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Bridging Educational Frontiers

AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA
Accessibility

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ABSTRACT:

This research dives deep into the rapidly evolving realm of postgraduate online education, mainly focusing on online MBA programs. The study unveils significant patterns and fresh perspectives through comprehensive content analysis and participant interviews. The transformative potential of AI in personalizing learning experiences has been recognized, with AI-AL tools highlighted as not just tools for automation but as dynamic partners in curating individualized learning experiences. Another significant discovery is the “resigned acceptance” phenomenon, revealing society's shift towards accepting technology’s omnipresence in education. Moreover, the rise of subscription-based models indicates a shift towards democratizing elite education, though questions arise regarding its long-term implications on educational quality. Practical implications suggest educational institutions could leverage AI to optimize student learning experiences and explore subscription-based pricing strategies to increase access. However, a balanced approach, ensuring the human touch in education remains, is crucial. Furthermore, emphasizing local collaborations when expanding into new regions is essential. This study underscores the importance of adapting to technological advancements while ensuring holistic, high-quality, and globally inclusive educational experiences.

KEYWORDS: Artificial intelligence, Adaptive learning, Online MBA, Subscription pricing model, Accessibility to higher education in developing regions

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Abbreviations

AACSB	Association to Advance Collegiate Schools of Business
ACSB	American Association of Collegiate Schools of Business
AI	Artificial Intelligence
AI-AL	Artificial Intelligence Adaptive Learning
CA	Content Analysis
CEO	Chief Executive Officer
ECTS	European Credit Transfer and Accumulation System
EMBA	Executive Master of Business Administration
ESCP	École Supérieure de Commerce de Paris
1IR	The First Industrial Revolution
2IR	The Second Industrial Revolution
3IR	The Third Industrial Revolution
ILS	Integrated Learning System
ITS	Intelligent Tutoring Systems
LMS	Learning Management Systems
MBA	Master of Business Administration
MOOC	Massive Open Online Courses
RQ	Research Question
SP	Social Presence
US	United States

1. Introduction

1.1 Motivation for the study

Management education stands at a crossroads. As the global labor market's demands shift, traditional teaching methodologies are becoming increasingly misaligned. The COVID-19 pandemic has further spotlighted the pressing need for educational institutions to innovate and adapt. Diaz, Halkias, and Thurman (2022) emphasize that business schools must embrace experimentation and innovation, cultivating ecosystems that champion reskilling and upskilling. Furthermore, a study by Çeviker-Çınar, Mura, and Demirbağ-Kaplan (2017) highlights the slow and partial integration of design thinking into business education, despite its potential to address the shortcomings of conventional pedagogical tools in preparing individuals for 21st century challenges. As the landscape of business education evolves, there's a compelling need to explore transformative tools and strategies that can bridge educational divides, ensuring that the next generation of business leaders is equipped to navigate an ever-changing world.

1.2 Research gap

Much has been discussed about the rise of AI in education. AI can revolutionize learning by tailoring it to individual needs (Tapalova & Zhiyenbayeva, 2022). The potential of AI in education is undeniable, yet its deep integration into online MBA programs, especially in developing regions, remains barely explored.

Subscription models, despite their growing popularity, remain a contentious topic. As Brown and Adler put it (2008), "merely increasing access does not guarantee the same quality of education." There is plenty of research showcasing the potential of these models but less diving into their practical implications, successes, and failures, especially in the context of online MBAs. Developing regions, with their unique challenges and opportunities, have not been at the forefront of these discussions. Teferra and Knight (2008) emphasized the significance of local and international partnerships in higher education

for these regions, but the integration of AI and subscription models is a largely uncharted territory.

1.3 Research problem and contribution

This study addresses the pressing need to explore the confluence of AI adaptive learning systems (AI-AL), subscription-based pricing strategies, and their feasibility in developing regions for an online MBA program. The specific objectives of this thesis are as follows:

- Investigate the combined impact: To explore whether the combination of AI-AL and subscription-based pricing strategy could make online MBA programs more accessible and feasible in developing regions.
- Provide integration guidelines: To provide guidelines for educational institutions on effectively integrating AI-AL and subscription-based pricing in their online MBA programs.
- Assess current barriers: To identify and analyze the challenges students from developing regions face in accessing online MBA programs and explore how AI-AL and subscription-based pricing can address these barriers.

As such, the central research question driving this study is: *How can AI-AL and subscription-based pricing models be effectively integrated to make online MBA programs more accessible and feasible for developing regions?*

1.3.1 Conceptual contributions

This research enhances the current literature by profoundly exploring the role of AI-AL in online MBA programs, an emerging area of global interest. In addition, it offers a thorough comprehension of the potential and hurdles associated with subscription-based pricing strategies, with a specific focus on their application in developing regions to create a more equitable educational landscape. Furthermore, this study bridges the

information gap on the feasibility of such innovative education models in developing regions, bringing unique insights, challenges, and opportunities to light.

1.3.2 Managerial implications

Institutions looking to broaden their presence in developing regions can utilize the insights from this study to refine their offerings and pricing structures. Similarly, policy-makers in these nations can consider this research as a fundamental framework to shape their educational technology and affordability approaches. Additionally, online MBA providers can incorporate these findings into their AI-driven platforms, ensuring they address the needs of a diverse student body, particularly those from developing areas.

1.4 Thesis structure:

This document is structured systematically to provide clarity and coherence. Also, it has been penned using the University of Vaasa's writing guidelines. The thesis begins with an Introduction in Chapter 1. It starts by elucidating the study's motivation, setting the tone for the reader to grasp the essence of the research. It then highlights the research gap, presenting the uncharted territories this study aims to explore. The research problem and theoretical contributions are then outlined, giving readers a clear picture of the study's significance and anticipated academic contributions.

Chapter 2 delves deep into the Literature Review, highlighting previous works, theories, and findings relevant to the study. This chapter lays the foundation, positioning the current research within the more extensive academic dialogue.

In Chapter 3, the Methodology is detailed. It walks the reader through the research design and then transitions into the participant selection process. A thorough outline of data collection follows, leading to data transcription. Ethical considerations are then highlighted to address the moral dimensions of the research. An intriguing aspect of this chapter is the mention of ChatGPT as a research assistant during content analysis,

indicating the integration of AI in the research process. The chapter then concludes with discussions on the limitations and a conclusive summary.

Chapter 4 presents the Findings. A comprehensive content analysis follows an introductory segment. The analysis is then broken down into theme-specific observations and overarching interlinkages, mainly focusing on the intersection of AI and accessibility. Any discrepancies or outliers observed during research are also brought to light, with the chapter concluding with its key takeaways.

Lastly, Chapter 5 offers a Discussion. It starts by laying out the theoretical implications of the findings, followed by managerial implications, providing practical insights for institutions and policymakers. The chapter also offers suggestions for future research, showcasing potential avenues for academic exploration. It wraps up by highlighting the limitations of the current study. This thesis comprehensively examines AI-adaptive learning and subscription models within online MBA accessibility, structured meticulously for easy navigation and understanding.

2. Literature review

After reviewing the literature on the history of MBA programs, the author of this thesis has found an interesting correlation with the concept of the three industrial revolutions popularized recently by Jeremy Rifkin (2011). The First Industrial Revolution (1IR) began in the late 18th century and was characterized by steam and waterpower to mechanize manufacturing and transportation. The Second Industrial Revolution (2IR) started in the late 19th century and was characterized by using electricity to create mass production and assembly lines. The Third Industrial Revolution (3IR), which Rifkin argues is currently underway, is characterized by the use of digital technology and renewable energy to create a “smart, green economy” and a “collaborative common” (Rifkin, 2011). All three industrial revolutions also coincide with significant disruption points in the development of the MBA program. One can easily discern the trend in question by examining the literature review section of this thesis. It should be readily apparent to the reader upon review.

2.1 Breaking boundaries: The rise and progression of distance learning and MBA programs

2.1.1 The MBA history

The first Industrial Revolution marked a significant shift in how work was performed. Before the 1IR, work was primarily done by hand, using muscle power. However, with new technologies, such as the steam engine and factory system, work began with machines powered by fossil fuels instead of human labor (Mokyr, 2004). This work shift transitioned from muscle to brain power as people used their cognitive abilities to operate and manage new machines and processes. The first successful business school, the *École Supérieure de Commerce de Paris* (ESCP), was born in 1819 as a response to the new needs that arose during the 1IR (Jones & Zeitlin, 2008). The Industrial Revolution brought about significant economic changes, including the growth of large-scale industry, the rise of a capitalist system, and the emergence of new forms of business organization

(Mokyr, 2004). These changes created a demand for a new type of professional with specialized knowledge and skills in business management. The ESCP was established to meet this demand by providing education and training in accounting, finance, marketing, and management (Jones & Zeitlin, 2008). The school was the first of its kind and set the standard for business education, leading to the creation of similar institutions across Europe and eventually throughout the world. With time, businesses grew in size and complexity; there was a growing need for individuals with the knowledge and skills to manage these organizations effectively. The birth of business programs can be traced back to the late 19th and early 20th centuries, at the crossroads between 1IR and 2IR, and the need for managers with a broader set of skills was on the rise (Jones & Zeitlin, 2008). The early business programs were designed to provide individuals with a comprehensive understanding of business operations and the ability to make strategic decisions that would drive the success of their organizations (Jones & Zeitlin, 2008).

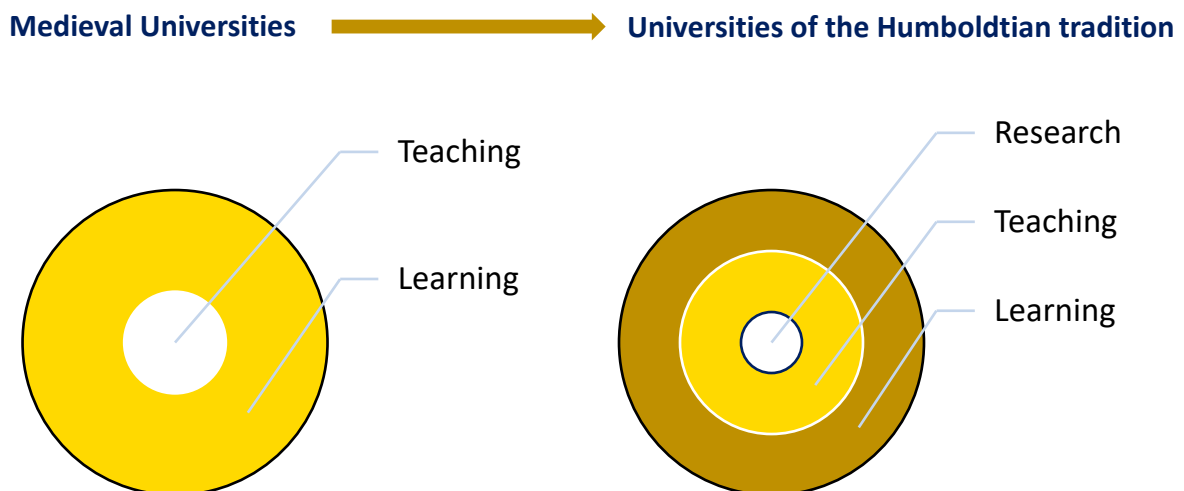


Figure 1. Medieval vs Humboldtian: A Comparative Analysis of University Pedagogic Models (Bowden & Marton, 1998).

Harvard University created the first MBA program in 1908 (HBS, 2023). The school was founded by a group of alumni who believed that the study of business should be taught in a university setting, and it was modeled after the Humboldtian model of higher education, also referred to at the time as the German model. Figure 1 provides a comparison

between the Medieval model and the Humboldtian models. The Medieval pedagogic model focused on religious studies, a rigid instruction system, and served the Church, while the Humboldtian model emphasized critical thinking, research, and contributing to society. During the Prussian reforms, Wilhelm von Humboldt developed the Humboldtian model, which depended on an expanding, educated middle class to support his views that education should be accessible to all (Bowden & Marton, 1998).

Harvard Business School's first Dean, Edwin F. Gay, was instrumental in its creation and development (HBS, 2023). The program offered courses in accounting, finance, and marketing, among others, and it was initially intended for students with a business background. The HBS program quickly became a model for other business schools and remains one of the world's most prestigious and well-respected business programs (HBS, 2023). The Association to Advance Collegiate Schools of Business (AACSB) was founded in 1916 as the American Association of Collegiate Schools of Business (AACSB). The creation of the AACSB marked an important milestone in the history of MBA programs, as it was the first organization to establish accreditation standards for business schools in the United States (AACSB, 2023). The organization aimed to ensure that business programs met a certain level of quality and rigor and that the business schools were producing well-prepared graduates for their careers. This was important because it helped to establish the MBA degree as a respected and valuable credential in the business world (DeBevoise, 2017). AACSB will be instrumental for the online MBA programs later on.

The first Executive MBA (EMBA) program was formed at the University of Chicago's Booth School of Business in 1943. This program was created to allow working professionals to earn an MBA degree while still maintaining their jobs. The program was designed to be flexible, with classes held on weekends and evenings to accommodate students' busy schedules. The Booth School of Business's EMBA program was innovative in that it was the first program to cater to working professionals and it set the standard for other business schools to follow. The program's success helped to establish the EMBA as a respected and valuable degree for professionals looking to advance their careers (The

University of Chicago Booth School of Business, n.d.). INSEAD, a French Business School, created the world's first one-year MBA program in 1957 (DeBevoise, 2017). This is the first recorded attempt to create a shortened MBA program, an idea that is further exploited in the present.

Table 1. Exploring the Diversity of Pre-Internet Distance Learning Methods (Harting & Erthal, 2005).

<i>Methods of Distance Learning</i>	<i>Description</i>
<i>Correspondence Education</i>	A system of education where students receive lessons and assignments through postal mail. Examples include Caleb Phillips' shorthand lessons advertised in the Boston Gazette in 1728 and Anna Eliot Ticknor's correspondence school in Boston, Massachusetts.
<i>The Lyceum and Chautauqua Movements</i>	The Lyceum movement taught adults about arts, sciences, and humanities through lectures and correspondence components. The Chautauquas offered home-study courses supplemented with material from the publishing house. They also offered a four-year reading and correspondence instruction program through which participants could earn certificates.
<i>University Extension Services</i>	A system of lectures at various sites and a system for correspondence instruction began in Great Britain in the mid-1800s. The University of Chicago developed a correspondence program, and William Rainey Harper is considered by many to be the father of modern correspondence education.
<i>The Open University</i>	The world's first university to teach only at a distance, admitted more than 24,000 students in 1971, its first year. Open University pioneered admission without qualifications and the concept of degrees built upon credits obtained by taking several modular courses. Students used various media, including specially produced textbooks, TV and radio programs, audio and video tapes, computer software, and home experiment kits.

Radio

Schools began using radio for adult education in credit and self-enrichment courses in 1928. Early broadcasts were accompanied by reading lists and notes, and the librarians were asked to make available the books cited in the bibliographies.

Television and Microwave

The University of Iowa began experimenting with transmitting instructional television courses in 1932. Universities began to set up microwave networks in the early 1970s. In the early 1980s, the Adult Learning Service (ALS) of the Public Broadcasting Service masterminded the first nationally coordinated initiative designed to make television college credit courses and other formal learning opportunities available to adults.

2.1.2 Emergence and evolution of distance education and the online MBA

Before online programs were created concurrently with the expansion of the Internet, distance learning was achieved by correspondence education, radio or television broadcasting, or degrees earned “in absentia”; see Table 1 for more info on distance learning before the Internet (Harting & Erthal, 2005). Asynchronous, synchronous, and hybrid delivery techniques were soon adopted by online programs (OMBA, 2022). Electronic learning environments and online courses emerged in the late 1960s and early 1970s. The first online MBA program was introduced in 1987 by Aspen University located in Denver, Colorado (OMBA, 2022). In the late 1980s and early 1990s, as more institutions started to provide online courses for working adults and adult learners, they also began to offer business degrees. The program was created to give working people a flexible and convenient method to complete their MBA while continuing to fulfill the demands of their existing employment. The program was delivered online and could be completed part-time, allowing students to continue working while earning their degrees. This format proved to be highly innovative and ahead of its time, as it was one of the first online MBA programs available and predates the widespread accessibility of the Internet as we know it today. Aspen University’s online MBA program made MBA education accessible to anyone with an internet connection, regardless of location (OMBA, 2022). AACSB

accredited the first online MBA at Auburn University in 1989 (DeBevoise, 2017). This is an important milestone because a prestigious accreditation body such as AACSB validated the relevance of an online MBA and set the standards for years to come. Initially, online courses were provided by universities like the University of Phoenix using CompuServe, a 1969-founded computer time-sharing service (OMBA, 2022).

Table 2. Notable Virtual Learning Platforms of the 1990s: A Table of Pioneering Distance Education Systems

<i>Virtual Learning Environment</i>	<i>Year Introduced</i>	<i>Features</i>
<i>FirstClass</i>	1992	Web-based and desktop client interface, multimedia content, synchronous and asynchronous communication tools, and customizable interface (The Open University, 1992)
<i>Blackboard</i>	1993	Web-based interface, multimedia content, synchronous and asynchronous communication tools, more focused on trainer’s needs (Bradford, Porciello, Balkon, & Backus, 2007)
<i>Virtual-U</i>	1995	Web-based interface, multimedia content, synchronous chat and whiteboard tools, and customizable interface (Fisher, Conway, & Groeneboer, 1999)
<i>TopClass</i>	1995	Web-based interface, multimedia content, synchronous and asynchronous communication tools, and student tracking and assessment (Graziadei, 1997)
<i>WebCT</i>	1996	Web-based interface, multimedia content, asynchronous discussion forums, synchronous chat and whiteboard tools, and student tracking and assessment (Goldberg, Salari, & Swoboda, 1996)

The World Wide Web’s launch in 1991 led to a change in education toward the Internet. The following year, the Alfred P. Sloan Foundation unveiled the Asynchronous Learning Networks, further advancing the “anytime, anywhere” concept of education (OMBA, 2022). Table 2 summarizes some of the most notable virtual learning environments in distance education during the 1990s. The platforms included in the table were pioneers in online learning, offering web-based interfaces, multimedia content, asynchronous and

synchronous communication tools, student tracking and assessment features, and customizable interfaces. The table provides a glimpse into the early stages of distance education and showcases the innovation and progress made during this period. Nowadays, these systems are called Learning Management Systems (LMS), and some of them, such as Blackboard, have endured over the years and are still available today.

