



## EXPLORING DIGITAL PUBLIC SERVICE THROUGH PUBLIC SERVICE LOGIC PERSPECTIVE: EVIDENCE FROM HEC PAKISTAN

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### **Abstract:**

During last century, most of the government around globe has initiated digital transformation of public service primarily for enhancing public service delivery, especially in developing nations where conventional bureaucratic structures frequently hamper efficiency and effectiveness. Utilizing the nexus between Public Service Logic (PSL) and the Technology Acceptance Model (TAM), this research investigates the role of citizen feedback in enhancing digital public services, specifically through the case study of the Higher Education Commission (HEC) of Pakistan's degree attestation system. The study is based on qualitative data derived from user interviews and online feedback to compare citizen experiences with digital and walk-in attestation services and also explore whether their experiences can add to any other user experience or not. The results indicate that digital system is better than the traditional walk-in process, which is still linked to delays and administrative frustration. The study does not find evidence of formal co-production or co-design; however, it illustrates that citizen feedback serves as an indirect yet significant contribution to public value creation by guiding future service enhancements and influencing user expectations. The study augments digital governance literature by positioning citizen feedback within a PSL framework, demonstrating that public value can develop incrementally through feedback loops rather than solely through fully institutionalized co-creation mechanisms. The results provide actionable insights for public service providers aiming to progress from basic digitization to enhanced citizen-centric service delivery.

**Keywords:** Public Service Logic; digital public services; citizen feedback; public value; higher education governance; Pakistan

### **Introduction**

Digital transformation is changing how public services are delivered around the world. It gives governments innovative ways to make things more efficient, transparent, and engaging for citizens. In developing nations like Pakistan, where public administration has historically been marked by hierarchical structures and procedural inefficiencies, digital platforms present significant potential for resolving continuing service delivery issues. But digitizing things doesn't necessarily create public value, though it potentially depends on how people use, perceive, and respond to digital services.

The Higher Education Commission (HEC) of Pakistan presents a significant opportunity to



analyze these dynamics. HEC is the federal agency in charge of overseeing higher education. It provides important services like degree attestation, which have a direct impact on graduates' job prospects and ability to move up in their education. In the past, degree attestation was done through a walk-in system that required people to go to HEC offices in person. This often led to long queues, delays, and uncontented citizens. Due to pressure from the government, especially during the COVID-19 pandemic, HEC set up a digital degree attestation system and a service delivery system based on couriers. This system has been implemented since 5 years and end users are not only utilizing this service but also perceive it as a better alternative for traditional systems. This change brings up some important questions for analysis. How do people perceive digital degree attestation services compared to the old walk-in system? What makes them trust and accept digital public services? And most importantly, how does feedback from citizens help improve services and create public value when there aren't any formal co-production mechanisms?

The current body of research on digital governance emphasizes the increasing role of citizens are recipients of services but also as contributors to public value through interaction, feedback, and engagement. Public Service Logic (PSL) asserts that public value is generated through continuous interactions between service providers and users, rather than exclusively through hierarchical service delivery. A significant portion of the empirical research on co-creation and digital public services originates from Western contexts, with scant evidence from South Asia. In Pakistan, research on e-government has predominantly concentrated on technology adoption rather than the influence of user engagement and feedback on service outcomes. This research addresses this void by analyzing HEC's digital degree attestation services through an integrated TAM-PSL framework. Instead of asserting formal value co-creation, the study examines the role of citizen feedback as an indirect contributor to public value creation, specifically by educating future users and directing gradual service enhancements. The paper adds to discussions about how to improve digital public services in developing countries and shows how public value can come from learning processes that are based on feedback.

