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Existing workflows and partner participation in shared technology adoption

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Abstract

Purpose: This paper examines how a partner's existing workflow can affect its willingness to participate in a shared technology and, in turn, the benefit expected by another organization. It connects comparative technology evaluation with interorganizational dependence.

Design/methodology/approach: The paper uses theory adaptation, drawing on research on organizational adoption, incumbent systems, network effects and ecosystem structure. The conceptual development is informed by two exploratory survey rounds conducted through Canadian supply chain networks, including four common fixed-choice questions and 216 written entries.

Findings: The surveys identify distinct conditions surrounding adoption and non-use, including unresolved assessment, unfavourable evaluation, implementation constraints, satisfactory existing processes and benefits dependent on participation by others. The conceptual analysis proposes that when a necessary partner already has an adequate workflow, the proposed arrangement may offer limited incremental benefit, reducing willingness to contribute and lowering the focal organization's confidence that required activities will occur. This effect should persist where the missing contribution is difficult to substitute.

Research limitations/implications: The surveys provide exploratory evidence rather than direct tests of the propositions. Future research should examine linked organizations and test how partner workflow adequacy, willingness to contribute and substitutability affect expected value.

Practical implications: Managers should assess whether necessary partners have sufficient reason to change existing workflows and whether missing contributions can be substituted.

Originality/value: The paper locates part of the focal organization's adoption problem in another organization's existing workflow and evaluation, distinguishing inability to contribute from limited incentive to change.

Keywords: organizational adoption; interorganizational systems; existing workflows; partner participation; technology evaluation; supply chains

Organizational comparisons in shared technology adoption

Organizations rarely adopt interorganizational technologies in isolation. Shared systems for exchanging documents, coordinating transactions or recording operational events create value through activities performed by more than one organization. A firm may therefore judge a proposed system to be technically capable and potentially beneficial while still being unable to realize those benefits because customers, suppliers, logistics providers or other partners do not make the required changes. This creates a managerial problem that differs from a conventional internal technology-adoption decision. The organization must evaluate not only whether the proposed technology improves its own work, but also whether the other organizations on which that improvement depends have sufficient reason to participate.

Several established research traditions explain parts of this problem. Research on organizational technology adoption shows that expected benefits, organizational readiness and external pressure shape adoption decisions (Iacovou et al., 1995; Chwelos et al., 2001). Diffusion research similarly emphasizes relative advantage: organizations compare an innovation with the practice it would replace rather than evaluating it in isolation (Rogers, 2003). Research on incumbent systems further shows that existing technologies, switching costs and established routines can constrain movement to new systems (Zhu et al., 2006; Polites and Karahanna, 2012). These perspectives explain why an organization may decline to adopt even when a new technology is functional. They direct attention to the comparison between a proposed arrangement and the organization’s current way of performing the work.

Interorganizational technologies add a second problem because the value available to one organization may depend on participation by others. Research on network effects and critical mass shows that the usefulness of interactive systems changes as participation changes (Markus, 1987; Riggins et al., 1994). More recent ecosystem research moves from the number of participating organizations to the particular actors and activities required to produce a value proposition (Adner, 2017). This distinction is important. Additional participants may increase the general reach of a shared system without supplying the particular information, action or commitment required by another organization. Research on ecosystem incentives consequently emphasizes that jointly created value does not imply that every participant has the same incentive to contribute (Chatain and Plaksenkova, 2026).

This paper connects these two sides of the adoption problem. An organization may expect substantial improvement from a shared workflow while a necessary partner sees little reason to change a process that already performs adequately. For example, a proposed billing arrangement might reduce reconciliation work for a purchaser but require a carrier to alter a reliable existing process and provide new information. The purchaser’s expected benefit depends on the carrier’s contribution, while the carrier’s willingness to contribute depends partly on its own comparison between the proposed arrangement and current practice. The performance of work inside one organization can therefore affect the technology evaluation made by another organization.

Blockchain provides the empirical setting in which this problem is examined. Blockchain is a distributed ledger through which participating computers maintain and validate a shared record. Proposed supply-chain applications have included shipping documents, product histories, transaction records and transport billing. Such applications are inherently interorganizational because participating firms must agree on what information will be supplied, how records will be used and which responsibilities each participant will assume. Empirical research has documented the organizational difficulty of establishing these arrangements, including problems of coordination, interoperability, infrastructure, knowledge and participation (Sternberg et al., 2021; Sultan, 2026). Blockchain is therefore useful here not because the proposed relationship is unique to blockchain, but because it makes dependence on contributions from organizational partners particularly visible.

