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Development of an E-commerce Platform using Strapi

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Abstract: In an era described by a way of means of fast technological advancement, schooling stands as a critical area ripe for transformation. Our E-commerce internet site emerges as a beacon of innovation, aiming to revolutionize conventional studying paradigms thru the seamless integration of current generation. With a multifaceted approach, our platform gives a complete suite of gear and assets tailor-made to satisfy the numerous desires of college students, educators, and establishments alike. At the coronary heart of our platform lies a dedication to accessibility and inclusivity, making sure that studying possibilities go beyond geographical barriers and socioeconomic barriers. Through interactive modules, attractive content, and customized studying pathways, we empower newcomers to domesticate their highbrow interest and free up their complete potential. For educators, our platform serves as a dynamic platform hub for expert development, fostering collaboration, and information sharing inside a colourful network of practice. From digital school rooms to collaborative undertaking control gear, we offer the scaffolding vital to facilitate powerful coaching within the virtual age. Furthermore, our platform harnesses the energy of information analytics and synthetic intelligence to supply actionable insights and customized recommendations, facilitating information pushed decision-making and improving studying outcomes.. Join us in this transformative adventure as we redefine the opportunities of schooling within the twenty first century and beyond. This summary succinctly captures the essence of the E-commerce internet site, Highlight its goals, characteristics and transformative potential holds for schooling. The summary for the E-commerce Website undertaking encapsulates the undertaking to create an modern instructional platform tailor-made for numerous newcomers. This undertaking goals to increase a user pleasant internet site supplying interactive studying assets, customized take a look at gear, and collaborative features. Key targets consist of supplying seamless navigation, curating numerous instructional content, enforcing adaptive studying algorithms, and fostering real-time collaboration amongst college students and educators.

I. INTRODUCTION

In an era of rapid technological advancements, educational environments are evolving to meet the dynamic needs of learners around the world. Our Posterz project is an innovative e-commerce solution designed to bridge the gap between traditional learning methods and the demands of the digital age. At the core of this platform is embodying a vision of inclusive, accessible and personalized education. By using cutting-edge technology, Posterz aims to empower learners of all ages and backgrounds to realize their full potential. Whether in an academic institution, professional development institute or informal learning environment, our platform delivers innovative and engaging learning experiences tailored to the needs of each individual.

Traditional education models often struggle to keep up with the rapidly changing technological landscape and the diverse needs of modern learners. Many learners face barriers such as limited access to quality resources, lack of personalized instruction, and outdated educational approaches. In addition, developer collaboration tools that are essential in educational and professional environments often lack critical features such as real-time collaboration, version control integration, and cross-platform compatibility. These deficiencies impact both the efficiency and comprehensiveness of the learning and development process, prompting learners and professionals to look for solutions that can address these challenges.

Posterz's implementation is to create a cloud-based real-time collaboration platform that integrates advanced tools that support education and software development. Based on the MERN stack, the platform provides a responsive interface with features such as customizable settings, syntax highlighting, and code completion. It supports a wide range of programming languages, including HTML, CSS, JavaScript, Python, and Ruby, to meet the diverse needs of learners and developers. Version control integration with tools such as Git and Bitbucket ensures seamless collaboration, and security measures such as two-factor authentication protect user data. The system is accessible from multiple operating systems, making it a versatile and comprehensive solution for users around the world.

Our project provides a dynamic and interactive learning environment that fosters collaboration, creativity, and productivity. Posterz provides a real-time code editor that allows multiple team members to work on the same file simultaneously while tracking changes in real time.

The platform improves development workflows with tools such as syntax highlighting, intelligent code completion, and integration with popular version control systems. By addressing the shortcomings of traditional models and existing tools, Posterz delivers a reliable and secure solution that meets the needs of learners and developers. Ultimately, the platform fosters inclusive education, streamlines development workflows, and significantly increases collaboration and productivity.

