

Business Model Innovation: A Journey with Time

Robin Kumar Agarwal, Ph.D. Scholar, JIS University, Assistant Professor, Asansol Engineering College,
robin.mgt@aecwb.edu.in

Dr. Indranil Mutsuddi, Associate Professor & HoD, Faculty of Management Studies, JIS University

Dr. Moumita Roy, Assistant Professor, Faculty of Management Studies, JIS University

Sumanta Karmakar, Assistant Professor, ECE Department, Asansol Engineering College

Gurjeet Singh, Assistant Professor, ECE Department, Asansol Engineering College

Corresponding author: rob.agarwal@gmail.com

Abstract

A Sustainable and Profitable business system is a dream journey for every stakeholder. Business Model has emerged as a completion factor for achieving such a dream in recent years. Research works show Business Model as a thriving factor to release the real potential of a business, and hence every business needs to simulate their business model for smooth transition in the dynamic business environment. This research work is designed to address such necessity of business model innovation, taking the Ed-Tech segment as a reference. The Ed-Tech world is somewhat incomplete in the absence of digital interface and business model innovation. Irrespective of their start point, all the major transitions in business related to education were found targeting a subscription model as their revenue stream. This paper contributes to the business model literature and adds a window to look at business model innovation as a derivative of time and not a fixed strategic issue.

Keywords: Business Model Innovation, Ed-Tech Startups

1. Introduction

The Ed-Tech segment has been flourishing with a mix of opportunity and scarcity. The Indian Ed-tech segment is expected to reach 29 B\$ in 2030 with a projected CAGR of 25.8% (Investindia). Other favourable statistics are 900 million internet users (IMAI-Kantar ICUBE 2020); 86% mobile phone penetration (Statistica), and 68% educators advocate for high demand of new age technologies like AI, ML, IoT, AR-VR, etc (TeamLease EdTech), making the Ed-Tech segment highly lucrative. Even in such a favourable position, more than 2000 startups in the Ed-tech sector shut their business in the last five years (Business Standard). Hence, it is now important to understand why does Ed-Tech world is struggling, though a lot of opportunities are there. Research works categorised the problems related to the Ed-Tech world into six different dimensions; that is, a) failure to pivot, b) no right team, c) no market need, d) running out of cash, e) poor channelling, and f) poor product (Fig. 1.1).