In addition to on-campus programs, online MBAs were available by the mid-1990s to meet the 100,000 students enrolling in advanced business degrees in the United States. Early online learning included both synchronous and asynchronous as well as hybrid components. Many of the first online MBA programs had weekend and evening requirements, allowing students to continue working (OMBA, 2022). Typical MBA programs are two years long. They provide complete business skills by combining core and advanced education. Unlike traditional MBA programs, online programs combine fundamental business subjects with advanced and specialized study (Herrington, 2010). Online learning may shorten the time required to complete an MBA and provide part-time enrolment. The growing need for specialization in business was foreshadowed by programs with a narrow focus, such as the MBA with an emphasis on entrepreneurship, launched by the University of Calgary in the 1970s. Soon after, more MBA specializations in leadership, marketing, healthcare administration, and accounting appeared (OMBA, 2022).

Table 3 presents a timeline summary of Section 2.1, and other significant milestones relevant to this research. Note that the three industrial revolutions eras can be found in the timeline. 1IR allowed the creation of an academic need for business programs; establishing the ESCP marked an important date in 1819. The 2IR (late 19th, 20th century) shaped the history of MBA programs, from the conception of the Harvard MBA in 1908 to the creation of the first genuinely online MBA by Aspen University in 1987, an event that also coincides with the advent of the 3IR (Rifkin, 2011).

Table 3. Distance Learning and MBA Programs: A Journey of Milestones and Innovations

<i>Year</i>	<i>Milestone</i>
1728	Caleb Phillipps advertised in the Boston Gazette, offering to teach via weekly lessons sent by mail, making it one of the earliest attempts at distance education. (Debter, 2014).
1819	The first business school in the world, the École Supérieure de Commerce de Paris (ESCP), was born (Jones & Zeitlin, 2008).
1858	The University of London pioneered correspondence courses, providing access to higher education for global students. Charles Dickens called it “People’s University”. While in prison, Nelson Mandela studied law as a University of London student (Debter, 2014).
1881	The Wharton School of Business was established as the first collegiate business school in the USA, in Philadelphia, Pennsylvania (Jones & Zeitlin, 2008), (OMBA, 2022).
1900	An MSc. degree, the forerunner to the MBA, was granted by the Tuck School of Business at Dartmouth College (OMBA, 2022).
1908	The Harvard Graduate School of Business Administration established the world's first MBA program (HBS, 2023; DeBevoise, 2017; Jones & Zeitlin, 2008; OMBA, 2022).
1915	Wendell Thomas Cunningham, the first African American to enroll in an MBA program at Harvard Business School, graduated (OMBA, 2022).
1916	AACSB is established (OMBA, 2022), (AACSB, 2023), (DeBevoise, 2017).
1921	Wharton created the first business research facility in history (OMBA, 2022), (The Wharton School, 2022).
1943	World’s first EMBA at The University of Chicago’s Booth School of Business (OMBA, 2022), (The University of Chicago Booth School of Business, n.d.).
1950	The first MBA program outside of the United States was introduced by the Ivey School of Business at the University of Western Ontario in Canada (OMBA, 2022).
1955	Pakistan’s University of Karachi was the first Asian university to offer an MBA degree (OMBA, 2022).
1956	Education over television: Chicago public television station WTTW broadcasts college courses for credit, attracting over 15,000 students in five years. Sunrise Semester, a similar initiative by New York University and CBS, is also lauded for awarding degrees through televised courses (Debter, 2014).

1957	The Institut Européen d'Administration des Affaires (INSEAD) created the first one-year MBA program (DeBevoise, 2017; OMBA, 2022).
1962	HBS started enrolling women in their MBA program (OMBA, 2022; Harvard Business School, n.d.).
1984	The National Technological University became the first accredited online university, funded by corporations such as IBM, Motorola, and HP. It used television to provide educational courses to employees (Debter, 2014).
1987	The first online MBA program was introduced in 1987 by Aspen University (OMBA, 2022).
1989	AACSB accredited the first online MBA at Auburn University (DeBevoise, 2017; OMBA, 2022).
2003	The US government reports that 41% of homeschoolers participate in distance learning, with 20% using TV, video, or radio, 19% using the Internet, and 15% taking mail correspondence courses (Debter, 2014).
2012	Elite universities, including Stanford, Harvard, and MIT, are rapidly developing and releasing massive open online courses (MOOCs) accessible online and free for students. Some of the most popular MOOCs have enrolled tens of thousands of students worldwide (Debter, 2014).
2019	COVID-19 was discovered on December 19 th in Wuhan, China (CDC, 2021).
2021	Online MBA programs now have more students than their in-person counterparts (OMBA, 2022).

2.2 Breaking boundaries: The rise and progression of distance learning and MBA programs

2.2.1 The shift from traditional MBAs to emerging educational trends

Despite their widespread appeal, MBA programs have faced scrutiny over the years. Critics have pointed out gaps in the curricula, a mismatch between taught skills and those needed in real-world managerial positions, and general fatigue associated with the traditional MBA model.

Mintzberg (2003) delivered one of the most pointed critiques, arguing that MBA programs often miss the mark when producing effective managers. Instead of offering practical management training, these programs tend to gravitate towards theoretical knowledge, which might not always translate to practical managerial skills. In his book, Mintzberg emphasizes the difference between mastering managerial practices and the abstract knowledge that MBA programs often prioritize (Mintzberg, 2003).

Further supporting this perspective, Pfeffer and Fong (2002) highlighted concerns about MBA education's true success and relevance. They argued that while MBA degrees might offer some advantages regarding initial job placements and salary hikes, their role in producing competent and successful managers in the long run remains questionable. This is because managerial roles often require competencies not sufficiently covered in MBA curricula (Pfeffer & Fong, 2002).

Bennis and O'Toole (2005) echoed similar sentiments, pinpointing a vital issue with business schools: they have strayed too far from their practical roots. The authors believe that business schools, while attempting to pursue academic respectability, have prioritized scientific research over practical applicability. As a result, graduates often find themselves armed with theoretical knowledge but not necessarily with the skills they need to tackle day-to-day challenges (Bennis & O'Toole, 2005).

Rubin and Dierdorff's (2009) research further illustrates this gap. Their study assessed the alignment of MBA curricula with the competencies required in managerial roles. Findings suggest that while specific competencies like decision-making and leadership are adequately covered, other vital skills are often glossed over. This misalignment only serves to amplify the challenges MBA graduates face in the real world (Rubin & Dierdorff, 2009). Finally, Datar, Garvin, and Cullen (2011) emphasized the urgent need for change. They argued that business education stands at a crossroads and must undergo significant transformations to remain relevant. The authors stressed that the current target is a revised MBA curriculum, more aligned with the actual demands of leadership roles (Datar, Garvin, & Cullen, 2011).

In conclusion, while MBA programs have paved the way for many to delve into management, there is a growing consensus that these programs need restructuring. The traditional model focuses more on theory than practice, which results in fatigue and calls for a more balanced approach to business education.

2.2.2 Ensuring access to MBA education for underprivileged students: The promise of digital platforms in developing countries

Equal access to quality education, including MBA programs, remains a challenge. Socio-economic disparities often create barriers that limit educational opportunities for underprivileged students. This is particularly pronounced in developing countries, where challenges include financial constraints, inadequate educational infrastructure, and restricted access to quality resources (Altbach, Reisberg, & Rumbley, 2009). Online programs offer a promising solution to bridge this gap, especially in poor regions. Brown and Adler (2008) emphasize the potential of online education to democratize learning. They illustrate how online platforms, supported by Learning Management Systems (LMS), AI, and adaptive learning technologies, can offer a cost-effective alternative to traditional MBA programs, making them more accessible to a broader audience (Daniel, 2016). This democratization process is especially crucial for developing countries, where traditional MBA program costs often become prohibitive due to high tuition fees and related

expenses such as travel and living costs (Knight, 2011). Over the past decades, there has been a substantial transformation in response to the mass demand for higher education. Global tertiary education enrollment has risen, but developing countries continue to trail behind. Significant financial barriers exist for students in these regions, as evidenced by the tertiary gross enrollment ratios (see Figure 2) (Altbach, Reisberg, & Rumbley, 2009).

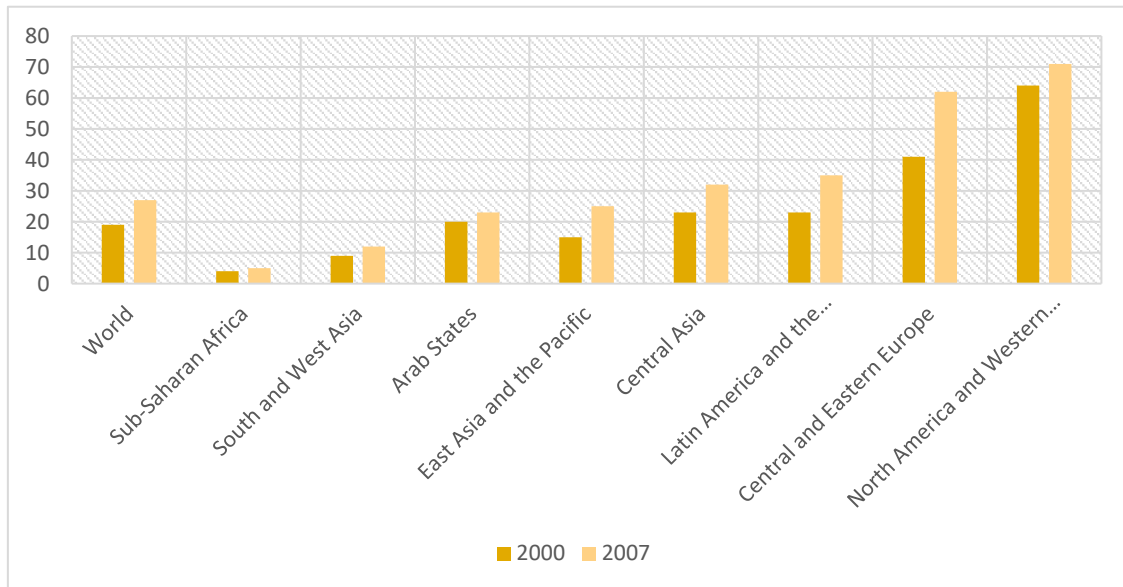


Figure 2. Tertiary gross enrolment ratio by geographical region, 2000 and 2007, post-secondary education (Altbach, Reisberg, & Rumbley, 2009)

Another formidable challenge for developing nations is the lack of adequate educational infrastructure such as advanced classrooms, libraries, and technological labs (Marginson, *The Confucian Model of Higher Education in East Asia and Singapore*, 2011). By harnessing the power of LMS, AI, and adaptive learning technologies, online platforms can bypass these physical limitations, offering students access to top-notch resources and learning experiences irrespective of vocation (Daniel, 2016). The scarcity of qualified faculty in these regions can also be mitigated with AI-driven solutions, allowing students to tap into global expertise without the constraints of geography (Kulik & Fletcher, 2015; Nye, Graesser, & Hu, 2014).

However, the integration of these technologies is not without challenges. Potential roadblocks include inconsistent internet access, digital literacy concerns, and data privacy issues (Holmes, Bialik, & Fadel, 2019). Collaborative efforts from educators, technologists, and policymakers are vital to ensure these online MBA programs are not only accessible but also equitable. In conclusion, while the challenges are multifaceted, the potential of online platforms, coupled with modern technologies, presents a promising avenue to democratize access to quality MBA education. Beyond mere recognition, implementing actionable measures is crucial to making quality education accessible to all, especially in the developing world.

Table 4. Distance Learning and MBA Programs: A Journey of Milestones and Innovations

<i>Factor</i>	<i>Description</i>
<i>Forms of Capital</i>	Encompasses social, cultural, and symbolic assets (Bourdieu, 1986)
<i>Social Capital</i>	Focuses on relationships and support networks (Coleman, 1988)
<i>Family Influence</i>	Role of family in shaping educational choices (Freeman, Brown, & Brown II, 2005)
<i>Online Platforms</i>	Democratizing access through digital means (Brown & Adler, 2008)
<i>Integrated Model of Access</i>	Multi-layered influences on education access (Perna, 2006)

2.3 Exploring the world of virtual education: A comprehensive look at modern online MBA programs

Table 3 displays that online MBA program enrolments exceeded those in on-campus programs in 2021. Although COVID-19 could be a significant factor in this shift, further research is required to verify this paradigm. QS.com reported that 82% of European business schools with online MBA programs expect an increase in international applicants in the coming three years (QS, 2022). Two primary motivations for pursuing an online MBA include the flexibility to balance other commitments and the possibility of working while studying (Kibelloh & Bao, 2014). Notably, there's a trend of younger candidates, a rise in applications from women and underrepresented groups, and an increase in schools offering test exemptions—currently, 47% of institutions with online MBA programs provide this (QS, 2022). Distance education enrollment saw an over 90% boost between 2019 and 2022 (Lederman, 2021).

However, some data presents a less favorable perspective on online MBAs. Of the institutions surveyed by QS.com, 92% that don't provide an online MBA (74 out of 167) don't plan to introduce one in the next three years. Even though a vast majority adapted to online platforms during the pandemic, many still believe in the intrinsic value of face-to-face experiences in MBA programs. They argue that hands-on learning and in-person interactions form the core value of an MBA (QS, 2022).

Given the potential influence of the pandemic on online MBA trends, further rigorous, peer-reviewed research is essential. At the time of this thesis, it's early to make definitive conclusions, but online MBA programs have undeniably found their footing in academia. The subsequent sections will discuss the defining traits of contemporary online MBA programs.

2.3.1 Virtual classrooms

Online learning or e-learning is an educational approach that relies on the internet and various multimedia tools for instructional delivery (Maddison, Doi, Lucky, & Kumaran, 2017). Its popularity has surged with different terms used interchangeably to denote it. For a more detailed list of these terms, refer to Figure 3. Online education is designed to provide flexibility, enabling learners to access educational materials from any location and at any time through different digital devices and platforms. As mentioned in the previous section, online learning evolved from the concept of distance education, which was initially based on correspondence courses. While the Internet arose, the scope of online learning also expanded, presenting an array of educational resources, and allowing better communication between instructors and learners (Means, Toyama, Murphy, Bakia, & Jones, 2010). This type of learning is essentially a virtual form of distance education with a geographical distance between learners and instructors.

E-learning, virtual education, distance
learning, online learning, remote learning, digital
learning, web-based learning, internet-based learning, electronic
education, cyber education, web education, computer-based learning,
mobile learning, online instruction, internet education, web-enhanced learning,
hybrid learning (combining online and in-person instruction), blended learning (com-
bining online and in-person instruction), web-supported learning, online coursework, web
courses, virtual classroom, cyber classroom, virtual college, electronic classroom, digital class-
room, online training, web training, online study, web study, distance study, virtual study,
web-based training, online tutoring, virtual tutoring, web tutoring, online lectures, virtual lectures,
web lectures, webinars, online seminars, web seminars, virtual seminars, electronic seminars, digital
seminars, virtual instruction, online education and training, distance education and training, web learn-
ing, virtual learning environment, distance education courses, online courses and programs, online col-
lege, virtual university, cyber school, online degree programs, virtual degree programs, web degree pro-
grams, e-learning platforms, online platforms, virtual platforms, web platforms, internet education and
training, virtual schools, web schools, digital courses, electronic courses, online classes, web classes, vir-
tual classes, digital classes, internet classes, online education and training programs, virtual education
and training programs, web-based education and training programs, online certification programs,
web certification programs, virtual certification programs, digital certification programs, e-learn-
ing solutions, online learning solutions, virtual learning solutions, web-based learning solutions,
internet-based learning solutions, distance learning programs, online degree programs, vir-
tual degree programs, online master's programs, web-based master's programs, virtual
master's programs, cyber degree programs, internet degree programs, web-based
degree programs, online professional development, virtual professional de-
velopment, distance professional development, e-learning courses,
online training courses, virtual training courses, and
web-based training courses.

Figure 3. An extensive list of terms and concepts that define online education (OpenAI, 2023)

Online learning occurs digitally, facilitating interaction between students and teachers using tools like video conferencing, online forums, email, and social media. It operates asynchronously, allowing students to engage with the content whenever they choose, provided they have internet connectivity. Moreover, the burden is on the students to direct their learning, which encompasses setting objectives, tracking their development, and actively seeking instructor feedback (Muilenburg & Berge, 2005).

While online learning provides flexibility, catering mainly to those with external responsibilities like work or familial obligations (Kibelloh & Bao, 2014), it also broadens the academic horizon for students. Those residing in remote areas or developing nations might lack access to elite educational facilities but can still enroll in global online courses. However, one cannot overlook specific challenges associated with online learning. The absence of direct, face-to-face communication can sometimes hinder immediate feedback, leading to a sense of isolation (Muilenburg & Berge, 2005). It also necessitates significant self-motivation and discipline due to the lack of set timelines. Technical issues like inconsistent internet connections or software glitches can further obstruct a seamless learning experience.

Different course delivery models have emerged in the realm of online education. There's blended/hybrid learning, which marries online with traditional instruction. Significant course content is delivered online and supplemented with periodic face-to-face interactions. On the other hand, fully online courses function entirely on the internet without physical meetings. Different variations include traditional and web-enhanced courses integrating online tools to enrich classroom instruction (Allen & Seaman, 2011). For an in-depth understanding of these delivery types based on online content percentage, see Table 5.

Table 5. Types of courses by delivery method (Allen & Seaman, 2011)

<i>Proportion of Content Delivered Online</i>	<i>Type of Course</i>	<i>Typical Description</i>
0%	Traditional	A course that does not utilize online technology but presents content through written or oral means.
1-29%	Web Facilitated	It utilizes web-based technologies to assist and enhance face-to-face instruction, a web-facilitated course. The course may use a course management system (CMS) or web pages to post the syllabus, course materials, and assignments. The primary focus of web-facilitated courses is in-person instruction, with technology as a supplementary tool to support the traditional classroom setting.
30-79%	Blended/Hybrid	A blended course refers to a course that combines both online and face-to-face delivery methods, where a significant amount of course material is delivered online, often through the use of online discussions and a course management system. Typically, blended courses require fewer face-to-face meetings than traditional courses, and the frequency of face-to-face meetings varies based on the course structure and the instructor's preferences.
80+%	Online	A course primarily conducted online, with little to no in-person meetings.

2.3.2 Program structure

Online MBAs are noted for their flexibility. Students often prefer them because they can complete coursework at their convenience, without mandatory scheduled in-person classes, which suits those juggling other commitments like work and family (Rydzewski, Eastman, & Bocchi, 2010). Furthermore, many such programs allow for rolling admissions, breaking away from the traditional academic calendar's constraints.

The history of MBA programs provides exciting insights. In the early 1900s, Harvard University had a straightforward MBA curriculum consisting of only three courses, with electives as diverse as railway accounting (Herrington, 2010). By the 1950s, the structure of the MBA courses began to stabilize across different institutions. The Association to Advance Collegiate Schools of Business (AACSB) made concerted efforts from 1925 to

establish curriculum standards, progressively including subjects like economics, industrial management, ethics, and computer science (Flesher, 2007). AACSB's regulations evolved, with the most notable shift in 1969 when they set clear definitions for core coursework durations and credit hours (Flesher, 2007).