#### **Literature Review:**

The foundational discourse on value co-creation stems from Service-Dominant Logic (SDL), which reconceptualizes value as arising from use rather than being intrinsic in outputs. Vargo and Lusch (2004, 2008) contend that customers (or service users) are active participants whose information and interactions influence value (Prahalad & Ramaswamy, 2004; Grönroos, 2008). SDL stresses that conversation, experience, and involvement are key to creating value. PSL is a complex and challenging framework, but it has the potential to transform public service delivery. It focuses on how value emerges through interactions between service organizations, citizens, and larger governance contexts without assuming that formal co-production happens in every case (Osborne et al., 2015; Osborne, 2018). PSL therefore accommodates varying levels of citizen engagement, from passive feedback to active collaboration. Public service organizations (PSOs) and public services. The establishment of public services and public organizations is viewed as the accomplishment of public policy in conventional public administration and management models. These organizations and services exist to serve the needs of the masses. PSL has a distinct perspective on organizations and services. Instead, they are tools that people using public services can utilize to meet their needs and improve their own lives (Eriksson & Hellström 2021). Nevertheless, the mere fact that a public service organization exists, does not generate value on its own. It is the way in which a citizen engages with a service or organization that provides it. For example, the presence of a



school and the role of its teachers do not provide value through education. Instead, it offers a collection of resources. The crucial aspect is how each schoolchild uses these resources, which will be influenced by their needs, expectations (conditioned by previous service experiences), and personal/family experiences. This research is actually establish that the public service like degree attestation services can actually be beneficial if user interaction with the system is capitalized.

In public administration, it is very important to know the difference between co-production and value co-creation. Co-production usually means that professionals and users work together to design and deliver services (Brandsen & Honingh, 2016). At the same time, PSL sees value creation as relational and emergent, acknowledging that citizens can indirectly contribute through feedback, evaluation, and experience (Osborne et al., 2016). Under PSL, value is not only embedded by providers but also manifested through usage, interaction, and reciprocal learning. Recent studies show that citizen engagement often happens through feedback systems, which are very important for creating public value, especially in digital service settings (Voorberg et al., 2015; Lember et al., 2019). A systematic review of digital participation indicates that digital engagement initiatives can create public value by allowing citizens to articulate preferences, priorities, and criticisms, even in the absence of formal co-design frameworks (Government Information Quarterly, 2024). This body of work emphasizes that feedback loops and represent the primary form of citizen engagement in numerous digital environments.

Digital transformation in the public sector has changed the way services are given and used. Digital platforms facilitate efficient delivery, enhanced accessibility, and instantaneous interaction (Dunleavy et al., 2006; Meijer, 2015). Recent studies highlight the influence of digital services on citizens' perceptions of public value, in addition to their contributions to efficiency. For instance, studies indicate that citizens evaluate digital public services through a public value framework, associating personal advantages—such as financial savings and convenience—with overarching societal principles like equity and democratic participation (Govt Information Quarterly, 2024). However, academics caution that technology alone does not ensure substantive engagement or value attainment. If public agencies don't listen to what users have to say, digital platforms could end up being just as inefficient as hierarchies (Janssen & van der Voort, 2016; OECD, 2024).

Even though digital governance is growing quickly, there isn't much research on digital public services and how people in South Asia get involved. Most research emphasizes adoption barriers, infrastructure limitations, and bureaucratic obstacles, rather than the role of citizen feedback in enhancing public value outcomes (Dwivedi et al., 2017; Naz, 2009). Furthermore, governance research in Pakistan has primarily focused on administrative inefficiencies, with limited emphasis on the role of digital platforms in facilitating citizen-state interactions. This study addresses a significant gap by analyzing citizen feedback not as formal co-creation but as an emergent mechanism for public value creation within HEC's digital degree attestation services. By combining PSL and TAM, it shows how feedback loops affect service improvement and future user experiences. This adds to the existing research on digital governance in developing countries.

### **Conceptual Framework**

To explain how feedback happens, it's important to know how citizens feel about digital services. The Technology Acceptance Model (TAM) asserts that perceived utility and user-friendliness drive citizen adoption of e-government services (Davis, 1989; Venkatesh et al., 2003). In public settings, these elements are intricately associated with trust and transparency,



which have demonstrated their impact on sustained engagement with digital platforms (Alryalat et al., 2020; Digital Trust & Adoption Review, 2025). Recent literature advocates for the amalgamation of adoption models, such as the Technology Acceptance Model (TAM), with governance theories, including the Public Service Logic (PSL), to elucidate the transition of technology utilization into continuous feedback and perceived public value (Lember et al., 2019; Othman & Che Hussin, 2024). This kind of integration demonstrates a process in which good user perceptions lead to usage, feedback, and service improvement, which fits with bigger ideas about how to create interactive public value.

