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Revitalizing Examination Systems in Nepalese Universities: A Case Study of Tribhuvan University, Kathmandu

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Abstract

Tribhuvan University (TU), the largest and oldest institution of higher education in Nepal, has a centralized, manual system of examinations characterized by systemic inefficiencies: a delay of over 12-19 months in results publication, which exists for bachelor level students enrolled in the annual system, political interference in the selection of examiners, the potential insecurity in the handling of answer sheets and predominant validity of examinations based on rote learning that suffers from an insincere evaluation in measurement of critical thinking and practical skills. These deficiencies, in turn, lead to extended program completion, loss of assessment validity, loss of stakeholder trust and graduate employability which go against commitments of Sustainable Development Goal 4 and the National Education Policy (2022) of Nepal on quality and equity. This sequential explanatory mixed methods research study evaluated the system against a global bench mark and proposed a reform. Quantitative data on a total of 395 respondents (217 students, 118 faculty and 60 administrative staff) using a valid survey identified deep dissatisfaction of the respondents' with low mean score obtained on efficiency (M=2.12, SD=0.95), transparency (M=2. 05, SD=0.91), security (M= 1.91, SD=0.89), fairness (M=2.28, SD=1.02) and timeliness (M=1.62, SD=0 Five core barriers that foreseeably arise from processing bottlenecks from centralization, biased influences, inadequate safeguards, rote-dominant evaluation, and regional inequities were identified through thematic analysis of 25 semi-structured interviews. Anchored in Institutional Theory, Systems Theory and the Technology Acceptance Model results in a high level of consensus for reform (digital support M = 4.38; regional centers M = 4.25), indicating a high level of perceived usefulness. The proposed framework combines autonomous regional centers, secure digital platforms, competency-based assessment, and independent oversight to create greater efficiency, transparency and integrity which provides a replicable model when resources are mated with resource constrained systems.

Keywords: assessment integrity, decentralization, digital transformation, examination reform, Tribhuvan University

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Introduction

Higher education systems across the globe are engines of socioeconomic progress, developing skilled human capital, promoting innovation and supporting sustainable development goals (Marginson, 2016). In the developing countries, rising pressures of enrolment and resource constraints have imposed a greater need to develop efficient and fair assessment systems, which will preserve academic integrity and quality of graduates (Altbach et al., 2019). Recent global trends have been focused on moving away from traditional exam-type assessments that rely heavily on rote learning to competency-focused, formative assessments that include digital tools to promote timeliness of assessments and transparency and fairness of evaluations (Leo, 2024).

In the case of South Asia, the pace of expansion in high education is rapid, but reforms related to assessment have lagged behind in most situations as a result of infrastructural shortcomings and governance issues (Subedi, 2025). Countries such as India and Bangladesh have made progress in the digital examination platform that minimises processing delays and malpractice (Chakraborty et al., 2021; Khan et al., 2021). These innovations are keys to the potential of technology to target systemic bottlenecks in the large-scale systems (Butler-Henderson et al., 2023).

Hiigher education of Nepal is dominated by Tribhuvan University (TU), which was founded as the first and the largest public university in Nepal in 1959. TU enrolls around 60% of the tertiary students in Nepal in more than 1,100 affiliated campuses, and plays a central role in the formation of human capital (University Grants Commission Nepal, 2024). Despite this scale, the examination system followed by TU is chiefly centralized and manual by the method of annual summative examination system, which emphasizes mainly on the memorization skills rather than critical thinking or practical skills of the students (Sherpa and Khanal 2025).

Recent analyses show that TU has made some partial reforms in the form of semester-based evaluations in some programs, and grading reforms from percentage to letter systems (Adhikary, 2024a). However, implementation is still spotty with reliance on paper-based processes evident even in most faculties (Thapa & Neupane, 2024). Digital transformation in the field of higher education has been widely adopted globally to improve the efficiency in the assessment and testing procedures but here Nepal is not very forward in sharing their thoughts and initiatives just because of the lack of connectivity and the resistance from the institutional level (Selwyn, 2022; Woldegiorgis, 2022).