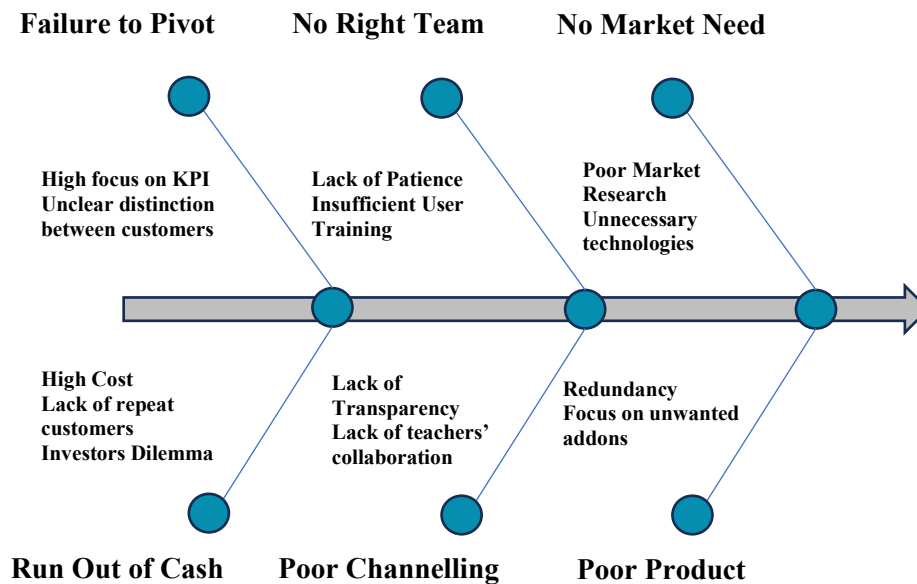


Fig. 1.1: Problem dimensions of Ed-Tech segment

All these dimensions are further supported by the opinions of different industry personnel related to the Ed-Tech (Table 1.1). Several reports were also highlighted the issues related with Ed-tech world among them, 11,223 startups in 2025 shutdown as per Tracxn data, more than 45% Layoff from Edtech out of total available startups in different sectors (INC Media 42 reports); more than Rs 200 crore loss registered by CueMath in a financial year 2022; Litigation issues for Byjus; more than 1100 layoff by Unacademy for cost cutting in a single financial year; 5% only students in rural areas had access to online learning resources (NSSO) are important to note.

Table 1.1: Opinions of different personnel related to Ed-Tech, highlighting the problems with Ed-Tech	
Neha Singh, Co-Founder, Tracxn	Survival in India's startup ecosystem depends on strong business fundamentals and effective execution. Startups that validate market demand, maintain financial discipline, and proactively manage regulatory requirements are better positioned to scale successfully and avoid the pitfalls that lead to setbacks. (Source: <i>Financial Express</i> – Oct 24, 2025)
Pranjal Kumar, CFO and Head of Education Fund, Bertelsmann	In our view, the failure rate for edtech startups is comparable to any other sector. Given that education is a high-involvement category and a career-affecting service, tech adoption is usually lower compared to other services and products. Hence, edtech startups can take more time to scale up than in some of the other categories. (Source: <i>Inc42.com</i> – Dec 26, 2019)
Ravi Kaklasaria (CEO & Co-founder, edForce)	The edtech sector has witnessed a wave of shutdowns as startups relying on classroom training and generic materials struggled to adapt to evolving demands. Many were caught in a burnout race, chasing unsustainable growth without innovating. (Source: <i>Business-Standard</i> – Jan 14, 2025)
Swanubhuti Jain, COO, JITO Incubation and Innovation Foundation	When it comes to the education sector, the perceived problem of each involved party is different and complicated, and most solutions offered don't appeal to all equally. (Source: <i>Inc42.com</i> – Dec 26, 2019)

Alakh Pandey, Co-founder, PhysicsWallh	The Edtech sector should prioritize education over sales, and that technology should serve as a tool to empower education, not the other way around. (Source: ANI – Sept 5, 2024)
Krishna Kumar, Founder and CEO, Simplilearn	Companies are tight on their technology spend. But there is a strong demand for learning. Everybody wants to learn GenAI and not fall behind the curve. (Source: Business-Standard – Jan 14, 2025)
Lloyd Mathias, Angel Investor	The edtech industry will move towards consolidation, where large companies with deep pockets will establish/strengthen their online arms, offering quality education while adding real-world value. (Source: Business-Standard – Jan 14, 2025)
Omar Kulkarni, Program Head, GMC Calibrator, Gray Matter Capital	I think in the phase of incipience, edtech entrepreneurs tend to focus on hyper-growth in terms of user acquisition instead of identifying impediments to a great learning experience to keep users engaged and creating high economic value, which is very hard in education. (Source: Inc42.com – Dec 26, 2019)

Digging into the problems of the ed-tech world following research questions were addressed:

RQ1: Whether business model innovation as a tool has been helping ed-tech startups to overcome from failure?

RQ2: Whether the ed-tech companies that are sustaining to beat the odds, are doing something different?

Problem dimensions, research statistics, and opinions of various stakeholders of ed-tech startups indicate the need to consider a viable solution that is somehow related to the business model of the startups. Researchers have given high rankings to business model innovation for the success of a startup (Teece, 2018; Foss & Saebi, 2018). In the further section, from the previous literature review related to Business Model Innovation as a solution for the potential problem with the ed-tech startups is shown. Furthermore, an analysis of business model innovation among 10 different successful ed-tech startups was done to support the business model innovation utility, which is followed by a discussion and limitations with future scope.

