



Enhancing the Competitiveness of Education and Training through Flawless Project Management

Nitu Singh Sisodia¹, Sarvesh Raj Rocque²

¹ Assistant Professor – HR/Marketing, Prestige Institute of Management & Research, Indore – 452001

² Training Specialist, Amity University Madhya Pradesh, Gwalior – 474004

Abstract: As a basic management tool, project management has not made significant advancements in recent decades. Along with a traditional technical environment, it is now enhanced with an organizational environment that identifies different portfolios of project work, which is extremely beneficial to the educational sector. In the education sector, its principles and techniques have evolved into a strategic environment for program management and portfolio management. According to many practitioners and authors in the education sector, project management refers to the tools, techniques, processes, and structures used to accomplish a project's goals. The term program management refers to the integrated and coordinated management of several related projects in order to achieve a specific strategic objective and gain competitive advantage. This is especially true in the educational sector. The concept of project management in education has traditionally been regarded as a subset of general management (operations and production). As part of a portfolio management strategy, an organization identifies the right programs for achieving its strategic goals, which may also result in a competitive advantage. There are those who view programme management in terms of a loose collection of education and training projects, and there are those who view it in terms of a more specific group of initiatives. The authors reached a comprehensive conclusion after conducting primary and secondary research in order to determine how project management enhances competitiveness in the education and training sector.

Keywords: Education and Project Management, competitiveness of education, educational project managers, projects and learning design, skills of educational project manager.

1. Introduction

It is essential that you have strong program and project management skills in order to achieve success in education. The Educational Institutions have managed a wide range of complex projects, requiring the collaboration of teams to achieve the collective goal of moving the needle for both the students and the cross-functional stakeholders involved with the project from beginning to end. It is common practice for project managers in the education sector to use a variety of technology resources when managing educational technology projects. The use of technology resources is one of the more tangible tools and techniques that educators and trainers employ for teaching and training. For project management and other general productivity purposes, both hardware and software tools can be used in conjunction with one another. When it comes to being a project manager in the education sector, it is imperative that they have a good understanding of the components that make up the instructional design model they are going to use in order to achieve their goals.

Organizations in the education sector are able to provide superior value to their students and employees by virtue of their competitive advantage over their competitors. The sustainability of an advantage depends on both the fact that it is difficult to replicate and the fact that it is difficult to duplicate. In order to ensure a successful transaction, both parties must be present at the same time. As part of your training and educational programs, it is imperative to remember that your students will also acquire the attributes associated with that knowledge as well as their economic needs. The current state of project management education and its future directions have been extensively discussed (Wirth, Itzhak, 1992).

There are certain skills and knowledge that must be possessed by an education project manager in order to be able to keep track of all the different pieces that have to be coordinated in order to help develop a successful educational program in order to be able to do this. Among the skills and knowledge that are included within these skills and knowledge are also some basic project management skills. The process of educational design is undoubtedly an organic one, as has been described by some of the most prominent researchers in the field of educational design in the past. Our understanding of the world isn't as linear as we like to think, and whilst we would like it to be, the truth is that it isn't. There is no doubt that education is one of the fields in which there are many details that can slip through the cracks, and many things can be overlooked when it comes to the details that are needed to be taken into account. To ensure that everything is on track, you need to pay close attention to a number of details in order to ensure that all goes according to plan. The goal here is to make sure that everything is going well in the world of education by paying close attention to them on a regular basis in order to keep things on track. There are a lot of important factors that can be overlooked when it comes to education, training, and development, but these are factors that are extremely important and should not be taken lightly.

The result is that your institution becomes a valuable educational resource for your students. As explained in the following paragraphs, a critical need is a necessity. What is the nature of the international education ecosystem? Is it something that our readers are familiar with? Overall, it is a quality that is not only desirable, but also vital to the success of any organization. To attract higher levels of customer loyalty, revenue, market share, and premiums, educational institutions must possess one or more of these critical competitive advantages.