The credit hour system marks the academic workload fundamental to American education. While it's prevalent in the US, Europe employs the European Credit Transfer and Accumulation System (ECTS). An average MBA program in the US is around 60 credit hours, typically spanning two years (Herrington, 2010). On the other hand, European MBA programs demand 90 to 120 ECTS credits, translating to roughly 45-60 US credit hours (European Commission, European Credit Transfer and Accumulation System (ECTS), 2023). The credit hour approach varies, with the US emphasizing classroom instruction hours, while ECTS credits account for all aspects of student work, including classroom hours, reading, and assignments (U.S. Department of Education, n.d.; European Commission, ECTS users' guide, 2015)

Notably, there are differences in the emphasis of US and European MBA programs. While European courses often dive deeper into theory, US programs prioritize real-world, practical skills. Furthermore, European programs might offer more adaptability in course choices, letting students mold their learning to personal preferences (Mazza, Sahlin-Andersson, & Jesper, 2005).

A recent European trend leans towards more affordable one-year MBA programs (60 ECTS). Contrarily, some leading US business schools are aligning with online platforms to offer economical online courses and flexible payment options. These US institutions are also expanding their curricula to encompass subjects like data, analytics, and programming, veering away from conventional business teachings. Interestingly, this move towards a tailored MBA education style in the US seems inspired by European models (The Economist, 2019).

2.3.3 Social presence

Online MBA programs have grown in popularity due to their flexibility. A central aspect of these programs is the concept of social presence (SP). The American Psychological Association describes social presence as the feeling of being with another person, especially when interacting in online groups. This essentially means the ability of students to connect with their instructors and peers in online settings. Yet, there are challenges in cultivating SP in online MBA programs (Garrison, Anderson, & Archer, 1999).

Online learning environments have significantly changed how education is delivered. This change has made nurturing a social presence in online MBA programs pivotal for student engagement and satisfaction. Social presence is about how participants in online communities perceive each other as real individuals (Garrison, Anderson, & Archer, 1999). This feeling of connection is fundamental for promoting active participation (Smith & Flaherty, 2013). The shift towards online education has been influenced by evolving student demographics, societal changes, and efficiency (Smith & Flaherty, 2013; Allen & Seaman, 2011).

Various stakeholders, including governments and startups, are leveraging online models to cater to the growing interest in online education. For instance, the Canadian Federal government and Ontario have initiated projects incorporating technology in higher education. Additionally, initiatives like edX by Harvard and MIT and platforms like Udacity and Coursera, both rooted in Stanford University, have disrupted traditional educational offerings (Smith & Flaherty, 2013). In the realm of online education, fostering meaningful interactions is imperative. The interactions within these settings are critical determinants of learning outcomes. Social presence is essential (Garrison, Anderson, & Archer, 1999), and the environment must encourage positive exchanges (Cleveland-Innes & Emes, 2005).

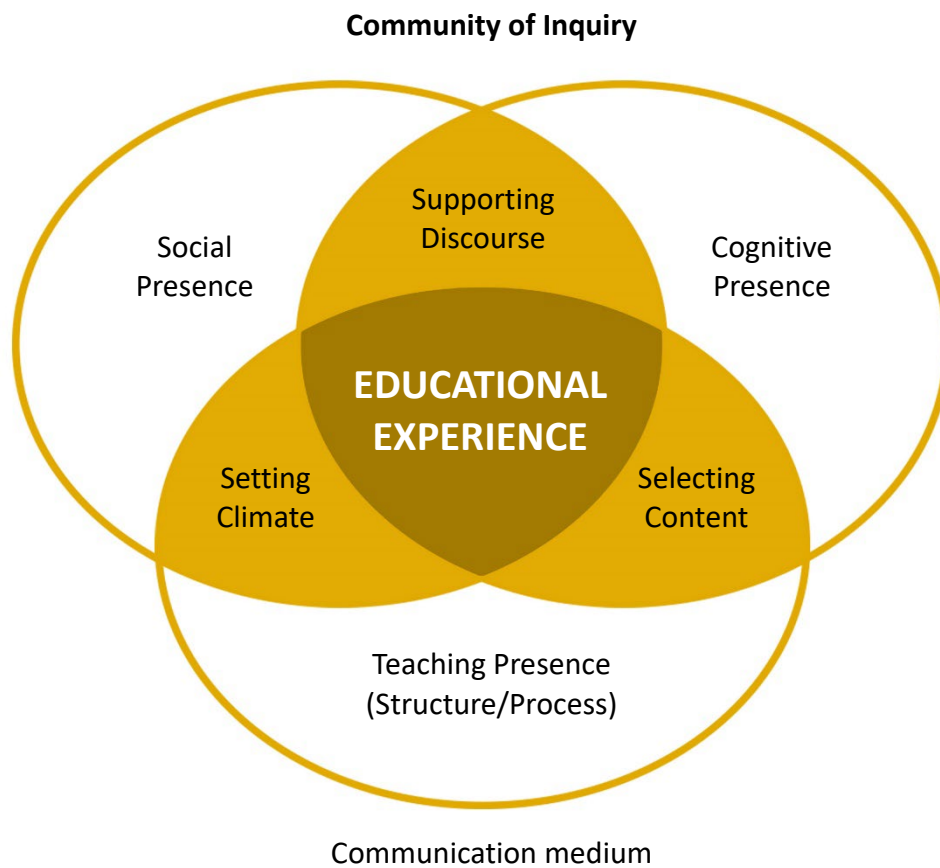


Figure 4. Community of Inquiry framework (Garrison, Anderson, & Archer, 1999)

The Community of Inquiry framework, illustrated in Figure 4, posits that effective communication and cognitive presence are prerequisites for critical thinking. SP supports this cognitive presence, enriching the learning experience. However, the role of the teaching presence, often seen as the domain of faculty, is equally significant alongside social and cognitive presence (Garrison, Anderson, & Archer, 1999).

Before an online course starts, learners often have online identities due to the prevalent use of platforms like blogs, wikis, YouTube, and Twitter. These identities can help set an initial interaction level, making it easier for students to connect within their new online classroom (Smith & Flaherty, 2013). The increasing popularity of online MBA programs underscores the importance of social presence. It is pivotal in ensuring students are engaged, satisfied, and can connect meaningfully with one another. The role of Learning

Management Systems (LMS) is to enhance this learning experience. The specifics of how LMS does this will be delved into in the following section, but it's worth noting the potential of LMS in enhancing SP in online MBA programs.

2.3.4 Learning Management Systems (LMS)

The evolution of Learning Management Systems began in the 1990s. Initially, LMS mainly handled administrative aspects of training, like course registration and progress tracking (Watson & Watson, 2007). With advancements in the Internet and technology, LMS started facilitating online learning delivery, management, and assessment (Ally, 2004). In the 1980s, the Integrated Learning System (ILS) was introduced to manage computer-based training, offering functionalities to develop content, track student progress, and offer feedback (Watson & Watson, 2007; Ally, 2004). With technological progress, LMS platforms like Blackboard, Moodle, and Canvas became prevalent (Coates, James, & Baldwin, 2005). These platforms introduced features that improved online learning experiences, from course management to content development (Dobre, 2013). The LMS market shifted to 2016, with Canvas's rapid growth and Blackboard's market share decline being significant changes. Other platforms like Pearson's LearningStudio and WebCT had notable market movements and surges in smaller systems with limited implementations (Hill, eliterate.us, 2016).

In recent years, the fusion of AI with LMS has been a notable development. AI-equipped systems can modify instructional content based on learner data (Chi, VanLehn, Litman, & Jordan, 2011). For instance, platforms like Knewton utilize AI for real-time personalized content and feedback (Knewton, 2023). Additionally, intelligent tutoring systems (ITS) have been developed, which leverage AI techniques to mimic one-on-one human tutoring (Nye, Graesser, & Hu, 2014). An example is the Cognitive Tutor by Carnegie Learning, which uses AI to offer personalized learner feedback (Koedinger, Anderson, Hadley, & Mark, 1997). Studies have indicated that incorporating AI and adaptive learning into LMS can positively impact learner outcomes (Kulik & Fletcher, 2015; Vanlehn, 2011). The

capability of AI-driven LMS to offer more tailored learning experiences has been recognized (Daniel, 2016).

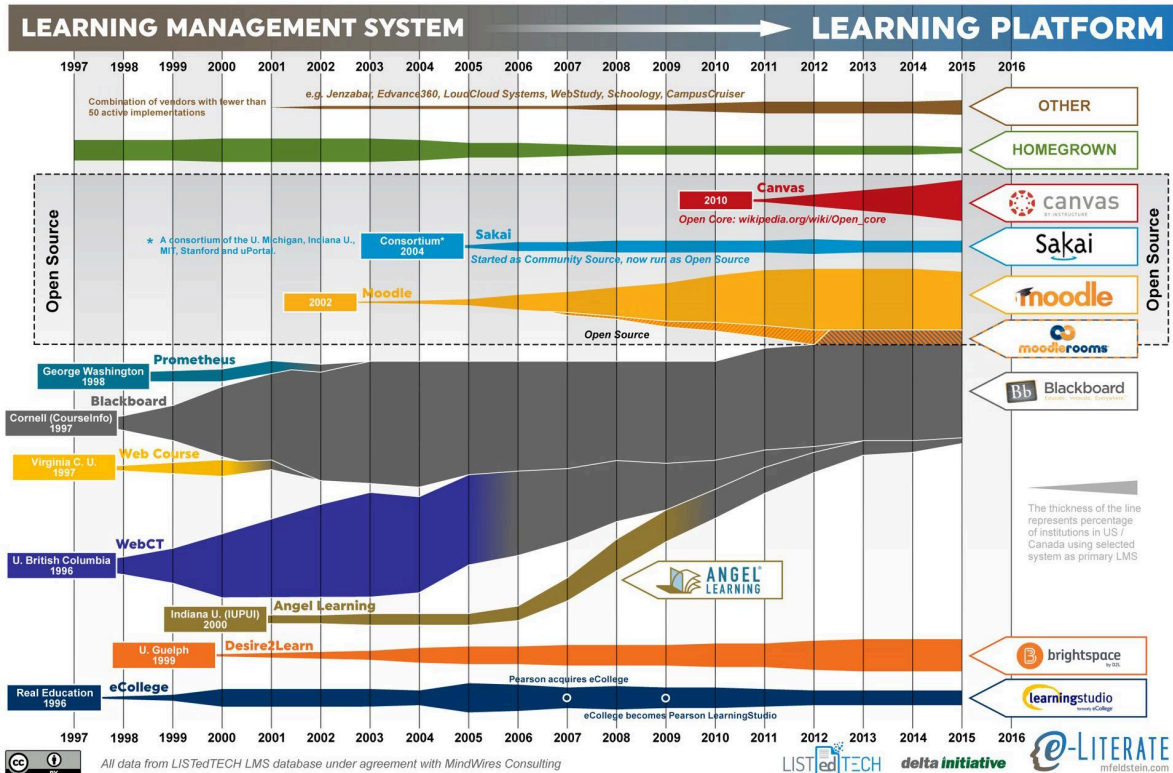


Figure 5. LMS Market Share for US and Canadian Higher Education Institutions (Hill, elite.us, 2016)

In summary, LMSs have progressed from essential administrative tools to complex systems enhanced by AI and adaptive learning technologies. This section provided an overview of LMS's evolution. The subsequent discussion will explore AI and adaptive learning, focusing on their fundamentals, techniques, and implications for online education. The challenges and prospects of deploying these technologies in online MBA programs will also be addressed.

2.3.5 AI and adaptive learning

Artificial Intelligence (AI) and adaptive learning technologies are increasingly being recognized in the context of online education. These technologies have been noted for potentially offering personalized learning experiences that align with individual learner needs. As online MBA education becomes popular, there's growing interest in understanding the role and implications of such technologies in this domain.

Adaptive learning is an educational method where students receive tailored learning experiences (Baraishuk, 2021). AI's role in education has been highlighted through the emergence of tools and applications, such as intelligent tutoring systems (ITS) and adaptive learning platforms. These platforms are designed to offer instruction tailored to individual needs and provide real-time feedback (Nye, Graesser, & Hu, 2014).

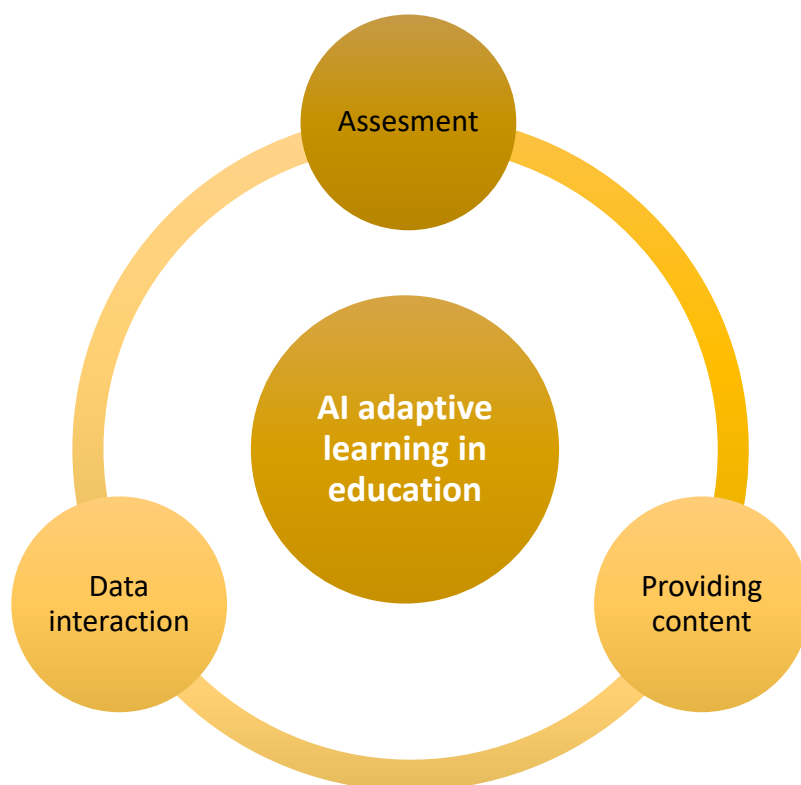


Figure 6. AI-Driven Education Cycle (Baraishuk, 2021)

Adaptive learning utilizes AI algorithms to modify content according to individual learner requirements (Woolf, 2007), described as a pedagogical approach. It factors in prior knowledge, learning style, and pace (Xie, Chu, Hwang, & Wang, 2019). Some studies even indicate higher learner engagement and academic performance with adaptive learning systems than traditional methods (Kulik & Fletcher, 2015). The Cognitive Tutor by Carnegie Learning is a notable example of utilizing AI to offer personalized feedback to enhance problem-solving skills (Koedinger, Anderson, Hadley, & Mark, 1997). However, alongside the potential advantages, there are challenges. Implementing AI and adaptive learning technologies requires vast amounts of quality data to train AI algorithms effectively. Ethical issues arise from the immense data collection and its potential misuse, raising privacy concerns (Holmes, Bialik, & Fadel, 2019). Also, employing AI in decisions like grading or admissions introduces transparency and fairness concerns (Baker & Siemens, 2014).

In sum, AI and adaptive learning technologies are showing promise in reshaping online MBA education. As discussed in preceding chapters, tools like LMS or AI-AL are vital in broadening access to quality business education. Yet, understanding and navigating these technologies' challenges is equally critical for building accessible, inclusive learning environments.

2.4 The subscription-based payment model

The subscription-based payment model has emerged as a promising solution to improve the accessibility of quality education, particularly in online MBA programs. This model, which involves paying a fixed periodic fee for unlimited access to educational resources and courses, can potentially alleviate the financial burden on students and promote greater participation in higher education (Hill, EDUCAUSE Review, 2012). In this chapter, we will explore the benefits and challenges associated with implementing a subscription-based payment model in online MBA programs and discuss how the integration of LMS, AI, and adaptive learning technologies can contribute to the success of this approach.

2.4.1 Benefits of the subscription-based payment model

One of the primary benefits of the subscription-based payment model is its potential to make education more affordable for students from diverse backgrounds. By allowing learners to access a wide range of educational resources and courses for a fixed, recurring fee, this model can help reduce the upfront costs associated with traditional MBA programs (Wildavsky, Kelly, & Carey, 2011). Additionally, the flexibility of subscription-based plans enables students to choose a payment plan that aligns with their financial capabilities, further enhancing accessibility (Hill, EDUCAUSE Review, 2012). Another advantage of the subscription-based payment model is its ability to promote continuous learning and skill development. As students have unlimited access to courses and resources, they are encouraged to explore various subjects and acquire new skills beyond the scope of a traditional MBA program (Wildavsky, Kelly, & Carey, 2011). This enhances the learning experience and contributes to the development of well-rounded professionals better prepared for the demands of the modern business world. Furthermore, the subscription-based payment model can benefit online MBA programs that leverage LMS, AI, and adaptive learning technologies. Integrating these technologies enables the delivery of personalized learning experiences and real-time feedback, allowing students to make the most of their subscriptions and maximize their learning outcomes (Daniel, 2016).

2.4.2 Challenges of the subscription-based payment model

Despite its potential benefits, the subscription-based payment model also presents specific challenges that must be addressed to ensure its successful implementation in online MBA programs. One of the critical challenges is the model's sustainability, particularly in generating sufficient revenue to cover the costs of developing and maintaining high-quality educational resources and infrastructure (Hill, EDUCAUSE Review, 2012). To address this issue, institutions may need to explore additional revenue streams, such as partnerships with industry, government funding, or philanthropic support (Wildavsky,

Kelly, & Carey, 2011). Another challenge is the potential for reduced student engagement and motivation, as the subscription-based payment model may lead to a perception of lower value for the educational experience (Hill, EDUCAUSE Review, 2012). To counter this, institutions must ensure that they provide high-quality educational content and support services that meet the expectations of students and promote a sense of value and satisfaction (Daniel, 2016).

Moreover, implementing the subscription-based payment model may require significant organizational and technological changes for institutions, such as developing new billing systems, course structures, and student support services (Wildavsky, Kelly, & Carey, 2011). Institutions must be prepared to invest in the necessary infrastructure and resources to support the transition to a subscription-based model and ensure its long-term success.

2.5 Synthesis

Throughout the literature review, we have explored various facets of online MBA education, focusing on leveling the playing field and enhancing accessibility for learners from diverse backgrounds. The journey began with examining the origins and progression of distance learning and MBA programs, highlighting the transformation brought about by technological advancements and the emergence of virtual education. The discussion then developed into the intricacies of modern online MBA programs, encompassing aspects such as virtual classrooms, program structure, social presence, and the critical role of LMS in delivering seamless educational experiences. As we ventured further into the realm of AI and adaptive learning, we discovered the potential of these technologies in addressing some of the challenges developing countries face in accessing quality business education. Through the democratization of education, LMS, AI, and adaptive learning have the power to break down barriers and create more inclusive, equitable, and effective learning environments.