2. Literature Review

2.1 Business Model

In the entire startup ecosystem, the business model plays a central role (Agarwal and Dubey, 2025), which can connect entrepreneurial traits to the creation of a sustainable venture (Fig 2.1.1). The Literature of the business model started taking its research journey with the resource-based view of a firm (Amit and Shoemaker, 1993). It expanded further by connecting discrete components with a central line (Linder & Cantrell, 2002; Magretta, 2002) to create value (Zott & Amit, 2001; Chesbrough & Rosenbloom, 2002) in the line of creative destruction theory (Schumpeter, 1942). Business model started to be taken further as a strategic point rather than only an operational challenge to comply (Zott, Amit & Massa, 2011; Chesbrough, 2010; Casadesus-Masanell & Ricart 2010; Shafer, Smith & Linder, 2005), which is supported with Strategic network theory (Gulati, 1998). A thematic definition of business model was provided, where orchestrating components of the business model effectively was explained as a success factor of an organization (Osterwalder & Pigneur, 2010). Value creation, delivery, and its capture were articulated as the three important pillars for a business model (Foss & Saebi, 2018; Teece, 2018; Wirtz et. al., 2016; Demil & Lecocq, 2010). At the current stage, with the advent of AI, business model innovation and transformation with AI is the area to explore more by the research world (Ledro et. al., 2025; Paepflow, 2025; Munira et.al., 2025; Sjodin et.al., 2023; Weber, 2022).

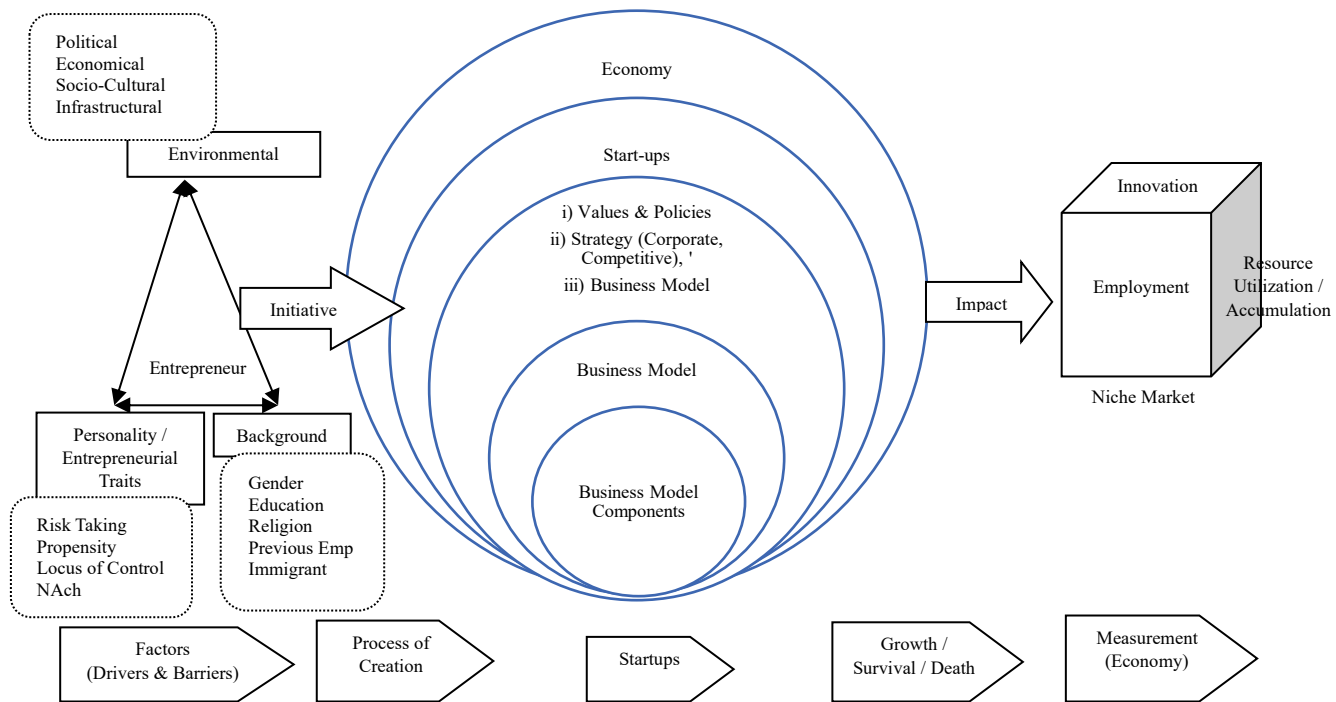


Fig. 2.1.1: Startup Ecosystem (Agarwal and Dubey, 2025)