The literature has consequently established that organizations compare innovations with existing practices, that incumbent systems can discourage migration, and that participation by other organizations can condition the value

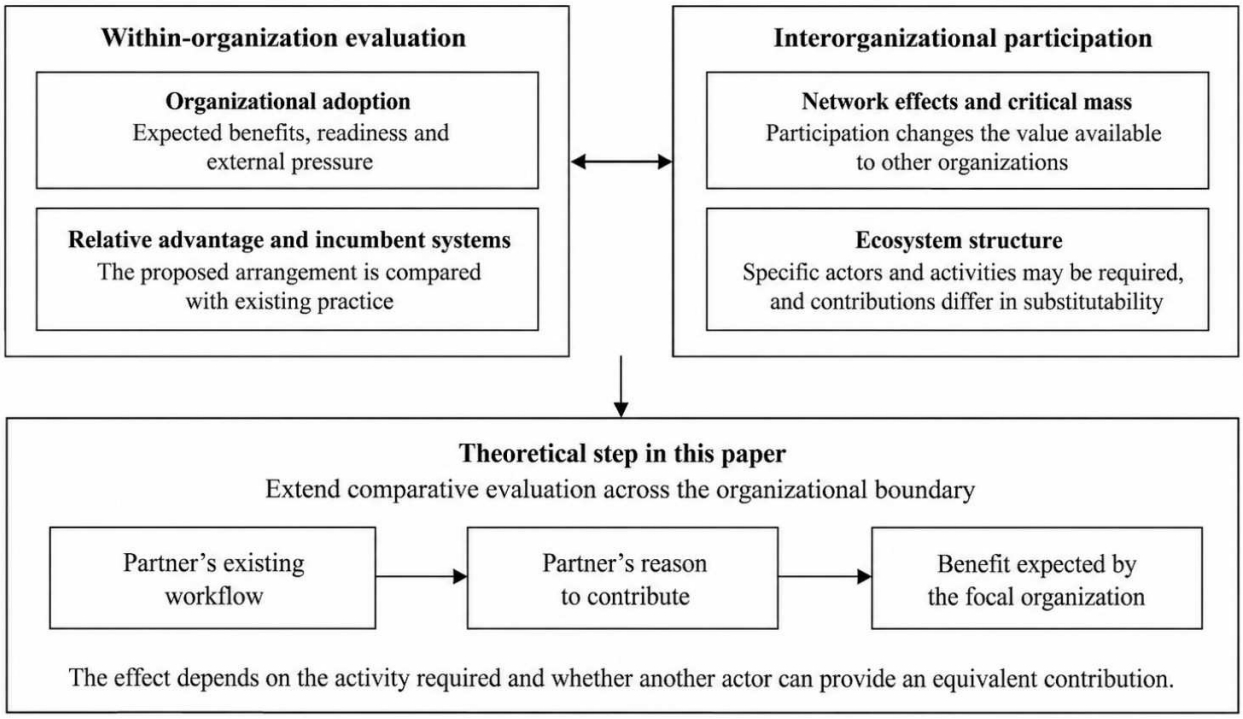
of an interorganizational system. What is less explicitly developed is the relationship among these observations: a necessary partner's satisfactory existing workflow can reduce that partner's reason to contribute, thereby reducing the expected benefit available to another organization. The focal organization in this paper is the organization whose adoption decision is being considered. The analysis examines how its evaluation of a shared proposal is conditioned by the existing workflows and expected contributions of the partners required to make that proposal work. In doing so, the paper connects comparative technology evaluation within organizations with interorganizational dependence across them.

The research question is how existing workflows within participating organizations condition the commitments needed to make shared technology worthwhile. The analysis focuses on a specified workflow and on the particular contributions required from participating organizations for that workflow to produce its expected benefit. This distinction matters because broad participation in a technology does not necessarily ensure that the activities required for a particular organizational improvement will occur. For example, knowing that many carriers use a shared platform is different from knowing that the carrier handling a particular shipment will provide accurate event records when they are needed. If those records are necessary to improve the purchaser's billing process, the value of the proposed workflow depends on that specific contribution.

This paper is primarily a conceptual contribution, supported by exploratory empirical evidence. I develop the argument through theory adaptation, using an activity-based account of ecosystem structure to extend comparative benefit assessment across organizational boundaries (Adner, 2017; Jaakkola, 2020). Two exploratory survey rounds provide empirical accounts of the organizational conditions that motivate and inform this development, including existing processes, implementation constraints, uncertain benefits and dependence on participation by other organizations. The survey findings are not used to test the proposed relationships. Instead, they provide examples of the evaluation problem that the theoretical explanation must accommodate. The conceptual development then extends the comparison with existing practice to necessary partners and considers how their evaluations can affect the focal organization's expected benefit. The resulting contribution explains how a partner's satisfactory existing workflow can reduce its reason to contribute and, through that contribution, constrain the benefit available to another organization even when the proposed technology remains technically capable. The propositions developed later in the paper specify this mechanism and the role of substitutability for future empirical testing.

Figure 1 positions the argument developed in this paper. It connects research concerned with how organizations compare proposed technologies with existing practices to research concerned with how participation by other organizations conditions the value of interorganizational arrangements. The theoretical step is to extend the comparison with existing practice to the partners whose contributions are required for the focal organization to realize its expected benefit.