The final section of the literature review examined the subscription-based payment model as a potential solution to enhance the accessibility of online MBA education. By discussing the benefits and challenges of this model, we shed light on the importance of balancing financial sustainability and providing affordable, quality education for all. Having laid the foundation for understanding the significance of AI, adaptive learning, and subscription models in making online MBA education more accessible, we now prepare to delve deeper into these concepts' practical implications and real-world applications. In the upcoming sections, the author will present the results of interviews with experts in the field, providing valuable insights and perspectives on the convergence of these various components. By synthesizing the knowledge gained from the literature review and expert opinions, we can envision a future where online MBA education becomes a catalyst for social and economic development, leveling the playing field for learners across the globe.

3. Methodology

Research objectives, the nature of the topic, and the type of data required to answer the research questions guide the methodological choices in a research study (Creswell, 2018). This study does not only aim to ascertain whether AI-adaptive learning tools and subscription-based pricing strategies can make online MBA programs more accessible, especially to developing regions, but also seeks to explore how and under what conditions these tools can be best utilized. Such an inquiry needs a research approach that is qualitative, exploratory, and interpretive in nature. Thus, a qualitative research methodology was deemed most suitable for this study.

Qualitative research focuses on the “why” and “how” of decision-making rather than just “what”, “where”, and “when” which are often the focal points of quantitative research (Merriam & Tisdell, 2015). This approach allows for the exploration of nuanced perspectives, the contextualization of experiences, and the understanding of phenomena in depth. Given the complex, multifaceted nature of technology in education and the intricacies of pricing strategies, a qualitative approach offers the depth required to capture the complexity of the issues.

Semi-structured interviews, in particular, were chosen as the primary data collection tool. These interviews balance the structure of standardized questions and the flexibility to delve deeper into specific areas based on the interviewee’s responses (Brinkmann, 2014). This flexibility is especially beneficial when dealing with experts and academics, as they can offer insights or introduce nuances that might not have been anticipated at the outset of the research. It provides an avenue to gather first-hand experiences, expert opinions, and insights that quantitative data might overlook. Furthermore, the semi-structured nature of the interviews allows the researcher to establish a conversational tone, fostering an environment where participants feel free to share their insights, experiences, and concerns openly and reflectively (DiCicco-Bloom & Crabtree, 2006).

In conclusion, the qualitative research approach, with its emphasis on depth and context, combined with the adaptability and conversational nature of semi-structured interviews, offers an effective strategy for achieving the objectives of this study.

3.1 Research design

The process of research could be compared to piecing together a puzzle. While quantitative methods can provide broad snapshots, offering vast data sets and general patterns, they might inadvertently neglect intricate details comparable to missing puzzle pieces. Qualitative research, on the other hand, fills these gaps, shedding light on the complex nuances and subtleties that are crucial for a comprehensive understanding (Creswell, 2018). Such an approach gives voice to those finer, often overlooked details, adding depth and dimension to the broader research narrative.

Semi-structured interviews play an essential role in qualitative research, as they can facilitate a dynamic conversation flow. Unlike structured interviews that rigidly adhere to pre-set questions, semi-structured interviews allow the respondent and researcher to organically navigate through the topic, bringing forth insights that might have been unintentionally left behind in a more structured setting (Smith J. A., 2015). This fluidity in conversation can often lead to the emergence of unexpected yet critical viewpoints. Such a design is beneficial when the subject matter is multi-layered, as when exploring AI-AL tools for online MBA programs and subscription-based pricing.

Furthermore, as Smith (2015) stated, the essence of qualitative research is to “understand the world from the perspective of its participants, leading to a deeper understanding.” By utilizing semi-structured interviews, researchers are granted the flexibility to adapt, ensuring that emergent ideas, even those initially left in the periphery, are given the attention they deserve, providing a fuller, richer picture of the research landscape.

3.2 Participant selection

In qualitative research, the success often hinges on the sampling techniques employed, given that they influence the depth and richness of the data collected. For this study, purposeful sampling was utilized to ensure that the participants were information-rich cases, aligning with Patton's (1990) assertion that this method focuses on selecting individuals who can provide deep insights due to their knowledge and experience. This approach ensured that the interviewees were knowledgeable and authoritative in their respective fields (Patton, 1990).

3.2.1 Criteria for selection

Central to the participant selection process was the aim to identify the most peer-reviewed and frequently cited authors within each primary topic. A focus on these indicators was adopted as they often signify expertise, influence, and academic contributions to a field (Harzing & Alakangas, 2016). Authors with extensive peer-reviewed publications and citations have typically introduced innovative ideas, conducted pioneering research, or provided significant commentary on existing findings. Also, practical experience was considered to create a balance among the interviewees. Pivotal to this research is to provide insights for the online MBA providers. Consequently, for instance, two participants are such organizations' CEOs.

3.2.2 Sampling strategy

Given the vast academic landscape and the richness of the explored subject areas, identifying potential participants necessitated a broad outreach approach. Approximately 50 invitations were dispatched via email to potential participants. This strategy aligns with Dillman, Smyth, and Christian's (2014) recommendation for achieving meaningful participation through extensive outreach. The resultant pool of nine interviewees can be classified as a "purposive sample". Purposive sampling, unlike random sampling, involves selecting participants based on specific characteristics or qualities they possess, ensuring they are exceptionally knowledgeable about the topic in question (Palinkas et al.,

2015). By targeting authors with significant peer-review and citation contributions, a sample rich in insights and deep in expertise was curated. Simple logic was utilized to select participants with industry expertise. The aim was to contact the most prominent MBA providers possible, of which two executive education organizations in Finland answered the call.

3.2.3 Participants profiles

In qualitative research, participant confidentiality is paramount, especially when the interviewees are notable figures within their fields, as it could make them easily identifiable. Nicknames were used for each participant to ensure privacy and confidentiality. Specifically, the nine participants will be Alpha, Bravo, Charlie, Delta, Echo, Foxtrot, Golf, Hotel, and India. This approach aligns with best research practices, ensuring that the participant's identity is protected and the richness and authenticity of their insights are retained (Saunders, Kitzinger, & Kitzinger, 2015).

Understanding the importance of confidentiality in research, the author has taken deliberate measures to protect the participants' identities. However, it is noteworthy that while keeping their identities concealed, a thorough profile for each has been put together. These profiles, found in Table 6, are detailed yet carefully crafted to avoid identifying information. They offer a deep dive into the participant's academic history, areas of expertise, and other relevant details without jeopardizing their anonymity.

By choosing to take this approach, the study strikes a crucial balance. On one hand, it ensures that the research is credible and trustworthy. Conversely, it emphasizes respecting the participants' rights and protecting their personal information.

Table 6. Codified participants' profile: from Alpha to India

<i>Participant</i>	<i>Background</i>
<i>Alpha</i>	D.Sc. (Econ), Board member of an Executive Education company a well-respected scholar in the field of management.
<i>Bravo</i>	Ph.D. Economics and Education. One of the most cited scholars in the field of business schools and industry-specific strategies.
<i>Charlie</i>	Ph.D. Industrial Engineering and Management. CEO of a Finnish mid-tier Executive Education company/provider.
<i>Delta</i>	Professor Emeritus, a former editor-in-chief of the International Journal of Higher Education. A highly cited author of higher education topics, including several historical perspectives of the field.
<i>Echo</i>	MSc, CEO of a top-tier Executive Education company/provider in Finland
<i>Foxtrot</i>	D.Phil. Science and Technology Policy Studies, Vice-rector of a Finnish university, innovation expert, prolific author, and global innovation advisor.
<i>Gulf</i>	Ph.D. in Computer Science and Analytics. A top-cited scholar and associate professor in the field of learning-analytics.
<i>Hotel</i>	Ph.D. in Cognitive Science with extensive experience of research and teaching in Human-Technology Interaction.
<i>India</i>	Ph.D. in Economics (Oxford). An independent development economist, World Bank leader in African affairs, and innovator in development policy.

3.3 Data collection

The intricacies of data collection are vital to the integrity of any qualitative study. This section delves into the data collection process of the present research, providing insights into its design, execution, and underlying rationale.

3.3.1 Development and structure of the interview guide

All interviews were conducted via Zoom. This platform was specifically chosen due to its integrated artificial intelligence capabilities that facilitate audio transcription to text, offering both convenience and accuracy. Each participant got a custom set of questions. The aim was to review their contributions to academia and create questions to serve as conversation starters. For the academic participants, a meticulous review was undertaken wherein their topmost peer-reviewed and frequently cited articles were amassed from Scopus. These articles were then segregated based on their direct relevance to the study. A comprehensive review was conducted for articles pertinent to the thesis's core themes. For those deemed tangentially related, only the abstracts were perused. This selective reading strategy enabled a thorough yet time-efficient examination (Holloway & Todres, 2003).

After this review, tailored questions were crafted for each participant, aligning with the thesis's research question (RQ) and objectives. Each set was methodically organized in a PowerPoint document to ensure a seamless flow during the interview process. Charlie and Echo were not scholars but instead fell into the category of practitioners. Both are CEOs of companies that might implement the findings of this thesis, so their real-world experience was highly valued. The questions for these two participants were also tailored to their personal and institutional capabilities. See Appendix 1 to review all the set of questions for every individual interview.

3.3.2 The process of conducting interviews

The interviews followed a systematic pattern, ensuring consistency in the research process. Upon receiving participants' consent, they were emailed a specific set of questions. This preemptive step was rooted in the belief that foreknowledge of the questions enhances the depth and thoughtfulness of responses (King, Horrocks, & Brooks, 2019). Before every interview, a brief 10-minute introduction regarding the study's background was presented. Each participant was heartily thanked for their invaluable contribution following the query phase. Key to the ethical considerations was the explicit request for permission to record and transcribe the session using Zoom's AI capabilities. Unanimously, all participants agreed.

Table 7. Overview of Interview Parameters

<i>Duration</i>	Forty-five minutes to an hour.
<i>Setting</i>	The interviews were conducted online and facilitated through Zoom.
<i>Number of Interviews</i>	A total of 9 interviews were conducted.

3.3.3 Rationale for chosen interview approach and its advantages

Central to this study's methodology was the adoption of a semi-structured interview format. Such a format, characterized by a blend of predetermined questions and the flexibility to incorporate spontaneous ones, offers a dynamic and adaptable conversation structure (DiCicco-Bloom & Crabtree, 2006). This ensures the dialog is rooted in the research's primary aims while being receptive to unforeseen yet essential insights that might emerge during the discussion. It lends itself to the depth, adaptability, and granularity that this study sought, effectively tailoring each interaction to the unique expertise and perspectives of the interviewee.

3.4 Data transcription

Data transcription is a crucial phase in qualitative research, where participant's spoken words are turned into written records. This step ensures the integrity of the data while providing a clear framework for analysis (Bailey, 2008). Upon the completion of each interview, the recording and its corresponding raw transcript were made available within the Zoom platform. However, it was observed that the initial AI-generated transcripts had an accuracy rate of about 60-70%. Such discrepancies could be attributed to various factors, including the participant's fluency in English and the inherent limitations of AI-based transcription tools. Given this, the researcher meticulously reviewed each recording, making the necessary corrections to ensure that every transcript mirrored the spoken words with 100% accuracy. This revision process was not uniform; it took 1 to 3 hours per interview.

The fluency of the participant significantly influenced the time and effort needed. Native or fluent English speakers generally yielded better initial transcripts, while the transcription required more intensive refinement for those whose first language was not English. This observation underscores a broader issue within automated transcription services: their capacity to handle diverse accents, dialects, and speech patterns may not always be optimal. After the transcription refinement process, the amended transcripts were transferred to Notepad on Windows. This platform was chosen for its simplicity and ease of use. Each dialogue was formatted for clarity, ensuring a streamlined format to facilitate subsequent reviews and analyses.

3.5 Data analysis

A critical phase of this research involved dissecting the vast qualitative data derived from the interviews to extract meaningful insights directly aligned with the RQ and the thesis objectives. The method adopted for this meticulous task was Content Analysis (CA), a systematic qualitative research technique used extensively for interpreting and summarizing textual information.

CA enables the systematic examination of communication material. It aids researchers in identifying, quantifying, and interpreting recurring patterns or themes within the text. Initially employed for textual content in media, it has gained prominence in diverse research fields, especially for analyzing and condensing voluminous qualitative data like interview transcripts (Hsieh & Shannon, 2005).

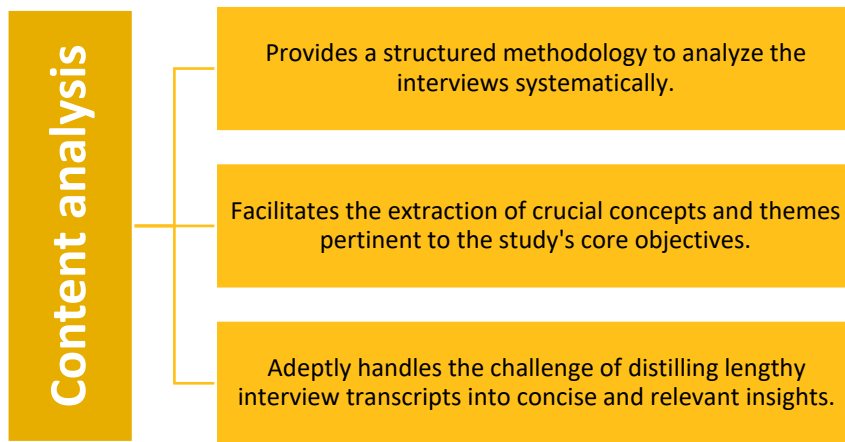


Figure 7. Advantages of Content Analysis for Interview Interpretation (Hsieh & Shannon, 2005)

The primary step involved creating summaries of each interview while focusing on highlights of significance to the study. Each summary was then analyzed, particularly assessing how the shared perspectives contribute or diverge from the resolution of the RQ and the objectives of the thesis. While this section outlines the analysis method and its application, readers should anticipate a comprehensive examination in the “Findings” chapter. This upcoming section will delve deeper into the nuanced insights, dissecting each interview’s contribution in the broader context of the research’s goals.

3.6 ChatGPT as a research assistant while performing content analysis

In the evolving domain of qualitative research, choosing tools and techniques is pivotal for maintaining the analysis's rigor, depth, and unbiased nature. The digital transformation has equipped researchers with various software platforms to facilitate qualitative content analysis. These software options provide an array of functionalities, ranging from coding assistance to thematic categorization. However, as the digital frontier expands, so do the capacity and capabilities of artificial intelligence. ChatGPT emerges as a revolutionary tool in this context, providing unprecedented advantages over traditional qualitative analysis software.

Table 8. The Rationale for Incorporating ChatGPT as a Research Assistant in Content Analysis

<i>Reasons for Selection</i>	<i>Explanation</i>
<i>Depth and Breadth of Knowledge</i>	ChatGPT, based on OpenAI's GPT-4 architecture, is trained on vast amounts of text, granting it an extensive knowledge base. It can contextualize data more comprehensively than other tools, potentially leading to deeper insights.
<i>Objectivity and Unbiased Coding</i>	Human researchers, despite their best efforts, come with their own biases. Using ChatGPT, the coding process aims to be more objective, reducing potential human bias that might tint the analysis.
<i>Flexibility and Adaptability</i>	Unlike many other software options confined to their initial programming, ChatGPT can adapt to the researcher's needs, answer queries in real-time, and provide clarifications where needed.
<i>State-of-the-Art Technology</i>	It would be careless to ignore the monumental advancements AI has achieved. By choosing not to employ a tool as powerful as ChatGPT, we might inadvertently limit our analysis's potential depth and breadth. In an era where technology continually redefines research paradigms, using the most advanced tools is not just a choice; it's an ethical imperative to ensure the highest quality of research.

The motivation behind using ChatGPT is to obtain the main ideas discussed in every interview in bullet points over predetermined areas of focus carefully selected. These bullet points were then used to write the final analysis. For a more detailed understanding

of how ChatGPT was integrated into the content analysis process, an example of a prompt used for coding purposes and the answer from ChatGPT has been provided in Appendix 3. In conclusion, the integration of ChatGPT as a research assistant is a testament to the fusion of traditional research methodologies with the power of AI, ushering in a new era of qualitative research.

4. Findings

4.1 Introduction to the findings

This chapter unveils the rich insights obtained from detailed interviews with leading experts in the fields covered in this study. Through these conversations, a deep dive was performed into the multifaceted aspects of AI-adaptive learning tools, subscription models, and accessibility of online MBA education. Central to the findings is the content analysis of each interview. This method systematically breaks down the invaluable wisdom shared by each participant, offering clarity and depth to their thoughts. The names of our renowned participants are confidential, but their insights ring clear and profound throughout this section. The author remains deeply grateful and, admittedly, awed by the opportunity to interact with such a remarkable group of professionals. Jokingly, there is wonderment if such a star-studded gathering could ever happen again, or if it was a stroke of rare luck.

Up ahead, interviews will be methodically dissected, each section corresponding to a central theme of the thesis. These themes serve as lenses, offering focused perspectives that answer the RQ. Readers can anticipate a clear walkthrough of the analysis process, an in-depth exploration of each theme, and how these insights relate to existing literature. In short, this chapter is a guided journey through expert opinions, blending established knowledge with fresh perspectives. It is a collective effort to add another layer of understanding to the subject. As we embark on this section, prepare for a deeper dive into the heart of the study.

4.2 Content analysis

Content analysis is a research technique used to quantify the content of textual information systematically and objectively. This method enables researchers to sift through large volumes of data to identify prevalent patterns and themes. According to Krippendorff (2019), content analysis “is a research technique for making replicable and valid

inferences from texts, or other meaningful matter, to the contexts of their use” (Krippendorff, 2019). For this study, content analysis was employed to scrutinize each interview, transforming narratives into structured insights that echo the objectives of the RQ. Krippendorff’s (2019) book was also used as the primary parameter presented to ChatGPT to code the transcripts. It is essential to mention that the data obtained from ChatGPT is as good as the prompt used. This systematic approach summarized each participant's content analysis insights in a table. These tables present distilled and coherent findings from each interview, offering readers a clear pathway to understanding the heart of each dialogue concerning the study's goals. Refer to Appendix 2 for a review of each content analysis table.

During the interviews the three main topics of this study were widely discussed. The first pattern identified is that AI-AL has emerged as a pivotal tool in reshaping the educational landscape, especially in the context of online MBA programs. The interviews reveal a consensus on the transformative potential of AI-AL, especially in customizing curricula to meet individual learner needs. Many participants alluded to the limitations of traditional, rigid, and standardized educational models, hinting at the vast potential of AI to offer curriculum customization and language translations, ensuring content relevance and comprehension.