2.2. Business Model Innovation and its utilities

In the era of innovation, business model innovation was also checked for business houses, within, and across the industry to know its impact on the performance of the startup (Sjodin et. al., 2022; Clauss et. al., 2021; Foss & Saebi, 2018). A significant impact on the performance was observed through business model innovation, dividing the model into four major components: Strategic, Market, Industrial, and Economic (Agarwal & Dubey, 2025). Hence, exploration of all these components by the start-ups could help to achieve the path of success, where a huge amount of failure is depicted in the Ed-tech world (Fig. 2.2.1).

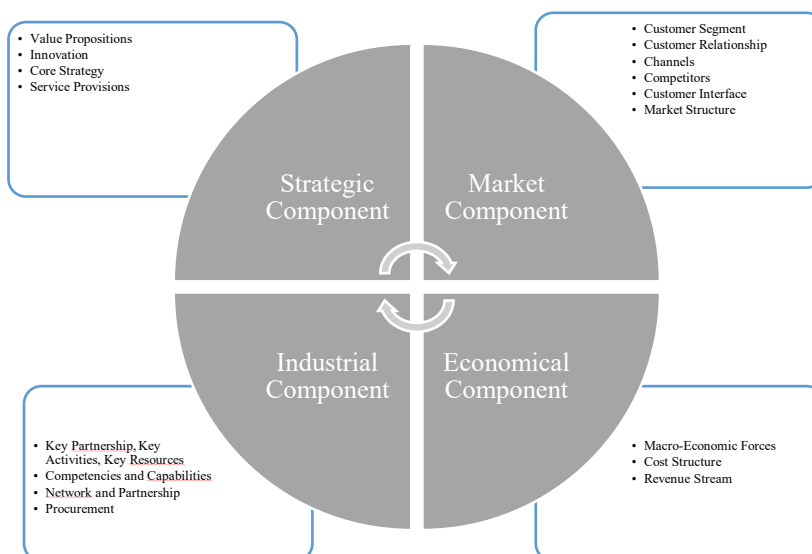


Fig. 2.2.1: Major Components of Business Model (Agarwal and Dubey, 2025)

3. Methodology

Though the research world indicates Business Model Innovation as a trigger point for sustaining in the Ed-tech startups, further investigation was required to find a better picture in this regard. Hence, this study employs a case study methodology to examine the phenomenon in its natural, real-world context. The case study approach is especially suited to understanding how and why questions in situations where the boundaries between phenomenon and context are not clearly demarcated (Crowe, et al., 2011; Yin, 2018; Younas & Inayat, 2025). It allows for detailed, holistic exploration of complex phenomena, including multiple interacting variables, which are difficult to isolate and test via purely quantitative methods (Merriam, 1998; Tobita, 2025). Moreover, case studies facilitate integration of qualitative and quantitative data sources—documentary evidence, interviews, observations—yielding richer insights than single-method designs (Stake, 1995; Younas & Inayat, 2025). In contexts like health, education, social innovation, and public policy, recent work shows that case study designs produce actionable findings and enable theory refinement (Mtisi, 2022; Tobita, 2025; Younas & Inayat, 2025). Therefore, a case study method was chosen to ensure the research captures the contextual nuances, stakeholder perspectives, and process dynamics necessary for both explanation and understanding. Here in this study, 10 different Ed-tech companies (Coursera, Udemy, Pearson, 2U, Blackboard, Instructure, Chegg, Pluralsight, edX, K12) running successfully were analyzed with the secondary sources in terms of their adjustments on all four components of the business model. Solutions to the problems identified in this case have been well found with such analysis.