2. A dedicated project manager is required for the Education Institutes

It is impossible to guarantee the success of a project, if a plan is not in place from the very beginning of the project. Education Project Managers are responsible for managing a variety of educational projects and partnerships as part of their job duties. Several private, public, city, state, and federal organizations fund these projects and partnerships, which are also managed by the individual or organization in question, and which are funded by a variety of private, public, cities, states, and federal agencies. The role of the project manager in the education department is to contribute to or lead a variety of activities within these projects in order to ensure that they are carried out effectively. In addition to assisting with the development of contracts and budgets, reporting, and coordinating the career and technical education programs within the department, the position also includes assisting with the development of contracts and budgets. One of the responsibilities of this position is to manage external partnerships, procurements, the implementation of the project, cross-departmental collaborations amongst staff, and obtaining permits for the project, among others. There is an increasing need for educators in the field of education to find project managers who are familiar with technology terminology and software in order to be able to handle ed-tech projects that have been developed as a result of ed-tech. It is important for instructional design projects to utilize and manage educational technology resources correctly in terms of utilizing and managing educational technology resources in the process of developing instructional materials. Whatever the type of technology that is mentioned, the most important aspect is to be able to communicate with the students, regardless of the type of technology that is mentioned. Having an understanding of technology, as well as the associated terminology, is extremely important for a project manager in the education sector if they want to ensure that a project runs smoothly and effectively.

In order for a person to be a successful education project manager, it is important for them to have a basic understanding of how project management works in order to be successful. In order for an education project to be successful in the shortest amount of time possible, it is essential that it is able to allocate and manage finite resources in order to achieve the project's goals as quickly as possible.

3. Need for project management competencies in education sector

It is imperative that an educational technology institute have the knowledge, skills, and abilities necessary to be able to achieve its project management objectives in the best possible way. The purpose of this is to ensure that the organization's objectives are met in order to be successful. Unfortunately, the education sector is unable to provide a definitive and clear answer to this crucial question at this point in time. Our analysis is based on the current knowledge that we have at our disposal at the moment. Traditionally, project management has enjoyed a rich history that encompasses a wide range of disciplines and has been around for a very long time. As a result of our well-developed knowledge base, a diverse set of practicing professionals from a wide range of fields are able to contribute to the success of this project. Further, there is an extensive professional credentialing system that certifies members of the profession who are among the most active in their field. During the development of our products and services, educational technology uses knowledge, skills, tools, and techniques that are commonly used in the area of project management in order to develop our products and services. As a result of this, we are able to support the development of our products and services. It has long been recognized that critical project management is one of the most significant technologies available today. It is for this reason that the craft of educational technology is integral to the success of those individuals who are involved in this field.

4. The future Project Management and Education Sector

It is evident that there are a number of ways in which the use of project management technology can help students to take a more active role in their own learning process. Over the last couple of decades, the concept of project management as a generic methodology has received a great deal of attention. The main reason for this is that it is capable of being applied to any type of project across a wide range of disciplines as a result of its flexibility. Despite this, there has been a growing number of studies focusing on the management of educational technology projects that place an emphasis on formal standards that are part of the methodology as a whole. In the project management sector, there has been an increase in the number of commonly accepted project management principles that have been adopted as the de facto framework for the management of projects in the field. The sector includes the education sector as well. Projects related to educational technology are included in this category.

In the field of educational technology, there are many products and services available that meet a variety of needs. There are a number of immersive, interactive, educational games or simulations that can be used in the classroom to enhance the learning environment through technology. Online learning courses that are interactive and personalized are becoming more popular among higher education institutions. It is also common for high-end corporations to employ performance improvement processes as part of their training and development programs. In spite of the fact that the intellectual property and creations of these products are vastly different, they are all characterized as project work regardless of their differences.

5. Education Sector and Benefits of Project Management

Several studies have shown that educational technology professionals spend a significant amount of their time devoted to project management activities. Observations based on empirical research have been made in this area. It is evident that both educational technology and project management work together in order to meet academic requirements and enhance the competitiveness of our workplaces. This is because both fields do their best to meet academic requirements. Managing projects in higher education involves the actual aspects of project management as well as the speed at which the work is completed. Educational technology professionals manage intricate projects in increasingly complex work environments with limited resources in an increasingly complex work environment

with the help of project management. Due to the project management methodologies, they are able to work quickly with evolving requirements and multiple stakeholders simultaneously.

It has been demonstrated that project management positively impacts a wide range of higher education jobs, including managing both online and blended course design, developing and improving courses, training and professional development, faculty and users support, student support, staff support, training and technical support, or maintenance initiatives. As part of our effort to provide context and insight into participants' work environments, we asked them to share information about their primary stakeholders and those they viewed as the most crucial to their projects in order to provide context and insight into their environments. Since all of these participants were from higher education contexts, ten of them cited faculty members as the most critical stakeholders in the process of their development. As a result of all agreed project management processes, they are able to achieve scale. It was further mentioned that the provosts and supervisory partners of the project were also critical stakeholders in the project, in addition to the students. According to many of the participants, there are a number of stakeholders that are directly affected by project management, including the organization, learners, end-users, and the administration of the university.