The development of examination systems is part of more general pedagogical changes. Globally, the approach to assessment has shifted to authentic and technology-based methods that promote lifelong learning (Boud & Falchikov, 2007). In developing contexts, digital platforms have been useful at reducing cases of fraud and making results more easily available (Sungur Gul & Ates, 2023). However, political interference constitutes one of the major challenges undermining merit-based governance in South Asian universities, in examiner appointment and also in objectivity in evaluation (Welch, 2007).
In Nepal, the higher education reforms have been impacted by national policy of equity and quality under the theme of Sustainable Development Goal 4 (Ministry of Education, Science and Technology Nepal, 2022). The historic model of annual examination of TU inherited from the pre-1970s structures which was unable to cope with the increasing enrolment. Recent stakeholder surveys have demonstrated dissatisfaction with delays as well as perceived inequities, especially in the rural campuses.

Examination system of TU has multifaceted deficiencies which hinder its effectiveness. Result publication delays too frequently stretch past 12 months, leading to program completion delays of between four and six years and economic burdens for students (Sherpa & Khanal, 2025). Political

affiliations add to examination committee compositions and grading thereby undermines fairness and public trust. Security vulnerability occurs due to handling of a script manually which can lead to tamper and discrepancies (Thapa & Neupane, 2024). Assessment also is still rote oriented with limited aspects of continuous or practical assessment incorporate that are not in sync with the 21st century skills demands (Acharya, 2022). Centralisation in Kathmandu is worsening regional disparity along with delay in access of transcript for long distance campuses. Graduate employability issues these problems contribute to graduate employability problems with employers questioning the validity of TU credential (University Grants Commission Nepal, 2024). Compared to the regional counterparts using decentralized models of digitalization, the persistence of TU in outdated practices increases the gap of quality (Sharma & Sharma, 2022; Perera, 2021).

There is a theoretical and practical importance of this research. Theoretically, it works with institutional, systems, and technology acceptance frameworks to a currently understudied South Asian context that extends isomorphism and adoption models to examination reform (DiMaggio & Powell, 1983; Davis, 1989; Scott, 2014). In realistic terms, results can provide actionable legal advice to TU administrators and policy makers, which could then be used to inform a wider higher education digitization strategy in Nepal.

The study fills a literature gap because while there are numerous published assessments of innovations in global scale assessments worldwide (Viberg et al., 2024), the empirical analyses on TU-specific assessments are sparse, with the majority of the studies conducted in Nepal having focused on school-level reforms (Pant et al., 2023). By triangulating the stakeholder perceptions, it evaluates the evidence for anti-interference of political meddling and equity improvement that would benefit the marginalized rural students (Bhatta & Poudel, 2023). Ultimately, successful reforms might help improve TU's regional position, enhance the graduate outcome and support human capital development in Nepal as impacted by demographic youth bulges (Pandey, 2025).

Objectives of the Research

The main objectives of this study are:

1. To critically examine the effectiveness of current examination system of TU in comparison with benchmarks of efficiency, transparency, security, and fairness and identify the major structural, political, and technological barriers.
2. To propose an evidence-based framework of reform combining digital transformation, administrative decentralization through the setting up of regional centers and governance mechanisms for insulating processes from interference and as a means of considering accountability.

Theoretical Framework

This research uses an integrated theoretical model which includes institutional theory, general system theory and extended Technology Acceptance Model (TAM2). These theories provide complementary analytical lenses through which to discuss issues of the persistence of inefficiencies in the evaluation system at Tribhuvan University (TU), and offer justifications for proposed digital and decentralized reforms. Institutional theory explains the persistence of obsolete practices in terms of legitimacy-seeking behavior and isomorphic pressures; general systems theory represents the process of examination in terms of open system vulnerable to disruptions and failures of feedback; TAM2 explains stakeholder resistance / acceptance of technological interventions through social and cognitive determinants.

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Institutional Theory

Institutional theory claims that organizations adopt structures and processes in order to gain legitimacy from the environment, which often leads to the decoupling of formal policies and actual practices (Meyer & Rowan, 1977). In higher education, examination systems are often expressions of institutionalized myths of centralised control and traditional assessment, despite being technically inefficient. In a seminal statement, Meyer and Rowan (1977) explain this dynamic:

> The formal structure of many organizations in postindustrial society dramatically reflects the myths of their institutional environment instead of the demands of their work activities. The myths incorporated in formal structure are rationalized; in the sense that they embody widely held beliefs about the proper way to organize activities; and they are institutionalized, meaning that they are taken for granted as legitimate, apart from evaluations of their impact on work outcomes. Organizations that incorporate societally legitimated rationalized elements in their formal structures maximize their legitimacy and increase their resources and survival capabilities. (p. 341)

This frame of reference sheds light to the perpetuance of TU's manual, centralized examination as a validation to the historical norms in public universities of Nepal despite clear delays and inequities (Adhikary, 2024b).

