OPEN INNOVATION WITHOUT ABSORPTIVE CAPACITY: WHY INDIVIDUAL EXTERNAL ENGAGEMENT FAILS TO BECOME INSTITUTIONAL LEARNING IN TRANSITION-ECONOMY HIGHER EDUCATION

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Abstract: *Open Innovation theory holds that organisations improve performance by purposively managing knowledge flows across their boundaries. Yet the value of external engagement depends on absorptive capacity — the institutional ability to recognise, assimilate, and apply external knowledge. This paper examines the gap between potential and realised absorptive capacity in a transition-economy higher education institution. Using survey data from staff of the Tashkent Institute of Management and Economics (TIME) in Uzbekistan (n = 50), the study finds that Open Innovation operates predominantly as an informal, individual-level phenomenon: while staff are encouraged to engage with external networks (mean = 3.14 on a five-point scale), the institution fails to capture that knowledge internally (mean = 2.24) and does not benchmark systematically against peers (mean = 2.14). This 0.90-point gap between encouraged individual engagement and realised institutional capture represents a structural failure of absorptive capacity. A pilot intervention demonstrated that targeted, low-cost mechanisms can begin to close this gap, raising the aggregate Open Innovation index by 21.2%. The paper argues that, in transition economies, the binding constraint on Open Innovation is not awareness or willingness but the absence of institutional*

infrastructure to convert individual exposure into organisational learning. Implications for institutional strategy and higher-education policy are discussed.

Keywords: *Open Innovation; absorptive capacity; higher education; transition economy; knowledge management; Uzbekistan*

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INTRODUCTION

Open Innovation is the purposive management of knowledge flows across organisational boundaries has become one of the most influential paradigms in innovation management since Chesbrough (2003) introduced the concept. Its central premise is that organisations can no longer rely solely on internal resources but must systematically source external knowledge (inbound), share internal knowledge externally (outbound), and co-create through partnerships (coupled). For resource-constrained organisations in transition economies, where internal research capacity is limited, the ability to source and integrate external knowledge is not merely advantageous but existential (World Bank, 2023).

However, Open Innovation cannot succeed on external engagement alone. Cohen and Levinthal (1990) demonstrated that the value an organisation derives from external knowledge depends on its absorptive capacity — the ability to recognise the value of new external information, assimilate it, and apply it to organisational ends. Zahra and George (2002) refined this concept by distinguishing potential absorptive capacity (acquiring and assimilating knowledge) from realised absorptive capacity (transforming and exploiting it), noting that the gap between the two is a common and under-examined source of organisational underperformance.

This distinction is particularly salient in higher education institutions in transition economies, which often inherit institutional structures that separate knowledge production from application (Ruziev and Majidov, 2022). Such

institutions may encourage individual academics to engage externally — attending conferences, maintaining professional networks, consulting — while lacking the organisational mechanisms to capture and diffuse the resulting knowledge. The result is a paradox: external engagement occurs, but institutional learning does not.

This paper examines that paradox empirically in the context of the Tashkent Institute of Management and Economics (TIME), a private higher education institution in Uzbekistan. The research question is: *To what extent does TIME convert individual-level external engagement into institutional-level absorptive capacity, and what are the implications for Open Innovation strategy in transition-economy higher education?* The paper contributes to a limited empirical literature on Open Innovation in Central Asian higher education and offers a diagnostic lens applicable to comparable institutions across the post-Soviet region.

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METHODS

The study employs a single-case design (Yin, 2018) supported by a structured staff survey, adopting a pragmatist research philosophy appropriate to applied, action-oriented research (Saunders, Lewis and Thornhill, 2019). TIME was selected as a representative case of a private, teaching-focused institution operating within Uzbekistan's evolving innovation ecosystem.

A 22-item survey using a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) was administered to all academic, administrative, and management staff. Of those invited, 50 valid responses were retained (a 76% response rate). This paper focuses on the five-item Open Innovation subscale (Section B), which measures inbound engagement (B1: seeks external ideas; B2: staff encouraged to engage externally), outbound engagement (B3: shares expertise externally), and the realised-capacity mechanisms (B4: external ideas captured internally; B5: benchmarks against peers). The sample composition is summarised in Table 1.

Table 1. Respondent profile (n = 50)

Category	Group	n	%
Role	Academic / Teaching	28	56
	Administrative	15	30
	Management	6	12
	Other	1	2
Tenure	Under 1 year	5	10
	1–3 years	19	38
	4–7 years	18	36
	8+ years	8	16

Responses were analysed using descriptive statistics (means, standard deviations, and agreement/disagreement distributions). Following standard interpretation conventions, mean scores above 3.5 were treated as relatively positive, 2.5–3.5 as moderate, and below 2.5 as relatively negative (Bryman, 2016). To assess whether the identified gaps were addressable, a pilot intervention was subsequently conducted during the author's internship, comprising guest practitioner sessions, an introductory benchmarking exercise, and structured knowledge-sharing activities; perceptions were re-measured among participating staff. The study acknowledges the limitations inherent to single-case, cross-sectional, self-report research (Podsakoff et al., 2003).