Table 9. Analysis overview of the three main topics of this study

<i>Topic</i>	<i>Instances identified</i>
<i>Artificial Intelligence and adaptive learning (AI-AL)</i>	31
<i>Subscription-based pricing strategy</i>	21
<i>Accessibility for developing regions</i>	20

Moreover, the discussions frequently circled back to the power of AI in bridging the gap between Western-centric educational models and the unique challenges, needs, and socio-political landscapes of developing regions. The emphasis on mutual learning further

underscores the importance of leveraging AI to facilitate a bi-directional flow of knowledge, moving away from a colonial, one-sided teaching approach.

Another pattern identified is that cost barriers are prominently featured in the narratives, with participants consistently highlighting the financial impediments faced by students in developing regions. This emphasis on cost barriers implicitly supports the idea of a subscription model as a viable solution to make MBA education more affordable. By pivoting to subscription-based models, online MBA programs can offer a flexible and economically feasible solution, opening doors to a broader demographic. Such a strategy democratizes access to quality education and aligns with the evolving consumption patterns of the digital age, where subscription models are increasingly favored (Wildavsky, Kelly, & Carey, 2011).

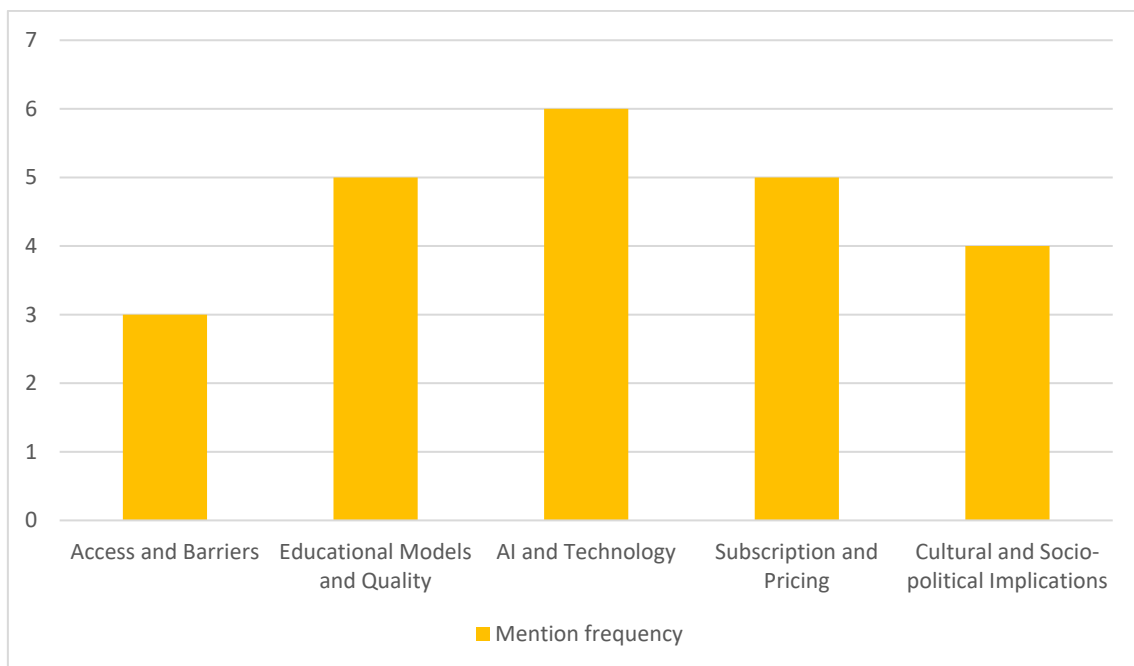


Figure 8. Broad topics and their mention frequency in the interviews.

A subsequent pattern is that accessibility for developing regions is a multifaceted challenge that transcends mere financial considerations. While cost is a significant barrier, the socio-political landscape, language, and the historical context of education being an

export from dominant Western regions further compound the issue. The interviews revealed a pressing need for more inclusive curricula, which not only aligns with global perspectives but also caters to the diverse socio-political and cultural nuances of developing regions. There is a palpable call for innovative strategies that prioritize localized experiences, academic flexibility, and cultural sensitivity. Immersing students in real-world international settings, such as experiential learning in Peru, was frequently mentioned as a holistic educational model.

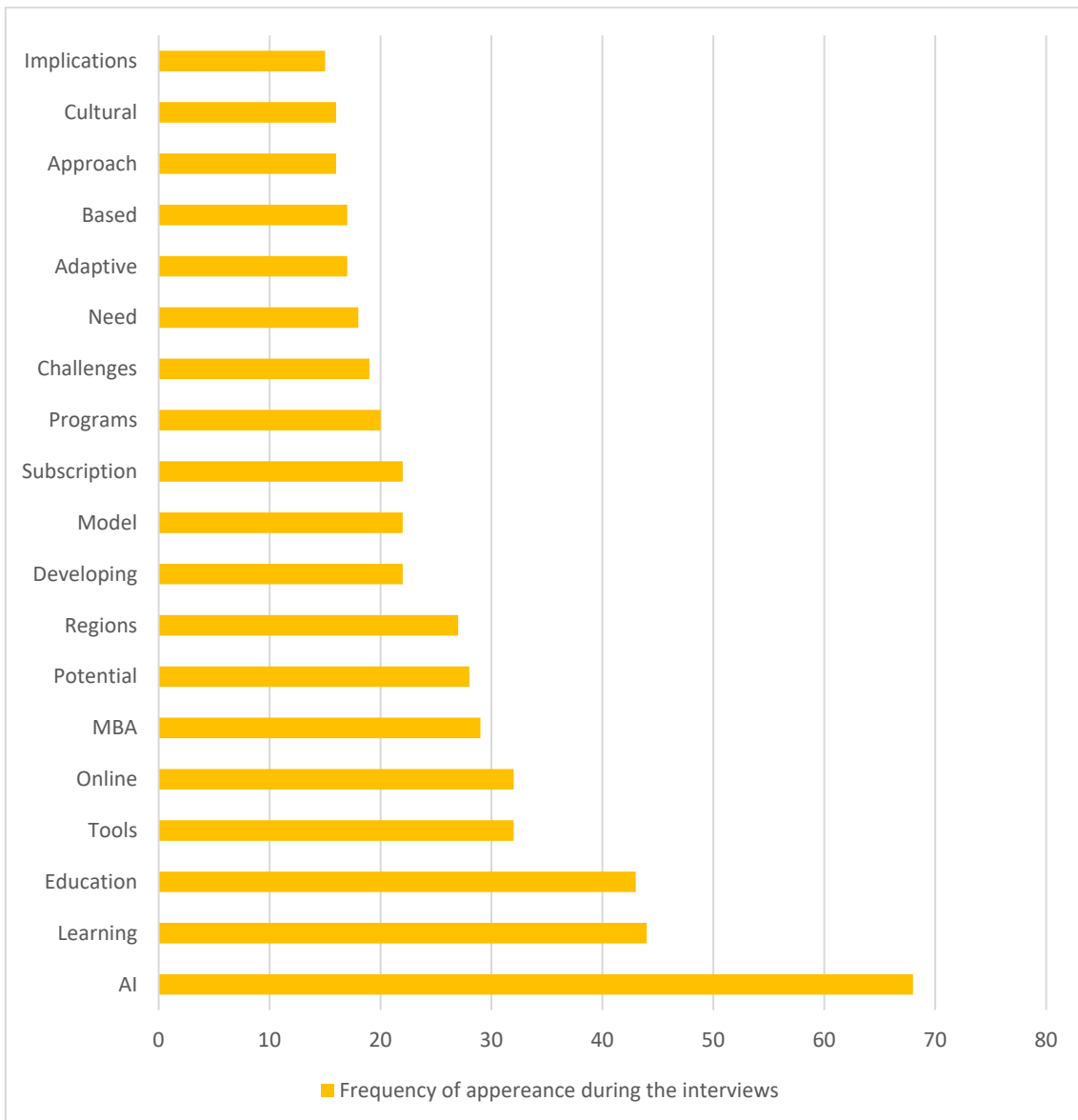


Figure 9. Interviews buzzwords

In synthesizing the insights from the interviews, it's evident that integrating AI-AL and subscription-based pricing models is critical to revolutionizing online MBA programs for developing regions. AI-AL can address the curriculum and language challenges, ensuring content relevance, while subscription pricing can dismantle financial barriers. However, institutions must go beyond these solutions for a truly inclusive and global MBA program, embedding academic flexibility, cultural sensitivity, and real-world experiences at the heart of their offerings. Only then can online MBA programs be genuinely accessible, feasible, and enriching for students from developing regions.

4.3 Theme-specific analysis

4.3.1 AI-AL

The interviews show that AI-adaptive learning plays a pivotal role in the future of online MBA programs. Each participant brings unique perspectives that interlace to form a comprehensive understanding of this theme. Alpha discusses the flexibility and segmentation of the market in online MBA programs, stating, *"The demand side and the challenges of differentiating between those who want an MBA and those who merely want professional development."* Charlie highlights, *"This AI word is now becoming part of our daily lives... I see that there are many opportunities to enhance the quality of these training programs."* From an educational expert background, Echo underscores that developing regions often employ mechanical systems. Echo mentioned, *"Online education in developing regions speaks to a different audience."* This sentiment parallels Foxtrot's emphasis on tailoring learning to individual needs, with Foxtrot stating, *"The main benefit in general for higher education is that you can personalize the learning experience."*

But while AI's potential is clear, so are its limitations. Gulf delves into the delicate balance between AI's prowess and inability to replace the genuine human social aspect of learning, emphasizing *"The value of personal feedback and the limitations of AI in providing that."* This sentiment echoes Foxtrot's emphasis on the irreplaceable value of personal feedback. Hotel takes it a notch further, discussing the emotional implications of AI,

suggesting that although AI can personalize learning, it might also inadvertently make students feel constantly observed. The many views from the interviews show how AI is used in education. Also, it can be discerned from the conversations that AI is no longer just a tool; it's a potential game-changer but requires sensitive implementation to ensure that the "human touch" in education is not lost.

4.3.2 Subscription-based pricing models

The subscription-based pricing model for online MBA programs emerges as a significant topic of interest across the interviews. The participants view its feasibility, strengths, and challenges through different lenses. Bravo hints at the subscription model's adaptability stating, *"Subscription models could also work for organizations who sponsor employees to attend. Potentially a subscription-based price model could work... You have to have some value-added components beyond the education that's being offered."* Echo emphasizes its potential to make programs cost-effective, noting, *"online education is obviously very scalable and pairing it with subscription can help the scalability."* Foxtrot provides a nuanced perspective, delving deep into balancing the model's price and reputation, mentioning, *"Online programs... will compete on reputation to some extent the perception of quality, and then, especially price."* India circles back to this theme, emphasizing the need for a flexible pricing model in developing regions. India and Echo highlight the importance of collaboration by engaging in local partnerships. The consensus seems to be that while the subscription model offers great promise regarding accessibility and affordability, it is not without its challenges. A one-size-fits-all approach might not work, and a nuanced, region-specific strategy is the key.

4.3.3 Accessibility in developing regions

Accessibility in developing regions is the third most discussed theme, mentioned in every interview with varying emphasis. Bravo and Charlie's insights indicate the challenges and opportunities of technology adaptation in different regions. Their focus on localizing content to match cultural nuances underscores the need to customize rather than generalize

solutions. Bravo stated *“Students, at least in the US, still want some form of face-to-face. They want the flexibility that online can offer, but they want some face-to-face components while this might not be the case in Africa.”* Echo and Foxtrot further discuss the importance of accessibility, touching on different facets like differently abled inclusivity and cultural barriers. Echo mentions, *“There are cultural challenges. There are different customs from place to place that could affect the outcome of learning, but not so much the access.”* Especially in regions like the Middle East, Foxtrot suggests that cultural expectations might need a hybrid learning model.

India, with its leadership role in African affairs, brings invaluable insights. India delves deep into the intricacies of making online MBA programs accessible in developing regions, pointing to economic contexts, infrastructural challenges, and the necessity of understanding cultural nuances. India’s emphasis on forging local partnerships echoes the earlier sentiments, hinting that local collaborations might be the “secret sauce” to making online MBAs genuinely accessible. This can be appreciated when India states, *“The key for you is to have really solid partners.”* In conclusion, accessibility is about providing content, understanding, adapting, and collaborating. The richness of insights from the participants underlines the multifaceted nature of this challenge and suggests an inclusive and innovative way forward.

4.4 Interlinking or overarching observations

4.4.1 The intersection of AI and accessibility

AI’s potential for adaptive learning was primarily recognized as a beacon of hope for increased accessibility. For instance, Echo touched upon the mechanical systems used in developing regions, suggesting that AI could modernize these systems. Yet, with Hotel’s perspective on AI’s emotional implications and the idea of students feeling constantly watched, there’s an inkling that accessibility is not just about reaching more people but ensuring they feel secure and comfortable in their learning environments. This

convergence suggests that while AI can bridge accessibility gaps, its application needs sensitivity to regional cultural, emotional, and social nuances.

Table 9. Voices from the field: Summary table of the theme-specific analysis

<i>Theme</i>	<i>Key Insights</i>
<i>AI-AL</i>	<ul style="list-style-type: none"> • AI-AL plays a pivotal role in online MBA programs. • AI-AL offers flexibility, segmentation, and personalization. • AI-AL has limitations, especially in replacing the human touch in education.
<i>Subscription-based pricing models</i>	<ul style="list-style-type: none"> • Subscription models are adaptable and can be cost-effective. • They offer potential for scalability. • It could provide a nuanced, region-specific strategy.
<i>Accessibility in developing regions</i>	<ul style="list-style-type: none"> • Need to customize solutions based on cultural nuances. • Importance of understanding and adapting to cultural barriers and expectations. • Local partnerships are crucial for genuine accessibility.

4.4.2 Pricing models and developing regions

The subscription-based pricing model stands out as an avenue to democratize education. None of the participants provided an example of another pricing tool that could be as effective as a subscription model. With Echo and Foxtrot emphasizing cost-effectiveness, and India stressing the need for flexible pricing in developing regions, it becomes clear that this model can be instrumental in increasing accessibility. However, it's not a straightforward solution. The consensus hints at a need for regional customization, suggesting that understanding local economic landscapes is crucial for the success of such models.

4.4.3 AI's role in pricing

While AI's adaptability in learning was a primary point of discussion, its potential implication in subscription-based pricing models wasn't directly mentioned but can be inferred. AI can dynamically assess regional preferences, economic climates, and user

behaviors to suggest region-specific pricing strategies. The contributions of participants like Bravo and Delta hinted at this interplay by emphasizing technology's role in adapting to different contexts.

4.4.4 Cultural sensitivities across themes

The importance of understanding and adapting to regional and cultural intricacies was a recurring sentiment. Whether discussing AI's role, pricing models, or general accessibility, the necessity to respect and accommodate cultural nuances was a unanimous observation. Foxtrot's insight into cultural expectations in the Middle East and India's emphasis on forging local partnerships are a testament to this interconnectedness.

4.5 Discrepancies or outliers

Throughout the content analysis, most participants provided views that aligned coherently with the three primary themes. However, some discrepancies or outliers in opinions are worth noting. For instance, while the potential of AI for adaptive learning was widely acknowledged, Hotel's concern about AI's emotional implications marked a deviation. The sentiment of students possibly feeling "constantly watched" introduced a dimension of discomfort, contrasting the largely optimistic views around AI's capabilities.

Similarly, while subscription-based pricing models were primarily seen as a solution for accessibility, India's emphasis on potential financial instability caused by such models was an outlier, suggesting that what works in one region might not be feasible in another. These outliers serve as a reminder that while overarching themes can offer comprehensive insights, individual perspectives, and unique concerns remain integral to building a holistic approach.

4.6 Conclusions

The comprehensive insights gathered from the interviews underscore the nuanced interplay of technology, economic structures, and cultural sensibilities in shaping the future of online MBA programs. AI's role in education is recognized as both a game-changer and a challenge. While its capability to personalize learning experiences is undeniable, concerns about its emotional implications and the possible erosion of the human touch in education persist. Among the participants, there is a sentiment that AI's integration should be balanced and sensitive to ensure the preservation of the essential human element in learning. On the financial frontier, a subscription-based pricing model is perceived as a potentially valuable strategy to democratize education. They present opportunities to make online MBA programs more affordable and accessible, especially in developing regions. Yet, there is a shared caution: the importance of maintaining quality and the understanding that a universal model might not suit every region's unique economic and cultural contexts.

Accessibility in developing regions is the most prominent theme, emphasizing cultural nuances, technological adaptability, and local collaborations. The consensus is clear: true accessibility is multi-dimensional, going beyond mere content provision to embrace cultural, economic, and infrastructural considerations. Interlinking these themes reveals an intricate web of interdependencies. The success of an AI-AL-based online MBA program lies in recognizing these intersections, such as the role of AI in shaping pricing strategies or the influence of cultural sensibilities across all themes. Embracing this interconnectedness becomes crucial to address the challenges and opportunities in online education holistically.

Yet, as the outliers in the analysis remind us, while general themes provide direction, individual concerns and perspectives must not be overshadowed. Crafting an inclusive future for AI-AL-based online MBA programs, innovative, and genuinely global demands a blend of both macro strategies and micro considerations. As the landscape of online education evolves, these insights, rich in depth and diversity, will guide its trajectory

toward a more accessible and empathetic future. The following section takes this content analysis into action by exploring the real-world implications and attempting to resolve the study.

5. Discussion

In this chapter, the findings derived from the interviews are discussed to conclude this research. Central to the inquiry is exploring how AI-AL and subscription-based pricing models can be effectively amalgamated to enhance the accessibility and feasibility of online MBA programs for developing regions. These interviews, characterized by depth and precision, offer a panoramic view of the current landscape of these topics. Through a systematic content analysis of the conversations, patterns, and insights have been identified that answer the RQ and illuminate areas previously less understood by the academic community.

In this section, the author aims to establish a direct correlation between the findings and the prevailing literature. By juxtaposing data with established theories and models, the results are assessed if they corroborate, challenge, or augment the existing knowledge base. Also, it is imperative to delineate the practical implications of these findings, providing valuable recommendations for educators, policymakers, and managerial professionals. As we navigate the intersections of AI-AL, subscription models, and online MBA education, it becomes evident that this research contributes to the broader academic narrative. Moreover, these understanding shapes informed strategies in educational methodologies and technology integration.

It is essential to highlight the findings' significance in the RQ context. The evidence and insights from the interviews offer a robust answer, bridging the gap between the potential of AI-AL and subscription models and their real-world application in making online MBA programs more attainable for developing regions.

