

## *Grasping The Challenge of Online Professional Development (OPD) in Pakistan*

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### **Abstract**

Online Professional Development (OPD) has emerged as a critical component in the professional growth of individuals across various fields globally. In Pakistan, however, the adoption and integration of OPD face unique challenges. This abstract explores these challenges, focusing on the socio-cultural, economic, and technological barriers that hinder the effectiveness of OPD in the country. Pakistan's socio-cultural landscape presents a significant hurdle. The traditional preference for face-to-face interactions in educational and professional settings often leads to skepticism towards online learning platforms. Additionally, gender norms and regional disparities further complicate access to OPD, particularly for women and individuals in rural areas. Economically, the cost of internet access and digital devices remains a substantial barrier. Many professionals cannot afford the necessary technology, which limits their ability to engage with OPD opportunities fully.

Despite these challenges, there are ongoing efforts to improve OPD in Pakistan. Government initiatives, non-profit organizations, and private sector investments are working towards enhancing digital infrastructure, providing affordable technology, and promoting digital literacy. Addressing these challenges is crucial for the successful integration of OPD in Pakistan, which can significantly contribute to the professional development of its workforce and overall economic growth.

### **Keywords**

Online Professional Development (OPD), Socio-Cultural Barriers, Economic Barriers, Regional Disparities, Educational Technology.

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## **Introduction**

Online professional development (OPD) has become a pivotal tool for career advancement globally, including in Pakistan. The accessibility and flexibility of online learning platforms present significant opportunities for professionals to enhance their skills and stay competitive in an evolving job market. However, the implementation and effectiveness of OPD in Pakistan come with unique challenges that need to be addressed. One of the primary advantages of OPD is the flexibility it offers. Unlike traditional in-person training, online courses can be accessed at any time and from any location, allowing professionals to learn at their own pace. This is particularly beneficial for those with busy schedules, as they can fit learning into their routines without sacrificing other responsibilities. Furthermore, the vast array of available courses enables individuals to tailor their education to their specific career needs and interests. Platforms like Coursera, LinkedIn Learning, and Udacity provide courses on diverse topics, from technical skills to leadership and management, catering to a wide range of professional development goals.

However, the flexibility of OPD also introduces challenges, particularly in terms of self-discipline and motivation. Without the structure of a traditional classroom, learners must be proactive in managing their time and staying engaged with the material. Research indicates that a significant number of online learners struggle with completion rates. According to a study by the Massachusetts Institute of Technology (MIT), the average completion rate for online courses is less than 10% (Reich & Ruipérez-Valiente, 2019).<sup>1</sup> This suggests that while access to OPD is abundant, maintaining the motivation to complete courses remains a significant hurdle.

### **The Rise of Online Professional Development**

The digital age has revolutionized the approach to professional development. Platforms like Coursera, edX, and local initiatives such as DigiSkills.pk offer diverse courses catering to a range of professional needs. These platforms provide the flexibility to learn at one's own pace and on one's schedule, which is especially valuable in a country where balancing work, family, and education can be challenging. The growing demand for such platforms highlights the shift towards digital learning solutions in Pakistan.

Online professional development (OPD) has seen significant growth in recent years, becoming an essential component of career advancement for professionals across various fields. The rise of OPD can be attributed to its flexibility, accessibility, and the wide range of learning opportunities it offers. Different types of OPD have emerged, each catering to specific needs and preferences, and their impact on individuals and organizations has been profound.

One prominent type of OPD is the Massive Open Online Course (MOOC). Platforms like Coursera, edX, and Khan Academy offer MOOCs on diverse subjects, from technical skills such as programming and data science to soft skills like leadership and communication. These courses are often created in collaboration with renowned universities and industry experts, providing learners with high-quality education and the opportunity to earn certificates that can enhance their resumes.<sup>2</sup> The impact of MOOCs is evident in their ability to democratize education, making high-quality learning accessible to individuals regardless of their geographical location or financial status.