II. LITERATURE SURVEY

The literature review of ecommerce websites includes a comprehensive survey of existing research, theory, and practice related to educational technology, online learning platforms, website design, user experience, and pedagogy. [17] Educational technology revolutionizes traditional learning paradigms, providing learners with flexible, accessible, and personalized educational experiences that go beyond the confines of the physical classroom. The development of online learning platforms has been driven by advances in technology, educational theory, and instructional design principles. In this context, theoretical frameworks such as constructivism, connectivism, and sociocultural theory provide a conceptual lens for understanding how learners engage with digital resources and online collaborative environments. Effective ecommerce websites integrate a variety of features, including adaptive algorithms,

[18] interactive multimedia content, gamification elements, and social learning features to improve user engagement and support diverse learning needs. User experience design (UX) and user interface (UI) play a key role in optimizing the usability and accessibility of ecommerce websites, emphasizing intuitive navigation, responsive design, and compelling visual aesthetics [19] to enable effective learning interactions. Pedagogical approaches such as inquiry-based learning, problem-based learning, and flipped classroom models are often integrated into ecommerce websites to promote active learning, critical thinking, and knowledge construction. [20] Empirical studies evaluating the effectiveness and impact of ecommerce websites highlight the potential for ecommerce websites to improve student learning outcomes, engagement, and satisfaction, although challenges remain, including technical limitations, accessibility issues, and resistance to change. Looking to the future, emerging trends in ecommerce research and practice, such as the integration of artificial intelligence, virtual reality, and data analytics, offer exciting opportunities to further improve the effectiveness and accessibility of online learning environments. By synthesizing and analyzing this diverse literature, this review provides a comprehensive understanding of the current state of ecommerce websites and supports the development of innovative, pedagogically sound digital learning solutions. [4] The literature on ecommerce websites is extensive and diverse, reflecting the dynamic nature of educational technology and its impact on modern learning environments. Digging deeper into this discussion, it becomes clear that integrating technology into education is not simply about digitizing traditional teaching methods, but rather about transforming the learning experience and responding appropriately to learners' evolving needs and expectations in the digital era. [2] Central to this transformation are myriad theoretical frameworks that inform the design, development, and implementation of ecommerce websites.

For example, constructivism [5] assumes that learners actively construct knowledge through interaction with the environment and emphasizes the importance of hands-on experience, collaboration, and reflection. In the context of ecommerce websites, this means incorporating interactive simulations, virtual labs, and collaborative tools that allow learners to explore concepts, experiment with ideas, and engage in meaningful dialogue with peers and instructors. [6] Similarly, connectivism emphasizes the importance of networked learning environments where learners can use digital resources, social networks, and online communities to access information, share knowledge, and generate new understanding together. Ecommerce websites designed from a connectivism perspective prioritize open access to educational content, peer-to-peer learning networks, and participatory platforms that allow learners to actively participate in the learning process. [3] These theoretical perspectives are complemented by sociocultural theory, which emphasizes the sociocultural context of learning and the role of social interactions in cognitive development. From this perspective, ecommerce websites are viewed as sociotechnical systems that mediate social interactions and promote knowledge construction, and scaffold learning experiences within virtual Communities of practice. Features such as discussion forums, community projects, and peer review mechanisms foster social presence, collaboration, and collective knowledge construction, reflecting the dynamics of personal interactions in online environments. In addition to theoretical frameworks, the design and functionality of ecommerce websites are based on user experience (UX) and user interface (UI) design principles. [10] UX/UI design involves a set of considerations aimed at optimizing the usability, accessibility, and aesthetics of digital interfaces and increasing user satisfaction and engagement. Applying these principles to ecommerce websites leads to the development of intuitive navigational structures, attractive layouts, clear communication cues, and visually appealing graphics that meet diverse learning preferences and needs.