Recent academic work has deepened comprehension of citizen participation and the generation of digital value. A Government Information Quarterly study (2024) examines citizens' perceptions of public value via digital services, indicating that dimensions such as accessibility, equity, and democratic participation are essential to citizen value evaluations. A 2024 systematic review of public value and e-government looks at important ideas about how to create public value in e-government, such as adoption, service quality, engagement, and security. It also stresses that public value comes from well-designed services and a good user experience.

### **Research Design**

This study employs a cross-sectional case design focusing on the Higher Education Commission (HEC) of Pakistan to investigate the creation of public service value through degree attestation services. The data collection involved analyzing online feedback from service users through different online mediums like HEC website, facebook as well as conducting 18 interviews through convenient sampling with users who had utilized the degree attestation services provided by HEC. The data was categorized into two major service aspects: users who opted for the walk-in service and users who chose the courier service for degree attestation. The comparison provided a very clear perceived value of each service and help researcher to identify the perception associated with digital services.

Interviews were based on factors like frequency of service usage, the perceived trustworthiness of the digital system, the fees paid for the services, the time taken to complete the degree attestation, the likelihood of recommending the chosen attestation method to others through word of mouth or online feedback, the overall perception of digital services provided by the government, challenges encountered during the process, the accuracy of the attestation process, and the efficiency of the overall process.

Thematic analysis was employed to identify the underlying themes in the data and to uncover the contributions and feedback provided by the users. This analysis helped the researcher gain insights into users' perceptions of the services, identify areas for improvement, and understand any issues or challenges they encountered during the process. The findings of this analysis hold significance in understanding the effectiveness and impact of digital services provided by government organizations and identification of whether the public service logic is prevalent in the process or not.

### **Findings**

The study reveals satisfactory and viable responses from the users. According to the primary interview data, respondents feel that this is the current and modern system that has not only facilitated the users but also sped up the process. The users consider the e services a better mode and reflect facilitation of public services. For the first time in Pakistani, degrees are being attested and verified online. It is a sign of the nation's education system as a whole relying more



and more on online venues and digital portals. Of course, the prevalence of the COVID-19 pandemic and its impact on mobility, which has prompted employees to do as much work remotely as possible, have also played a significant role in this move.

According to HEC official website:

*“In order to prevent spread of COVID-19, HEC has currently suspended Urgent Attestation under walk-in mode at Islamabad and Regional Centres, Lahore, Karachi, Peshawar and Quetta w.e.f. 18th November 2020. Therefore, all applicants are advised not to visit any HEC office for attestation. However, applicants may apply for degree attestation through courier mode (TCS).”*

The analysis of the collected data revealed distinct themes that shed light on the users' feedback regarding the two modes of degree attestation: courier service and walk-in service. Overall, the feedback towards the courier attestation system was positive, indicating a satisfactory experience. However, in contrast, the walk-in customers expressed a high level of disappointment with the system.

The comparative analysis conducted between the two mediums strongly supports the availability and effectiveness of the online system. Users found the online platform to be convenient, efficient, and reliable for submitting their documents and scheduling appointments. However, despite recognizing the advantages of the online system, some users still opted for the walk-in service due to time constraints or urgent requirements.

Respondents who utilized the walk-in service provided valuable suggestions for improvement. They emphasized the need for more counters to accommodate a larger number of users and requested increased cooperation from the staff to ensure a smoother and more streamlined attestation process. These suggestions aim to address the challenges faced by walk-in customers and enhance their overall experience.

Overall, the analysis of user feedback highlighted positive sentiments towards the courier attestation system and the importance of the online platform. However, improvements in walk-in services, such as additional counters and improved staff cooperation, are necessary to enhance the efficiency and effectiveness of the attestation process for those who choose this mode. Initial codes developed from the data have been presented in table 1.

**Table 1: First Stage Coding**

Initial code	References	Sample excerpts
Experience with the system	20	Great Experience Very well managed and planned institute providing very fast services. Overall procedure has become easier than before due to online system. It was a good experience for service.  A lush green well maintained beautiful family park. Jogging track for evening and morning walk is there. A restaurant with Indoor and out door dining also facilitates the visitors. Good security arrangements. Only families can enter the park. Date palms and other beautiful trees enhances the beauty of the park. Smooth work.