Another type of OPD is self-paced learning, which allows individuals to learn at their own speed without the constraints of a fixed schedule. This format is ideal for busy professionals who need to balance work, family, and education. Platforms like LinkedIn Learning and Udemy offer self-paced courses that cover a wide array of topics. The impact of self-paced

learning is significant, as it empowers learners to take control of their education and tailor it to their specific needs and goals, leading to improved job performance and career advancement.

Instructor-led online courses provide a more structured learning experience compared to MOOCs and self-paced learning. These courses, often delivered through platforms like Zoom or Microsoft Teams, involve live sessions with instructors, allowing for real-time interaction and immediate feedback.<sup>3</sup> This type of OPD is particularly beneficial for complex subjects that require guided instruction and for learners who thrive in a more interactive environment. The impact of instructor-led courses is seen in the enhanced understanding and retention of material, as well as the development of a supportive learning community.

Corporate training programs have also embraced online professional development. Many organizations now use online platforms to deliver training to their employees, covering topics such as compliance, technical skills, and professional development. These programs often include a combination of self-paced modules, live webinars, and interactive elements like quizzes and group projects. The impact of corporate online training is substantial, as it enables organizations to efficiently upskill their workforce, improve productivity, and stay competitive in a rapidly changing business environment.

Microlearning, which involves short, focused learning sessions, is another type of OPD gaining popularity. Platforms like Duolingo for language learning and Blinkist for book summaries exemplify this approach. Microlearning caters to the modern professional's busy lifestyle by breaking down complex subjects into manageable, bite-sized lessons. The impact of microlearning is notable in its ability to facilitate continuous learning and knowledge retention without overwhelming the learner, making it easier to integrate learning into daily routines.

The impact of online professional development extends beyond individual benefits. Organizations that invest in OPD for their employees often see improved job satisfaction, higher retention rates, and a more skilled and adaptable workforce. Moreover, the ability to access a global talent pool of instructors and course creators allows organizations to provide high-quality training without the logistical challenges associated with traditional, in-person training programs.

In conclusion, the rise of online professional development has transformed the landscape of continuous education. Different types of OPD, including MOOCs, self-paced learning, instructor-led courses, corporate training programs, and microlearning, cater to various learning preferences and needs. The impact of these learning modalities is profound, benefiting both individuals and organizations by enhancing skills, increasing accessibility to education, and fostering a culture of continuous learning. As technology continues to evolve, the scope and effectiveness of OPD are likely to expand further, shaping the future of professional development.

#### **Challenges in Access and Infrastructure**

One of the most significant barriers to effective OPD in Pakistan is the digital divide. According to the Pakistan Telecommunication Authority (PTA), internet penetration in Pakistan stands at around 39%, with considerable disparities between urban and rural areas.<sup>4</sup> This digital divide means that a significant portion of the population lacks access to the reliable internet necessary for engaging in online learning. Additionally, the quality of internet service can be inconsistent, further hindering the learning experience.

Access to online professional development (OPD) is hindered by various challenges in infrastructure and accessibility. These challenges manifest in several forms, each impacting

learners and educators differently, and ultimately influencing the effectiveness of OPD initiatives.

A primary challenge is the digital divide, which refers to the disparity in access to technology and the internet. In many regions, especially rural and underdeveloped areas, reliable internet access is limited or nonexistent. According to the International Telecommunication Union (ITU), approximately 37% of the global population had never used the internet by the end of 2021, with most of these individuals residing in developing countries. This digital divide limits access to OPD resources, creating an unequal playing field where only those with adequate internet connectivity can benefit from online learning opportunities.<sup>5</sup> The impact is profound, as it perpetuates educational inequalities and hinders the professional growth of individuals in underserved communities.

