PalArch's Journal of Archaeology of Egypt / Egyptology

BUSINESS EDUCATION INDUSTRY PREPARING FOR EDUCATION 4.0

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Dr. Prakash Hemraj Karmadkar , D. Lit . Research Scholar , Business Education Industry Preparing For Education 4.0 , Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(8), 4453-4457. ISSN 1567-214x.

KeyWork : Business Education, Industrial Revolution, Education 4.0.

Abstract:

The threshold of a technological revolution that will vitally alter the way human live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before. We do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society.

Introduction:

By means of digital transformation, products and business models in today's competitive environment are increasingly being transformed by technology. This new digital economy places information technology (IT) at the centre of firm strategy and operations, and requires a new breed of IT managers and leaders who can examine technology through a business lens.

The Business Technology Management Specialization will empower you with knowledge of the IT domain, project management, leadership and team building skills, and functional and analytical skills. These skills are critical skills for leveraging technology to create competitive advantage.

The Specialization will introduce by management institutions to the IT-powered digital transformation that business is going through. It will enable you to understand how insightful executives leverage IT to create value and understand the competitive dynamics of industries that consume significant technology.

Due to new technology, people are becoming less and less dependent on traditional educational institutions. Universities and college offer that people cannot access on the internet. The First Industrial Revolution used water and steam power to mechanize production. The Second used electric power to create mass production. The Third used electronics and information technology to automate production. Now a Fourth Industrial Revolution is building on the Third, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. There are three reasons why today's transformations represent not merely a prolongation of the Third Industrial Revolution but rather the arrival of a Fourth and distinct one: velocity, scope, and systems impact. The speed of current breakthroughs has no historical precedent. When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace. Moreover, it is disrupting almost every industry in every country. And the breadth and depth of these changes herald the transformation of entire systems of production, management, and governance. The possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, are unlimited. And these possibilities will be multiplied by emerging technology breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing.

The fourth industrial revolution and Artificial intelligence :

The fourth industrial revolution is changing the world around us. Artificial intelligence (AI), robotics, big data and the internet of things will combine to impact on jobs and industry. However, the 21st century's intellectually intensive jobs will be impacted just as much as those manual activities that were changed forever by the industrial revolution of the 19th century. The fourth industrial revolution will also affect the roles that UK universities and colleges prepare students for, and educational institutions are ideally placed to help produce the workforce for this new world and the student experience to match it. And that includes adult learners as well as business school leavers.

The full advantage of the opportunity created by advanced technology we need a similar revolution in education – not just to meet the needs of industry, but also to ensure the best possible student experience, use of staff time and investment in estates and facilities. As Paul Feldman, chief executive of Jisc, the UK's technology solutions not-for-profit, says that: "We know that some universities are already developing an Education 4.0 experience for students that reflects the fast-developing world around them.

The new world to meet the expectations of students in 10 to 20 years' time, we need more urgent collaboration across the sector. Universities to design and deliver the technological solutions for a future-proof student experience that can also help tackle the big challenges in Higher Education. SPPU University introduced the Education 4.0 concept and invited delegates to reflect on where new trends and technologies might lead. This feedback will inform. When we choose research and development projects to meet the needs of the educators and learners of tomorrow. Universities, colleges and research centres can still get involved by contacting SOL.

Trends are being used by SOL as prompts:

1) **Teaching transformed** – how should human teachers focus their efforts if AI and other technologies become used to their full potential in the university experience?
2) **Personalised adaptive learning** – an individualised approach that takes learner diversity, performance and behaviour into account.
3) **Assessment re-imagined** – can AI, digital experiential learning and micro-credentials replace high stakes summative tests?
4) **Intelligent digital and physical estates** – this concept is responsive to student journeys and interactions, helping universities deliver efficiencies and a smart approach to campus design.

University leaders who attended the workshop were asked to predict the trend that they felt would have the greatest impact and discuss how institutions could best respond. More than half the delegates felt that personalised adaptive learning was the key trend to watch, supported and underpinned by transformed teaching methods. Delegates said this transition was attractive to them because it lets the institution focus on developing learners as individuals. University leaders were particularly interested in using AI to improve support for student mental health and wellbeing. It could highlight to personal tutors when a student is disengaged and potentially at risk.

It was acknowledged that profound changes to working practices need to be handled carefully. It was important to have a dialogue about the direction and the pace of change, in particular about reward mechanisms and policy frameworks that would encourage innovative practices. Delegates also felt that many of the fundamental tenets of the university degree and the conventional practices of higher education would come under scrutiny. For example, will the metrics we use to measure the quality of higher education be fit for purpose for the world of tomorrow? It was predicted that students would in future have greater flexibility in choosing their mode of engagement. For example, by mixing campus-based and distance learning on a module-by-module basis. Technology can sometimes create perverse incentives, such as the reduced student engagement seen when lecture capture is made available online and it is no longer necessary to attend lectures in person. University leaders said that technology such as learning analytics would be increasingly important in helping tutors to develop a holistic view of learners' engagement and progress. Delegates said that the emerging technological trends should produce great opportunities for students to take ownership of their learning and that learners should be able to see evidence of their progress towards their qualification. This could be done through credits that they have accumulated as the university's AI recognises their growing mastery of the subject matter. Delegates felt that these types of systems would eventually manifest across the education system, as confidence grows in using technology to transform assessment. Indian universities and colleges can play a pivotal role in retraining and up-skilling, providing adult learners with a "careers booster jab". It was also recognised that a large proportion of future students would be looking for flexible approaches to learning because of their work and caring commitments. Technology will play a vital role in enabling this. Armed with this valuable feedback, Jisc will decide – in conjunction with universities, colleges and research centres – which ideas to take forward as R&D projects. Each project will be designed collaboratively to meet the needs of IT, business and teaching staff, and students.