6. Methodology

We interviewed and surveyed 200 people from a cross-section of the fields of education and training for this study. A series of surveys were conducted by the author to gain an understanding of how people interpret the changes in their practices that result from our findings. It was requested that participants complete a survey in order to assess their attitudes towards competition, training and development undertaken, management and its perceived benefits to themselves as well as their expectations regarding how competitiveness of education affect them prior to implementation, as well as their understanding of its effects. In order to determine whether previous expectations had been met, a survey was conducted following the implementation process. In order to form an opinion, they were compared with those that had developed after the start of the implementation.

The use of competitiveness of education has had a significant impact on training and has played a significant role in many different fields. Using a five-point Likert scale, respondents were asked to rate the questionnaire from 5 points (strongly agree) to 1 point (strongly disagree). In accordance with the scale above, respondents were asked to indicate their level of agreement with this statement. We calculated the validity of the measurement questions using Cronbach's alpha as a tool for determining validity. As calculated by SPSS for the reliability statistics, the Cronbach's alpha of the 22 items in the questionnaire "Enhancing the Competitiveness of Education and Training through Flawless Project Management" is 0.896. This result indicates that the data are reliable and suitable for further analysis. As you can see, the value is well above the minimum value of 0.6.

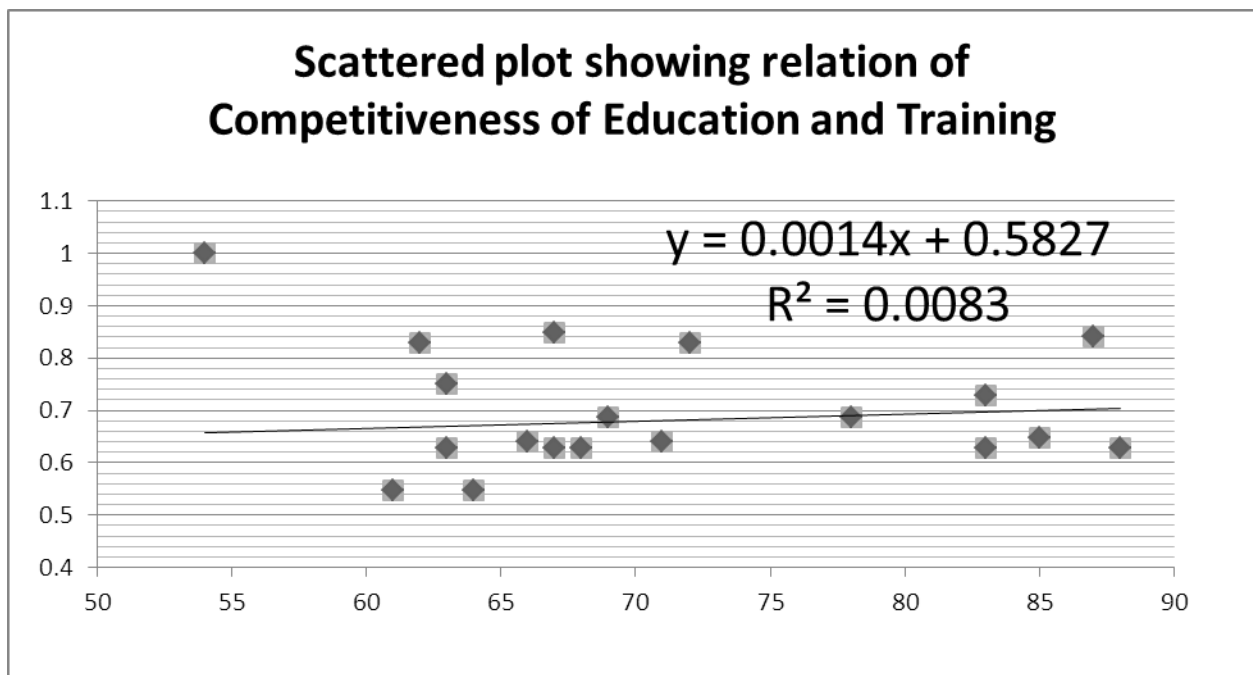
RELIABILITY TEST: Cronbach's Alpha														
Measure of Internal Consistency														
Cronbach's alpha tests to see if multiple-question Likert scale surveys are reliable. It will tell you if the test you have designed is accurately measuring the variable of interest.														
Cronbach's Alpha	INTERPRETATION													
$\alpha = \frac{K}{K-1} \left[1 - \frac{\sum s_y^2}{s_x^2} \right]$	Interpreting ALPHA for dichotomous or Likert scale question.													
	<table border="1"> <thead> <tr> <th>CRONBACH'S α</th> <th>INTERNAL CONSISTENCY</th> </tr> </thead> <tbody> <tr> <td>0.90 and above</td> <td>Excellent</td> </tr> <tr> <td>0.80 - 0.89</td> <td>Good</td> </tr> <tr> <td>0.70 - 0.79</td> <td>Acceptable</td> </tr> <tr> <td>0.60 - 0.69</td> <td>Questionable</td> </tr> <tr> <td>0.50 - 0.59</td> <td>Poor</td> </tr> <tr> <td>below 0.50</td> <td>Unacceptable</td> </tr> </tbody> </table>	CRONBACH'S α	INTERNAL CONSISTENCY	0.90 and above	Excellent	0.80 - 0.89	Good	0.70 - 0.79	Acceptable	0.60 - 0.69	Questionable	0.50 - 0.59	Poor	below 0.50
CRONBACH'S α	INTERNAL CONSISTENCY													
0.90 and above	Excellent													
0.80 - 0.89	Good													
0.70 - 0.79	Acceptable													
0.60 - 0.69	Questionable													
0.50 - 0.59	Poor													
below 0.50	Unacceptable													
Where														
K	is the number of test item													
$\sum s_y^2$	is sum of the item variance													
s_x^2	is the variance of total score													
https://www.statisticshowto.com/cronbachs-alpha-spss/														

