administration, and resoluteness of university procedures and strategies, absence of well-planned reward instruments, and inefficient management of KT exchanges as obstructions to KT between academia and industry.
- 2.5. Barbolla and Corredera (2009) proposed a framework involving organization/company, university, specialized/technical and associative/relationship points of view. They showed that from the knowledge perspective, key elements influencing the achievement or failure of an undertaking include innovation development, preparation for application, well-defined characterized goals and extent of the task, technical risks, and technical feasibility to actualize results (Figure 3).
- 2.6. Pertuze *et al.* (2010) bolster that an organization's worth research sway over a venture result. A basic factor to assess KT viability is the way the new knowledge will build an organization's exhibition. At a university level, significant components influencing the coordinated effort to disseminate specialists' knowledge include inspiration, motivating forces, senior administration support, and strong authority on the subject.
- 2.7. In the system of transnational KT, Duan (2010) recognizes top achievement factors including social mindfulness, inspiration, information separation between accomplices, receptiveness and trust, choice of accomplices and associations between them, clear objectives for KT through coordinated efforts, and language.
- 2.8. A study conducted by Susanty *et al.* (2012) showed that KT effectiveness is influenced by two factors, i.e., organizational culture and organizational structure. The result of the study also proved that KT effectiveness has impact on performance of the enterprise through an increase in obtaining market share and profit.

Figure 3. Factors for KT Analysis.

TECHNICAL FEATURES	UNIVERSITY FEATURES
<ul style="list-style-type: none"> • technology maturity • technical risk • project viability and technical feasibility • well-defined objectives • stakeholders involvement • application capacity / usefulness • strategic context 	<ul style="list-style-type: none"> • level of general know-how • level of specific know-how • researchers motivation • staff and resources • incentives and reward structure • senior management support • strong leadership • experience of working with industry
COMPANY FEATURES	RELATIONSHIP ASPECT
<ul style="list-style-type: none"> • absorptive capacity • ability to integrate technology into value chain • confidence in results • experience of working with academia • senior management support • sufficient resources • change management capacity • effectiveness of internal communication 	<ul style="list-style-type: none"> • mutual confidence • shared vision • professional and personal relationship • cultural interface • established planning and coordination • clarity of role and responsibilities • access to information / transparency • flexibility • effective project management • long-term relationship

Source: Barbolla and Corredera (2009), Pertuze *et al.* (2010).

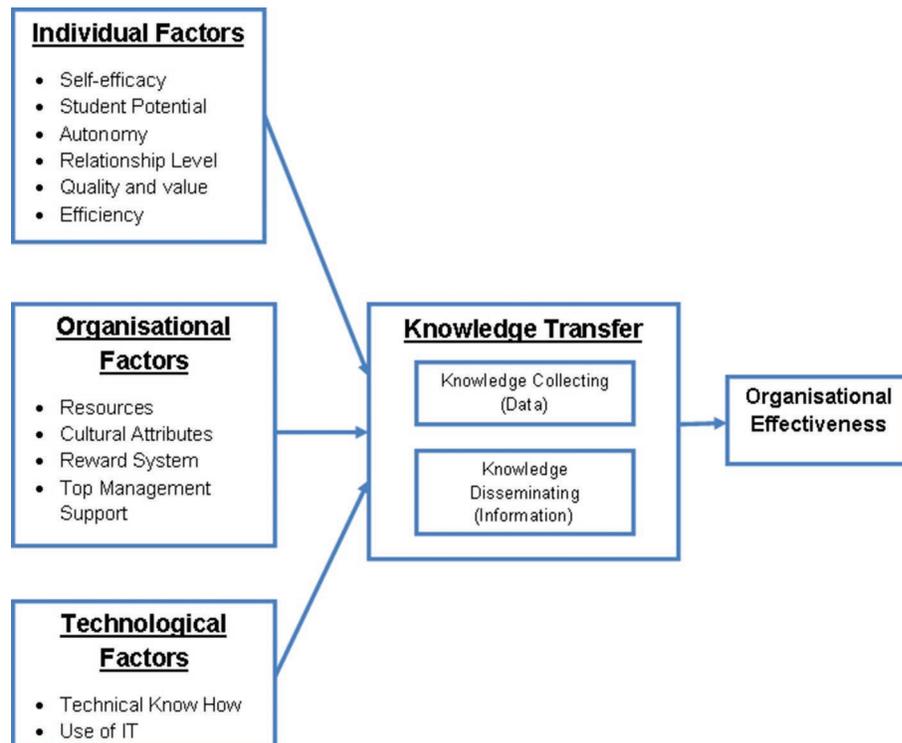
- 2.9. According to Vivian Doherty and Kathryn Cormican (2017), effective communication has the most grounded impact on the organization’s overall performance, trailed by trust, then inspiration, and then initiative. Rewards were found to be the least important factor, but still important in the overall context of knowledge sharing. A greater understanding of knowledge-sharing practices provides the critical information needed to guide the development of tailored support structures in order to equip employees with the skills and competencies needed to become more effective in practice.
- 2.10. Frank *et al.* (2018) put forth an association model for factors affecting KT. In this model, they proposed that product strategy is a central aspect in the KT factors. The KT can be effective only if the organization has a platform strategy with different derivative projects that can take advantage from prior knowledge. Therefore, managers should take special care of this aspect. Research also suggests that managers should consider external factors that will define the way knowledge is transferred and how the other KT factors will behave. In this sense, an effective KT strategy should consider the contextual aspects to define the right KT strategy.