4. Findings

With digital transformation accelerating across industries, the education sector has witnessed significant shifts in how learning content is created, delivered, and monetized. Ed-Tech companies have emerged as pivotal players in this transformation, each employing unique business strategies to deliver value to various stakeholders. This section dissects their approaches based on four critical components of business model innovation: Strategic, Market, Industrial, and Economic.

4.1 Strategic Components

The strategic orientation of Ed-Tech companies reflects their core value proposition and delivery mechanism. **Coursera** leverages the freemium model by offering free MOOCs that transition into paid certifications and degree programs, democratizing access to higher education. **Udemy** adopts a platform-based approach, acting as a global marketplace for course creators and learners, including services such as corporate training, micro-credentials, and enterprise solutions. **Pearson**, rooted in traditional publishing, has strategically transformed into a provider of digital educational solutions through platforms such as MyLab and Revel. **2U** focuses on delivering high-quality, interactive online degree programs, short-term courses, and bootcamps in collaboration with prestigious universities. On the technology service side, **Blackboard** and **Instructure** (Canvas) provide robust learning management systems (LMS) equipped with tools for analytics, virtual classrooms, and assessment. **Chegg** offers academic support services, including textbook rentals, tutoring, and study tools, positioning itself as a student-first platform. **Pluralsight** differentiates itself by focusing on upskilling professionals through technical and soft skills training. **edX** targets learners seeking affordable higher education alternatives through MicroMasters and Professional Certificate Programs. **K12**, in contrast, focuses on providing comprehensive K–12 education aligned with state standards.

4.2 Market Components

Market components highlight the customer segments targeted by Ed-Tech startups. **Coursera**, **Pearson**, and **2U** cater to students, governments, and businesses by offering both academic and professional development content. **Udemy** has a broad global market encompassing individuals, enterprises, and independent instructors,

emphasizing scalability and diversity of content. **Pluralsight** focuses primarily on individual learners and business enterprises seeking skill development in high-demand technologies. **Blackboard** and **Instructure** serve academic institutions such as schools and universities, as well as professional learning organizations. **Chegg** targets students at all levels, providing affordable academic support services. **edX** collaborates with both universities and learners, aiming to bridge the gap between traditional education and flexible, skill-based learning. **K12** specifically targets school-age learners from kindergarten through grade 12, offering educational programs to districts, schools, and individual students.

4.3 Industrial Components

Industrial components examine how Ed-Tech companies collaborate with institutional, corporate, and technological partners to create value. **Coursera** and **Pearson** have partnered with universities like the University of Illinois and Macquarie University to develop scalable academic content. **Udemy** engages with industry experts and organizations, providing solutions like “Udemy for Business” and “Udemy Live” for professional development and branding. **2U** relies heavily on university partnerships to co-develop online degree programs and career-boosting bootcamps. **Blackboard** collaborates with McGraw-Hill Education and integrates a suite of software services into its LMS. **Instructure** partners with Canvas, Microsoft, and Zoom to enhance learning engagement and retention. **Chegg** has partnered with Pearson to ensure content quality and provide a connection between students and academic experts. **Pluralsight** works with major technology firms such as Microsoft, Google, and Oracle to provide up-to-date technical education and industry-recognized training. **edX** partners with universities and employers to offer credit-bearing courses and utilizes analytics to track learning outcomes. **K12** incorporates certified teachers and academic coaches into its model, enhancing personalized K–12 learning.

4.4 Economical Components

The economic aspect of these business models determines how value is monetized. **Coursera** utilizes a freemium-to-direct-sale model, enabling mass accessibility while earning revenue through certifications and degrees. **Udemy** operates on a commission model for instructors and offers subscription services for businesses. **Pearson** combines direct sales with subscription-based access to its digital platforms. **2U** follows a revenue-sharing model with its university partners, making it a co-invested ecosystem. **Blackboard** and **Instructure** have transitioned from perpetual licensing to cloud-based subscription models to improve scalability and cost predictability. **Chegg** follows a transactional model for services such as textbook rentals and gradually moves toward subscriptions. **Pluralsight** employs a purely subscription-based model with options for hybrid offerings tailored to enterprise clients. **edX** uses a combination of free access, donations, grant-based funding, and paid offerings, including subscription-based access to premium content. **K12** blends a per-pupil public funding model with direct sales of courseware to schools and districts.