Figure 1: Positioning this paper's contribution within research on organizational adoption and interorganizational participation



Source: Author's own work

Existing workflows and interorganizational dependence

Comparative benefit and current performance

Relative advantage concerns the perceived improvement an innovation offers over the practice it supersedes (Rogers, 2003). In interorganizational adoption, expected benefits operate alongside organizational readiness and external pressure (Iacovou et al., 1995; Chwelos et al., 2001). An organization may therefore expect benefits but lack the resources to implement a proposal, or face a customer requirement even when its own operational improvement is small.

An existing workflow comprises the systems, procedures and relationships through which an organization currently performs an activity. Incumbent adequacy means how well that workflow meets the needs relevant to a proposed change. For billing, those needs might include accuracy, staff effort and the time required to resolve discrepancies. Adequacy differs from switching costs, which arise from moving to another arrangement, and inertia, through which people persist with established practices beyond their present performance (Polites and Karahanna, 2012). A satisfactory incumbent can therefore provide a defensible reason to retain current practice.

Research on migration and substitution further shows that the attractiveness of the alternative to adoption is not fixed. Expected benefits, network effects and adoption costs influence migration between interorganizational systems, while developments surrounding both emerging and incumbent technologies shape substitution (Zhu et al., 2006; Adner and Kapoor, 2016). The present argument extends this comparison to the existing workflow of a necessary partner. Better performance there can affect the focal organization through the partner's willingness to undertake the proposed work.

Activities and incentives among partners

Interorganizational systems also depend on participation. Network effects arise when participation changes the value available to other participants, while critical mass concerns the level of participation needed to sustain an interactive system's usefulness (Markus, 1987). These relationships do not require benefits to be distributed equally. Buyers and suppliers can face different incentives, including situations in which one party subsidizes another's adoption (Riggins et al., 1994). Unequal gains and stalled participation are therefore established features of interorganizational adoption.

An activity-based view of ecosystems adds greater specificity by identifying the actors and activities required for a value proposition (Adner, 2017). This directs attention not only to whether organizations participate, but to whether the required contribution will occur and whether another actor can provide an equivalent contribution. A customer's confirmation of receipt, for example, may be necessary before a shipment can be reconciled. Additional carriers cannot necessarily substitute for that customer.

This emphasis on specific contributions also sharpens the incentive problem. Complementarity and bargaining affect incentives to improve ecosystem functionality, reinforcing the distinction between creating value collectively and giving each participant a reason to contribute (Chatain and Plaksenkova, 2026). The present argument focuses on one source of that difference: how work already performed outside the proposed arrangement affects a participant's reason to contribute and, in turn, another organization's adoption evaluation.

The contribution relative to adoption research

Recent adoption research already incorporates many of the conditions relevant to this problem, including fit and viability, ecosystem readiness, and technological, organizational, environmental, supply chain and user-level enablers and inhibitors (Liang et al., 2021; Lustenberger et al., 2021; Rahman et al., 2026). Together, these studies support attention to both internal organizational conditions and the interorganizational environment in which adoption occurs.

A particularly close comparison comes from research on non-adoption. Hubenova et al. (2024) identify sufficient existing technologies, absent external pressure and incomplete upstream integration among the explanations for non-adoption. The distinction developed here is relational. Satisfaction with current work can affect an organization's own adoption decision, but it can also affect another organization whose proposed improvement depends on its participation. Separating these effects helps explain why a proposal that is attractive to one participant may remain difficult to implement collectively.

The contribution of this inquiry is therefore an elaboration of an established adoption problem rather than a separate theory of adoption. It specifies the route from a partner's existing performance, through that partner's evaluation and willingness to contribute, to the focal organization's expected benefit. It also identifies when wider recruitment is unlikely to resolve the problem: a replacement participant must be able to perform the particular activity on which the proposed benefit depends.

Research design and analysis

Survey recruitment and ethical approval

The surveys queried participants about how and why organizations involved in Canadian supply chains used or planned to use blockchain. Recruitment was conducted primarily through the Canadian Institute of Traffic and Transportation (CITT), now branded as Canada's Logistics Association, a national professional association serving logistics and transportation professionals. CITT distributed multiple electronic invitations to its full membership during each survey round, encouraging members to complete the Qualtrics questionnaire. Additional recruitment support came through industry networks associated with Conestoga College's Magna Centre for Supply Chain

Excellence and the Canadian Blockchain Supply Chain Association (CBSCA). The surveys were solicited to CITT and CBSCA members and affiliates on two occasions, from Nov – Dec in both 2021 and 2022. Participation in the survey was voluntary.

The study received approval from the Conestoga College Research Ethics Board in Ontario, Canada, under protocol 425 on 18 November 2021. An approved amendment extended the study into a second annual repetition in 2022. The protocol provided for conduct under the Tri-Council Policy Statement on ethical research involving humans. At the beginning of the questionnaire, participants were presented with the REB-approved information letter and consent form and were asked to indicate informed consent by selecting “I Agree” before proceeding. Participants could omit questions and could request withdrawal under the terms described in the information letter. Names and email addresses were treated as confidential. Participants were advised that anonymity could not be guaranteed and were asked to disclose only information they were willing to make public. The approved retention period was seven years. This article reports on the questionnaire results.