[8] By prioritizing user-centered design principles, e-commerce websites strive to create seamless and enjoyable learning experiences that motivate learners to actively participate in and continue the learning process. Pedagogical approaches and instructional strategies also play an important role in the design and implementation of e-commerce websites. For example, inquiry-based learning focuses on exploring questions, problems, or scenarios that stimulate curiosity, critical thinking, and problem-solving skills. [7] E-commerce websites for inquiry-based learning provide learners with authentic tasks, real-world simulations, and resources for inquiry, encouraging active exploration, experimentation, and reflection. Similarly, problem-based learning (PBL) challenges learners to solve complex, poorly structured problems that require collaboration, analysis, and integration of knowledge from multiple disciplines. PBL e-commerce websites provide scaffolding tools, expert support, and multimedia resources to guide learners through the problem-solving process and promote deep understanding, metacognitive skills, and independent learning habits.

[9] Additionally, the flipped classroom model, which reverses traditional teaching methods by delivering educational content online and using class time for active learning activities, has gained traction in the e-commerce context. E-commerce websites serve as repositories of multimedia lectures, tutorials, and interactive modules that learners can access outside of class. This allows teachers to make the most of face-to-face interactions in collaborative projects, discussions, and hands-on activities. Transforming instruction using e-commerce websites allows educators to personalize instruction, promote active engagement, and foster higher-order thinking skills in learners. Empirical studies evaluating the effectiveness and impact of e-commerce websites provide valuable insights into their potential benefits and challenges. [23] Studies examining student learning outcomes, engagement, and satisfaction have shown promising results, with many learners reporting increased motivation, improved performance, and deeper understanding of course content. However, challenges such as technological barriers, digital divides, and resistance to change remain widespread, highlighting the need for comprehensive strategies to address these issues. Additionally, concerns about privacy, security breaches, and ethical implications of technology-enabled learning environments require careful consideration to ensure responsible and ethical use of e-commerce websites. Looking to the future, new trends in e-commerce research and practice promise to further improve the effectiveness, accessibility, and inclusivity of online learning environments. For example, artificial intelligence (AI) technologies offer opportunities to personalize learning experiences, provide real-time feedback, and automate administrative tasks, thereby optimizing instructional support and efficiency.

[24] Virtual reality (VR) and augmented reality (AR) applications enable immersive, experiential learning experiences that simulate real-world environments, enhance spatial reasoning skills, and foster empathy and cultural awareness. The field of educational technology (E-commerce) has evolved significantly over the last few decades, with numerous studies highlighting its potential to reshape the educational landscape. A variety of platforms, tools, and technologies have been developed to address the diverse needs of students, teachers, and institutions, making learning more accessible, flexible, and personalized. This literature review discusses key developments in the E-commerce domain, focusing on the integration of technology in learning, personalized learning paths, and the role of artificial intelligence (AI) in educational systems.

1) *The Integration of Technology in Education*

The use of technology in education has been explored extensively, particularly in its role in enhancing the learning experience. According to Anderson (2008), digital learning environments have the ability to engage students in ways traditional classrooms cannot. These environments support active learning by providing interactive and multimedia resources that accommodate diverse learning styles. Studies have shown that platforms integrating technologies like *virtual classrooms*, *interactive simulations*, and *collaborative tools* enhance student engagement and retention (Siemens, 2013). Moreover, research by Laurillard (2012) found that the integration of technology allows for more personalized and efficient teaching practices, as educators can cater to the individual needs of students through data-driven insights.

2) *Personalized Learning*

Personalized learning has emerged as a core principle in modern education, where students are provided with customized learning experiences based on their preferences, strengths, and learning pace. According to Walkington (2013), personalized learning algorithms can adapt to individual student needs, providing tailored feedback and resources that optimize learning outcomes. A study by Blatchford et al. (2017) highlighted the importance of adaptive learning systems in improving the quality of education by offering real-time adjustments to learning materials. In a similar vein, Fletcher (2017) noted that adaptive technologies play a crucial role in supporting learners with diverse abilities, offering them the autonomy to progress at their own pace.