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		<p>no Delayed..</p> <p>Absolute professional staff.</p> <p>Worst system ever thats why Pakistan is suffering I don't know which type of people working in hec and handling work where i can report really bad system i send documents in lahore hec and put special letter + extra envelop inside of tcs envelope for was seal and they did nothing when you ask for some help on call /online portal you will get only one answer ( its not our department)</p>
Smooth process	25	<p>The process is smooth, if you're on time for your appointment.</p> <p>You just have to wait 30 minutes for the attestation process.</p> <p>HEC has improved a lot in its degree attestation service. I had undergone the same process before and it was so messy and uncomfortable. But now they have the whole application made online and you show up at your selected time slot. There's ...More</p>
Easy process/ simplicity of the process	10	<p>The procedure has become efficient and effective now due to online portal service. Its extremely easy for someone who has basic knowledge of using mobile.</p> <p>While submitting online application it take some time for initial scrutiny of uploaded documents but once you are allowed to select a day for your appointment you are good to go.</p> <p>Improved comparatively with other government institutions.</p>
Availability of the guidelines	29	<p>I think the guidelines provided are sufficient to apply</p> <p>The portal is very well designed and allows you to understand the process easily</p> <p>User guidelines are adequately available which help us to fill and submit the application without any help</p>
Bug in the online portal	5	<p>I suggest to install HEC application. Web is not user friendly. Submit all documents through app, and take appointment through app.</p> <p>It has been 16 days I have applied for degree attestation from 26th January. Called them 5 times, no proper response except we do not have data for how many applicants Infront of you, you just have to wait. blindly. No response on issue ticket, they keep delaying</p>
Slow service at the office	10	<p>They are too slow. You need to do the whole procedure with patience. Moreover, you do not need to worry, you can do the attestation at the spot by paying 5k for urgent attestation fee.</p> <p>Slow and incompetent people deciding the future of talented and the well-educated.</p>

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Feedback

Time slot allotted to me was 13:30-14:30, Friday. There is actually a break on Friday, about which i was unaware, the break on Friday is from 12:30 to 2:45. Keep it in mind, It's not a typographical mistake it really is 2:45. The officials come back to the counters at 2:00 pm and after 10 minutes they say its our HEC official 30 minutes break now, so they turf off the counter lights and go, and came back at 2:45. I went to HEC at 12:15 just to grab my token prior to the break but the counter machine refused my request :( so i got my token at 2:15 (after Jumma) submitted my documents at 3:15 at got if back at 4:30.

Good people. Mr. Muhammad Naghman is an Amazing man in HEC Lahore. Guide me and help me in a very positive way. Overall superb experience.

Information system is not as great and not up to the mark to be labeled as higher education commission. Service is slow that one readily gets disappointed. Less number of windows and usually long waiting lines. No proper feedback online. FAQs area doesn't cover the queries generally asked by the student

Initial codes reveal two distinctive categories of respondents experience: the walk-in experience users have complained about the staff attitude, slow speed, and inadequate facilities while courier service users are mostly satisfied with the process. Once the degree is attested users are asked to provide their feedback through the generated forum and this way their feedback is incorporated into the system. The availability of the feedback channel allows users to identify the problems they face and comment on their overall experience. This section explains themes generated from the data which revolves around user perception of efficiency of the services offered, comparison between the two modes of service and user faced problems in the process.

1. Perceived Efficiency of Walk-in Services

Participants frequently described walk-in degree attestation as efficient and predictable, particularly in terms of rapid document submission and timely confirmation. Users emphasized the immediacy of face-to-face processing, often receiving email verification within a short period. These experiences shaped positive evaluations of walk-in services despite the physical effort involved.

One of the respondent indicated: *“Information system is not as great and not up to the mark to be labeled as higher education commission”*

2. Expectation–Reality Gap in Physical Services

Several users reported a mismatch between expectations and actual service procedures at walk-in centers. Early arrival did not necessarily result in faster processing due to token-based entry systems and fixed operating hours. This gap influenced user perceptions of fairness and transparency in physical service delivery.

Most of tehr respondents highlighted: *“Service is slow that one readily gets disappointed”*.