The questionnaire asked respondents to report on their own familiarity with blockchain and on the circumstances of the organization they were using as the basis for their answers. Questions addressed whether the organization had used blockchain, how it had been used, whether other supply-chain organizations also participated, whether blockchain was intended to replace an existing process or system, and the organization’s reasons for use or non-use. Respondents were also asked about possible future uses, alternative non-blockchain solutions, and how a proposed blockchain solution might compare with existing approaches. The questionnaire collected organizational context, including organization name, industry, Canadian operations, participation in a supply chain, organization size and revenue, together with the respondent’s job title. Reported job titles included directors, managers, supervisors, buyers, analysts and customer-service staff, and respondents varied in their familiarity with blockchain. The analysis therefore treats the responses as participants’ accounts of the use, evaluation and potential adoption of blockchain within the organizations they described.

Common questions and units of analysis

The two survey rounds are compared using four fixed-choice questions that appeared in both questionnaires: respondents’ general familiarity with blockchain, familiarity with possible applications within their organization, whether their organization had ever used blockchain, and the likelihood that their organization would use blockchain in the future. Each item is reported using the number of valid responses to that question as its denominator, so responses from partially completed questionnaires are retained where the relevant question was answered. The organizational-use question asked whether the organization had ever used blockchain. A “yes” response therefore indicates reported experience with the technology, but does not by itself indicate that blockchain had reached sustained operational deployment.

The written responses are analyzed separately from these fixed-choice questions. They comprise 92 entries from 2021 and 124 from 2022. For this analysis, an entry is one written response retained within a question group. The common groups are applications, with 37 entries in 2021 and 48 in 2022; current use, with three and 13; adoption motives, with three and 11; reasons for non-use, with 42 in each round; and replacement of existing processes, with seven and 10. Because one respondent could provide written answers to several questions, and could contribute more than one response relevant to non-use, these counts describe the amount of written material analyzed rather than the number of respondents or organizations represented.

The two survey rounds are treated as separate observations of the population reached through the recruitment process in 2021 and 2022. Comparisons are therefore descriptive and concern common response distributions and recurring explanations across the two collection periods. The analysis does not treat the surveys as a longitudinal panel or attempt to trace changes within matched respondents. The survey instrument is provided as supplementary material.

Interpretation of written answers

The written responses were analyzed using qualitative content analysis informed by organizational adoption research (Hsieh and Shannon, 2005). Initial descriptive categories captured the applications respondents discussed, their reasons for considering or using blockchain, and the barriers they identified. The 84 written responses concerning non-use were then examined more closely to distinguish six types of explanation: unresolved assessment, unfavourable evaluation, comparison with an existing workflow, dependence of the expected benefit on participation by others, absent customer demand, and implementation constraints. More than one interpretation could apply to the same response.

Coding was based on what respondents explicitly stated rather than on assumptions about what they may have meant. For example, mentioning expense did not by itself establish that an organization could not afford implementation or had concluded that the expected return was unfavourable. A reference to technological immaturity did not establish dependence on a particular partner, and uncertainty about the role of an IT department did not by itself establish an organization-wide knowledge deficit. Where responses were tentative or expressed more than one explanation, those qualifications were retained. Responses referring to risk, conservatism or other explanations also remained in the analysis even when none of the six focal interpretations applied.

To make these decisions transparent, the supplementary entry-level record retains each response’s original primary category together with any overlapping interpretations and a note explaining the coding decision. Additional checks considered repeated respondents, the question group in which each response appeared, and instances of similar wording across responses. The analysis does not claim independent coding reliability. Instead, these procedures provide a record of how brief and sometimes ambiguous responses were interpreted and help avoid assigning more meaning to them than their wording supports.

Conceptual development

Interorganizational adoption research provides the starting concepts for the analysis: comparative benefit, organizational readiness and external influence. Ecosystem research adds a complementary perspective by identifying the specific actors and activities required for a proposed benefit to be realized. Following Jaakkola (2020), the paper uses theory adaptation to connect these perspectives and extend comparative evaluation beyond the focal organization to the partners whose contributions are required. The literature considered therefore centres on organizational adoption, incumbent systems, participation incentives and dependence on particular activities. Recent research on non-adoption and ecosystem alignment is used to position the argument and keep the claimed contribution appropriately bounded.

The survey results provide empirical examples of the organizational conditions that the theoretical explanation must account for. Building from those observations, the propositions extend the comparison with existing practice to necessary partners and consider how their evaluations can affect the focal organization’s expected benefit. The surveys do not observe a linked sequence of evaluations across interacting partners. The propositions should therefore be understood as theoretical deductions informed by the survey findings rather than as relationships directly demonstrated by the survey data.