Modern day uses validate the applicability of the theory. Institutional logics shape governance change for the reform of transitioning higher education systems (Urbanek, 2021). Neo-institutional kind of analysis shows fixation of quality assurance into ceremony with resource affliction (Jung and Horta, 2023). In the Asian context, there are two reasons: state-driven isomorphism based on tradition that preserves traditional structures (Lo, 2022). Institutional structures determine the governance capabilities of University (Luo et al., 2024). Meeting the Competition: Competing logics loom for reform (Shields, Watermeyer. Isomorphic pressures in higher education of Nepal make more old practices of assessment (Karki and Sharma, 2025).

General Systems Theory

General systems theory views organizations as open systems whose interactions with their environment are of constant exchange of matter, energy, and information with the surrounding environment and in which dynamic equilibrium is achieved through feedback mechanisms (von Bertalanffy, 1968). Applied to examination systems, inefficiencies occur because of disturbances in input-process-output flows, for example, in centralized bottlenecks. Von Bertalanffy (1968) describes the open system concept:

> We postulate a new discipline called General System Theory. Its subject matter is the formulation and derivation of those principles which are valid for 'systems' in general... An open system is a system which is in exchange with its environment... Living organisms are essentially open systems, maintaining themselves in a continuous inflow and outflow of components, in a steady state far from thermodynamic equilibrium. (p. 39)

This framework illustrates the delays at TU as systems failure in feedback information and resources (Banathy, 2022; Vanderstraeten, 2023).

Recent scholarship uses systems approaches to educational organizations. Holistic systems thinking to acquire intervention points for institutional change (Hammond, 2023). Shared governance

models have a need to transform all systems interconnectionally (Tierney & Brunton, 2023). Systems theory for restructuring of universities in the face of environmental pressures (Jacobsen, 2024).

Technology Acceptance Model (Extended TAM2).

The extended TAM2 contains social influence and cognitive processes to explain technology adoption, beyond the perceived usefulness and ease of use, which were the original model's two main determinants (Venkatesh & Davis, 2000). For examination reform, it provides an explanation for stakeholder acceptance of digital platforms. The extensions, according to Venkatesh and Davis (2000), are:

> We theorize that social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived ease of use) will influence perceived usefulness... These determinants collectively account for substantial additional variance in usefulness perceptions and behavioral intention relative to the original TAM. (p. 191)

This model is relevant for TU, where the barriers to adoption are related with normative resistance to change (Granic & Marangunic, 2019; Scherer et al., 2019).

TAM extensions are validated by empirical studies in higher education. Faculty's adoption of digital tools depend on what is demonstrable and relevant (Al-Emran et al., 2018). Post-pandemic digital maturity is aligned to perceived usefulness (Remifard, 2020). Extended models are predictors of online assessment integration (Butler-Henderson et al., 2023). The tripartite framework rigorously explains the inertia of structures (institutional theory), operational bottlenecks (systems theory) and the barriers to adoption (TAM2) and facilitates digital decentralization as an overall coherent reform strategy.

Methodology

This study employed a pragmatic research paradigm, which gives priority to the research problem rather than dogma about methodology and allows for the combination of quantitative and qualitative methodology to obtain an overall understanding (Creswell & Plano Clark, 2018). A sequential explanatory mixed methodologies approach was adopted using quantitative methods and analyses were carried out beforehand qualitative phases and the latter being used to explain and elaborate quantitative findings (Ivankova et al., 2006). This design was chosen because initial survey findings reflected general patterns of stakeholder dissatisfaction, which were important to determine in depth through in-depth interviews to contextualize mechanisms and lived experiences.

The sequential explanatory design is good in enhancing validity through triangulation, as the presence of quantitative data gives generalize the patterns, while qualitative data provides the interpretive depth that reduces the limitation inherent in only one method (Fetters et al., 2013). Integration took place on multiple levels - sampling (quantitative sample was based on informing interviewee selection), analysis (qualitative themes interpreted quantitative results), and reporting (joint displays to link findings).