5.1 Ethical considerations

In qualitative research, protecting participants' identities and the data they provide is of utmost importance, especially when human subjects are involved. Such measures not only respect individuals' rights but also contribute to the integrity of the research

process. To protect participants' identities, pseudonyms, as mentioned previously, were assigned. This aligns with ethical recommendations for research (Orb, Eisenhauer, & Dianne, 2001). Ensuring anonymity not only upholds the privacy rights of participants but also diminishes the potential for biases that can occur when researchers or readers know the respondent's identities. All participants were adequately briefed on the purpose of the study and the subsequent steps for data management. They knew how recordings and transcripts would be handled, stored, and potentially utilized. Refer to Annex 4 for reviewing the GDPR-compliant form shared with the participants of this thesis.

Data is stored on both a hard drive and cloud storage to ensure its preservation. Dual storage methods safeguard against data loss, ensuring longevity and availability for future research endeavors. Participants were also informed that their data might be used in future studies, ensuring transparency in research intentions. Beyond the measures for data preservation, stringent security protocols are in place to prevent unauthorized access to stored data. This includes encryption of files and password protection. See Annex 5 to read the data management plan created for this study.

5.2 Conceptual implications

In academic research, insights acquired from novel findings serve as criteria that can either validate or challenge pre-existing theoretical constructs. This research on online MBA programs, AI in education, subscription pricing models, and accessibility in developing regions, when juxtaposed against existing theories, offers a rich collective of intersections, alignments, and deviations. The forthcoming discussion will unravel these dynamics.

5.2.1 Comparison with existing theories

The transformative nature of AI in personalizing learning experiences has been a focal point in academic discussions. Francesc , Subosa, Rivas, and Valverde (2019) have also emphasized AI's capability to revolutionize learning by tailoring it to individual needs.

Echo and Foxtrot's experiences underscore this potential, highlighting AI-AL tools' strides in customizing education. However, the mechanistic aspects of education in developing regions, as posited by Malone (2004), indicate that not all AI integrations are equally beneficial, with repetitive tasks emerging as prime candidates for automation (Malone, 2004). Hotel's concerns about the implications of AI's intersection with emotional learning, and data privacy align with O'Neil (2016), who warned of AI algorithms' opaque operations (O'Neil, 2016). Hotel's introduced term "resigned acceptance" aligns well with Turkle's exploration of societal shifts concerning technology (Turkle, 2016), and Carr's introspection on how the internet molds cognitive functions (Carr, 2010).

Christensen's (2013) theory of disruptive innovation gains prominence in light of the increasing gravitation towards subscription models in online MBA education, especially as illuminated in India's interview. This model, potentially democratizing access to top-tier education, can be seen as a pathbreaking shift from traditional modes. However, Foxtrot's and Marginson's observations raise pertinent questions about maintaining the delicate balance between accessibility and reputation in education (Marginson, High participation systems of higher education, 2016). Echo's reverence for the Finnish educational paradigm, recognized globally for its innovative policies, is in sync with Sahlberg and Hargreaves' book on how the Finnish education model could have a global impact (Sahlberg & Hargreaves, 2011).

Wenger's concept of "communities of practice" gains traction with the emphasis on collaborative learning and partnerships emphasized by both India and Foxtrot (Wenger, 1998). Moreover, this focus on local partnerships gels well with Teferra and Knight's (2008) emphasis on the international collaboration essential for fostering local relevance in education. Gulf and Foxtrot's championing of human interactions in education, despite AI advancements, reflects Biesta's (2015) sentiments against reducing education to mere "learnification," emphasizing the holistic development of individuals through genuine human interactions (Biesta, 2015).

5.2.2 Discrepancies with existing literature

While the findings predominantly align with established literature, there are notable discrepancies. Brynjolfsson & McAfee (2014) present a more cautious view, speculating that rapid AI advancements could exacerbate socio-economic disparities, casting shadows on the equitable access to AI-empowered MBA programs (Brynjolfsson & McAfee, 2014). Moreover, Brown & Adler's (2008) standpoint challenges the almost holy status of subscription models, suggesting that democratizing elite education might come at the cost of diluted educational value. Hotel's idea of "resigned acceptance" contrasts with Selwyn's advocacy for a more critical look at the burgeoning dominance of digital technology in education (Selwyn, 2016). Though mostly positively received, the universally applauded Finnish collaborative learning system faces critiques, as Lave points out, suggesting that shared practices might not always redound to benefit the learning community (Lave, 1991).

5.2.3 New insights

Emerging from this research are a few insights that have the potential to reshape conventional thinking in the field. One such revelation, underscored by participants like Echo and Foxtrot, is the burgeoning potential of AI-AL in personalizing learning paths within online MBA courses. This insight moves past the traditional view of AI-AL as merely a tool for automating repetitive tasks, proposing its transformative capacity in reshaping pedagogical strategies instead. Another illuminating insight revolves around the "resigned acceptance" phenomenon, as introduced by Hotel. This societal shift towards accepting the omnipresence of technology in educational settings drives educators and policymakers alike to reconsider the ethics, modalities, and implications of integrating AI-AL tools in curricula. Furthermore, the discussion on subscription models reveals a growing trend in democratizing elite education. While the financial feasibility of these models is clear, their long-term efficacy and implications on pedagogical quality are areas for further investigation.

5.2.4 Modify or propose theories

The findings, particularly from Echo and Foxtrot, suggest potential modifications to existing theories regarding AI's role in education. Instead of viewing AI solely as an automation tool, there's a burgeoning argument for its role as a dynamic partner in curating tailored learning experiences. This reimagines existing AI education models to accommodate AI's growing influence in personalizing education. Furthermore, as detailed by Hotel, the emerging concept of "resignated acceptance" may prompt academia to revisit and perhaps recalibrate theories on technological integration in education. Recognizing this trend could propose new theoretical frameworks around the ethical, psychological, and societal implications of such an acceptance.

5.2.5 Contribute to debates

The results of this research contribute to several ongoing debates in the educational sector. For instance, the efficacy and ethicality of integrating AI-AL tools in education, a discussion energized by the contrasting views of Francesc , Subosa, Rivas, and Valverde (2019) and O'Neil (2016), is further complicated and enriched by the findings. Moreover, while echoing Christensen's (2013) theory of disruptive innovation, the subscription-based model's potential to democratize elite education also invites scrutiny, as noted by Brown and Adler (2008). This adds another layer to the debate on the balance between accessibility and quality in education.

Lastly, despite the AI surge, the persistent emphasis on the indispensable value of human interaction in learning reignites the dialogue on what constitutes genuine education. Here, the research aligns with Biesta's (2015) concerns, promoting a discourse that values education as a transmission of knowledge and a holistic process of human cultivation.

5.3 Managerial implications

With the undeniable growth of online MBA programs and the nuanced insights gathered from the interviewees, it becomes of utmost importance for decision-makers in the education and business sectors to comprehend the ramifications of such changes. This section sheds light on the practical implications of the findings, aiming to guide managerial decisions, strategic planning, and forward-thinking initiatives.

5.3.1 Practical applications

Drawing from the qualitative data gathered, particularly from Echo and Foxtrot's emphasis on AI-AL tools, it becomes clear that institutions could leverage artificial intelligence to individualize learning experiences, optimizing the learning curve of their students. Echo's insights resonate with Francesc, Subosa, Rivas, and Valverde's (2019) observations, emphasizing that personalization through AI enhances learners' engagement and retention. Managers in educational technology firms could prioritize integrating such adaptive tools and creating products that cater to the diverse needs of learners. Furthermore, the discussions surrounding the subscription-based model, notably accentuated in India's narrative, imply a seismic shift in how MBA education is consumed. Universities, ed-tech startups, and e-learning platforms might consider exploring this pricing strategy, potentially democratizing access to top-tier education. Not only could this approach increase enrolment rates, but it could also foster long-term loyalty, primarily if continuous value is delivered to subscribers. Lastly, as underlined by India's emphasis on local partnerships, educational institutions aiming to penetrate new regions or markets should prioritize collaborations with local entities. These alliances could facilitate a smoother integration, addressing different territories' unique cultural, linguistic, and logistical challenges.

5.3.2 Recommendations

To address data privacy concerns, elucidated by Hotel and echoing the apprehensions discussed by O'Neil (2016), institutions and businesses venturing into online MBA

education should place importance on creating transparent data usage policies. Given the rise of data breaches and concerns surrounding personal data, a transparent approach could elevate the trust of stakeholders, including students and their employers. For regions with infrastructural or connectivity challenges, institutions could explore hybrid models. These would involve a blend of online resources, offline capabilities (like downloading course material for offline viewing), and occasional on-site sessions. Such an approach would ensure that students can access quality education regardless of geographical constraints. Lastly, as highlighted by Foxtrot and India, it is essential to consider engaging in local partnerships to cater to the needs of specific regions.

5.3.3 Caution

While integrating AI in education has merits, managers and decision-makers should be wary of over-reliance. Gulf's and Foxtrot's reflections on the importance of human interactions serve as an important reminder that the human touch remains irreplaceable. Institutions should balance technological advancements with opportunities for real-world interactions, peer discussions, and mentorship sessions.

5.3.4 Broaden perspectives

Incorporating AI-AL tools in education, the potential of subscription-based models, and the importance of local partnerships all underscore a broader implication: the need for a shift in perspective. Institutions and businesses should transition from a traditional mindset to a more adaptive, learner-centric, and globally inclusive outlook. The reflections from Hotel on societal shifts towards technology, reminiscent of Turtle's (2015) observations, further solidify this need. By doing so, they stand to create more impactful, relevant, and sustainable educational experiences for learners across the globe.

5.4 Suggestions for future research

Given the nature of the current study's focus on the feasibility of online MBA programs for developing regions, the use of subscription-based pricing models, the integration of AI-AL into online MBA programs, and the associated challenges and opportunities, there are several avenues that future research can explore to understand further and enhance this paradigm shift in education.

5.4.1 Extensions of the research

Building upon the existing study can take multiple forms. A recommendation would be replicating the research in diverse geographical and cultural contexts, understanding nuances specific to regions, cultures, and educational frameworks. The data collated in the present study can be enhanced with a systematic literature review, which could highlight newer facets of how the proposed online MBA model could be developed. Moreover, while the current interviewees provided a wealth of insights, it is conceivable that expanding the number of participants could offer more holistic data, enabling a richer comprehension of the topics at hand.

5.4.2 Unanswered questions

Several intriguing points emerged from this study that demand further exploration. The impact of the COVID-19 pandemic on educational preferences, specifically the ascendancy of online MBA enrollment over face-to-face alternatives, was touched upon. However, comprehensive data on this shift remains elusive. As the post-pandemic era evolves, it would be invaluable for researchers to delve into this, filling the existing research void. Another area that stands out is integrating AI tools into current Learning Management Systems (LMS) like Moodle. Given the nascent stage of many AI educational tools, there is a significant gap in understanding how these integrations might function optimally. Furthermore, the overarching question related to the costs of such integrations remains ambiguous. A tangible estimate can be achieved only through an intricate cost analysis, considering various project scopes and scales.

5.4.3 Methodological advancements

While the present study uses a qualitative interview-based methodology, future researchers might benefit from a mixed-methods approach. This would synergize qualitative insights with quantitative data, offering a more holistic perspective. Integrating advanced technologies such as AI-driven content analysis tools, including using ChatGPT as a research assistant, could help unlock a significant shift in effectiveness, allowing future researchers to achieve results faster and answer more complicated questions. Universities should not only promote tools like ChatGPT in academic research but actively encourage it, given the depth and breadth they add to scholarly inquiries.

Moreover, longitudinal studies that monitor the shift in student preferences and learning outcomes over extended durations can further support and enhance the present research results. To conclude, this study has laid a foundation for comprehending the relationship between AI-AL tools, online MBAs, and the inherent challenges and has also spotlighted numerous opportunities for profound investigation. This ensures that the academic dialogue in this field remains dynamic and continuously evolving.

5.4.4 Case selection limitations

The nature of the sample size and participants in this study is not aimed at achieving statistical generalizability, but rather conceptual generalization towards theoretical propositions. While the insights provided by all participants are valuable, it is essential to note that qualitative research seeks to generalize findings in a conceptual manner rather than a statistical one (Yin, 2017). Therefore, while the specific group of participants might introduce biases based on their backgrounds, experiences, and perspectives, the goal is not to wholly extend these findings to a broader population but to derive theoretical insights that can be applied in similar contexts (Palinkas, et al., 2015)

5.4.5 Subjectivity

Qualitative research, by its very nature, struggles with issues of subjectivity. The researcher's understanding and biases influence content analysis's coding and theme extraction process (Maxwell, 1996). While efforts were made to remain objective, interpretations of data might have been influenced by preconceived notions, potentially affecting the final analysis. This issue also exemplifies why AI tools such as ChatGPT introduce a new way of compiling and processing data more unbiasedly.

5.4.6 Scope limitations

Specific topics or areas were not extensively explored due to the study's focus or time constraints. For instance, while the impact of the COVID-19 pandemic on educational preferences was touched upon, an in-depth exploration was outside the study's scope. Similarly, the detailed mechanics of AI tool integrations in platforms like Moodle were not delved into extensively. In summary, while the study's findings contribute significantly to understanding all three main topics for online MBA programs, it's vital to interpret the results within the aforementioned contextual limitations.

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Appendices

Appendix 1. List of questions for every individual interview

<i>Participant</i>	<i>Background</i>
<i>Alpha</i>	<p>What are your views on online MBA programs? Challenges? Benefits?</p> <p>Do you think that the perception of quality of an online MBA is below than a normal presential MBA?</p> <p>In your opinion, what are the pros/cons of incorporating AI-adaptive learning (AI-AL) tools in online MBA programs, and how do you see it working in practice?</p> <p>How feasible do you think a subscription-based pricing strategy is for online MBA programs?</p> <p>In your opinion, what are some of the major barriers that developing regions face when accessing quality business education?</p>
<i>Bravo</i>	<p>Can you share your thoughts on the current state of online MBA education and the challenges it faces?</p> <p>Do you think that now the barriers will be less for the for the online programs?</p> <p>How do you visualize a subscription-based pricing model working in practice?</p> <p>Do you think that the pricing should be based on the perceived value that the customer will receive?</p> <p>Do you think that subscription-based pricing models have the potential to change the landscape of online MBA education?</p> <p>What advantages (if any) do you think a subscription-based pricing model could offer over traditional per-credit or per-course pricing?</p> <p>What do you think are the key factors to consider when implementing a subscription-based pricing model for an online MBA program?</p> <p>What do you think will be a good testing period for a program like this?</p> <p>And when it comes to time, how long should be enough to know to decide on the program's feasibility?</p> <p>How can schools balance affordability with maintaining program quality and competitiveness in the marketplace?</p>

In your opinion, what is the highest measurement of a program's quality?

If we take a group of graduates, what will be the parameter that you will use to measure the program's quality?

Can you share examples of schools or programs implementing a subscription-based pricing model or similar?

How can schools leverage technology and data to ensure that pricing is fair and sustainable for both the school and students?

What impact do you think subscription-based pricing models will have on student retention and graduation rates in online MBA programs?

How do you see schools addressing concerns around variable costs and fluctuating student enrollment in a subscription-based pricing model?

What impact do you think subscription pricing models will have on the perception of the value of an MBA degree?

How can schools use subscription-based pricing models to attract a more diverse range of students, including those from non-traditional backgrounds or those with financial constraints?

Finally, what advice do you have for schools considering implementing a subscription-based pricing model for their online MBA programs, and what challenges should they anticipate and prepare for?

Charlie

Could you share some of the major challenges that online MBA and presential programs face currently, based on your experience?

How do you visualize AI-adaptive learning tools enhancing the quality of online MBA programs?

In your opinion, is a subscription-based model viable for online MBA programs? Why or why not?

How can online MBA programs with these features better accommodate the educational needs of developing areas?

What measures can universities or business schools take to design an online MBA program that is cost-effective, accessible, and high-quality for students in developing regions?

Do you believe that spreading the Finnish higher education pedagogical model through an online platform could yield positive outcomes for Finland? If so, could you elaborate on how?

Delta

Based on your historical perspective gained from your research, what do you think the new trends in higher education will be in the next 10, 20, 30 years?

Based on your research on the cultural and identity aspects of higher education, what challenges do you foresee in implementing autonomous artificial intelligence tools in the learning process of higher education providers?

How could the Finnish higher education system contribute to the development of accessible online higher education programs targeted at developing regions?

What are the moral implications in introducing AI tools in higher education pedagogy?

Echo

What is your opinion on online programs for continuing education and executive education? Pros, Cons.

How can AI tools improve the online learning experience?

Do you think that subscription-based pricing models are feasible for online programs? Why or why not?

Can online programs use these characteristics to better cater to the needs of developing regions?

What steps can universities or business schools take to design online programs that are affordable, accessible, and high-quality for students in developing regions?

Do you think that exporting the Finnish higher education pedagogical model through an online program could be beneficial to Finland, if so, how?

Foxtrot

In your opinion, what are the key benefits of incorporating AI-adaptive learning tools in online MBA programs, and how do you see it working in practice?

Do you think an online MBA will fall into the category of a mid-range product?

Do you think that AI-adaptive learning tools have the potential to change the landscape of online MBA education in the near future?

What challenges do you foresee in the adoption and implementation of AI-adaptive learning tools in online MBA programs?

Follow up question: ethically, how far can we push these tools when it comes to replacing human interaction? What do you think will be the point that we say, like, okay, I think we don't need to use these AI tools anymore, we need a real person. So which point do you think that will be?

How feasible do you think a subscription-based pricing strategy is for online MBA programs?

What are the potential advantages and disadvantages of a subscription-based pricing model in the context of online MBA education?

How might a subscription-based pricing model impact the accessibility of online MBA education to learners in developing regions?

In your opinion, what are some of the major barriers that developing regions face when accessing quality business education?

Do you think that AI-adaptive learning tools and subscription-based pricing strategies address these barriers?

What role do you think executive education providers can play in making online MBA education more accessible to learners in developing regions?

Gulf

What is adaptive learning?

Follow-up question, when it comes to ICT, what would be adaptive learning in the field of your research?

What is an AI-powered adaptive learning tool (AI-AL)?

follow-up question, do you think that AI-AL will be able to increase the sense of social presence in a platform by learning on the habits of individuals and trying to replicate social cues to keep them engaged?

What are the pros/cons of AI-AL tools in higher education?

In your opinion, what AI-AL tools could be used in online programs in a university setting?

Do you think that there will be, or are at the moment in the works, APIs that are going to use this kind of technology that you can integrate into learning platforms?

Synchronous or asynchronous, what are the pros/cons of each method when using AI-AL?

Should AI-AL be implemented in LMSs (i.e., Moodle)? Any current examples?