Another significant issue is the quality of internet connectivity. Even in areas where internet access is available, it may be plagued by slow speeds and frequent disruptions. The World Bank reports that many developing countries suffer from inadequate broadband infrastructure, leading to unreliable internet services. This can severely impact the learning experience, as stable internet connectivity is crucial for participating in live sessions, downloading course materials, and engaging in interactive activities. The frustration and inefficiency caused by poor internet quality can lead to decreased motivation and lower completion rates for online courses.<sup>6</sup>

Technical infrastructure, including the availability and quality of devices, also plays a critical role in access to OPD. Many individuals, especially in low-income households, lack access to modern computers, tablets, or smartphones necessary for participating in online courses. Furthermore, outdated or low-performance devices can struggle to support the software and applications used in OPD platforms. This technological gap not only limits access to online learning but also affects the quality of the learning experience. The impact is evident in the reduced ability of learners to fully engage with course content, participate in interactive elements, and achieve desired learning outcomes.

Language and digital literacy barriers further complicate access to OPD. In many regions, the majority of online courses are offered in dominant global languages such as English, which may not be accessible to non-native speakers. Moreover, even if learners are proficient in the course language, they may lack the necessary digital literacy skills to navigate online learning platforms effectively. According to UNESCO, a significant portion of the global population lacks basic digital literacy skills, which can hinder their ability to benefit from online education.<sup>7</sup> The impact of these barriers includes reduced enrollment in OPD courses, lower completion rates, and a diminished capacity to leverage online learning for professional development.

Economic factors also play a crucial role in access to OPD. While many online courses are offered for free, a significant number of high-quality programs require payment for access or certification. For individuals in low-income regions, the cost of these courses can be prohibitive. Additionally, the hidden costs of internet access and purchasing necessary devices can add to the financial burden. The economic challenge limits the ability of individuals to invest in their professional development, thereby impacting their career advancement opportunities and overall economic mobility.

The challenges in access and infrastructure significantly impact the effectiveness and inclusivity of online professional development. The digital divide, poor internet quality, inadequate technical infrastructure, language and digital literacy barriers, and economic

constraints all contribute to a landscape where many individuals are unable to benefit from OPD. Addressing these challenges requires coordinated efforts from governments, educational institutions, and technology providers to improve infrastructure, expand access to affordable internet and devices, enhance digital literacy, and offer more inclusive and affordable learning opportunities. By tackling these issues, we can create a more equitable environment where everyone has the chance to engage in lifelong learning and professional growth.

### **Self-Discipline and Motivation**

Flexibility in OPD requires a high level of self-discipline and motivation, which can be challenging for many learners. Unlike traditional classroom settings, online courses often lack the structured environment that helps maintain engagement. A study by the Massachusetts Institute of Technology (MIT) found that the average completion rate for online courses is less than 10% (Reich & Ruipérez-Valiente, 2019).<sup>8</sup> In Pakistan, where learners may also juggle multiple responsibilities, maintaining motivation and completing courses can be particularly difficult.

### **Quality and Credibility of Courses**

The quality and credibility of online courses vary widely. While some platforms offer high-quality, accredited courses taught by industry experts, others may provide less rigorous or outdated content. For Pakistani professionals, it is crucial to evaluate the credibility of courses and the qualifications of instructors. Ensuring the selection of reputable courses is essential for achieving meaningful professional development outcomes.

The quality and credibility of online professional development (OPD) courses are critical factors that influence their effectiveness and impact. Different types of OPD courses vary in their quality and credibility, which in turn affects the learning outcomes and professional growth of participants. Evaluating these factors is essential to ensure that learners invest their time and resources in courses that provide genuine value.

Massive Open Online Courses (MOOCs) are a popular type of OPD that offer a wide range of subjects from various prestigious institutions. While MOOCs from platforms like Coursera, edX, and Khan Academy are often created in collaboration with top universities and industry experts, ensuring high-quality content, there are also MOOCs from lesser-known providers that may not maintain the same standards. The credibility of MOOCs is often linked to their association with reputable institutions and the qualifications of their instructors. High-quality MOOCs provide learners with valuable skills and knowledge that can enhance their career prospects, but low-quality MOOCs may lead to a subpar learning experience and limited professional benefits.