Survey results and the evaluation problem

Familiarity and reported use

Table I reports the common categorical distributions. Very familiar responses account for nine of 81 answers in 2021 and 26 of 70 in 2022. Reported ever-use accounts for four of 63 and 11 of 61 answers. Many respondents were unsure whether their organization had used the technology. These distributions establish a setting in which accounts of possible applications coexist with limited knowledge of organizational activity.

Table I Familiarity and reported organizational use

Item	Response	2021 n/N (%)	2022 n/N (%)
General familiarity	Very familiar	9/81 (11.1%)	26/70 (37.1%)
	Somewhat familiar	33/81 (40.7%)	21/70 (30.0%)
	Not very familiar	28/81 (34.6%)	15/70 (21.4%)
	Not at all familiar	11/81 (13.6%)	8/70 (11.4%)
Familiarity with organizational applications	Very familiar	3/71 (4.2%)	17/63 (27.0%)
	Somewhat familiar	31/71 (43.7%)	19/63 (30.2%)
	Not very familiar	19/71 (26.8%)	17/63 (27.0%)
	Not at all familiar	18/71 (25.4%)	10/63 (15.9%)
Organization ever used blockchain	Yes	4/63 (6.3%)	11/61 (18.0%)
	No	36/63 (57.1%)	33/61 (54.1%)
	I'm not sure	23/63 (36.5%)	17/61 (27.9%)
Likelihood of future use	Very likely	9/57 (15.8%)	12/57 (21.1%)
	Likely	12/57 (21.1%)	13/57 (22.8%)
	Somewhat likely	22/57 (38.6%)	19/57 (33.3%)
	Not likely	14/57 (24.6%)	13/57 (22.8%)

Note: N is the number of valid answers to the item. Differences describe separate survey rounds. Source: survey results. Source: Author’s own work based on survey results.

Respondents identified work involving documents, tracking and billing. A 2021 participant described linking shipping documents and customs submissions to client records. A 2022 participant described standardizing documents shared with customers. An account of reported use in 2021 connected transport billing with carrier participation and the aim of reducing manual labour and improving accuracy. These are accounts of intended or reported operational benefits, rather than verified performance measurements.

Distinct explanations within non-use answers

Table II reports the overlapping interpretations. Unresolved assessment appears in 13 entries from 2021 and 11 from 2022. Unfavourable evaluation appears in seven and five, including tentative and mixed answers. These counts describe the content of the written results. They do not establish how common each explanation is among organizations or whether its prevalence changed.

Table II Overlapping interpretations of non-use entries

Interpretation	2021 entries	2022 entries
Unresolved assessment	13	11
Unfavourable evaluation	7	5
Comparison with an existing workflow	1	2
Participation conditions a benefit	1	2
Absent customer demand	1	1
Implementation constraint	4	5
None of the six focal interpretations	17	20

Note: Each round contains 42 entries. Codes overlap and totals are not additive. Source: Author’s own work based on survey results.

One 2022 respondent wrote, “I don’t believe anyone in our business knows enough about blockchain to formulate a business plan on integrating it” (entry 006). This concerns the ability to formulate an assessment. By comparison, “No IT team in house to manage the process” identifies an implementation resource (2021, R043, Q33). Other respondents described financial or technical limitations. These explanations remain relevant even where a technology might offer benefits.

Customer demand is a separate consideration. A 2021 respondent reported no request from important customers making adoption essential for business continuity (R048, Q51). A 2022 service provider stated, “Nobody has even hinted that they are looking for us to participate in this technology” (entry 032). These accounts describe responsiveness to customers. They do not establish that customer activity is technically necessary for an operational improvement.

Current performance and conditions on joint use

A 2021 respondent indicated that successful implementation would require participation by customer service providers and spare-parts suppliers (R045, Q51). The same response also identified implementation costs as a concern. Considered in full, the response therefore points to both a cost constraint and a dependence on participation by other organizations. A coding approach based only on the primary cost category would miss that second element. The respondent did not, however, explain why those partners had not participated.

A 2022 respondent made the relationship between existing practice and partner participation more explicit: “Using blockchain only for us (instead of in conjunction with our partners) will probably not be as effective as what we are doing as of now” (entry 003). This response indicates that the organization viewed its current centralized arrangement as acceptable and expected limited benefit from adopting blockchain without its partners. It therefore combines a comparison with the existing workflow, the effort involved in changing that workflow, and dependence on joint use. Another respondent referred to existing electronic accounts payable and receivable and indicated a preference for improving the security of the current information-exchange process rather than replacing it (entry 021).

A further 2022 response stated, “Needs to be a critical mass of adopters before the investment would be worth it” (entry 020). This directly links the value of adoption to the level of participation, but it does not identify which organizations or activities are necessary for that value to be realized. That distinction matters. Statements about slow adoption, immature systems or missing standards describe broader uncertainty about the development of the technology or market. They do not, by themselves, establish that a specific operational benefit depends on a particular partner’s contribution.