Can AI-AL improve quality of higher education? if so, how?

What recommendations would you give to universities that are considering implementing AI-AL tools for their online programs?

Hotel

Given your expertise in human technology interaction, how do you envision AI adaptive learning tools, transforming the online MBA education experience?

Do you know which tools or by name we are talking about right now?

Can you explain how cognitive semiotics might influence the design and use of AI-adaptive learning in an online MBA context?

How can we ensure that AI-adaptive learning systems are ethical and respect users' privacy, particularly in an online MBA platform? So, who set the boundaries?

How could human-centered design principles be employed in AI-adaptive learning systems to make online MBA programs more accessible?

Can you give your opinion on, or your views about the role of trust in data-driven systems, particularly AI-adaptive learning tools, in the context of online MBA education? Particularly in this kind of tool that we are talking about.

How do you foresee AI-adaptive learning tools navigating these sensitive areas while still providing a personalized learning experience?

Based on your work in embodied and multisensory user experiences, how can these elements be incorporated into the design of an AI-adaptive learning platform for online MBA students?

India

Based on your extensive experience in the field of international development, what do you see as the most significant challenges in providing high-quality education programs from low to high middle-income individuals in emerging economies?

From your perspective, how can we address the digital divide and infrastructure issues that often limit access to online education for lower-income individuals in these regions?

What strategies or policy recommendations would you suggest for governments and educational institutions to better support the successful implementation of affordable online higher education programs in emerging economies?

In your work at the World Bank, you focused on improving service delivery in developing countries. How can the lessons learned from these experiences be applied to ensure the effectiveness and sustainability of education programs intended to be delivered online?

Can you share any examples of successful interventions or initiatives that have been able to provide affordable and high-quality education to underserved communities in emerging economies, and what factors contributed to their success?

Appendix 2. Content analysis for every participant

Content analysis for Alpha

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	Alpha's discussion centers around the accessibility and dynamics of business education. Notably the delivery of business education in developing regions. The setting reveals a backdrop of traditional Western-centric education models juxtaposed against creating regions' specific needs, challenges, and socio-political landscapes.
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • Barriers in Developing Regions: Alpha repeatedly reiterated the role of cost as a crucial impediment. Additionally, the socio-political landscape and language emerged prominently as challenges. • Education as an Export: A historical context was evident, where education has been a financial export from dominant Western regions. This perspective has gradually evolved. • Mutual Learning: This theme surfaced recurrently, emphasizing a shift from a one-sided, colonial teaching approach to a mutual knowledge exchange. • Business Models with Social Value: Companies like Colgate and General Electric were highlighted for their strategies addressing social needs before creating demand. • Immersive Experiences: The idea of immersing students in real-world international settings, such as Peru, was presented as a model for holistic education.
<i>Implicit Meanings and Inferences</i>	<ul style="list-style-type: none"> • The values embedded in Western education might not always align with global perspectives, implying a need for more inclusive curricula. • There is a latent call for innovative business strategies that don't just serve Western business interests but adapt to diverse global contexts. • Alpha's comments about the importance of localized experiences and academic flexibility hint at the limitations of rigid, standardized educational models.
<i>Conclusions and Implications for the Thesis</i>	<p>AI-Adaptive Learning: Although not directly mentioned, the discussed challenges suggest potential areas where AI-adaptive tools could play a role, particularly in curriculum customization and language translations.</p> <p>Subscription-based Pricing: Alpha's emphasis on cost barriers implicitly supports the idea of a subscription model as a plausible solution to make MBA education more affordable.</p> <p>Holistic and Accessible MBA Programs: The shared insights underscore the necessity for a comprehensive MBA program tailored to diverse learners, which blends academic rigor with real-world experiences and cultural sensitivity.</p>

Content analysis for Bravo

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	The interview with Bravo predominantly centers around the feasibility and implications of a subscription-based pricing model in MBA education.
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • Subscription-Based Pricing Model: Bravo consistently mentioned the subscription model concept, highlighting its potential benefits and challenges. Bravo suggests that institutions have yet to embrace this model, especially for MBA programs fully. • Program Quality & Access: The discussion frequently shifted between the need for quality and the desire for greater access. Bravo brought up the potential dilution of program quality but emphasized the model's capacity to attract a diverse student base, including those from developing regions. • Institutional Challenges: There is a recurring theme surrounding institutions' hesitancy and reactive nature, particularly when faced with fluctuating enrollments and variable costs. The inherent risk aversion of institutional stakeholders, such as CFOs, was a notable concern. • Market Perception: An interesting facet of the interview was the discussion about how subscription pricing could impact the perceived value of an MBA. The brand strength of the institution offering such a model seemed to be a significant factor in determining this perception.
<i>Implicit Meanings and Inferences</i>	<ul style="list-style-type: none"> • Changing Institutional Mindset: Beyond the direct challenges of implementing subscription pricing, Bravo subtly hints at the need for a more strategic and less reactive approach from institutions. The mention of a "champion of this model" suggests that a dedicated advocate or team might be necessary for successful implementation. • Cultural Implications of Online Learning: Bravo touched upon the potential lack of community and weak networking in online programs. This can be inferred as a challenge in developing regions where interpersonal connections and networks are pivotal in career progression.
<i>Conclusions and Implications for the Thesis</i>	The interview with Bravo offers rich insights into a subscription-based pricing model's multifaceted challenges and opportunities in online MBA education. While the immediate benefits regarding access and affordability are clear, institutions face strategic, financial, and perceptual difficulties in their implementation. For the broader thesis, this interview underscores the need for institutions to be more proactive and strategic, while also hinting at the untapped potential of integrating AI-adaptive learning tools to enhance access and affordability further.

Content analysis for Charlie

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	<p>The interview was conducted within the larger discourse of leveraging modern educational tools and pricing models to make online MBA programs more accessible, particularly to developing regions. Charlie is an expert who expresses his concerns, understanding, and perspectives on the effectiveness of AI-adaptive learning tools and subscription models in achieving this goal.</p>
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • Quality of Online MBA Programs: A recurring concern Charlie expresses is maintaining the quality of the learning process in online MBA programs. The theme is prevalent in the context of both AI-adaptive learning tools and subscription-based pricing models. • AI in Education: The potential of AI tools to enhance the quality of online programs was a significant theme. While Charlie admits not being entirely familiar with these tools, he acknowledges their increasing role in education and their potential benefits in tracking and improving learning outcomes. • Subscription-based Model: A notable theme is the potential of subscription-based pricing to dilute the educational quality or speed up course completion. The dilemma is whether this model can ensure genuine learning while being affordable. • Challenges in Developing Regions: Charlie repeatedly brings up the unique challenges faced by students in developing areas, ranging from infrastructure limitations to cultural nuances in the approach to learning.
<i>Implicit Meanings and Inferences</i>	<ul style="list-style-type: none"> • Need for Balanced Approach: Throughout the interview, there is an implicit understanding that while technology and new pricing models can open up new avenues, a balanced approach ensuring quality is paramount. • Data vs. Knowledge: Charlie emphasizes that merely having data isn't sufficient. The transition from data to information to knowledge reflects an underlying belief in a holistic approach to AI-driven education rather than mere reliance on data points. • Cultural and Structural Considerations: When discussing the challenges in developing regions, Charlie seems to allude to the importance of understanding the broader socio-cultural and infrastructural landscape. This hints at the need for a tailored, region-specific approach to implementing online MBA programs in these areas.
<i>Conclusions and Implications for the Thesis</i>	<p>The interview with Charlie offers valuable insights, especially concerning the need for quality, the potential of AI, and the considerations required for developing regions. A primary takeaway is prioritizing quality and genuine learning, regardless of the tools or models employed. For the thesis, this stresses the importance of ensuring that any recommended AI-</p>

adaptive tool or subscription model is always aligned with the primary goal of effective learning. Additionally, developing regions' unique challenges and nuances underscore the need for a specialized approach when designing online MBA programs for such areas. Lastly, the transformation from data to actionable knowledge through AI tools suggests a broader discussion in the thesis about the pedagogical implications of AI in online education.

Content analysis for Delta

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	Delta offers insights into the future of higher education, emphasizing the historical constants and possible technological disruptions. He uniquely blends his understanding of higher education's social and institutional responsibilities with the potential challenges and advantages introduced by artificial intelligence. This provides a comprehensive backdrop for an online MBA program aspiring to employ AI-adaptive tools.
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • Continuity in Higher Education: Delta frequently referenced the longstanding traditions of higher education institutions and their resistance to change. This suggests that innovations, like AI tools, must coexist or integrate seamlessly with established pedagogies. • Role of AI in Pedagogy: The potential of AI in augmenting teaching methods was highlighted. Delta expressed skepticism about AI's impact on academic identities but acknowledged its utility in managing big data and assisting with lectures for vast student groups. • Cultural & Identity Challenges: The distinction between European and American academic identities provided an essential discourse on how AI tools might be received differently based on regional academic identities. • Finnish Higher Education: Delta's perspective on the Finnish education system, emphasizing low hierarchy and student responsibility, sets a standard for any international program's pedagogical approach.
<i>Implicit Meanings and Inferences</i>	<ul style="list-style-type: none"> • Reluctance vs. Innovation: While Delta accepts the longstanding traditions of higher education, there's a subtle encouragement for innovators to understand these traditions when introducing new tools. • Ethical Considerations: The discourse on cheating and using AI suggests implementing such tools must come with reinforced ethical teachings. • Adaptation to Cultural Nuances: The emphasis on the differences in academic identities across regions indicates a need for MBA programs to be culturally adaptive, mainly if they aim to penetrate diverse global regions.

Conclusions and Implications for the Thesis

Delta's insights shed light on the complexities of integrating AI tools in higher education. For an online MBA program, it implies that AI-adaptive tools must be delicately balanced with the rich traditions of academia. The perspective on the Finnish higher education system sets a gold standard for the program, emphasizing student responsibility and low hierarchy. Moreover, Delta's comments indicate that while subscription-based models can increase accessibility, attention must be paid to regional academic identities and pedagogical traditions to ensure effective delivery. The interview underscores the need for ethical guidelines accompanying AI integrations, ensuring that the pursuit of accessibility and innovation doesn't compromise learning integrity.

Content analysis for Echo

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	<p>The interview with Echo revolves around the role of AI in shaping the future of online education, the feasibility of a subscription-based model for online MBA programs, and the accessibility of such programs in developing regions. Echo's responses reflect its extensive experience in educational exports and underscore the transformative potential of technology and collaboration in global education.</p>
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • AI and Mechanical Learning: Echo frequently underscores the mechanical nature of many educational systems in developing regions. He believes this makes them susceptible to being replaced by AI, which can handle mechanical tasks more efficiently. • Affordability and Accessibility: The discussion regularly touches on making online programs cost-effective through phased module development and tapping into local expertise. Accessibility, especially for the differently abled, is also emphasized. • Finnish Higher Education Model: Echo's belief in the Finnish educational system's global potential recurs in the conversation, highlighting its innovative nature and potential as a significant export. • Collaboration: The theme of cooperation between Finnish educational entities, rather than competition, emerges as a solid recommendation for substantially impacting international education. • Government's Role: Echo brings up the importance of government support, hinting at a possible avenue for research into how governments can further enable educational exports.
<i>Implicit Meanings and Inferences</i>	<ul style="list-style-type: none"> • Change in Traditional Learning Paradigms: Echo's focus on the mechanical nature of learning hints at the broader concern of the need for educational systems to evolve in the face of AI advancements. • Incremental Development: Creating courses module-by-module suggests a flexible, iterative approach to course development, which might be a valuable strategy for MBA programs.

Conclusions and Implications for the Thesis

- Shared Vision: Echo's emphasis on collaboration suggests that a shared vision, rather than isolated efforts, could be more effective in making Finnish education a primary global industry.

Echo's insights present a compelling case for the role of AI in reshaping online education. They suggest that for online MBA programs to be successful and accessible, they must be adaptive and proactive in the face of technological advancements. The feasibility of a subscription-based model is hinted at through discussions of phased development and cost-effectiveness, although it may need further exploration. Finally, emphasizing collaboration offers a potential roadmap for educational institutions, indicating that combined efforts can lead to better outcomes.

Content analysis for Foxtrot

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	<p>The discourse with Foxtrot is centered around the prospects and challenges of implementing AI-adaptive learning tools in online MBA programs and the potential of a subscription-based pricing strategy. The dialogue encompasses a broad view of higher education and a focused examination of online MBAs. Given that the primary objective is to determine the feasibility of making these programs accessible in developing regions, the interview dives deep into the intricate aspects of technology, pricing, quality, and cultural expectations.</p>
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • Personalization of Learning Experience: Foxtrot frequently emphasizes the potential of AI-adaptive tools to personalize the learning experience, making it tailored to individual needs. • Economic Viability: There's a recurrent theme on the economic aspects, including the costs associated with implementing AI tools and the balance between price and reputation for the subscription-based model. • Ethical Challenges: Concerns about students' data privacy and the ethical dimensions of AI tools were consistently highlighted. • Cultural Expectations and Accessibility: Foxtrot often touches upon the cultural barriers and the need for face-to-face interactions, especially in developing regions and areas like the Middle East. • Pricing Strategy: The differentiation between international and regional fees and the potential of scholarships and stackable education was a repeated topic.
<i>Implicit Meanings and Inferences</i>	<ul style="list-style-type: none"> • The Value of Human Interaction: Despite the advancements in AI, there is an underlying sentiment emphasizing the irreplaceable value of personal feedback and interaction.

Conclusions and Implications for the Thesis

- The Challenge of Scaling: Foxtrot subtly implies that while online MBAs may offer affordability and flexibility, scaling them while maintaining quality will be a significant challenge.
- Market Specificity: The responses suggest that the appeal and success of online MBAs with AI tools may vary across regions due to distinct cultural, economic, and technological landscapes.

Foxtrot’s comments reinforce the potential of AI-adaptive tools in enhancing the online MBA experience while highlighting the economic, ethical, and cultural challenges. The emphasis on balancing price with reputation offers a perspective for a subscription-based model, highlighting its potential to democratize education in developing regions. However, the cultural expectations, especially the intrinsic value of human interaction, indicate that a hybrid model might be preferred. For the thesis, it’s essential to weigh these insights and explore the intricate balance between technology, pricing strategy, and cultural preferences in making online MBA education accessible and valuable.

Content analysis for Gulf

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	<p>The interview revolves around adaptive learning, AI applications in learning, the challenges, and potentials of integrating AI into higher education, and the ways to make online education more accessible and effective. As a scholar in learning analytics, Gulf provides valuable insights into these themes, presenting a good understanding of the potential and limitations of AI in education.</p>
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • Adaptive Learning: Gulf emphasizes the varying interpretations of adaptive learning. Gulf clarifies it as personalized learning, adjusting the pace, content, and approach to fit individual student needs. • AI in Learning: AI's role, as described by Gulf, involves personalizing the learning experience by understanding the student’s capabilities, skills, background, and approach to self-regulation. • Social Aspect of Learning: An important consideration is the limitation of AI in replicating the social aspects of learning. While AI might facilitate content delivery and help in various other ways, it cannot replace the human need for genuine social interaction. • Pros and Cons of AI-AL: Gulf highlights the potential benefits (personalized learning, timely feedback) and drawbacks (misinformation, data privacy concerns, potential biases) of using AI in learning. • Synchronous vs. Asynchronous Learning: Gulf touches upon the economic and feasibility aspects, suggesting that while synchronous is ideal, conditions may dictate the choice. • Application in Higher Education: Gulf’s advice is to approach with caution. While Gulf encourages embracing AI-AL tools, a highlight

Implicit Meanings and Inferences

is understanding their implications and ensuring they are implemented clearly.

- Skepticism towards AI's Human-like Qualities: Gulf's repeated mentions of AI's limitations in recreating human interactions imply a cautious approach towards overstating AI's capabilities.
- Economic Considerations: Implicit in the discussion of synchronous vs. asynchronous learning is the underlying economic considerations of providing quality education at reduced costs.
- The urgency for Higher Education Institutions: The encouragement for universities to approach AI with hope rather than fear highlights an underlying sentiment that institutions may lag in technology adoption.

Conclusions and Implications for the Thesis

Gulf's insights provide a balanced perspective on AI-AL tools' capabilities and limitations. For an online MBA aspiring to be both accessible and of high quality, it would be crucial to incorporate AI tools to maximize their potential, such as personalized feedback, while being aware of their limitations, like not entirely replacing the human touch. The discussion on synchronous vs. asynchronous learning touches on the feasibility of scaling educational offerings for broader audiences, potentially in developing regions. However, the challenge remains in effectively implementing AI tools, considering the students' diverse backgrounds and needs. Gulf's cautionary stance also suggests the need for rigorous evaluation and thoughtful integration of these tools into higher education curricula.

Content analysis for Hotel

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	The discussion revolves around the implications of AI and data privacy in learning, particularly regarding AI-AL tools. The participant, Hotel, has a solid academic background in Cognitive Science, offering expertise in Human-Technology Interaction.
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • AI and Data Privacy: The concern over AI systems constantly monitoring and learning from user behaviors stands out. The concept of "resignated acceptance" is introduced, reflecting a society's gradual acquiescence to technology's omnipresence. • Emotional Experience of Privacy: Hotel emphasizes the psychological effects of being under surveillance, especially by technology. The panoptic model is highlighted where individuals are unaware of when they are being observed. • Embodied and Multisensory User Experience: The interview touches upon tangible learning experiences that are not strictly screen based. The possibility of AI-driven embodied systems that engage users more hands-only is discussed.

Implicit Meanings and Inferences

- **AI's Role in Changing Human Behavior and Thought Patterns:** Hotel articulates concerns about how technology, even without being invasive like the rumored Neuralink (Neuralink, 2023), might already influence human behaviors and thinking processes.
- **Resigned Acquiescence to AI's Pervasiveness:** While society might express discomfort with AI's constant monitoring, there's an underlying acceptance that this is the new normal. This may imply that despite the challenges or concerns about privacy, the convenience and benefits offered by AI might make it an accepted part of future learning platforms.
- **The Value of Privacy:** The discourse suggests that privacy might become a luxury, available only to the elite. In an era where data drives technology, giving up personal information might be the price for access to superior educational tools.
- **Embodied Learning as a Counter to Abstract AI:** Hotel's discussion on embodied learning systems suggests a desire or need to ground AI technologies in tangible, human-centered experiences.

Conclusions and Implications for the Thesis

The interview with Hotel offers rich insights into the emotional and cognitive implications of integrating AI into learning. For an online MBA program targeting accessibility, it suggests a careful balance between leveraging AI's capabilities and addressing privacy concerns. The discussion on embodied and multisensory user experiences implies that future AI-driven learning platforms might need to look beyond traditional screen-based interfaces. Considering these factors will be critical for the success of online MBA programs, especially in developing regions where cultural and societal norms around privacy and technology might differ.