3) *The Role of Artificial Intelligence in Education*

The potential of artificial intelligence (AI) in education is increasingly being recognized as it can improve personalized learning, automate administrative tasks, and provide intelligent tutoring systems. Chen et al. (2018) described how AI-powered platforms can analyze learner interactions, identify knowledge gaps, and provide personalized learning materials. The role of AI in education is not limited to personalizing learning, but also extends to assessment and feedback. Woolf (2010) found that an AI-based system can grade assignments and provide instant feedback, ensuring timely intervention for students who need additional support. Additionally, the use of machine learning algorithms allows for the continued development of the platform, providing better recommendations over time.

4. Collaborative Learning and Community Building

Collaboration between students and teachers has long been recognized as a key component of effective learning. Platforms that incorporate social learning features such as discussion forums, peer assessment, and group projects have been proven to increase student engagement and foster a sense of community. According to Vygotsky's (1978) social constructivist theory, knowledge emerges through interaction with others. This theory has influenced the design of Ecommerce platforms that foster collaborative learning. Salmon (2013) described how virtual learning environments (VLEs) enable peer-to-peer dialogue and knowledge sharing, thereby enriching the learning experience and building supportive learning communities.

III. METHODOLOGY

Implementing an ecommerce website in the dynamic educational technology (ecommerce) landscape requires a comprehensive and carefully planned methodology. The effort begins with a detailed requirements analysis that considers the diverse needs of users and stakeholders alike. [1] A nuanced understanding of educational goals and user preferences is gained through surveys, interviews, and market research to lay the foundation for subsequent development stages. Collaboration with designers and education experts then drives the conceptualization and design of the website's architecture, user interface, and interactive features. Wireframes and prototypes are iteratively refined to ensure alignment with educational principles and user experience best practices. Central to the methodology is the adoption of agile development principles, which allow for iterative development cycles with an emphasis on flexibility, adaptability, and stakeholder feedback. Development iterations are broken down into manageable sprints, each designed to deliver tangible progress and value. [11] This iterative approach allows for continuous refinement and optimization, ensuring that the evolving needs of users and stakeholders are effectively addressed throughout the development process. [14] A central aspect of the methodology revolves around technology selection. Programming languages [22] and development tools are carefully considered. Factors such as scalability, security, and compatibility are paramount and guide decision-making to ensure the ecommerce website is robust and future-proof. The selected technology stack leverages industry best practices and emerging technologies and forms the foundation on which the website's functionality is built. An essential part of any successful ecommerce website is the seamless integration of learning technologies and content curation strategies.

[12] Adaptive learning algorithms, gamification elements, and assessment tools will be integrated to improve the website's effectiveness in delivering personalized learning experiences. Content creation and curation efforts will be guided by collaboration with subject matter experts and educators to ensure the development of high-quality educational resources aligned with curriculum standards and pedagogical best practices. [21] Testing and quality assurance will be a key milestone in the implementation plan, with rigorous evaluations being performed to ensure the functionality, performance,

and usability of the ecommerce website. A comprehensive testing protocol will include functional, compatibility, security, and user acceptance testing aimed at identifying and resolving any issues or discrepancies prior to deployment.

[13] The adoption phase will culminate in the implementation process, where careful planning and coordination are paramount. The hosting environment will be configured, databases will be set up, and security measures will be implemented to protect user data and privacy. [17] A comprehensive adoption strategy will be developed, including marketing, advertising, and user onboarding efforts, to drive adoption and engagement. Once released, our focus will be on monitoring and maintenance, with a focus on ensuring the ongoing stability, security, and performance of ecommerce websites. Monitoring tools are used to track website performance metrics, user engagement data, and feedback channels, allowing for continuous optimization and improvement. [15] Regular maintenance procedures are implemented to resolve technical issues, update content, and onboard users. In conclusion, enforcing an ecommerce internet site needs a multifaceted method that prioritizes person-centric design, technological excellence, and academic impact. By embracing iterative improvement methodologies, fostering collaboration with academic experts, and leveraging modern technologies, the mission goals to supply a platform that transforms the getting to know experience.