Under the coding rules used here, entry 003 is the only response that explicitly combines both elements central to the theoretical argument: a comparison with an existing workflow and a condition that the expected benefit depends on participation by others. The remaining responses provide evidence of related components, such as incumbent processes, implementation constraints and participation requirements. Reported reasons for adoption also extended beyond immediate operational improvement and included experimentation and participation in technological development.

How a partner's existing workflow affects a shared proposal

Evaluating a shared workflow

The analysis focuses on how an organization evaluates a particular shared workflow. That workflow depends on a participation arrangement: the set of actors expected to perform the activities needed for the workflow to function (Adner, 2017). Participation confidence refers to a manager's expectation that those activities will be completed to the required standard and within the required time. Expected incremental value is the improvement the organization expects relative to its existing workflow after accounting for transition costs, ongoing costs and risks. This comparison builds on the established idea that organizations evaluate an innovation relative to the practice it would replace rather than in isolation (Rogers, 2003; Iacovou et al., 1995; Zhu et al., 2006). Implementation commitment occurs when the organization assigns resources to put the proposed workflow into practice.

Participation sufficiency describes the point at which the expected contributions of participating actors are strong enough for the proposed workflow to provide sufficient incremental value relative to the organization's current practice. It is therefore an outcome of the evaluation, not a separate cause of attractiveness. For that reason, participation sufficiency should not be measured simply by asking whether managers find a proposal attractive and then used to explain that same judgement. Current workflow performance, confidence that required activities will be completed, and the resulting expected gains need to be assessed separately.

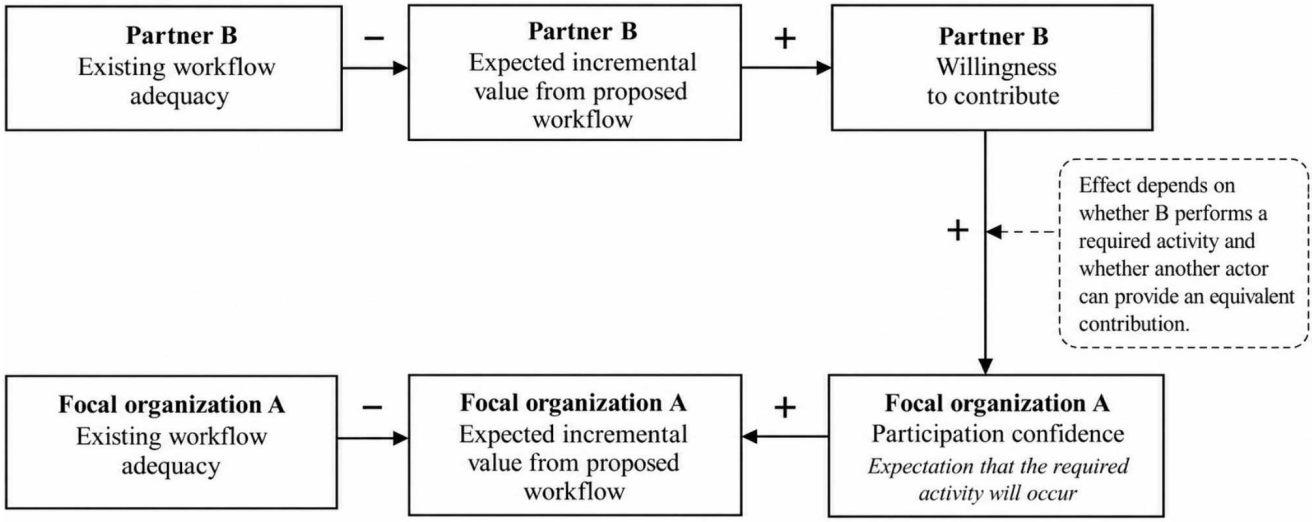
For any given proposal, a better-performing existing workflow leaves less room for improvement. This follows from comparative evaluation and from research showing that incumbent systems and their performance shape decisions about migration and substitution (Zhu et al., 2006; Polites and Karahanna, 2012; Adner and Kapoor, 2016). If the expected benefit also depends on confidence that required activities will be completed, then a stronger incumbent means that a higher level of participation confidence may be needed before replacement becomes worthwhile, all else equal. The argument becomes more important in an interorganizational setting because the activities needed to produce a benefit may be performed by different actors (Adner, 2017). The theoretical step developed here is to apply the same comparison with existing practice to the partners whose contributions are necessary for the focal organization to realize its expected benefit.

When a partner has little reason to change

Consider a purchaser and a carrier evaluating a shared billing workflow. The example is hypothetical but illustrates the mechanism developed here. The purchaser currently resolves billing disputes manually and expects standardized shipment-event data to reduce that work. The carrier, however, already produces reliable invoices through an integrated system. Both organizations may agree that the proposed technology is technically capable, yet evaluate the operational value of changing their own workflows differently.

If the carrier decides not to provide the required shipment-event data, the purchaser can no longer expect the full improvement on which its business case was based. Nothing has changed in the purchaser's existing workflow, and nothing has changed in the technical capability of the proposed system. What has changed is the purchaser's confidence that a necessary partner contribution will occur. Figure 2 shows how that change in the carrier's evaluation can affect the purchaser's expected incremental value.