### 3. Digital Platform Usability Constraints

Usability issues emerged as a dominant theme in digital service experiences. Users highlighted problems such as OTP failures, limited system availability on weekends or holidays, and technical glitches that disrupted access. These challenges affected users' ability to complete the attestation process smoothly.

Some of the respondents indicated toward application instead of web page: *"I suggest to install HEC application. Web is not user friendly"*

### 4. Delayed Digital Processing and Responsiveness

Many users expressed frustration with prolonged online scrutiny and the absence of timely status updates. Delays extending over several weeks were commonly reported, creating uncertainty and dissatisfaction. Limited communication during this stage contributed to negative perceptions of digital service reliability.

*"It's much better to go and complete remaining process book appointment book and go instead of TCS it will take more time"*

*"yes you can go directly by choosing the urgent service then they give an appointment after that u can go and get ur docs attested"*.

### 5. Information Accuracy and Transparency Issues

Concerns were raised regarding incomplete or inaccurate information displayed on the digital portal, including missing attestation details. Users noted that correction requests and complaints often remained unresolved for extended periods, affecting confidence in the system's accuracy.

### 6. Third-Party Recognition and System Trust

Trust issues became evident when discrepancies between portal records and third-party requirements led to document rejections. Users reported having to initiate reprocessing due to mismatches, highlighting the importance of system accuracy for external validation and institutional credibility.

### 7. Access and Logistical Trade-offs

Users compared walk-in, courier, and digital options by weighing convenience against processing speed. While digital and courier services offered flexibility, walk-in services were often preferred for faster outcomes. These trade-offs influenced service choice depending on urgency and accessibility.

As indicated: *I was really worried in the beginning, especially after reading so many mixed experiences online. But for me, the courier process was extremely smooth, fast, and efficient. " I also want to acknowledge this group. I visited here multiple times for queries and guidance. The posts and responses from members helped me a lot, and I'm truly grateful"*.

### 8. User Preparedness and Information Gaps

In previous times, rejections were frequently attributed to incomplete or illegible documentation submitted by users. Participants emphasized that unclear instructions and limited guidance contributed to errors, indicating that user preparedness played a significant role in service outcomes. However the provision of portal guidelines and helplines now have improved the situation but again the dependency on the user usage of these portals.

For an instance :

The themes generated from the data indicate that users have a positive perception of the online system and appreciate the improved efficiency of the degree attestation process. However, some users also expressed negative feedback regarding the slow speed of the attestation process and the lack of cooperation from staff members. The online portal received mixed feedback, with some users finding it easy to use, while others found it difficult. There were complaints



about the lack of proper feedback and information available online, including the FAQs section not covering commonly asked questions. Additionally, issues related to delays in the attestation process and long waiting lines led to frustration and disappointment among users. While some staff members were praised for their professionalism and helpfulness, the information system was criticized for not being up to the mark for a higher education commission.

## **Discussion**

### **Absence of Formal Value Co-Creation**

The findings of the study reveal limited evidence to support formal value co creation which is expected through service dominant logic. It is due to the fact that users do not participate in service design, decision-making, or joint problem-solving integrated with the service provider. However, the user interaction with the service provide is primarily transactional inherently governed by predefined procedures and institutional rules. These findings are actually support the public service logic which assume that public service generally receive co production or co design by just offering it(Osborne, 2018).

It is important to note the Digital services of government, though guarantee better access and efficiency, but do not transform users into co creators of the service. The system constraints like portal downtime, delayed scrutiny, and incomplete information may indicate bureaucratic logic rather than service dominant logic unless accompanied by organizational change and institutional responsiveness.

### **Presence of Public Value Through Value-in-Use**

Despite the absence of formal co-creation, the study finds clear evidence of public value realized through value-in-use. Users evaluate services based on timeliness, convenience, reliability, and recognition by third-party institutions. Walk-in services, for instance, are perceived as valuable due to immediate processing and predictable outcomes, even when physical effort is required. Similarly, digital services generate value by reducing paperwork and enabling remote access, despite usability challenges.

From a PSL perspective, these experiences demonstrate that public value emerges not through joint production but through citizens' lived experiences of service use. Value is realized individually and contextually, shaped by institutional constraints and service outcomes rather than collaborative intent. This finding supports the argument that public value does not require active co-creation to exist; it can emerge incrementally through effective service delivery.

