

Cost of Not Investing (CONI) in Intelligent Processes Automation

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Abstract. As organisations navigate complex AI-driven workplace transformations through intelligent automation of business processes, traditional investment evaluation methods inadequately capture the strategic risks of its delayed adoption. Our study introduces the concept of the Cost of Not Investing (CONI), exploring how automation delays can impact organisational competitiveness and workforce dynamics. Drawing on existing theories, such as Opportunity Cost, Real Options Theory, Dynamic Capabilities, and Game Theory, we conceptualise a framework identifying three CONI dimensions: operational inefficiencies, strategic disadvantages, and human capital impacts. We operationalise CONI with a measurement-based model that maps each dimension to auditable indicators (e.g., process mining logs, service level penalties, talent attrition premiums) and test initial perceptions from a cross-sector survey of 108 professionals in the US and EU. Respondents perceive material consequences of delay: talent migration (81%), lower productivity (77%), increased training and rework costs (72%), reduced market responsiveness (7%), and loss of early mover advantages (74%). Yet evaluation practices reveal a critical implementation gap: only 16.7% systematically incorporate strategic costs, and 33.3% report no structured method. Our contribution lies in demonstrating how CONI operates as a cascading mechanism (not merely additive costs), where delayed options reduce capability-building opportunities, which amplifies competitive disadvantages. We provide a research agenda for validating objective and longitudinal CONI estimates in IPA-intensive settings.

Keywords: Intelligent Process Automation · Cost of Not Investing · Real Options · Dynamic Capabilities

1 Introduction

The nature of organisational work has been rapidly changing as intelligent systems cover a growing share of cognitive, coordinative, and transactional tasks. Intelligent Process Automation (IPA), i.e. the combination of robotic process

automation (RPA) with machine learning (ML) and agentic artificial intelligence (AI), reconfigures who does what, when, and with what data [7, 32, 6]. At the same time, firms confront increasingly tight labour markets, rising capability requirements, and a shift toward human-machine complementarity aligned with Industry 5.0 priorities. While the direct benefits of IPA, such as cycle-time reduction, error minimisation, and compliance-by-design, are well documented [29, 1], investment appraisals rarely quantify the penalties incurred by delaying adoption [39].

Such oversight matters because IPA fundamentally differs from traditional IT investments in three ways: (1) it generates compounding learning effects where early data collection improves future model performance, (2) it creates irreversible capability gaps as competitors accumulate automation-specific knowledge, and (3) it triggers workforce dynamics where talent migrates to more automated environments, creating self-reinforcing cycles of disadvantage [17].

Organisations frequently underestimate strategic flexibility gained through timely investments, overlooking that delays may result in irreversibly lost opportunities or reduced managerial options [37]. The dynamic capabilities perspective underscores that companies failing to invest timely risk losing abilities to sense and seize market opportunities, limiting sustained competitive advantage in digital environments [12]. From a game-theoretic perspective, delayed automations risk competitive takeover, where early adopters gain strategic advantages through operational superiority [40].

Our paper aims to make two main contributions. First, it is to advance theory by sequencing Real Options, Dynamic Capabilities, Opportunity Cost, and Game Theory into a cascading CONI construct for IPA, demonstrating how option value feeds capability accumulation under competitive timing. Second, it addresses the gap between theoretical understanding and practical implementation, proposing a research agenda for further studies on objective, longitudinal CONI estimates.

Traditional investment appraisal methods prove insufficient for automation decisions involving strategic uncertainties and irreversibility, failing to account for managerial flexibility and competitive interactions [11, ?]. Hence, our research addresses this gap by exploring CONI in Intelligent Process Automation, aiming to integrate strategic perspectives to understand broader implications of automation investment timing and the future of work. Therefore, we shall explore the below Research Question:

RG: How do organisations understand, measure, and act on the costs of not investing in intelligent process automation?

2 Literature Background

This section introduces the two streams of literature that provided the foundation for our study and led to its formulation. These are the reviews of works on process automation technologies, as well as cost theories related to strategic investments.

2.1 Process Automation Technology

Process automation technologies have undergone rapid transformation with intelligent solutions fundamentally changing organisational approaches to digital transformation [28]. Robotic Process Automation (RPA) enables organisations to automate repetitive, rule-based tasks by mimicking human interactions with information systems, operating at the user interface level without requiring infrastructure changes [19, 35]. Successful RPA implementation requires careful governance, organisational readiness, and change management strategies [20].

AI capabilities have expanded automation scope from rule-based tasks to complex, judgment-based tasks through Intelligent Process Automation (IPA), which combines RPA's structured processing with cognitive capabilities via machine learning, natural language processing, and computer vision [18, 23]. This enables organizations to address sophisticated process scenarios while improving decision-making through data-driven insights [14]. Implementing modern process automation solutions presents both opportunities and challenges, requiring process standardization, employee training, strategic alignment, and comprehensive governance frameworks to manage technological complexity [27, 22]. Economic implications have become critical, with traditional cost accounting methods insufficient for evaluating automation investments' long-term strategic benefits and indirect costs [39].