Year 2021 - learning via digital platforms.

"It is important to remember that technology itself is neither good nor bad. Whilst remote learning can be great in certain contexts, it is important to acknowledge it does not suit all learning situations and the individual needs of learners. When learning via a screen, we are lacking elements such as touch, looking someone directly in the eye and lots of other nuances in communication. Learning essential skills such as empathy or bravery might be difficult to do online – and I am not sure if they even ought to be taught online, to be honest. It is identify the possibilities and risks of e-learning in the coming years.

Role of validation in learning will change in the future

Business education providers in developing countries might not be able to offer the same quality of courses as those offered for free online. Except local young people still feel like they must go to a local business school, because that is the only way to get a diploma or certification that they need to get a job. Validation will become generally more difficult, as we progress into so-called "softer skills. It is not easy to assess things such as curiosity, courage or empathy.

Examples of Education 4.0 in exploit

Using AI and chatbot technology, Becky provides an instantaneous response and information to prospective students going through clearing. A total of 89 students who were made an offer via the chatbot enrolled in September 2020, which represents a 46.6 per cent conversion of offers to enrolment. This compared to a general conversion rate of 26 per cent. SOL enrolment of students recruited during clearing increased by 5 per cent in 2020 and the university estimates a return of investment on MBA (SOL) Rs. 80000 in tuition fees.

University's blended learning system

The Savitribai Phule Pune University and its affiliated business management college/Institutions has moved to one large lecture theatre and several smaller spaces. Active Blended Learning (ABL) is embedded across the entire teaching practice. The traditional view that the blend is a combination of online and face-to-face is pushed to one side. SOL is far more sophisticated, interesting and exciting than a mere combination of face-to-face with online teaching. "SOL provides a learning environment where students play an active role and are given the opportunity to engage in a variety of ways in and outside the classroom, in the field, in the lab, in the studio and in the workplace. Those study modes are fully integrated into a proper blend, not different strands of a course running in parallel. Over the past three years we have been redesigning our curriculum to ensure that the principles of SOL are followed, but also that we review space allocation and timetabling to accommodate the students in smaller teaching rooms

Management Institutes plans to co-ordinate through smart phones

MI is about to get an upgrade, which will enable students to access it through their smartphones, Laptop, TAB. The SOL is currently teaching MI to respond to a broad set of staff questions that will assist teachers and support teams to gather on-demand information about student progress, staff rotas, holidays taken, professional development records, documents on the college intranet and much more.

Industry 4.0 is changing the world. Higher education institutes are contributing to these changes through research and education. This paper sheds light on materials science as a critical component in the fourth industrial revolution. The paper explains the need for private business and governmental institutes' involvement. The higher education institute's research contribution through some examples of advanced manufacturing and future factories such as modifications of sensors, piezoelectric materials, 3D/4D printing and self-healing materials is explained. This includes the adoption of nanotechnology in different technical aspects and applications. The paper also shows how higher education institutes can contribute to Industry 4.0 through preparing students with required attributes and soft skills. This preparation can be achieved by new teaching systems and by involvement in new research programs. Research programs examples from Qatar are mentioned.

Conclusion :

The education system has been producing graduates without any exposure to computers. When these graduates take teaching assignments they are not equipped to use technology for education. Technology and educational reforms has to be done taking these into consideration.

Collaboration on tech-driven design will help the leaders and learners of tomorrow Concepts such as philosophy and art are the things that machines cannot take from us. And it seems to me that the things that separate us from the machines are also the things that make us happy. At the same time, many people have achieved better learning results during the pandemic and felt like they have been able to focus more when studying online without external distractions it will be considered.

References :

1) K. Schwab, "The fourth industrial revolution", Currency, 2017.
2) J.C. Andre, Industry 4.0: Paradoxes and Conflicts, July 2019, ISBN 978-1-786-30482-7.
3) M. Falk, "What drives business research and development (r&d) intensity across organisation for economic co-operation and development (OECD) countries?", Appl. Economics., vol. 38, no. 5, pp. 533-47, 2006.
4) K. Deshmukh, M.T. Houkan, M.A. AlMaadeed and K.K. Sadasivuni, "Introduction to 3D and 4D printing technology: State of the art and recent trends" in 3D and 4D Printing of Polymer Nanocomposite Materials, Elsevier, pp. 1-24, 2020.
5) Handbook of research on recent developments in materials science and corrosion engineering education, IGI Global, 2015.
6) https://elmmagazine.eu/future-of-adult-education/creating-new-learning-pathways-with-ai-the-journey-has-begun/