The analysis reveals that Ed-Tech companies adopt diverse and adaptive business models based on their strategic vision, target market, industry collaboration, and revenue generation approach. While some like **Coursera** and **edX** prioritize open access and scalability, others like **2U** and **K12** focus on deeply integrated, institution-aligned solutions. The continuous innovation across these four business model components has enabled Ed-Tech firms to meet the changing needs of learners and institutions in a digitally connected world. Table 4.1 shows business model innovation in all 4 components by different successful ed-tech startups.

4.1: Components with Business Model Innovation in Ed-Tech Startups

Company	Strategic Components	Market Components	Industrial Components	Economical Components
Coursera	Free Online Course, MOOCS to paid courses	Students, Businesses, and Government	Universities like the University of Illinois, Macquarie University, etc. Online courses, customised training, and development programs for specific needs.	Free to Direct sale model
Udemy	Marketplace for creating and sellers of courses using its platform to a Library of course providers. Corporate training, customised enterprise solutions, online certifications, micro-credentials, and annual events	Global audience	Business Enterprise, Industry experts Udemy for Business for employees Udemy for Business Enterprises for branding and reporting Online certification and micro-credential Udemy Live for bringing together instructors, industry experts, and leaders	Commission to subscription-based model
Pearson	Traditional printing and publishing of textbooks and education materials to digital products and services Development of digital learning platforms like Mylab, Revel, and Mastering End-to-end solution for educators and learners for curriculum design	Universities, Schools, and Government	Universities like the University of Illinois Interactive and personalised learning experience through adaptive learning algorithms, gamification, and multimedia content.	Direct Sales and subscription-based model
2U	Online degree program designed to provide engaging and interactive quality learning experience to short-term courses, bootcamps, and professional development programs	Universities, Organisations, and Governments	Universities, Organisations, and Governments Online programs, short-term courses, bootcamps, and Professional development programs	Revenue Sharing model with universities
Blackboard	Providing online courses and managing students' interaction, assessment, and grades through a cloud-based learning management system (LMS) to a wider range of solutions and services like Software solutions, Virtual classroom, video conferencing, Analytics for data-driven decisions, student communication, and collaborations Implementation, Training, and Support Services	Schools and Universities	Partnership with McGraw-Hill Education Online courses, Software solutions, and services	Perpetual Licensing Model to a cloud-based subscription-based model
Instructure	Providing online courses and managing students' interaction, assessment, and grades through Canvas, a cloud-based learning management system (LMS), to a wider range of solutions and services like Software solutions, Analytics for data-driven decisions, student communication, and collaborations	Schools, Corporate and Professional Learning	Partnership with Canvas, Microsoft, Zoom Online courses, Software solutions, and services to support student engagement and retention	Perpetual Licensing Model to a cloud-based subscription-based model
Chegg	Textbook rental to Online Tutoring, study tools, and college application and scholarship search services	Students at all levels	Partnership with Pearson Connection between Students and Expert	Transaction-based model to a subscription-based model
Pluralsight	Online Platform to offer technology skills training courses for individuals and businesses.	Individuals and businesses.	Technology companies like Microsoft, Google, Oracle, etc. From technology skills training to courses on soft skills like communication, leadership, and problem-solving	Purely subscription-based to a hybrid model
edX	Flexible and affordable alternative to traditional higher education	Universities and Institutions	Institutions and Employers to offer credit-bearing courses and degrees	Free, Donation, and Grant-based model to Paid

	Offering through Micromasters and Professional Certificate Program for mastery in particular skills		Course development and delivery, analytics, and reporting for tracking and measuring the impact of the online learning program	offerings for learners and institutions. Subscription-based access to premium content and services.
K12	Core Academic Subject to include electives, career and technical education, and enrichment programs. Customised Curriculum and Courseware aligned with State Standards	Students from KG to Std. 12	Certified Teachers, Academic Coaches Online Education Prog.	Per-Pupil funding model to a hybrid Model that includes Per-Pupil and Direct Sales of Curriculum and courseware to schools and districts