On the basis of literature collected, organizational (academia–industry) success is dependent upon three types of factors ie individual factors, organizational factors, and technological factors. These factors are collectively accountable for KT and it takes place through knowledge collecting and knowledge disseminating, which ultimately yields organizational effectiveness. The conceptual framework of KT is shown in Figure 4.

On the basis of literature review, the researcher has framed 4 hypotheses:

- H1₀**: There is no significant association between individual factors and employee compliance to KT.
H1_A: There is a significant association between individual factors and employee compliance with KT.

Figure 4. Conceptual Framework of KT.



H2₀: There is no significant association between organizational factors and employee compliance with KT.

H2_A: There is a significant association between organizational factors and employee compliance with KT.

H3₀: There is no significant association between technological factors and employee compliance with KT.

H3_A: There is a significant association between technological factors and employee compliance with KT.

H4₀: Employee compliance with KT does not influence organizational effectiveness.

H4_A: Employee compliance with KT significantly influences organizational effectiveness.

3. OBJECTIVES OF THE STUDY

The research is the foundation of a wide-ranging literature survey and develops a speculative framework for KT collaborations to come up with a strategic decision-making process in order to assess the prospective nature of an interface between the academia and industry. The findings of the literature survey are used to design a questionnaire. The objectives of the study are as follows:

- To study the KT interface between the academia and industry
- To explore and investigate the factors affecting the success rate of KT from institutions to industry in the emerging competitive environment
- To identify the impact of key success factors on employee compliance with KT.
- To identify the impact of employee compliance with KT for organizational effectiveness.

4. METHOD(S)

This research is descriptive as well as analytical in nature and includes surveys and fact-finding inquiries of different kinds. The data is collected from both primary as well as secondary sources. Primary data is collected through structured questionnaire/personal interviews. The data provided by the various government agencies and regulatory bodies and that obtained from published materials and websites are referred to as secondary data. On the basis of the literature survey, the researcher has identified 12 key success factors for KT, which most significantly contribute to the effectiveness of the academia–industry interface. Based on synthesis and analysis of the literature, a structured questionnaire was designed considering 12 core elements as key success factors. They include (i) self-efficacy, (ii) student potential, (iii) relationship, (iv) organizational support, (v) cultural attributes, (vi) reward system, (vii) quality and value, (viii) autonomy, (ix) resources, (x) efficiency, (xi) technical knowhow, and (xii) use of IT. These key factors are sub-divided under three heads, namely, individual factors, organizational factors, and technological factors, which are shown in Figure 4. For sample selection, the researcher has used nonprobability convenience sampling. The researcher has distributed 120 questionnaires to various academicians, institutional managers, and industry representatives of Moradabad city; out of the 120 questionnaires, the researcher has received 107 questionnaires, but only 100 questionnaires were chosen. The rest of the 7 questionnaires are those in which some of the respondents have given incomplete information, some are unfilled, or the data received is not appropriate for the analysis. Hence, they were discarded (as shown in Table 1).