Figure 2 How a partner's existing workflow affects the focal organization's evaluation



Note: Signs indicate the proposed direction of relationships, holding other conditions constant. Relationships are conceptual rather than estimated. Source: Author's own work.

Proposition 1: When a shared proposal depends on a partner's voluntary contribution, greater adequacy of that partner's existing workflow reduces the focal organization's expected incremental value by lowering the partner's expected incremental value from the proposed workflow, reducing its willingness to contribute, and thereby reducing the focal organization's participation confidence. This relationship is expected where the partner's willingness to contribute responds to its own comparative benefit, holding the capability of the proposed system, contribution costs and commercial inducements constant.

The proposition describes an indirect effect that originates in another organization's current performance. It is most relevant when the partner can decline to contribute without sacrificing a more important commercial benefit. Participation may still occur even when the proposed workflow offers little immediate operational improvement if the partner faces a contractual requirement, receives compensation, expects strategic learning or anticipates future business. The focal organization must also have some basis for forming expectations about the partner's intentions. A change in the partner's evaluation cannot affect the focal organization's expected value unless it changes the focal organization's confidence that the required contribution will occur.

The proposition does not assume that partners evaluate proposals perfectly or that retaining an existing workflow produces the best outcome for the network as a whole. Rather, it identifies a mechanism through which two capable organizations can reach different conclusions about the same shared proposal. Evidence consistent with the proposition would show a change in a partner's evaluation of the proposed workflow, followed by a change in its intended contribution and then a change in the focal organization's participation confidence or expected incremental value, while the proposed technology and the focal organization's own existing workflow remain unchanged.

Substitutability and the response to non-participation

The effect of non-participation depends on the activity that is missing and on whether another actor can perform it. A purchaser may be able to obtain a generic verification service from several providers, making that contribution relatively easy to replace. By contrast, confirmation from the customer that received a particular shipment may have no equivalent substitute. Wider adoption can increase the number of available participants or reduce participation costs, but it will not solve the focal organization's problem unless it makes the required contribution available.

Proposition 2: The less substitutable a necessary partner's contribution, the more persistent the effect described in Proposition 1 will be as overall adoption increases. This effect will weaken if wider adoption improves the partner's expected benefit, makes an equivalent contribution available from another actor, or removes the dependency through redesign of the workflow.

The proposition identifies when simply recruiting more participants is unlikely to solve a participation problem. It remains consistent with research on network effects and with established mechanisms such as subsidizing another organization's adoption (Riggins et al., 1994). The more important managerial question is why the required contribution is unavailable. A partner that is technically capable but sees little benefit in changing its current workflow presents a different problem from a willing partner that lacks the resources or integration capability needed to participate.

The appropriate response therefore depends on whether the missing contribution can be substituted. If another participant can perform the required activity, managers may be able to recruit an equivalent provider. If the contribution is effectively indispensable, managers may instead need to reduce the effort required from the partner, alter the distribution of benefits, provide other incentives, or redesign the workflow so that the dependency is reduced or removed. These responses either change the partner's evaluation of participation or change the focal organization's dependence on that partner. Increasing industry adoption alone does not necessarily accomplish either.

Implications for organizational analysis and practice

The theoretical contribution of this article is to show that part of an organization's adoption problem can originate in the current performance of another organization. The focal organization may see clear value in the proposed workflow, while a necessary partner sees little improvement over its existing practice. When the focal organization depends on that partner's contribution, the partner's evaluation becomes part of the focal organization's business case. The effect occurs through expectations about whether the required contribution will actually be made.

This argument extends established explanations of uneven incentives and ecosystem alignment. Riggins et al. (1994) show why participants in interorganizational systems may require different incentives, while Chatain and Plaksenkova (2026) examine how complementarity and bargaining shape incentive alignment. The additional contribution here is to identify the performance of a partner's existing workflow as one reason those incentives can diverge. This helps distinguish between two different participation problems: a partner that is unable to contribute and a partner that is capable of contributing but has little reason to change its current way of working.

The same distinction helps interpret organizational non-use more carefully. *Unresolved assessment* means that managers have not yet reached a clear evaluation of the proposal. *Unfavourable evaluation* means that they have evaluated it and do not judge it sufficiently attractive. *Implementation constraints* mean that the organization may see value in the proposal but lacks the ability or resources to act. These explanations can occur together, but they imply different problems and therefore different responses. Greater knowledge may help managers reach a clearer judgement without making the proposal itself more attractive. This is consistent with research on organizational learning in technology diffusion and with research that treats rejection, rather than adoption, as a legitimate organizational outcome (Attewell, 1992; Abrahamson, 1991).

Evaluating and negotiating a shared workflow

Managers should begin by defining the workflow they want to improve and the performance of the current process against which any improvement will be judged. They can then identify the activities required for the proposed workflow to succeed, determine which partners must perform them, and clarify the expected standard, timing and responsibility for resolving exceptions. A general expression of interest provides much less assurance than a clear commitment to perform the activities on which the expected benefit depends.