Table - Reliability Statistics

Cronbach's Alpha	N of Items
.896	22

Data Collection

- 1. Primary data:** Based on a questionnaire consisting of 22 questions asked by the participants closely related to the areas of Competitiveness of Education and Training, the following primary data were collected from the selected samples.
- 2. Linear Regression:** To further prove or disprove the relationship between Competitiveness of Education and Training, the former was considered as an independent variable and the latter as a dependent variable. An established relationship between the two variables using a simple linear method, a statistical method. The data from the designed questionnaire as well as the analysis in Excel helped to demonstrate a general flow of the points based on the x-axis and the y-axis, indicating a positive trend and placing the points close together, which indicates a strong and positive correlation between competitiveness of education and training, as indicated by the regression line, where the y-intercept is 0.001 and the m-intercept is 0.582. The Slope where a slope is the measure of the steepness of a straight line (Change in y / change in x, for any two points on the line) & Regression Square is .008.

Fig – Linear Regression**7. Conclusion**

This study has contributed to our understanding of how project management can be used to improve the competitiveness of education and training as a result of the caveats mentioned above. There is one way to achieve this, and that is through flawless project management of educational technology professionals within higher education institutions, as well as how those professionals are managed effectively. Our findings from this study indicate that educational technology is enhancing the competitiveness of education and training by providing flawless project management which enhances the competitiveness of education and training. Education and training are being improved as a result of this. According to the findings of our study, educational technology professionals contribute a significant amount of competitiveness to the higher education sector through the application of project management techniques. Previous research has confirmed these findings. There was a study we conducted in which a large number of participants had academic backgrounds in the broad field of educational technology and project management, which was a research study we

conducted. In addition to formal training in topics like learning theories, instructional theories and strategies, instructional design and development models, and learning sciences, they also had extensive hands-on experience in the field. A consensus was reached among all of them that a flawless project management approach would greatly enhance the competitiveness of education and training.

As a result of the advances in educational technology, as well as its influence on competitiveness in general, there is a lot of potential for research in the field of project management in educational technology. Consequently, there will be ample opportunities in the future for researchers to address a wide variety of theoretical and practical questions.