The data was received from a total of 100 respondents, who are the employees of various educational institutions and business partners. The Likert scale is used as the measurement scale. For the survey, the researcher has used the five-point scale: little extent, some extent, moderate extent, much extent, and great extent, i.e., 1 for little extent, 2 for some extent, 3 for moderate extent, 4 for much extent, and 5 for great extent for analyzing the level of respondents' satisfaction with effectiveness of key success factors. The different statistical tools such as correlation, multiple regression analysis, Kolmogorov–Smirnov Test (K–S Test), and Scatter diagram are used for analyzing data using Excel. Moreover, the respondents were asked to add their suggestions, which endow a strong qualitative facet to the study, and thus, enhanced the understanding toward key success factors.

Table 1. Statistical Data of Respondent Groups and Response Rate.

S. No.	Respondents	Total no. of questionnaires sent to the respondents	Total no. of questionnaires received from the respondents	Discarded questionnaires	Questionnaires considered	Response rates (%)
1.	Academicians	70	64	3	61	50.83
2.	Institutional Managers	25	22	2	20	16.66
3.	Industry Representatives	25	21	2	19	15.83
	Total	120	107	07	100	83.32

5. RESULTS AND DISCUSSION

To test the given hypotheses and survey findings methodically, the researcher has to analyze the data by using appropriate statistical tools such as correlation, regression analysis, Kolmogorov–Smirnov Test (K–S Test), and Scatter diagram. In order to find out which factors have the foremost impact on KT, correlation, regression, and scatter diagram are used. The researchers have applied the K–S test to evaluate the organizational effectiveness on the basis of employee compliance with KT. The results of the hypotheses are as follows.

5.1. Testing of Hypothesis 1

H1₀: There is no significant association between individual factors and employee compliance with KT.

H1_A: There is a significant association between individual factors and employee compliance with KT.

To test the validity of the data, correlation, multiple regression, and scatter diagram were applied. The results are depicted in the following paragraphs.

In association with Hypothesis 1, a correlation analysis was conducted for employees’ compliance with KT as the dependent variable and individual factors as independent variable. As shown in Table 2, the result of correlation analysis shows a positive relation between independent variable (X) and dependent variable (Y). Here, the Pearson Correlation value turns out to be 1, which signifies the positive correlation between two variables (Table 2).

In order to observe the impact of the independent variable on the dependent variable and to check the hypothesis, multiple regression analysis was applied. Results of multiple regression analysis are presented in Table 3. In the model summary of regression analysis, the value of R squared is 0.500. This means that individual factors create a 50.0% impact on employees’ compliance with KT, which is evident by the value

Table 2. Correlation Analysis Model Summary of Hypothesis 1.

		Independent Variable	Dependent Variable
Independent Variable	Pearson Correlation	1	0.707**
	Sig. (2-tailed]		0.000
	N	100	100
Dependent Variable	Pearson Correlation	0.707**	1
	Sig. (2-tailed)	0.000	
	N	100	100

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

Table 3. Regression Analysis Model Summary of Hypothesis 1.

SUMMARY OUTPUT

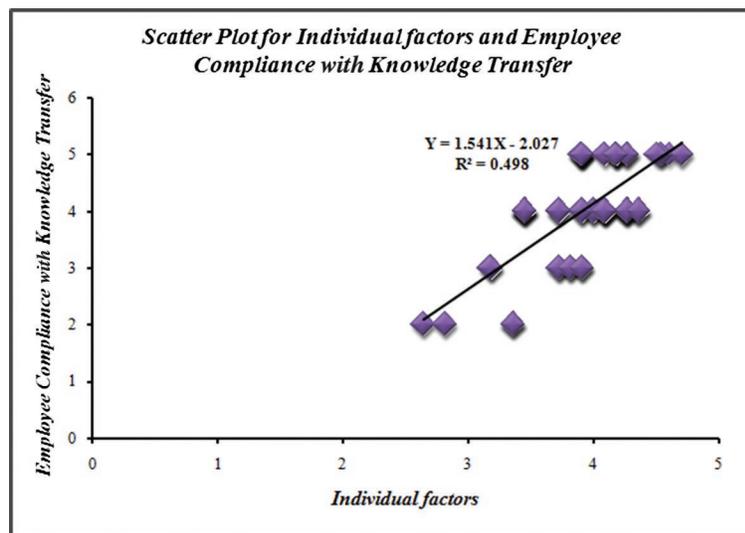
<i>Regression Statistics</i>	
Multiple R	0.707733755
R Square	0.500887067
Adjusted R Square	0.495794078
Standard Error	0.646081564
Observations	100

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	41.05270404	41.05270404	98.3483484	1.83174E-16
Residual	98	40.90729596	0.417421387		
Total	99	81.96			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-1.896524342	0.600087962	-3.160410575	0.002096208	-3.087379343	-0.705669341	-3.087379343	-0.705669341
X Variable 1	1.509391364	0.152201287	9.91707358	1.83174E-16	1.20735287	1.811429857	1.20735287	1.811429857

Figure 5. Scatter Plot and Regression Line Representing Association of Individual Factors and Employee Compliance to Share Knowledge.