Research Design and Rationale

The study was constructed around a two-phase sequential explanatory design study. Phase 1 involved a cross-sectional survey to identify perceptions related to efficiency, transparency, security, fairness and timeliness. Phase 2 included semi-structured interviews to help understand underlying

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reasons for quantitative patterns to develop reform insights. Document analysis complemented both phases to put into context institutional practices (Bowen, 2009).

This design was heavily justified by the research objectives: objective 1 (system evaluation) called for breadth (quantitative), whereas objective 2 (reform framework) called for depth (qualitative). Prior research using mixed-methods approaches in higher education governance has confirmed the positive impact of using sequential methods to produce more robust policy recommendations than using only one method (Plowright, 2011).

Population and Sampling

The target population of traditional students, faculty and administration members who are associated with Tribhuvan University (TU) are all students and staff (approximately 600,000 students and 20,000) in 2024-2025 academic year, in 1,100 campuses (University Grants Commission Nepal, 2024).

For the quantitative phase stratified random sampling ensured the representation by role of representative student, faculty, administrative; and by faculty affiliation (Humanities, Science & Technology, Management, and Education). Sample size was calculated in advance with the help of G*Power software for medium effect size (f2 = 0.15), a = .05, and power = .90, which showed a minimum of 350 respondents (Faul et al., 2009). A total of 450 questionnaires were distributed and 395 responses were usable, which was higher than the calculated requirement, indicating satisfactory inferential validity.

For than the quantitative phase, a purposive sampling was employed for 25 important informants (12 faculty, 8 administrations, 5 students) with direct examination experience. Sampling continued for the themes were saturated - no new themes were found in the last 3 interviews (Guest et al., 2006; Saunders et al., 2018).

Data Collection Instruments and Procedures

Three instruments were used:

Survey Questionnaire: A researcher-developed instrument comprised of 30 questions (with Likert-scale responses) of five constructs, and questions for demographic and open-ended responses. Items were adapted from validated scales on educational assessment quality (Kuh et al, 2014; Coates, 2016); and piloted with 40 stakeholders for clarity for the user and reliability (ranging from Cronbach's a = .82-.91 on subscales).
Semi-Structured Interview Guide: Consisted of 12 open ended questions related to challenges, experiences and reform preferences. Two higher education experts reviewed the guide for review on content validity.
Document Review: Official TU regulations, examination reports and policy documents (2019-2025) were analyzed to triangulate primary data (Bowen, 2009).
The Data collection of this research was conducted March - June 2025. Surveys were administered both online and face-to-face in central and regional campuses. Interviews (45-70 minutes) were audio-recorded and conducted (with consent) face-to-face or via Zoom.

Data Analysis

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Quantitative data were analyzed with the help of IBM SPSS 28. Descriptive statistics like means, standard deviations, and frequencies were used to summarize the perceptions. Inferential tests of difference, OWB one-way and post-hoc Tukey ; were conducted on role and faculty, with effect sizes (Field, 2018). Tests of assumptions (normality, homogeneity) using Shapirowilk's and Scheme for equality of variances.

Qualitative data was subjected to reflexive thematic analysis by following Braun and Clarke's (2022) 6-phase method: familiarization, coding, theme generation, review, definition, and reporting. NVivo 14 supported coding; inter-coder reliability (k = .87) was determined by an independent researcher that coded 20% of transcripts. Integration took place through joint display and narrative weaving of quantitative patterns (e.g. low timeliness scores) and qualitative explanations (e.g. manual processing bottlenecks) (Fetters et al., 2013).

Validity, Reliability and Trustworthiness

Quantitative validity was assured by pilot testing, stratified sampling and statistical power. Reliability was verified through the internal consistency method (Cronbach's alpha >.80). Qualitative trustworthiness adhered to the theories proposed by Lincoln and Guba (1985) including, but not limited to: credibility (member checking, triangulation), transferability (thick description), dependability (audit trail), and conformability (reflexive journaling). Mixed-methods validity met meta-inferences legitimacy criteria (Onwuegbuzie & Johnson, 2006).

Ethical Considerations

Participants gave written informed consent; anonymity and confidentiality were ensured by the use of pseudonyms and secure storage. Voluntary participation and the right to withdrawal were stressed. There were no incentives not to resort to coercion. This rigorous methodological framework helpfully addresses the research objectives logically by having parameters of breadth, depth and triangulation in order to guide towards credible, actionable findings for crafted examination reforms at, Tribhuvan University.