The evaluation should also consider the current workflows of the necessary partners. If a partner already performs its activity effectively, managers need to understand what operational improvement, commercial benefit or other incentive would justify changing that work. Recruiting additional participants will have limited value if none can provide the required activity. Where an equivalent provider is available, however, substituting another participant may be easier than renegotiating the original partner's involvement.

Two comparisons can help managers identify the source of the problem. The first asks whether the proposed workflow would be attractive if all required activities were performed dependably. The second asks whether it remains attractive given the commitments that are actually available. If the proposal is unattractive even under dependable participation, managers should reconsider the design, cost or distribution of benefits. If the proposal is attractive under dependable participation but unattractive with the commitments currently available, the problem is participation rather than the underlying proposal. Managers can then examine whether the missing contribution reflects limited capability, an unresolved evaluation or an unfavourable comparison from the partner's perspective.

Limitations and further research

This paper is primarily a conceptual contribution. It develops an explanation of interorganizational technology adoption by connecting established research on comparative benefit, incumbent systems, participation incentives and ecosystem structure. The two exploratory survey rounds provide empirical context and examples of the evaluation problem that the theory is intended to explain. They inform the development of the argument but are not presented as a direct test of the propositions. The contribution should therefore be assessed principally in terms of the conceptual relationships proposed and their usefulness for explaining participation in shared workflows.

The survey evidence has limitations appropriate to that supporting role. Responses were voluntary and self-reported, and the two survey rounds represent separate collection periods rather than a longitudinal panel. Written responses were often brief, and some respondents contributed answers to more than one question, so counts of entries should not be interpreted as estimates of the prevalence of particular explanations among organizations. More importantly for the conceptual model, the surveys did not collect linked evaluations from the different organizations participating in the same workflow. They therefore provide evidence of the component conditions discussed in the paper, including existing processes, implementation constraints and dependence on participation, but do not directly observe the complete sequence proposed between a partner's evaluation and the focal organization's expected value. The survey instrument is provided as supplementary material to document the questions and response options used in the study.

Future research on Proposition 1 should examine the proposed relationship across linked organizations. Studies could identify a shared workflow, measure the adequacy of each organization's existing process, assess each partner's expected incremental value and willingness to contribute, and then examine how those commitments affect the focal organization's participation confidence and expected value. Longitudinal field studies would be particularly useful because they could observe changes in partner evaluations and commitments as a proposal develops. Dyadic or multi-organization case studies, surveys of matched partners, and experimental or vignette designs could also test individual parts of the mechanism. Evidence would support Proposition 1 if, holding the relevant proposal characteristics reasonably constant, greater adequacy of a partner's existing workflow is associated with lower expected incremental value for that partner, reduced willingness to contribute, and consequently lower participation confidence or expected value for the focal organization. The proposition would be weakened where partner workflow adequacy changes without affecting willingness to contribute under the conditions specified in the proposition.

Future research on Proposition 2 should examine when the consequences of non-participation can be overcome through wider adoption. The key empirical distinction is between contributions that can be supplied by several actors and those tied to a particular partner or activity. Studies could compare shared workflows with different levels

of substitutability and observe whether additional adopters actually make the required contribution available. Proposition 2 would be supported if low substitutability makes the effects described in Proposition 1 persist even as aggregate adoption increases, while greater substitutability allows another participant to provide an equivalent contribution. Research should also examine the conditions identified in the proposition that could break this relationship: wider adoption may improve the original partner's expected benefit, create an equivalent source of the required contribution, or enable redesign of the workflow so that the dependency no longer exists.

Together, these studies would help establish the boundary conditions of the proposed explanation. Contractual obligations, compensation, strategic objectives, institutional pressures and other sources of interorganizational influence may sometimes outweigh the operational comparison developed here. Future research can therefore determine not only whether the proposed relationships occur, but also when the adequacy of existing workflows is an important explanation for participation and when other mechanisms provide a stronger account.

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Declarations

Ethics approval and informed consent

The study received approval from the Conestoga College Research Ethics Board (protocol 425) on 18 November 2021. An approved amendment extended the study to a second survey round in 2022. The research was conducted under the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. Participants received the REB-approved information letter and consent form before beginning the questionnaire and provided informed consent by selecting "I Agree." Participation was voluntary, and participants could omit questions or request withdrawal under the conditions described in the information letter.

Conflict of interest

The author declares no conflict of interest.

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AI use disclosure

The generative artificial intelligence tool ChatGPT, was used to copy-edit the existing author written manuscript. The tool was used to check for grammatical errors, improve sentence clarity, and decrease complexity of prose. The author reviewed and verified all recommendations and takes full responsibility for the final manuscript.

Data availability statement

The survey instrument is provided as supplementary material. The underlying respondent-level survey data are not publicly available because the research records contain potentially identifying participant and organizational information.

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