$R = 0.707$. Also, the value of p turned out to be 0.002, which is less than α , i.e., 0.05, the assumed level of significance. Hence, the Null Hypothesis is rejected. Therefore, based on the results, it can be concluded that $H1_A$ is accepted, which means there is significant association between individual factors and employees' compliance with KT.

Figure 5 shows the scatter plot and regression line representing dependency of employees' compliance with KT on individual factors.

Hence, the equation turns out to be $Y = 1.541X - 2.027$, where X represents the individual factors and Y represents the employees' compliance with KT. In Figure 5, the regression line indicates that individual factors yield in contributing to employee motivation to transfer knowledge.

5.2. Testing of Hypothesis 2

H2₀: There is no significant association between organizational factors and employee compliance with KT.

H2_A: There is a significant association between organizational factors and employee compliance with KT.

To test the validity of the data, correlation, multiple regression, and scatter diagram were applied. The results are depicted in the following text.

In association with Hypothesis 2, correlation analysis was conducted with employees' compliance with KT as the dependent variable and organizational Factors as independent variable. As shown in Table 4, the result of correlation analysis shows the positive relation between independent variable (X) and dependent variable (Y). Here, the Pearson's Correlation value turns out to be 1, which signifies the positive correlation between two variables (Table 4).

In order to observe the impact of the independent variable on the dependent variable and to check the hypothesis, multiple regression analysis was applied. Results of multiple regression analysis are presented in Table 5. In the model summary of regression analysis, the value of R squared is 0.288. This means that organizational factors create 28.8% impact on employees' compliance with KT, which is evident by the value of $R = 0.537$. Also, the value of p turned out to be 0.000, which is less than α i.e. 0.05, assumed level of significance. Hence, the Null Hypothesis is rejected. Therefore, on the basis of the results, the researcher can come to a conclusion that $H2_A$ is accepted, which means there is significant association between organizational factors and employees' compliance with KT.

Figure 6 shows the scatter plot and regression line representing dependency of employees' compliance with kt on organizational factors.

Hence, the equation turns out to be $Y = 0.640X + 1.890$, where X represents the organizational factors and Y represents the employee compliance with transfer knowledge. In Figure 6, the regression line indicates that organizational factors yield in contributing to employee motivation to transfer knowledge.

Table 4: Correlation Analysis Model Summary of Hypothesis 2

		Independent Variable	Dependent Variable
Independent Variable	Pearson Correlation	1	537"
	Sig. (2-tailed)		0.000
	N	100	100
Dependent Variable	Pearson Correlation	0.537"	1
	Sig. (2-tailed)	0.000	
	N	100	100

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

Table 5. Regression Analysis Model Summary of Hypothesis 2

SUMMARY OUTPUT

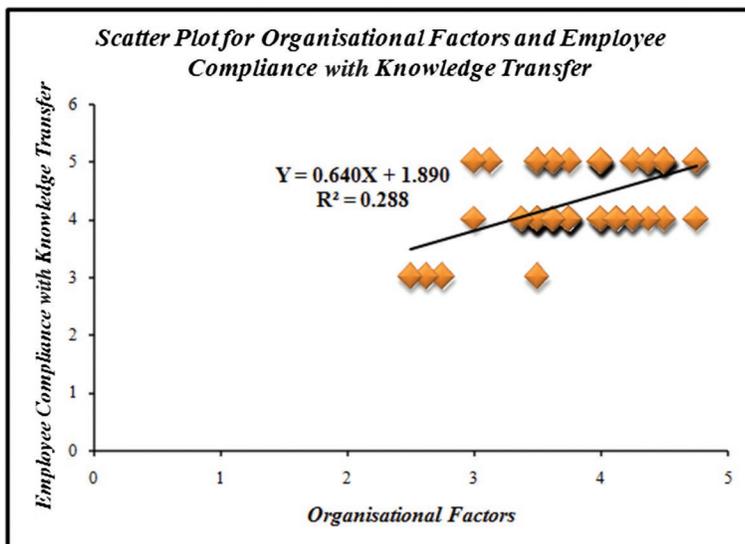
<i>Regression Statistics</i>	
Multiple R	0.635299712
R Square	0.403605724
Adjusted R Square	0.397520068
Standard Error	0.588967219
Observations	100