Self-paced learning courses are another common type of OPD. Platforms such as LinkedIn Learning and Udemy offer a plethora of courses that learners can complete at their own pace. The quality and credibility of these courses can vary significantly. While some courses are taught by industry professionals and experts with practical experience, others may be created by less experienced instructors, leading to inconsistent quality.<sup>9</sup> The impact of self-paced learning is highly dependent on the course's content and the instructor's expertise. High-quality self-paced courses can lead to substantial skill development and career advancement, while poorly designed courses may result in wasted time and resources without significant professional growth.

Instructor-led online courses offer a more structured and interactive learning experience compared to MOOCs and self-paced courses. These courses, often delivered through platforms like Zoom or Microsoft Teams, involve real-time sessions with instructors, allowing for



immediate feedback and interaction.<sup>10</sup> The credibility of these courses is generally higher when they are offered by reputable institutions or well-known industry professionals. The impact of instructor-led courses is significant, as they provide a comprehensive understanding of the subject matter and foster a collaborative learning environment. However, the effectiveness of these courses depends on the instructor's teaching skills and the course design.

Corporate training programs delivered online are increasingly used by organizations to upskill their employees. These programs often include a combination of self-paced modules, live webinars, and interactive elements such as quizzes and group projects. The quality of corporate training programs is typically high, as they are designed to meet specific business needs and are often created in partnership with industry experts. The credibility of these programs is usually assured by the organization's investment in reputable training providers. The impact of high-quality corporate training programs is substantial, leading to improved employee performance, increased productivity, and enhanced organizational competitiveness. However, if the training programs are not well-designed or tailored to the employees' needs, the effectiveness may be limited.

Microlearning, which involves short, focused learning sessions, is another type of OPD that is gaining popularity. Platforms like Duolingo for language learning and Blinkist for book summaries exemplify this approach.<sup>11</sup> The quality and credibility of microlearning content depend on the accuracy and relevance of the information provided. High-quality microlearning sessions are concise and focused, providing learners with essential knowledge that can be quickly applied in their professional contexts. The impact of effective microlearning is notable in its ability to facilitate continuous learning and quick skill acquisition without overwhelming the learner. However, low-quality microlearning content that lacks depth and accuracy may not provide meaningful learning outcomes. In conclusion, the quality and credibility of online professional development courses vary widely across different types. High-quality and credible courses, whether they are MOOCs, self-paced learning, instructor-led, corporate training programs, or microlearning sessions, can significantly enhance professional skills and career prospects. Conversely, low-quality courses with questionable credibility can lead to a poor learning experience and limited professional benefits. It is crucial for learners to carefully evaluate the quality and credibility of OPD courses to ensure they invest their time and resources in programs that offer genuine value and contribute to their professional growth.

Effective learning often requires interaction and engagement, which can be limited in online settings. Traditional classroom environments provide face-to-face interaction with instructors and peers, fostering a collaborative learning atmosphere. In contrast, online courses can feel isolating. To mitigate this, many OPD platforms incorporate interactive elements such as discussion forums, live webinars, and group projects. These features can enhance the learning experience by facilitating peer interaction and real-time feedback from instructors.

### **Technical Barriers**

Technical issues present another significant barrier to OPD in Pakistan. Reliable internet access, up-to-date hardware, and familiarity with online learning platforms are essential for a seamless learning experience. For individuals in areas with limited internet connectivity or those who lack the necessary technological resources, these barriers can be insurmountable. Providing adequate support and resources to address these technical challenges is crucial for equitable access to online learning opportunities.

Technical barriers to online professional development (OPD) in Pakistan present significant challenges that affect access and the effectiveness of online learning. These barriers

include unreliable internet connectivity, limited access to suitable devices, low digital literacy, software compatibility issues, and security concerns. Understanding these barriers and their impact is crucial for developing strategies to enhance OPD in the country.