Results

This section reports results generated from the sequential explanatory mixed-methods design. Quantitative results are presented first, which gives general patterns of stakeholder perceptions. Qualitative results are then followed by explanatory depth results. Integration through joint displays completes the section and shows the value of integrating qualitative themes into quantitative patterns (Fetters et al., 2013).

Quantitative Results

The survey produced 395 usable answers of 450 distributed (87.8% response rate), which was greater than the a priori sample size needed to achieve statistical power (Faul et al., 2009).

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Table 1
Demographic Characteristics of Survey Respondents (N = 395)

Characteristic	Category	n	%
Role	Student	217	55.0
	Faculty	118	29.9
	Administrative Staff	60	15.2
Faculty Affiliation	Humanities	99	25.1
	Science & Technology	88	22.3
	Management	103	26.1
	Education	105	26.6
Gender	Male	237	60.0
	Female	158	40.0
	Other/Prefer not to say	0	0.0
Campus Location	Central (Kathmandu Valley)	210	53.2
	Regional	185	46.8

Note. Percentages may not sum to 100 due to rounding.

Table 1 shows the survey sample of 395 respondents from an academic institution shows a majority student representation at 55.0% (n=217), followed by faculty at 29.9% (n=118) and administrative staff at 15.2% (n=60). Among faculty, affiliations are fairly balanced across disciplines, with Education (26.6%, n=105) and Management (26.1%, n=103) slightly leading, followed by Humanities (25.1%, n=99) and Science & Technology (22.3%, n=88). The gender distribution is 60.0% male (n=237) and 40.0% female (n=158), with no respondents selecting "Other" or "Prefer not to say." Geographically, respondents are split almost evenly between Central (Kathmandu Valley) campuses at 53.2% (n=210) and Regional campuses at 46.8% (n=185), indicating a reasonably representative mix of roles, disciplines, genders, and locations within the institution. The sample was balanced across roles and faculties, with slight overrepresentation of central campuses, reflecting TU's enrollment distribution (University Grants Commission Nepal, 2024).

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Table 2
Descriptive Statistics for Perceptions of the Examination System (N = 395)

Construct/Item	M	SD	Skewness	Kurtosis
Overall Efficiency	2.12	0.95	0.68	-0.42
Overall Transparency	2.05	0.91	0.74	-0.31
Overall Security	1.91	0.89	0.82	-0.19
Overall Fairness	2.28	1.02	0.59	-0.61
Timeliness of Result Publication	1.62	0.81	1.05	0.72
Assessment of Critical Thinking Skills	2.41	1.07	0.51	-0.78
Support for Digital Transformation	4.38	0.72	-1.12	0.95
Support for Regional Examination Centers	4.25	0.81	-0.98	0.64

Note. Items rated on a 5-point Likert scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). Higher means indicate more positive perceptions.

Descriptive statistics showed, overall, low satisfaction with system core attributes (all means < 2.5), suggesting a general level of dissatisfaction. Timeliness had the lowest rating (M = 1.62), mirroring the delays documented > 12 months. In contrast, proposed reforms received strong support (means > 4.2), implying high perceived usefulness of the idea of digital and decentralized solutions. Skewness and kurtosis values (| < 2|) affirmed approximate normality and support the use of parametric testing (Field, 2018). Inferential analysis was used to assess group differences. One-way analysis of variance showed significant differences by role in all constructs except support for reforms.

Table 3
One-Way ANOVA Results for Perceptions by Stakeholder Role

Construct	F(2, 392)	p	η^2	Post-Hoc (Tukey) Significant Differences
Efficiency	12.45	<.001	.06	Admin < Students, Faculty
Transparency	14.78	<.001	.07	Admin < Students, Faculty
Security	18.92	<.001	.09	Admin < Students < Faculty
Fairness	9.34	<.001	.05	Admin < Faculty
Timeliness	16.21	<.001	.08	Admin < Students, Faculty
Critical Thinking Assessment	11.56	<.001	.06	Students < Faculty
Digital Transformation Support	2.18	.115	.01	None
Regional Centers Support	1.89	.153	.01	None

Note. η^2 = partial eta squared (small ≈ .01, medium ≈ .06, large ≈ .14).

Administrative staff had substantially lower perceptions in most dimensions (medium effect size) likely expressing a direct exposure to operational bottlenecks. Students rated critical thinking assessment lowest while faculty expressed relative optimism. Of note, support for reforms did not show significant

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differences suggesting consensus across roles. Open-ended responses from survey (n = 312) supported quantitative results, with 78% of people mentioning delays and 65% advocating digitization.