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	23.00552628	23.00552628	66.32082596	1.25078E-12
Residual	98	33.99447372	0.346882385		
Total	99	57			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.599996436	0.580126018	-1.034251899	0.003563902	-1.75123761	0.551244737	-1.75123761	0.551244737
X Variable 1	1.196302871	0.146898101	8.14375994	1.25078E-12	0.904788377	1.487817364	0.904788377	1.487817364

Figure 6. Scatter Plot and Regression Line Representing Association of Organizational Factors and Employee Compliance to Share Knowledge.



5.3. Testing of Hypothesis 3

H3₀: There is no significant association between technological factors and employee compliance with KT.

H3_A: There is a significant association between technological factors and employee compliance with KT.

To test the validity of the data, correlation, multiple regression and scatter diagram were applied. The results are depicted in the following text.

In association with Hypothesis 3, the correlation analysis was conducted with employees' compliance with KT as the dependent variable and technological factors as independent variable. As shown in Table 6,

Table 6. Correlation Analysis Model Summary of Hypothesis 3.

		Independent Variable	Dependent Variable
Independent Variable	Pearson Correlation	1	0.635**
	Sig. (2-tailed)		0.000
	N	100	100
Dependent Variable	Pearson Correlation	0.635**	1
	Sig. (2-tailed)	0.000	
	N	100	100

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

Table 7. Regression Analysis Model Summary of Hypothesis 3.

SUMMARY OUTPUT

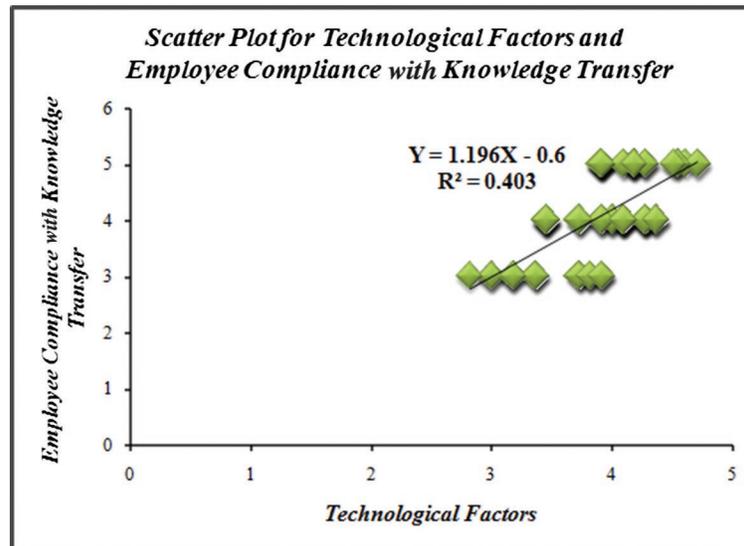
Regression Statistics	
Multiple R	0.635299712
R Square	0.403605724
Adjusted R Square	0.397520068
Standard Error	0.588967219
Observations	100

ANOVA

	df	SS	MS	F	Significance F
Regression	1	23.00552628	23.00552628	66.32082596	1.25078E-12
Residual	98	33.99447372	0.346882385		
Total	99	57			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.599996436	0.580126018	-1.034251899	0.003563902	-1.75123761	0.551244737	-1.75123761	0.551244737
X Variable 1	1.196302871	0.146898101	8.14375994	1.25078E-12	0.904788377	1.487817364	0.904788377	1.487817364

Figure 7. Scatter Plot and Regression Line Representing Association of Technological Factors and Employee Compliance to Share Knowledge.



the result of correlation analysis shows the positive relation between independent variable (X) and dependent variable (Y). Here, the Pearson Correlation value comes out to be 1, which signifies the positive correlation between the two variables (Table 6).