5. Discussion

All 10 ed-tech startups, significantly tried to innovate their business model to remain sustainable in the segment. Ed-Tech companies' business model scanning reports reveal the nature of the ed-tech world, which is highly lucrative because of enormous opportunity, but equally carries lots of ice under water, in which high customization, initiatives driven by requirement and not by urgency, and focused activities and networking are highly important to consider. (Fig. 5.1). Hence, the research question that is the potential solutions of the problems with the ed-tech world (RQ1) and specific actions by the ed-tech startups (RQ2) were addressed suitably in the following lines:

i) No Market need, Lack of proper product, and the right team in an unmaintained economic aspect are the major killers of Ed-Techs. Hence, the right pivot of the business, maintaining the required revenue stream, is key to survival. Subscription-based model adoption has been helping the startups to gain profitability and competitiveness.

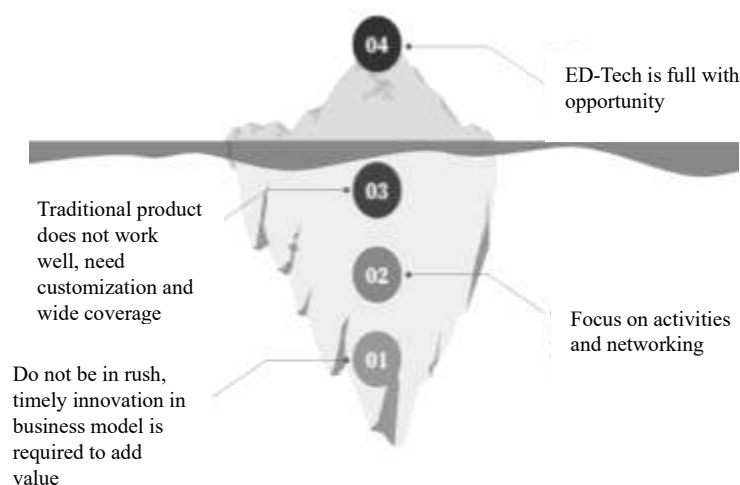


Fig 5.1: Iceberg view of challenges with Ed-Tech

- ii) Targeting Technology to deliver with available resources in an improvised interface can help.
- iii) Value addition through Customization and inclusiveness, targeting the required solution service to the consumers, is important.
- iv) Focus on Business development, not on KPIs only, is important for business houses.
- v) Research on relevant content and required skill delivery is required.

6. Conclusion

From traditional to contemporary business houses, everyone looks quite busy in adjusting their business landscape in terms of operation and services, especially in the Education segment. This case study is drafted to determine whether all transitions in such landscapes are ultimately collaged into a single frame in terms of revenue stream, or if there are multiple edges available. It is concluded that the ed-tech world is largely convinced of the subscription-based model. This case highlights the advantages of Business Model innovation and the adverse effects due to mismanagement. Major driver for business model innovation in Ed-Tech world is wider access for a broad range of consumers; customized learning experiences; collaborative, and project-based learning environment; cost-effective & data-driven decision-making solutions, whereas, Organisational culture and mindset, data privacy and security, balancing innovation and quality, and insufficient resources are the significant barriers.

6.1 Practical and Social Implications

This study has the potential to be absorbed as a trigger for the initiation of change in business thought. The dynamic environment never allows the business world to sit idle, and hence the running business model always faces challenges that can be troubleshooted with the authentic strategy-business model pair.

6.2 Limitations and future scope

This case solely covers the ed-tech in the business model innovation lens. The major limitation of the case is the limited coverage of Ed-Tech startups. In theoretical pursuits, only operational aspects of startups were given priority, whereas the entrepreneurial aspect was totally ignored. Further exploration of such kind of cases can help to reveal many more secrets, like which product/service lines are getting high priority and how to adjust the business model to match the requirements. And, is there any feasible alternative available for ed-tech startups other than the subscription-based revenue model!

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