Post release efforts will consciousness on non-stop development thru data pushed insights, proactive maintenance, and person engagement strategies. Ultimately, the aim is to create a dynamic, scalable, and inclusive e-commerce answer that empowers educators whilst adapting to the evolving wishes of the academic landscape."In summary, implementing an e-commerce website requires a comprehensive and iterative approach characterized by collaboration, agility, and a relentless commitment to excellence. Following a structured methodology that includes requirements analysis, design, development, testing, deployment, and maintenance can effectively enable businesses to realize their vision of an innovative educational platform that supports learners and educators alike. The Home Page typically outlines the various elements and navigation paths present on a website or application homepage. It is a visual representation of the structure and components of a typical homepage. Each component may lead to further sub-pages or actions, depending on the specific design. Here, we have created an educational website that offers multiple courses for students to gain knowledge. They can also purchase the courses online. We also provide recorded sessions where you can watch recorded lectures for each course.

The flowchart requires the user to login to the platform. If the user is already registered, he/she is directly redirected to the login page. After entering the username and password, a loading page opens where the user can select multiple courses from the e-commerce website.

```

{
  "name": "server",
  "private": true,
  "version": "0.1.0",
  "description": "A Strapi application",
  "scripts": {
    "develop": "strapi develop",
    "start": "strapi start",
    "build": "strapi build",
    "strapi": "strapi"
  },
  "dependencies": {
    "@strapi/plugin-i18n": "4.6.1",
    "@strapi/plugin-users-permissions": "4.6.1",
    "@strapi/provider-upload-cloudinary": "^4.6.1",
    "@strapi/strapi": "4.6.1",
    "better-sqlite3": "8.0.1"
  },
  "author": {
    "name": "A Strapi developer"
  },
  "strapi": {
    "uuid": "99537baa-50ce-41c7-b1f7-f9f67d0c3617"
  },
  "engines": {
    "node": ">=14.19.1 <=18.x.x",
    "npm": ">=6.0.0"
  },
  "license": "MIT"
}

```

Fig.1:Flowchart of Homepage

It shows the homepage typically outlines the various elements and navigation paths present on the homepage of a website or application. It provides a visual representation of the structure and components of a typical homepage. Each Component may lead to further subpages or actions, depending on the specific design.

IV. IMPLEMENTATION

An open-source education platform based on the MERN stack, the implementation of Posterz involves building a robust and scalable architecture. The front-end is developed using React.js to ensure a dynamic and responsive UI, and uses Context API or Redux for state management. The strapi is powered by Node.js and Express.js, which handles the server-side logic and creation of a RESTful API. MongoDB acts as the database to store structured data such as user profiles, courses, and reviews. Authentication and authorization is implemented using JWT with role-based access control for students and faculty. Key features include course creation, video streaming, quizzes, real-time progress tracking, etc..

| Field Name | Data Type | Description |
|------------------------------|--------------------|--|
| <code>id</code> | ObjectId | Unique identifier for the user. |
| <code>name</code> | String | Full name of the user (optional for guest). |
| <code>email</code> | String | User's email address (unique, optional for guest login). |
| <code>password</code> | String | Hashed password for secure login (not required for guest login). |
| <code>role</code> | String | Role of the user (<code>student</code> , <code>teacher</code> , <code>guest</code>). |
| <code>specialization</code> | String | Teacher's area of expertise (only for teachers). |
| <code>enrolledCourses</code> | Array of ObjectIds | List of courses the user has enrolled in (only for students). |
| <code>createdCourses</code> | Array of ObjectIds | List of courses created by the teacher (only for teachers). |
| <code>loginType</code> | String | Method of login (<code>email</code> , <code>google</code> , <code>guest</code>). |
| <code>lastLogin</code> | Date | Date and time of the user's last login. |
| <code>createdAt</code> | Date | Account creation date. |