In order to see the impact of the independent variable on the dependent variable and to check the hypothesis, multiple regression analysis was applied. Results of the multiple regression analysis are presented in Table 7. In the model summary of regression analysis, the value of *R* squared is 0.403. This means that technological factors create 40.3% impact on employees' compliance with KT, which is evident by the value of $R = 0.635$. Also, the value of *p* turned out to be 0.003, which is less than α , i.e., 0.05, the assumed level of significance. Hence, the Null Hypothesis is rejected. Therefore, based on the results, it can be concluded that H_{2A} is accepted, which means there is significant association between technological factors and employees' compliance with KT.

Figure 7 shows the scatter plot and regression line representing dependency of employees' compliance with KT on technological factors.

Hence, the equation turns out to be $Y = 1.196X - 0.6$, where *X* represents the technological factors and *Y* represents the employee compliance with KT. In Figure 7, the regression line indicates that technological factors yield in contributing to employee motivation to transfer knowledge.

5.4. Testing of Hypothesis 4

H_{4_0} : Employee Compliance with KT does not influence organizational effectiveness.

H_{4_A} : Employee Compliance with KT significantly influences organizational effectiveness.

For testing the applicability of the data, the Kolmogorov–Smirnov Test (K–S Test) was applied as goodness of fit test through Excel. This was performed for testing Hypothesis 4. Hence, the results of the K–S test are depicted in the following text.

Where,

$F_o(X)$ represents: the observed cumulative frequency distribution of organizational effectiveness through employee compliance with KT.

$Fr(X)$ represents: the theoretical cumulative frequency distribution of organizational effectiveness through employee compliance with KT.

Results of the Kolmogorov–Smirnov Test are presented in Table 8. From the model summary of the Kolmogorov–Smirnov Test, the critical value of *D* at a 0.05 level of significance is 0.072695058 and the calculated

Table 8. Kolmogorov–Smirnov Test Model Summary of Hypothesis 4.

Statements	Observed frequency (K)	Theoretical frequency (T)	Observed proportion (K/n)	Theoretical proportion (T/n)	Observed cumulative proportion [Fo(X)]	Theoretical cumulative proportion [Fr(X)]	Fo(X)–Fr(X)
Strongly Agree	29	25	0.29	0.25	0.29	0.25	0.04
Agree	49	50	0.49	0.50	0.78	0.75	0.03
Neutral	14	15	0.14	0.15	0.92	0.9	0.02
Disagree	4	5	0.04	0.05	0.96	0.95	0.01
Strongly Disagree	4	5	0.04	0.05	1	1	0.00
Total (n)	100	100					
$D = \text{Maximum } F_o(X) - F_r(X) =$							0.1
Critical value of D at 0.05 significance level = $1.36 / \sqrt{n} =$							0.072695058

value of *D* is 0.1, which is greater than the critical value and thus serves as a goodness of fit. Therefore, it can be seen that the cumulative distributions show a large deviation from the critical value and this indicates a difference between the sample distributions, which results in the rejection of the Null Hypothesis. Hence, from the above statistics, the researcher concludes that employee compliance with KT significantly influences organizational effectiveness.

Thus, from the overall statistical data, it is evident that KT is significantly dependent on three factors, i.e., individual, organizational, and technological, which ultimately contribute toward the effectiveness of educational institutions-and-industry interface.

6. CONCLUSION

The academia–industry interface is progressively playing a significant role in developing a creativity, innovation, and KT systems. It is important to comprehend the nature of the academia–industry interfaces, their effectiveness, and probable obstacles to guarantee valuable KT, competitiveness, and developing knowledge-based economies. India is the world’s third-largest producer of graduates in a year, but only 15% of these graduates possess employable skills. The deterioration in the quality of students’ skills reflects on the degradation in quality of KT. Factors that negatively influence KT in an organization are empirically proven to be the major reasons for organizational ineffectiveness. With the growing pace of the hi-tech world, the internal factors related to the individual, organization, and technology can be controlled to some extent by the organizations, but the external causes related to market conditions and political, economic, and legal risks can be alleviated only through conscientiousness. This study will be helpful for both educational institutions and industry to better understand the KT systems. The researcher has made an attempt to identify the most prominent success factors responsible for valuable KT. However, there were several other factors on the basis of respondents’ suggestions such as intellectual level, emotional intelligence, communication, financial status, motivation, quality, etc., that affect the efficiency of KT from academia to industry, which need to be further studied. This study will contribute to various educational institutions of the Moradabad city, India, and enhance the quality of educational systems in India overall.

Acknowledgment

No financial or material support.

Author Contributions

AS and AG contributed equally to this original research work.

Conflict of Interest

None.

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