RESULTS

Open Innovation is informal and individual

The item-level results for the Open Innovation subscale reveal a consistent pattern (Figure 1). The highest-scoring item is B2 — staff encouraged to engage with external networks — at a mean of 3.14, the only item in the moderate-to-positive range. In contrast, the mechanisms that would convert individual engagement into institutional learning score substantially lower: B4 (external ideas captured internally) at 2.24, with 60% of respondents disagreeing, and B5 (systematic benchmarking) at 2.14, with 70% disagreeing.

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B1 (seeks external ideas) and B3 (shares expertise) fall between these poles at 2.82 and 2.60 respectively. The aggregate Open Innovation index is 2.59, placing the institution just above the negative threshold.

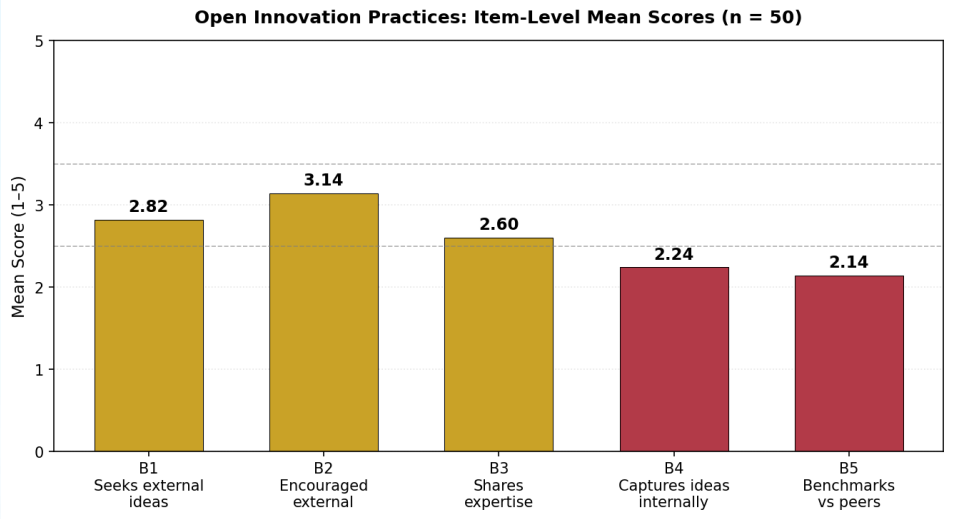


Figure 1. Open Innovation practices: item-level mean scores (n = 50).

The absorptive capacity gap

The juxtaposition of these items exposes a clear structural gap (Figure 2). Individual external engagement is encouraged (B2 = 3.14), reflecting a reasonable level of potential absorptive capacity. Yet realised absorptive capacity — the institutional capture of external ideas (B4 = 2.24) and systematic comparison against peers (B5 = 2.14) — lags by approximately 0.90 of a scale point. In the terms of Zahra and George (2002), TIME exhibits moderate potential absorptive capacity but markedly weaker realised absorptive capacity. Knowledge enters the institution through its individual members but is not assimilated, transformed, or exploited at the organisational level.

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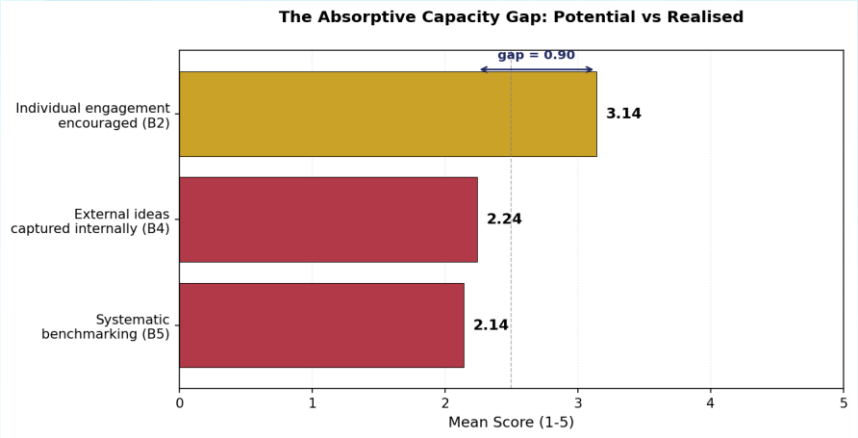


Figure 2. The absorptive capacity gap: potential versus realised.

This pattern is consistent with the diagnosis that, in transition-economy institutions, the predominant constraint on Open Innovation is not the willingness of individuals to engage externally but the absence of the social-integration mechanisms — shared repositories, knowledge-sharing forums, benchmarking routines — that Todorova and Durisin (2007) identify as essential for converting potential into realised absorptive capacity.

The gap is addressable: pilot evidence

The pilot intervention provides preliminary evidence that the gap can be narrowed through deliberate, low-cost mechanisms (Figure 3 and Table 2). Following the introduction of guest practitioner sessions, an introductory benchmarking exercise, and structured knowledge-sharing activities, perceptions among participating staff improved across all measured Open Innovation items. The largest single gain was in benchmarking (B5: +0.60), directly reflecting the benchmarking exercise. At the aggregate level, the Open Innovation index rose from 2.59 to 3.14 — an improvement of 21.2%.