Qualitative Results

Thematic analysis of 25 interviews (with a total of 18 hours of transcription) revealed 5 main themes, reached at a point of saturation (no new codes after interview 22). Themes were cross-validated with the document review of TU examination reports (2019 - 2025), which confirmed there were persistent delays and centralization issues.

Table 4

Qualitative Themes, Subthemes, and Exemplar Quotes

Theme	Prevalence (% Interviews)	Subthemes	Exemplar Quote
Chronic Delays and Bottlenecks	96%	Manual processing, centralization	"Results take 14–19 months because everything goes to Kathmandu—regional scripts pile up for months." (Faculty 7)
Political Interference	84%	Examiner appointments, grading bias	"Committees are filled by party affiliates; merit is secondary." (Admin 3)
Security Vulnerabilities	80%	Script tampering, lax protocols	"Scripts are carried home—no CCTV, no seals; discrepancies are common." (Student 2)
Rote-Oriented Assessment	72%	Lack of practical/continuous evaluation	"Exams test memory, not skills—practical weight is negligible." (Faculty 11)
Strong Reform Endorsement	100%	Digital platforms, regional centers	"Online systems and regional offices would cut delays by half—we need them now." (Admin 8)

Themes aligned logically with quantitative lows: delays explained timeliness scores; interference and vulnerabilities underpinned security/transparency deficits; rote focus justified critical thinking ratings. Universal reform support corroborated high quantitative endorsement.

Integration of Quantitative and Qualitative Findings

Table 5

Joint Display Linking Quantitative Perceptions and Qualitative Explanations

Quantitative Finding (Mean Score)	Related Qualitative Theme	Explanatory Quote/Linkage
Timeliness (M = 1.62)	Chronic Delays and Bottlenecks	Manual centralization creates processing backlogs, directly causing prolonged waits.
Security (M = 1.91)	Security Vulnerabilities	Lax physical protocols enable tampering, eroding perceived integrity.
Transparency (M = 2.05)	Political Interference	Partisan appointments foster bias suspicions, lowering trust.
Critical Thinking (M = 2.41)	Rote-Oriented Assessment	Annual memory-based exams neglect skills, misaligning with stakeholder expectations.
Digital Support (M = 4.38)	Strong Reform Endorsement	High perceived usefulness drives consensus for technology as bottleneck solution.

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This integration confirms that low satisfaction stems from systemic, interpretable mechanisms, while reform enthusiasm reflects viable adoption potential.

Discussion

The findings represent strong empirical evidence of severe failures in the examination system of Tribhuvan University, yet illustrate agreement among stakeholders on the need for changes to make the system an institution of transformational benefits. Quantitative data showed uniformly low perceptions (with all core means less than 2.5) with timeliness identified as the most critical point of failure. Inferential tests showed variations according to role (the administrative staff, closest in to operations, were the most negative) consistent with firsthand knowledge of inefficiencies. Qualitative themes systematically explain these patterns: centralization and manual processes have propagative effects in delays; political patronage discards meritocracy; inadequate safeguards are inviting malpractices; and rote dominance debilitated competencies.

It is integration through the joint display that rigorously validates the explanatory power of the sequential design: qualitative mechanisms are directly responsible for quantitative deficits and universal reform endorsement evaporates with high support scores. Through this convergence, meta-inferences reinforce the perception that whether or not a single challenge is seen by a person or a group, these challenges are not individual perceptions but collective systemic failures (Fetters et al., 2013).

Theoretical Implications

Findings are very compatible with the integrated framework. Institutional theory explains continuation of inefficient practices in the form of conformity to legitimized myths of centralized control (Meyer & Rowan, 1977). Political interference and manual traditions are examples of decoupled structure - formally rational and technically dysfunctional; sustained by normative and coercive isomorphism in the public universities of Nepal. Systems theory packages delays and vulnerabilities in terms of breakdowns in the feedback loops of an open system overwhelmed by an uneven load of enrollments with no adaptive inputs (von Bertalanffy, 1968). Centralization creates real bottlenecks that interfere with haywire maintenance and compound errors down the packaging line.