Content analysis for India

<i>Theme</i>	<i>Analysis</i>
<i>Contextual Framework</i>	The interview with India, an esteemed economic figure with an Oxford PhD, a leadership role in African affairs at the World Bank, and innovation in development policy, provides a rich context for understanding the accessibility of online MBA education, particularly in developing regions. Given India's economic development and policy expertise, the insights likely offer a valuable perspective on MBA programs' cost structures and delivery methods, making them more accessible in developing regions.
<i>Key Themes and Frequencies</i>	<ul style="list-style-type: none"> • AI-AL: India implies the potential of AI-AL tools in democratizing education. The critical aspect of such tools is personalized learning experiences, making them more efficient and effective for diverse student populations. • Subscription-based Pricing: A notable frequency in the discourse is the reference to the subscription model's feasibility for online MBA programs. India discusses the potential of this model to

*Implicit Meanings
and Inferences*

reduce financial barriers and to allow more flexible access to course content.

- **Developing Regions' Accessibility:** The narrative often refers to the challenges and opportunities of making online MBA programs accessible in developing regions. India underscores the significance of considering local economic contexts, infrastructural challenges, and cultural nuances.
- **"The key for you is to have really solid partners.":** As stated by India, seeking local partnerships in every region would be the best course of action. This is due to the local knowledge that those partnerships can bring to the table.

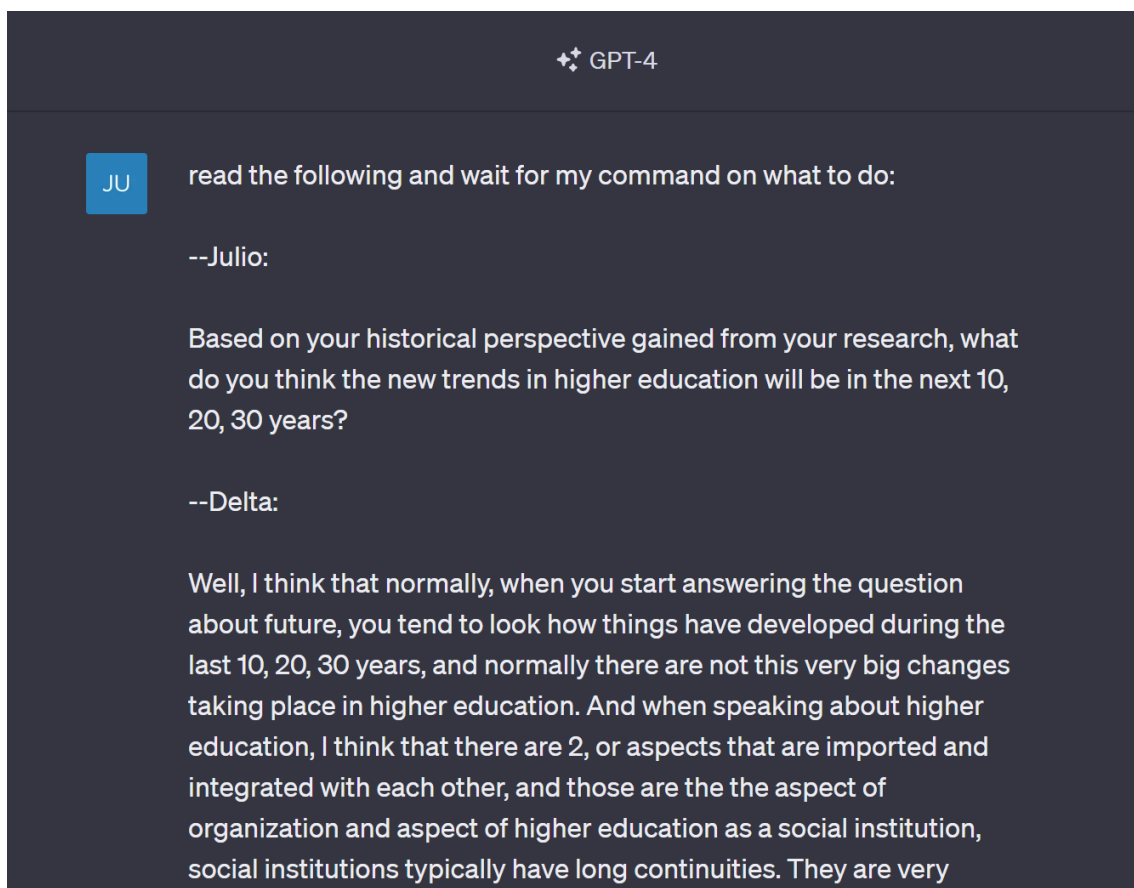
- India believes that traditional educational models may not work in developing regions.
- India recognizes the need for innovative solutions tailored for regions in development.
- Successful implementation needs meticulous planning—suggestion of partnering to approach local markets better.
- Importance of understanding local contexts.

*Conclusions and
Implications
for the Thesis*

India's insights offer a comprehensive perspective on the potential of AI-adaptive learning and subscription models in making online MBA programs more accessible. India's belief in the efficacy of these tools and methods indicates their potential significance in online education.

Appendix 3. Example of a ChatGPT query

First query: providing the transcript was not always a smooth activity. ChatGPT has a limit of around 2000 words per prompt. The interviews were between 2000-6000 words. In the case that the transcript did not fit into one prompt then it was distributed to ChatGPT in various parts depending on the size of the transcript. Below is an example of an interview that was under 2000 words. Also, take into consideration that to comply with GDPR rules and Data Management Plan, the transcripts must be anonymized before uploading to ChatGPT. Meaning that no name, personal information, and company-sensitive information should be in the text that is going to be uploaded. A meticulous adjustment of the transcripts was performed prior to uploading.



Second query:

JU

I am Julio Serrano and I am writing a Master thesis. The name of the thesis is:

“Bridging Educational Frontiers: AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility”.

I have three areas of focus on the thesis. One is searching the different AI-adaptive learning tools for online MBA programs, the second is to explore the feasibility of using a subscription-based pricing strategy for online MBA programs, and the third is understand how an online MBA that uses both of the mentioned characteristics could become accessible to developing regions.

For the aforementioned thesis, I have chosen a qualitative study. I have conducted 9 semi-structured interviews with experts and academics in each field. The method for analyzing the data from the interviews is Content Analysis as described in the book Content analysis: An introduction to its methodology by Krippendorff. I want you to act as my research assistant and use the techniques described on the book to help me write a content analysis of this interview. The above text is a transcript of the interview with Delta. Provide patterns in the form of bullet points under the following categories:

1. Contextual Framework
2. Key Themes and Frequencies
3. Implicit Meanings and Inferences
4. Conclusions and Implications for the Thesis

Be impartial, unbiased, and don't let any idea untouched even if you think that it could be meaningless or of no use for the study. Try to find patterns even if they are implicit.

Third query:



Certainly, Julio. I'll assist you in applying Krippendorff's content analysis methodology to the transcript you've provided. Let's delve into the analysis:



1. Contextual Framework

- **Interview Setting:** Semi-structured interviews with experts and academics related to higher education, future trends, AI's role in learning, and the potential changes in the organization and culture of academic institutions.
- **Purpose:** Understand the future trends in higher education, implications of introducing AI in the learning process, and suggestions for implementing online MBA programs in developing regions.
- **Informant:** Jussi, an expert on higher education trends with prior experience cooperating with "education finland".

2. Key Themes and Frequencies

- **Historical Perspective and Continuity in Higher Education:** Mentioned several times, indicating the importance of understanding the historical trajectory of education to predict future trends.
- **Higher Education as a Social Institution:** Highlighted as having a long-standing tradition and being reluctant to change.
- **Technology's Role in Pedagogy:** Questions about AI's potential contributions, suggesting both anticipation and skepticism about its impact.
- **Cultural and Identity Aspects:** Distinction between European and American academic identities and the potential friction AI might introduce.
- **Finnish Higher Education System:** Emphasized as a unique model, especially in its low hierarchical nature and student-centric approach.


Third query (cont.):

3. Implicit Meanings and Inferences

- **Resistance to Change:** There's an underlying sentiment that while higher education as a social institution has evolved, its core remains consistent. This may suggest that integrating AI and subscription models might face some resistance or skepticism.
- **Cultural Differences:** Jussi's emphasis on the different academic identities between Europe and America implies that the success of any new educational strategy, including AI and subscription models, might vary by region and cultural context.
- **AI's Value:** The repeated questioning of AI's role and value in pedagogy and academic identity hints at both curiosity and skepticism. While AI might offer some solutions, it might not change the core of teaching, learning, or academic identity.
- **Finnish Model as a Gold Standard:** The detailed discussion about the Finnish higher education model suggests it's seen as effective and might serve as an inspiration or model for other regions.

4. Conclusions and Implications for the Thesis

- **Evolution, not Revolution:** Given the historical continuity of higher education, changes introduced by AI and subscription models might be more evolutionary rather than revolutionary.
- **Cultural Sensitivity:** Any global strategy should account for regional and cultural variations in academic identity and practice.
- **AI's Role:** While AI can play a role in pedagogy, its introduction should be thoughtful, ethical, and in line with the core principles of education. It's not a one-size-fits-all solution.
- **Learning from Finland:** To make MBA programs accessible globally, especially in developing regions, there might be lessons to draw from Finland's low hierarchy, student-centric approach.

 Regenerate

Appendix 4. GDPR privacy notice shared with interview participants

English Version:

DATA PROTECTION NOTICE EU Data Protection Regulation (106/679) art 12-14

Registry name

Bridging Educational Frontiers. AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility.

Controller(s)

Julio Serrano, julio.serrano@uvaasaexed.fi

Personal data processing purpose and processing basis

Your personal data is processed by "Bridging Educational Frontiers. AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility" in the related thesis.

"This research dives deep into the rapidly evolving realm of Postgraduate online education, particularly focusing on online MBA programs. Through comprehensive content analysis and participant interviews, the study reveals significant patterns and fresh perspectives. The transformative potential of AI in personalizing learning experiences has been recognized, with AI-AL tools highlighted as not just tools for automation, but as dynamic partners in curating individualized learning experiences. Another significant discovery is the "resigned acceptance" phenomenon, revealing society's shift towards accepting technology's omnipresence in education. Moreover, the rise of subscription-based models indicates a shift towards democratizing elite education, although questions arise regarding its long-term implications on educational quality. Practical implications suggest educational institutions could leverage AI to optimize student learning experiences and explore subscription-based pricing strategies to increase access. However, a balanced approach, ensuring human touch in education remains, is crucial.

Furthermore, emphasizing local collaborations when expanding into new regions is essential. This study underscores the importance of adapting to technological advancements while ensuring holistic, high-quality, and globally inclusive educational experiences.”

Participation in the study is voluntary. The basis for processing personal data is:

a) consent. Consent can be revoked at any time by notifying the controller. Withdrawal of consent does not affect the legality of the processing carried out before the withdrawal of consent.

Personal data retention period

After the thesis is completed, the material and personal data will be destroyed.

Data content and data sources of the register

Description of the types of personal data processed in the register by data group, e.g.:

- Name information
- Video and audio.

The data is collected from the subjects themselves

Rights of the registrant

In accordance with data protection legislation, you have the right to access data, correct data, delete data (right to be forgotten), restrict data processing and object to personal data processing. If you want to exercise any of your rights, contact the controller.

The right to appeal to the authority

You have the right to file a complaint with the authority supervising the processing of personal data if you suspect that your personal data is being processed in violation of the data protection legislation: tietosuoja.fi, phone: 0295666700, e-mail: tietosuoja@om.fi

Recipients of personal data

Your personal data will not be disclosed to outsiders.

Principles of registry protection

Manual material is kept in a locked room/cabinet. Digital material is protected with a username and password or with two-step user authentication (MFA). Direct identification information is removed from the data.

The data was anonymized before being uploaded to any electronic service. All information is stored in Password protected accounts. Only anonymized text was transferred to the electronic content (ChatGPT).

Finnish version:

TIETOSUOJAILMOITUS

EU:n tietosuoja-asetus (106/679) art 12-14

Rekisterin nimi

Bridging Educational Frontiers. AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility.

Rekisterinpitäjä(t)

Julio Serrano, julio.serrano@uvaasaexed.fi

Henkilötietojen käsittelytarkoitus ja käsittelyperuste

Henkilötietojasi käsitellään ”Bridging Educational Frontiers. AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility” liittyvässä opinnäytetutkimuksessa.

“This research dives deep into the rapidly evolving realm of postgraduate online education, particularly focusing on online MBA programs. Through comprehensive content analysis and participant interviews, the study unveils significant patterns and fresh perspectives. The transformative potential of AI in personalizing learning experiences has been recognized, with AI-AL tools highlighted as not just tools for automation, but as dynamic partners in curating individualized learning experiences. Another significant discovery is the “resigned acceptance” phenomenon, revealing society’s shift towards accepting technology’s omnipresence in education. Moreover, the rise of subscription-based models indicates a shift towards democratizing elite education, though questions arise regarding its long-term implications on educational quality. Practical implications suggest educational institutions could leverage AI to optimize student learning experiences and explore subscription-based pricing strategies to increase access. However, a balanced approach, ensuring human touch in education remains, is crucial. Furthermore, emphasizing local collaborations when expanding into new regions is essential. This

study underscores the importance of adapting to technological advancements while ensuring holistic, high-quality, and globally inclusive educational experiences.”

Tutkimukseen osallistuminen on vapaaehtoista. Henkilötietojen käsittelyperusteena on:
a) suostumus. Suostumuksen voi peruuttaa milloin tahansa ilmoittamalla tästä rekisterinpitäjälle. Suostumuksen peruuttaminen ei vaikuta ennen suostumuksen peruuttamista suoritettun käsittelyn lainmukaisuuteen.

Henkilötietojen säilytysaika

Opinnäytteen/opinnäytteiden valmistuttua aineisto ja henkilötiedot tuhoetaan.

Rekisterin tietosisältö ja tietolähteet

Kuvaus rekisterissä käsiteltävistä henkilötietotyypeistä tietoryhmittäin, esim.:

- Nimitiedot
- Video ja ääni.

Tiedot kerätään tutkittavilta itseltään

Rekisteröidyn oikeudet

Tietosuojalainsäädännön mukaisesti sinulle kuuluu oikeus saada pääsy tietoihin, oikaista tietoja, oikeus tietojen poistamiseen (oikeus tulla unohdetuksi), rajoittaa tietojen käsittelyä ja vastustaa henkilötietojen käsittelyä. Jos haluat käyttää jotain oikeuttasi, ota yhteys rekisterinpitäjään.

Oikeus valittaa viranomaiselle

Sinulla on oikeus tehdä valitus henkilötietojen käsittelyä valvovalle viranomaiselle, jos epäilet henkilötietojasi käsiteltävän vastoin tietosuojalainsäädäntöä: tietosuoja.fi, puh: 0295666700, sähköposti: tietosuoja@om.fi

Henkilötietojen vastaanottajat

Henkilötietojasi ei luovuteta ulkopuolisille.

Rekisterin suojauksen periaatteet

Manuaalinen aineisto säilytetään lukitussa tilassa/kaapissa. Digitaalinen aineisto suojataan käyttäjätunnuksella ja salasanalla tai kaksivaiheisella käyttäjän tunnistuksella (MFA). Aineistosta poistetaan suorat tunnistetiedot.

Tiedot anonymisoitiin ennen niiden lataamista mihinkään sähköiseen palveluun. Kaikki tiedot tallennetaan Salasana suojatuille tileille. Sähköiseen sisältöön (ChatGPT) siirrettiin vain anonymisoitua tekstiä.

Appendix 5. Data Management Plan

Plan Overview

A Data Management Plan created using DMPTuuli

Title: Bridging Educational Frontiers, AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility

Creator: Julio Serrano

Affiliation: University of Vaasa

Template: General Finnish DMP template

Project abstract:

This research dives deep into the rapidly evolving realm of postgraduate online education, particularly focusing on online MBA programs. Through comprehensive content analysis and participant interviews, the study unveils significant patterns and fresh perspectives. The transformative potential of AI in personalizing learning experiences has been recognized, with AI-AL tools highlighted as not just tools for automation, but as dynamic partners in curating individualized learning experiences. Another significant discovery is the "resigned acceptance" phenomenon, revealing society's shift towards accepting technology's omnipresence in education. Moreover, the rise of subscription-based models indicates a shift towards democratizing elite education, though questions arise regarding its long-term implications on educational quality. Practical implications suggest educational institutions could leverage AI to optimize student learning experiences and explore subscription-based pricing strategies to increase access. However, a balanced approach, ensuring human touch in education remains, is crucial. Furthermore, emphasizing local collaborations when expanding into new regions is essential. This study underscores the importance of adapting to technological advancements while ensuring holistic, high-quality, and globally inclusive educational experiences.

ID: 22528

Start date: 01-12-2022

End date: 30-09-2023

Last modified: 04-09-2023

Bridging Educational Frontiers, AI-Adaptive Learning, Subscription Strategies, and the Quest for Global Online MBA Accessibility

1. General description of the data

1.1 What kinds of data is your research based on? What data will be collected, produced or reused? What file formats will the data be in? Additionally, give a rough estimate of the size of the data produced/collected.

9 Interviews

1.2 How will the consistency and quality of data be controlled?

Transcriptions were recorded by Zoom and then later polished by user.

2. Ethical and legal compliance

2.1 What legal issues are related to your data management? (For example, GDPR and other legislation affecting data processing.)

GDPR and personal data protection act will be followed. Privacy notice has been made. Consent to record and process data was also performed. Data was anonymized before feeding into the data content analysis process.

2.2 How will you manage the rights of the data you use, produce and share?

Question not answered.

3. Documentation and metadata

3.1 How will you document your data in order to make it findable, accessible, interoperable and re-usable for you and others? What kind of metadata standards, README files or other documentation will you use to help others to understand and use your data?

Data has been documented electronically via Windows folder.

4. Storage and backup during the research project

4.1 Where will your data be stored, and how will the data be backed up?

Data will be stored on researcher own computer, an external hard drive, and University's if Vaasa cloud service (cloud.uwasa.fi)

4.2 Who will be responsible for controlling access to your data, and how will secured access be controlled?

Secured by password and/or encryption.

5. Opening, publishing and archiving the data after the research project

5.1 What part of the data can be made openly available or published? Where and when will the data, or its metadata, be made available?

Question not answered.

5.2 Where will data with long-term value be preserved, and for how long?

Question not answered.

6. Data management responsibilities and resources

6.1 Who (for example role, position, and institution) will be responsible for data management?

Question not answered.

6.2 What resources will be required for your data management procedures to ensure that the data can be opened and preserved according to FAIR principles (Findable, Accessible, Interoperable, Re-usable)?

Question not answered.