Database example

V. RESULT

The research paper provides a comprehensive overview of the evolution, challenges, and solutions in the field of e-commerce website design. By tracing the development of e-commerce from its early stages to the present day, the paper highlights the significant advancements in technology and consumer expectations that have shaped the landscape. Through an analysis of existing solutions and a bibliometric examination of key features, effectiveness, and drawbacks, the paper establishes a foundation for addressing the complexities of modern e-commerce platforms. Furthermore, the paper identifies specific problem areas related to user experience optimization, security and compliance, mobile responsiveness, and product management. By defining clear goals and objectives for designing an e-commerce website, the paper offers a strategic framework for businesses to create compelling online shopping experiences that meet the evolving needs and expectations of consumers. In conclusion, the research paper serves as a valuable resource for businesses seeking to navigate the complexities of e-commerce website design. By understanding the challenges and opportunities inherent in the field, businesses can strategically plan their website development efforts to drive engagement, foster trust, and ultimately boost sales in the competitive e-commerce landscape. Text heads organize the topics on a relational, hierarchical basis.

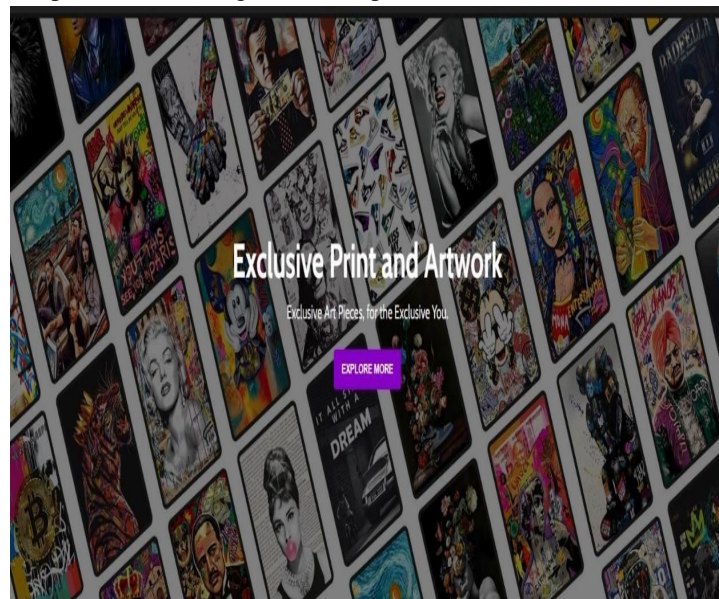


Fig.1: Sign up page. In this figure, it shows how a user will log in using its username and password.

VI. CONCLUSION AND FUTURE SCOPE

Posterz is a robust and innovative education platform with a strong technological foundation and a well-thought-out structure for both student and teacher users. The platform's client-server architecture, combined with powerful front-end and strapi technologies, provides a promising foundation for scalability and future growth. The integration of cloud services, real-time feedback systems, and payment solutions demonstrate the company's commitment to optimizing the learning process and making education accessible to a global audience.

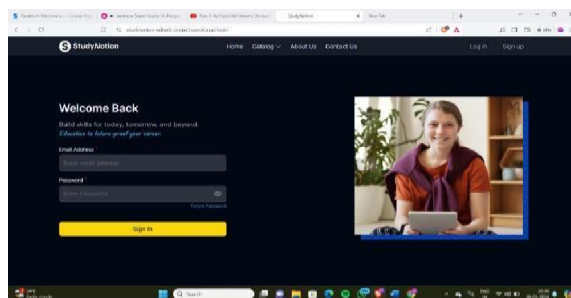


Fig2.Loginpage

In this figure , new users will register themselves and ifAlready have an account ,then sign up page will occur.