Table 2. Open Innovation perceptions: pilot before and after

Item	Before	After	Change
B1: Seeks external ideas	2.82	3.26	+0.44
B2: Encouraged external engagement	3.14	3.52	+0.38
B3: Shares expertise externally	2.60	3.04	+0.44
B5: Benchmarking	2.14	2.74	+0.60

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Item	Before	After	Change
Open Innovation index (aggregate)	**2.59**	**3.14**	**+21.2%**

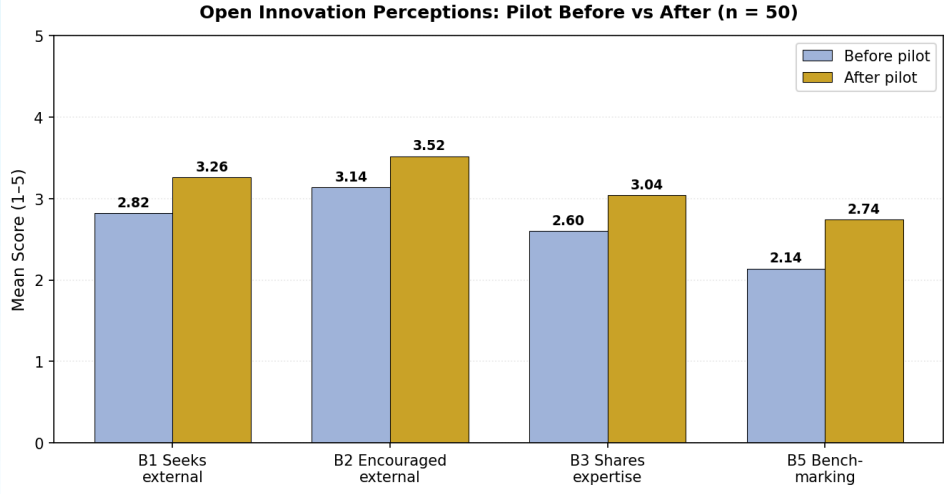


Figure 3. Open Innovation perceptions: pilot before versus after (n = 50).

The pilot results are indicative rather than conclusive, given the limited duration, the absence of a control group, and possible expectancy effects among participants. Nonetheless, the consistency of improvement across all items suggests that the absorptive-capacity gap reflects a remediable absence of institutional mechanisms rather than an immutable cultural barrier.

DISCUSSION

The findings support a clear theoretical interpretation. TIME does not suffer from a deficit of openness in the conventional sense: its staff are encouraged to engage externally and do so. What it lacks is the institutional infrastructure that converts this individual openness into organisational capability. This is precisely the distinction Cohen and Levinthal (1990) drew between exposure to external knowledge and the capacity to exploit it, and which Zahra and George (2002) formalised as the gap between potential and realised absorptive capacity.

The implication for Open Innovation theory is that, in transition-economy higher education, the binding constraint lies not at the boundary-spanning stage (acquiring external knowledge) but at the internal-integration

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stage (assimilating and exploiting it). This shifts the strategic priority away from exhortations to "be more open" and toward the construction of concrete absorptive mechanisms: structured knowledge repositories, benchmarking routines, internal knowledge-sharing forums, and processes for capturing and diffusing the insights that individual staff already bring into the institution. The pilot evidence indicates that such mechanisms need not be costly to produce measurable effects.

For institutional strategy, three priorities follow. First, institutions should establish formal knowledge-capture mechanisms — even a simple shared repository and periodic knowledge-sharing meetings address the B4 deficit at minimal cost. Second, systematic benchmarking against peer institutions, currently almost absent (B5 = 2.14), should be instituted as an annual routine. Third, the individual external engagement that already occurs should be channelled through coordinated institutional programmes (such as a guest practitioner programme) rather than left to personal initiative.

For higher-education policy in transition economies, the findings suggest that investment in external-engagement opportunities will yield limited returns unless matched by investment in institutional absorptive capacity. Policy instruments that reward not merely the existence of partnerships but the demonstrable internal use of externally sourced knowledge would better align incentives with the realised-capacity stage where the constraint actually binds.

CONCLUSION

This paper examined why individual external engagement fails to become institutional learning in a transition-economy higher education institution. Drawing on survey data from TIME (n = 50), it identified a 0.90-point gap between encouraged individual engagement (B2 = 3.14) and realised institutional knowledge capture (B4 = 2.24), interpreting this as a structural failure of realised absorptive capacity. A pilot intervention demonstrated that

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targeted, low-cost mechanisms can begin to close the gap, improving the aggregate Open Innovation index by 21.2%.

The central contribution is to reframe the Open Innovation challenge in transition-economy higher education: the problem is rarely a lack of openness, and usually a lack of absorptive infrastructure. Future research should test this proposition through longitudinal, multi-institutional designs that track whether the construction of absorptive mechanisms produces sustained gains in institutional performance. For institutions like TIME, the path toward effective Open Innovation lies not in opening further outward but in building the internal capacity to learn from the openness that already exists.

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