Unreliable internet connectivity is a major technical barrier in Pakistan. Despite efforts to improve internet infrastructure, the Pakistan Telecommunication Authority (PTA) reported that internet penetration in Pakistan was around 39% in 2021, with significant disparities between urban and rural areas.<sup>12</sup> Many rural regions still lack reliable internet access, making it difficult for learners to participate in online courses. This connectivity issue disrupts the learning experience, leading to decreased engagement and lower completion rates. The impact is particularly severe in rural and remote areas, where students and professionals may be entirely cut off from online educational opportunities.

Limited access to suitable devices is another critical barrier. Many Pakistani households, especially in low-income areas, do not have access to modern computers, tablets, or smartphones necessary for participating in OPD. According to the Pakistan Bureau of Statistics, a significant proportion of the population uses basic mobile phones rather than smartphones capable of supporting online learning applications.<sup>13</sup> This device limitation restricts the ability of learners to access and engage with course content, participate in interactive sessions, and complete assignments. The impact of inadequate device access is a significant reduction in the ability to benefit from OPD, widening the digital divide and educational inequality.

Low digital literacy is a substantial hurdle to effective OPD in Pakistan. Many individuals, particularly in rural areas, have limited experience with digital technologies and may lack the skills needed to navigate online learning platforms effectively. A report by the World Bank highlighted that a large segment of the Pakistani population requires significant improvements in digital literacy to fully participate in the digital economy.<sup>14</sup> The lack of digital literacy prevents learners from accessing, understanding, and utilizing online educational resources, thereby limiting their ability to benefit from OPD. The impact includes lower participation rates in online courses and reduced learning outcomes.

Software compatibility issues also pose technical barriers to OPD in Pakistan. Different online courses may require specific software or applications that may not be compatible with all devices or operating systems commonly used in the country. Learners often face difficulties in accessing course materials if the required software is not available on their devices or if they lack the technical knowledge to install and troubleshoot these applications. This barrier can lead to missed learning opportunities and can deter learners from continuing their professional development. The impact is a significant reduction in the effectiveness of online learning due to technical frustrations.

Security and privacy concerns further complicate access to OPD in Pakistan. Learners may be hesitant to engage with online platforms due to concerns about the security of their personal information and the potential for cyber threats. According to the Digital Rights Foundation, Pakistan has witnessed an increase in cyber-attacks targeting educational institutions and online platforms.<sup>15</sup> These security concerns can lead to decreased trust in online learning environments, reluctance to participate in OPD, and potential harm from data breaches. The impact includes lower enrollment in online courses and increased anxiety among learners about the safety of their information.

Technical barriers to online professional development in Pakistan are diverse and significantly impact the accessibility and effectiveness of OPD. Unreliable internet

connectivity, limited access to suitable devices, low digital literacy, software compatibility issues, and security concerns all present substantial challenges. These barriers lead to decreased engagement, lower completion rates, and a reduced ability to benefit from online learning opportunities. Addressing these technical barriers requires coordinated efforts to improve internet infrastructure, provide affordable access to modern devices, enhance digital literacy, ensure software compatibility, and secure online learning environments. By tackling these challenges, Pakistan can create a more inclusive and effective OPD landscape, enabling more individuals to engage in lifelong learning and professional growth.