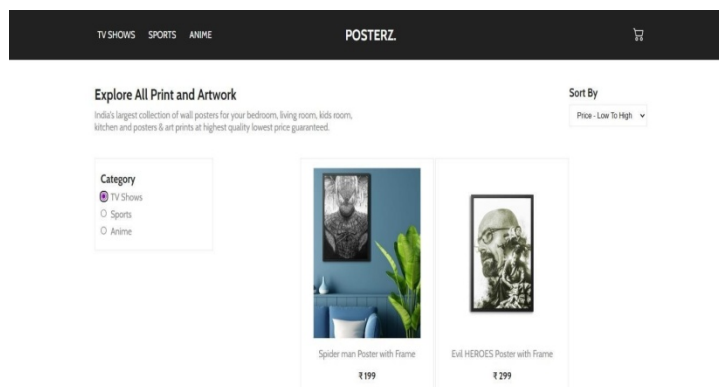


Fig.3.Loading page

In this figure , it appears when we are switching from one page to another page . include brief messages or graphics to provide users with information or reassurance about the loading page.

The current education technology landscape continues to evolve, with an increasing focus on creating personalized, flexible, and interactive learning experiences. Posterz is well-positioned to contribute to this transformation with its strong technology infrastructure and commitment to students and teachers. As digital learning platforms grow in importance, their ability to provide a seamless user experience and ensure high-quality course delivery is critical. Posterz's integration of ReactJS for dynamic UI and NodeJS/ExpressJS for efficient server operations provides a solid foundation to support these trends. In particular, its course management system for instructors is a key feature that sets Posterz apart. The platform empowers educators to optimize their content and delivery methods by providing instructors with the ability to create, update, and manage courses as well as the ability to gain insights into performance metrics such as views and ratings. The ability to customize content based on real-time feedback, student engagement, and performance data greatly improves the effectiveness of education. This data-driven approach also provides instructors the opportunity to hone their teaching strategies and maintain high educational standards for diverse learning groups. For students, the personalized experience offered by Posterz, including features such as wishlist management and easy access to course content, is a key benefit. The intuitive design allows learners to easily navigate the platform, find relevant courses, and manage their learning progress. This ease of use is likely to increase adoption, especially among less tech-savvy students. Additionally, with the integration of a secure payment gateway through Razorpay, the platform ensures that students can complete their transactions seamlessly without worrying about the safety of their payments. User trust and a focus on security build credibility and help attract a larger user base. Looking forward, mobile-first development must be a priority, especially given the increasing use of smartphones for learning. Posterz could significantly expand its reach by offering a mobile app that allows students to learn on the go and instructors to manage courses from anywhere. A mobile app could also incorporate features such as push notifications for course updates, assignments, and promotions to increase student engagement and retention.

Moreover, the integration of AI provides another opportunity for further development of the platform. Implementing an AI-powered system to analyze students' learning patterns and recommend customized courses and resources would add another layer of personalization. This would help students find courses that match their learning goals and preferences, improving their overall learning experience.

Additionally, machine learning algorithms could also be used to evaluate course performance and provide actionable feedback to instructors to improve content, teaching methods, and student interactions. Finally, community-building features such as discussion forums and live question-and-answer sessions would encourage interaction between students and faculty, thereby fostering collaboration and engagement. These features allow learners to actively participate in the learning process, share insights, and clear doubts, further enhancing the overall learning experience.

In summary, Posterz is a promising solution in the Ecommerce space, offering a user-friendly platform that meets the needs of both students and teachers. The platform's adaptability and advanced improvements, especially in the areas of AI, mobile access, and community building, make it a strong competitor in the increasingly competitive digital learning environment. Through continuous innovation and improvement, Posterz has the potential to shape the future of online education and provide an inclusive and accessible learning ecosystem for all.