TAM2 predictions held: High reform endorsement ($M > 4.2$, no group differences) that indicates strong perceptions of the usefulness and result demonstrability of digital/decentralized solutions in overcoming ease of use barriers by demonstrating regional successes (Venkatesh & Davis, 2000). Lack of resistance is suggestive of good social influence norms among stakeholders. The explanatory power of the framework is illustrated as there are thematic-quantitative linkages particularly institutional-myths perpetuate rote teacher assessment (low critical thinking scores); systemic bottlenecks delay (lowest timeliness mean); positive TAM determinants drive reform consensus.

Comparison with Available Literature

Results agree with regional trends. Prolonged delays are similar to observations in South Asian public Universities where manual centralization delays processing for more than 12 months (Sharma & Sharma, 2022). Political interference is similar to governance in transitional systems where partisan appointments destroy fairness (Cummings & Bain, 2022). Whereas script tampering risks have been documented in paper-based regimes, security vulnerabilities are consistent. Rote assessment leaving stakeholders dissatisfied and echoing throughout the world (Herrera et al.,2023,), at least this describes the

dissatisfaction surrounding its widespread use of assessment, and authentic evaluation is the cry for the day. Strong digital support rates give TAM applications a boost in developing parts of the world, where perceived usefulness can accelerate an application in the context of tackling infrastructure barriers (Sungur Gul & Ates, 2023).

Implications and Recommendations

Findings Highlight Urgent Areas for Reform Digital transformation-Available through 100% qualitative and M=4.38 quantitatively-there is promise of efficiency by automation of workflows reducing human error and processing time. Regional centers, which are also highly endorsed, would deconcentrate authority and respond to centralization bottlenecks and gaps in equity with respect to rural campuses (46.8% of sample).

Integrated security protocols (e.g. tracking of digital scripts) directly address vulnerabilities. Competency-based reforms, with the element of continuous assessment, would move the evaluation of critical thinking from current lows. Policy recommendations include: (1) phased digital platform rollout with stakeholder training; (2) establishment of five autonomous regional centers; (3) independent oversight committees to insulate processes from interference; and (4) curriculum revision mandating ≥30% practical/continuous weight. Implementation feasibility is proven by unison of roles - no substantial reform objection - easing change management.

Applications and Weaknesses of the Study

Cross-sectional design limits causality claims; longitudinal studies could track reform impacts. Self-report data risk social desirability bias, though triangulation mitigates this. Sample overrepresentation of central campuses may underemphasize rural perspectives, warranting targeted follow-up. Future research should pilot digital interventions, applying extended TAM longitudinally to measure actual adoption versus intention.Thus, in this study, logically interlinked, triangulated evidences of systemic failures of examination of TU has been articulated in authentic context of robust theorized explanations and consensus of stakeholders about its solutions. Reforms, if they are put in place, hold grounds for transformation for Nepal's flagship university.

Conclusion

This mixed methods investigation has achieved its first objective that is to critically assess the examination system of Tribhuvan University against set benchmarks of efficiency, transparency, security and fairness rigorously. Quantitative data from 395 stakeholders showed unrealistically low perceptions on all fundamental aspects; efficiency (M = 2.12), transparency (M = 2.05), security (M = 1.91), fairness (M = 2.28), and timeliness (M = 1.62); with inferential tests confirming significant effect role-based disparities and medium effect sizes due to operational exposure. These patterns were stepwise explained using qualitative thematic analysis; identifying interrelated barriers of chronic centralization-.an delays (up to 19 months, partisan interference in appointments, grading, inadequate script safeguards to enable malpractice, rote-dominant assessments narrating critical competencies. Triangulated with checking against documents and integrated with joint displays, the results provide the conclusive proof of systemic misalignment with international standards and national policy imperatives to valid structural, political and technological deficiencies as primary impediments to academic integrity as well as results for students.

The second objective; to make an evidence-based reform framework; has been met through insight from stakeholders based on institutional, systems and TAM2 theories. Universal support for digital transformation (M = 4.38) and regional centers (M = 4.25) with 100% qualitative support and no

group differences creating high perceived usefulness and feasibility for decentralized administration, safe digital workflows, competency-oriented evaluation, and independent mechanisms of oversight. These measures are focused directly on addressing identified bottlenecks, isomorphic persistence of outmoded practices and adoption, providing a scalable model which promises reduced processing times, improved equity for regional campuses (46.8% of sample) and insulation from interference. Implementation would bring TU on a global level with benchmarks that will restore the credibility of the institution and facilitate the quality of higher education in Nepal.

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