### **Strategies for Effective Online Professional Development**

- Strategies for effective online professional development (OPD) in Pakistan must address the unique challenges faced by learners and educators in the country. These strategies include improving internet infrastructure, providing access to suitable devices, enhancing digital literacy, ensuring high-quality content, and fostering a supportive learning environment. Each strategy can significantly impact the effectiveness of OPD, leading to better learning outcomes and professional growth.
- Improving internet infrastructure is a foundational strategy for effective OPD in Pakistan. The government and private sector must invest in expanding broadband coverage, especially in rural and underserved areas. Enhancing internet connectivity ensures that more individuals can access online courses without disruption. According to the Pakistan Telecommunication Authority (PTA), increasing internet penetration and improving service quality can significantly enhance the reach and effectiveness of OPD. The impact of better internet infrastructure includes higher engagement levels, improved course completion rates, and greater access to educational opportunities across the country.<sup>16</sup>
- Providing access to suitable devices is another critical strategy. Initiatives to distribute affordable and modern devices to students and professionals can bridge the technology gap. Public-private partnerships can play a crucial role in making devices like laptops, tablets, and smartphones more accessible. Programs similar to the government's "Digital Pakistan" initiative can facilitate this process. The impact of increased device access is significant, enabling more learners to participate fully in online courses, engage with interactive content, and complete assignments effectively.
- Enhancing digital literacy is essential for maximizing the benefits of OPD. Digital literacy programs should be integrated into the education system at all levels, from primary to higher education, and extended to professional training programs. Organizations such as the World Bank have highlighted the need for comprehensive digital literacy initiatives to equip individuals with the necessary skills to navigate and utilize digital tools effectively.<sup>17</sup> The impact of improved digital literacy includes greater confidence and competence in using online learning platforms, higher participation rates, and better learning outcomes.
- Ensuring high-quality content is vital for effective OPD. Online courses must be designed by experts and adhere to high educational standards. Collaboration with reputable educational institutions and industry professionals can help maintain the quality and relevance of course content. Platforms like Coursera and edX, which partner with top universities, set a benchmark for quality. In Pakistan, local platforms should strive to meet similar standards. The impact of high-quality



content includes enhanced learning experiences, better knowledge retention, and more significant professional development.

- Fostering a supportive learning environment is another key strategy. Online learning can be isolating, so creating opportunities for interaction and community building is crucial. Implementing features such as discussion forums, peer review systems, and live Q&A sessions can help. Additionally, providing access to mentors and support services can significantly enhance the learning experience. Research by the Massachusetts Institute of Technology (MIT) has shown that learner support systems can improve engagement and completion rates.<sup>18</sup> The impact of a supportive learning environment includes increased learner satisfaction, higher levels of motivation, and better overall outcomes.
- Customizing learning paths to meet the diverse needs of learners is also important. OPD platforms should offer personalized learning experiences based on individual goals, learning styles, and career paths. Adaptive learning technologies, which tailor content and pace to the learner's needs, can be particularly effective. This approach ensures that learners receive relevant and engaging content that matches their professional aspirations. The impact of personalized learning paths includes higher engagement, improved learning efficiency, and more targeted skill development.

In conclusion, effective online professional development in Pakistan requires a multi-faceted approach that addresses the unique challenges of the local context. Strategies such as improving internet infrastructure, providing access to suitable devices, enhancing digital literacy, ensuring high-quality content, fostering a supportive learning environment, and customizing learning paths can significantly improve the effectiveness of OPD.<sup>19</sup> By implementing these strategies, Pakistan can create a more inclusive and impactful OPD landscape, enabling individuals to achieve their professional goals and contribute to the country's development.

### **Summary**

Effective online professional development (OPD) strategies are essential for overcoming barriers and enhancing the learning experience for professionals. These strategies include improving internet infrastructure to ensure reliable and fast connectivity, providing access to suitable devices to bridge the technology gap, and enhancing digital literacy to equip individuals with necessary digital skills. Ensuring high-quality content through expert-designed courses, fostering a supportive learning environment with interactive features and mentorship, and customizing learning paths to meet individual goals are also crucial. Each of these strategies significantly impacts learner engagement, course completion rates, and overall learning outcomes, enabling broader participation and more meaningful professional development.

### **Conclusion**

In conclusion, implementing a multi-faceted approach to online professional development is key to maximizing its effectiveness and accessibility. By addressing challenges related to internet infrastructure, device accessibility, digital literacy, content quality, supportive environments, and personalized learning paths, OPD can become more inclusive and impactful. These strategies collectively enhance the learning experience, improve engagement and completion rates, and help professionals achieve their career goals. Through coordinated efforts, it is possible to create a robust OPD landscape that fosters continuous learning and professional growth, ultimately contributing to the development of skilled professionals and advancing various fields.

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