REFERENCES

- [1] Acquaro, P.E. (2017). Exploring the selection, adoption, and support of online learning tools in higher education. (Paper). Retrieved from: <https://www.ecommercedecisionmakinginhighered.org/ecommerceresearchpapers>
- [2] Asen, R., Gurke, D., Conners, P., Solomon, R., and Gumm, E. (2013). Findings and advice from school boards: 4,444 lessons from three Wisconsin school districts. *Education Policy*, 27(1), 33-63.
- [3] Birkland, E. (2003). *Introduction to the political process: theories, concepts, and models of public policy making* (3rd ed.).
- [4] Armonk, NY: I Sharp. Bonabeau, E. (2003). Don't trust your gut. *Harvard Business Review*, 81(5), 116-123.
- [5] Bowers, A.J., Shoho, A.R., Barnett, B.G. (2014). School leaders' use of data for decision-making: An introduction. A. J. Bowers, A. R. Shoho, B.G. Barnett (Hrsg.) 著. Using data in schools to inform leadership and decision making (pp. 1-16). Charlotte, NC: Information Age Publishing Inc.
- [6] Braybooke, D., and Lindblom, C. (1963). *Decision Strategies*. New York: Free Press.
- [7] Brewer, G.D., DeLeon, P. (1983). *Fundamentals of Policy Analysis*.
- [8] Chicago: Dorsey Cartwright, N., and Hardie, J. (2012). *Evidence-based policy: A practical guide to doing better*. Oxford, UK: Oxford University Press
- [9] Cohen, M.D., March, J. G. & Olsen, J. P. (1972). The garbage can model of organizational choice. *Administrative Science Quarterly*, 17(1), 1-25.
- [10] Deming, D.J. & Figlio, D. (2016). Accountability in U.S. Education: Applying Lessons from the K-12 Experience to Higher Education >
- [11] *The Journal of Economy Perspectives*, 30(3), 33-55
- [12] Dziuban, C., Moskal, P., Cassisi, J., & Fawcett, A. (2016). Adapt to Learn and Learn to Adapt. *Research Bulletin*. Louisville, CO: ECAR, September 30, 2016.
- [13] Edwards, W. (1954). *Theory of decision making*.
- [14] *Psychological Bulletin*, 51(4), 380.
- [15] Feuer, M. J. (2015). Evidence and advocacy. In M.J. Fire, A.I. Berman, R.C. Atkinson. *The past as a prologue: the National Academy of Education reflects 50 members*. (p. 95-101).
- [16] Washington, DC: National Academy of Education.
- [17] Goldstein, P.J., Katz, R.N. (2005). *Academic Analysis: Management Information and Technology Use in Higher Education* (Vol. 8).
- [18] EDUCAUSE Applied Research Center.
- [19] Gormley, W.T., Jr. (2011). From science to policy in early childhood education. *Science*, 333(6045), 978-981. [16] Hornig, M., and C. Coburn (2008). Evidence-based decision-making in school district central offices: Towards a policy and research agenda. *Education Policy*, 22(4), 578- 608.
- [20] Ikemoto, G.S. & Marsh, J.A. (2007). Breaking the "data-driven" mantra: Different conceptions of data-driven decision making. *Annals of the National Association for Research in Education*, 106(1), 105- 131.
- [21] Johnson, L., Adams-Becker, S., and Hall, C. (2015).
- [22] *NMC Technology Landscape for Australian Higher Education 2015: A Regional Report of the*
- [23] Horizon Project. Austin, TX: New Media Consortium.
- [24] Lindblom, C. (1959). *The Science of Navigating Disruption*.
- [25] *Public Administration Review*, 19, 79-88.
- [26] Majone, G. (1989).
- [27] *Evidence, Argument, and Persuasion in the Political Process*. New Haven and London: Yale University Press.
- [28] Merriam, S.B., Tisdell, E.J. (2015). *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.
- [29] Mustafa, A., Goh, M. (1996).
- [30] A multi-criteria model for university management. *Omega*, 24(2), 167-178.
- [31] Resnick, L. (2015). The role of the National Academy of Education in linking research and practice. In M.J.



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