8. References

1. Antonacopoulou, E. P. (2000). Reconnecting education, development and training through learning: a holographic perspective. *Education+ Training*.
2. Baisya, R. K., & Tiwari, S. P. (2008). E-governance Challenges and Strategies for Better-managed Projects. *Emerging Technologies in E-Government*, 203-208.
3. Keser, H. Y. (2015). EFFECTS OF HIGHER EDUCATION ON GLOBAL COMPETITIVENESS: REVIEWS IN RELATION WITH EUROPEAN COUNTRIES AND THE MIDDLE EAST COUNTRIES. *Annals of 'Constantin Brancusi' University of Targu-Jiu. Economy Series*, 1(1).
4. Machi, E. (2009). Improving US Competitiveness with K-12 STEM Education and Training. Heritage Special Report. SR-57. A Report on the STEM Education and National Security Conference, October 21-23, 2008. Heritage Foundation.
5. Okoye, K. R. E., & Okwelle, P. C. (2014). Technical Vocational Education and Training (TVET) as intervention mechanism for global competitiveness: Perspectives from Nigeria. *Developing Country Studies*, 4(4), 85-91.
6. Pan, W., Chen, L., & Zhan, W. (2020). Implications of construction vocational education and training for regional competitiveness: Case study of Singapore and Hong Kong. *Journal of Management in Engineering*, 36(2), 05019010.
7. Safari, S., Ghasemi, R., Elahi Gol, A., & Mirzahosseini Kashani, Y. (2012). Relationship between 'Higher Education and Training' and 'Technological Readiness: A Secondary Analysis of Countries Global Competitiveness'. *American Journal of Scientific Research*, 48, 135-148.
8. Sekuloska, J. D. (2014). Higher education and training as crucial pillars in creating the competitiveness of nation. *Procedia-Social and Behavioral Sciences*, 156, 241-246.
9. Siddhartha Paul Tiwari., and Baisya, Rajat K. "E-governance and its impact on enterprise competitiveness: Trends, Status and Challenges." *MDI, Gurgaon INDIA in Association with Australian Centre for Asian Business, University of South Australia, Adelaide, AUSTRALIA* (2014): 1.
10. Tiwari, Siddhartha Paul. "Workshop on Digital Marketing: Credit Course, IIM, Indore (2010): 1-24.
11. Tiwari, Siddhartha Paul. "Editorial: Project and Technology Management Foundation (PTMF) Newsletter (December, 2014)" 3-1(2014).
12. Tiwari, Siddhartha Paul. "Exploring the Linkage between a Successful Digital Campaign and Gaming." *Casual Connect, Asia Pacific, Singapore* 1 (1) (2014): 5-6.
13. Tiwari, Siddhartha Paul. "Business: Innovation & Survival, by a Googler." (2015).
14. Tiwari, Siddhartha Paul. "Strengthening E-Commerce Product Launches-Improving Efficiencies from Development to Production." *Project And Technology Management Foundation (A Non-Profit Organization) Member of Asia Pacific Federation of Project Management* 1.2 (2015): 4-6.

15. Tiwari, Siddhartha Paul. "Editorial: Project and Technology Management Foundation (PTMF) Newsletter (June, 2015)" 3-1(2015).
16. Tiwari, Siddhartha Paul. "Strengthening E-Commerce Product Launches-Improving Efficiencies from Development to Production." *GMM Content Creators Workshop on Countering the Narrative of Violent Extremism - Kuala Lumpur, Malaysia* (2015).
17. Tiwari, Siddhartha Paul. "Diversity and its importance in today's corporate environment." <https://dms.iitd.ac.in/guest-speakers/> (2015): 1.
18. Tiwari, Siddhartha Paul. "Emerging trends in soybean industry." (2017).
19. Tiwari, Siddhartha Paul, and S. P. Tiwari. "Is export-oriented and currency dynamics-based Indian soybean revolution environment-friendly." *Current Science* 114.08 (2018): 1604-1605.
20. Tiwari, Siddhartha Paul. "Emerging Technologies: Factors Influencing Knowledge Sharing." *World Journal of Educational Research* (2022).
21. Tiwari, Siddhartha Paul. "Information and communication technology initiatives for knowledge sharing in agriculture." *arXiv preprint arXiv: 2202.08649* (2022).
22. Tiwari, Siddhartha Paul. "Knowledge Enhancement and Mobile Technology: Improving Effectiveness and Efficiency." *arXiv preprint arXiv: 2208.04706* (2022).
23. Tiwari, Siddhartha Paul. "Knowledge Management Strategies and Emerging Technologies--An Overview Of the Underpinning Concepts." *arXiv preprint arXiv: 2205.01100*(2022).
24. Tiwari, Siddhartha Paul. "Re-emergence of Asia in the New Industrial Era." *Technium Soc. Sci. J.* 29 (2022): 471.
25. Tiwari, Siddhartha Paul. "Organizational Competitiveness and Digital Governance Challenges." *Archives of Business Research* 10.3 (2022).
26. Tiwari, Siddhartha Paul. "The Potential Impact of COVID-19 on the Asian Rural Economy: A Study Based on Asian Countries." *Journal of Education, Management and Development Studies* 2.3 (2022): 1-7.
27. Tiwari, Siddhartha Paul. "Covid-19: Knowledge Development, Exchange, and Emerging Technologies." *International Journal of Social Science Research and Review* 5.5 (2022): 310-314.
28. Tiwari, Siddhartha Paul. "Knowledge Management Strategies and Emerging Technologies-an Overview of the Underpinning Concepts-Siddhartha Paul Tiwari." (2022).
29. Wirth, I. (1996). How generic and how industry—specific is the project management profession? *International Journal of Project Management*, 14(1), 7-11.