### **User Feedback as an Indirect Value Mechanism**

A key contribution of this study lies in reconceptualizing user feedback as an indirect mechanism of public value creation rather than evidence of co-creation. Feedback expressed through social media, online forums, and complaint mechanisms reflects citizens' experiential knowledge of service shortcomings and strengths. While users do not influence service design directly, their feedback creates informational inputs that can support organizational learning and service improvement for future users.

This feedback-driven pathway aligns with PSL's emphasis on learning and adaptation within public service systems. However, the findings also indicate that the realization of public value through feedback depends heavily on institutional responsiveness. Delays in addressing complaints and unresolved portal inaccuracies weaken feedback loops and limit their contribution to public value outcomes. Thus, feedback alone is insufficient; it must be systematically interpreted and acted upon by public organizations.

### **Interpreting Findings Through TAM**

It is also indicated by the findings that TAM improved the explanatory power of the study by clarifying how perceptions of usefulness, ease of use, and trust shape engagement with digital



services. Positive perceptions of usefulness encourage adoption, but usability failures and trust issues—such as third-party rejections due to portal inaccuracies—undermine sustained engagement. These findings suggest that technology acceptance is a necessary but insufficient condition for public value creation.

By integrating TAM with PSL, the study demonstrates that adoption enables feedback, but feedback does not equate to co-creation. Instead, it facilitates a sequential process in which positive service experiences support continued use, user feedback highlights gaps, and institutional learning determines whether public value is enhanced over time. This integrated perspective extends existing literature that has often treated adoption and value creation as analytically separate phenomena.

### **Implications for Digital Public Service Governance**

The findings carry important implications for digital public service governance in developing contexts. First, policymakers should avoid normative assumptions that digital platforms automatically foster co-creation. Second, public value should be understood as emerging through service reliability, responsiveness, and institutional learning, rather than participatory design alone. Third, feedback mechanisms must be institutionalized and visibly linked to service improvement to strengthen trust and legitimacy.

In sum, this study demonstrates that while digital degree attestation services do not enable formal value co-creation, they nonetheless generate public value through value-in-use and feedback-enabled learning. This distinction refines theoretical debates on co-creation and offers a pragmatic framework for understanding how digital public services can deliver value in institutionally constrained environments.

### **Conclusion:**

Based on the findings it can be concluded that the users who are aware of the e services mechanism and are confident to use the system effectively generally have a positive perception of the digital mode. However, the dissatisfaction from the users about the delays and OTP are also evident which reflect technical inefficiency of the system.

Moreover it is an important finding that the user awareness, their effort to self service by consulting portal guidelines and online videos improve the chances of service success. In this process the feedback of the users on the online medium like social media and website of HEC, provide an important platform for the future service user as their perception and mode selection is based on that feedback also. This situation can act as a value co creation or may act as value destruction mechanism. This call for an important responsibility of the stakeholders involved to identify the real issues and resolve them so that user feedback may not turn out to be so negative that it impact the future users.

The social media engagement of HEC relevant personnel can also add to the process to address the queries of the users on a run time basis so that a clear guidance can be provided to them.

As a nutshell it is important to keep in consideration the impact of provision of digital services and all the contextual factors must be kept in mind as providing e services alone cannot create public service value rather than an active role of each stakeholder involve is essential to atleast the full potential of the initiative taken.

### **Recommendations:**

On the basis of discussion and conclusion three major recommendations are there for future. Firstly for policy makers, it is important to note that digitalizing public service is an important initiative for making government transparent and more responsiveness however the success of



any initiative lies in the increased level of awareness of the service use and its benefits to the end users. Moreover the provision of helping portals, manuals and videos make the service more useful. Another important recommendation is that policy makers must consider users a resource which can engage in feedback provision and hence can act as a value creator agent if utilized properly. So obtaining the feedback about their service usage and its structural display on public forums help the other users and also incorporating their suggestions into the system increase the viability of the public service thus depicting true public service logic. Thirdly the collaboration of institutions like universities and employers may help HEC to view a more holistic picture and can improve the service by actively engaging the major stakeholders of the degree attestations services like employers and citizens both.

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