Automation initiatives increasingly focus on augmenting human capabilities rather than replacement, requiring new workforce development approaches that balance technological capabilities with human factors for both operational efficiency and employee satisfaction [15, 26]. However, the literature lacks frameworks for understanding how automation timing affects talent retention and competitive positioning, gaps our CONI framework addresses.

2.2 Strategic Perspectives on IT Investment Costs

We draw on four theoretical perspectives that, while previously applied separately to IT investments, have not been integrated to explain automation delay costs. We show how these theories connect in a temporal sequence: opportunity costs occur immediately, triggering option value loss, which constrains capability development, ultimately affecting competitive outcomes.

Opportunity Cost Opportunity cost represents foregone value from choosing one alternative over another [5, 16]. In IPA contexts, maintaining manual processes means forgoing efficiency gains, accuracy improvements, and cost reductions available through automation. While opportunity cost typically assumes independent choices, we argue that in IPA, today's foregone opportunities affect tomorrow's options, a connection existing literature overlooks [2, 9].

Previous studies measure opportunity costs through NPV analysis [37], Real Options Analysis for technology investments with uncertain outcomes [3], and Market Share Analysis incorporating competitive dynamics [24].

In technology investment contexts, opportunity cost analysis addresses Technical Debt from delayed updates [21], Strategic Position Erosion from delayed adoption [33], and Innovation Capability Impact from outdated systems [36]. Key measurement challenges include counterfactual estimation uncertainty, dynamic technology market changes, and quantifying intangible benefits affecting organizational capabilities and employee satisfaction.

Real Options Theory Real Options Theory extends traditional investment appraisal by recognizing managerial flexibility value in strategic decision-making under uncertainty, conceptualizing investments as ‘options’ granting flexibility to defer, scale, expand, or abandon investments based on evolving market conditions [37, 4]. This flexibility enables proactive risk management through adaptive resource allocation as uncertainty resolves. Applied to IPA, Real Options Theory highlights strategic benefits from the solution’s flexibility under technological volatility and competitive uncertainty. While IPA investments involve substantial initial outlays, they create valuable future strategic adaptation opportunities. Conversely, delaying automation investments compromises long-term strategic options, potentially locking companies into suboptimal configurations as competitive landscapes evolve [11].

From this perspective, CONI in automation would extend beyond immediate financial impacts to address strategic opportunity costs including permanently lost managerial flexibility, diminished competitive responsiveness, and reduced ability to capture market opportunities, enabling richer strategic valuation transcending traditional short-term focused appraisal methods.

Dynamic Capabilities Dynamic Capabilities theory emphasizes organizations’ ability to adapt, sense opportunities, and dynamically reconfigure resources in rapidly evolving competitive environments, enabling sustained competitive advantage through ongoing adaptation [36, 12]. In the Process Automation contexts, dynamic capabilities relate to rapidly integrating digital technologies, exploiting real-time analytics, enhancing operational agility, and reorganizing processes in response to market demands, being essential capabilities in digital transformation environments [38, 30].

Organizations delaying automation investments risk substantial dynamic capability deterioration, significantly impacting strategic resilience, innovation potential, and competitive adaptability, thus amplifying CONI. Delayed investment consequences transcend short-term inefficiencies to encompass reduced organizational agility, slower technological response, diminished opportunity capture, and impaired market leadership maintenance [10, 12].

Dynamic capabilities theory therefore underlines automation investment urgency, highlighting that delayed investments fundamentally weaken organisational adaptability and competitiveness with long-lasting strategic effects beyond conventional measures.

Game Theory Game theory considers strategic interactions among competing companies and interdependencies in decision-making, where investments are in-

fluenced by competitor actions, market conditions, and asymmetric information creating strategic complexity [40, 34]. Investment timing and nature profoundly influence competitive positioning, as companies delaying investments risk are losing strategic advantages to proactive competitors, while early adopters achieve first-mover benefits including market dominance and network effects, creating entry barriers [34]. Underestimating competitor strategies or misinterpreting market signals leads to severe strategic miscalculations. Companies hesitating or failing to anticipate competitor moves face irreversible disadvantages, including market share loss and diminished competitive leverage, beyond immediate operational considerations [40].

Synthesis Taken together, these lenses specify CONI as a time-indexed expected costs with four observable components: (i) operational leakage relative to an IPA-feasible baseline; (ii) decaying option value as flexibility windows close; (iii) slower dynamic capability accumulation that lengthens time-to-competence and reduces automation coverage; and (iv) competitive interaction losses as rivals move first.

3 Methodology

This exploratory study examines how organisations perceive CONI in IPA investments. Following Gregor’s [13] Type II theory (analysis and explanation), we aimed to describe current understanding and practices to build theory about CONI awareness and evaluation gaps.

For this purpose, we developed our survey following guidelines by DeVellis [8], adapting validated scales where available. Specifically, we took operational efficiency items from van der Aalst et al. [1], strategic flexibility measures from Trigeorgis and Reuer [37], capability assessment items from Teece et al. [36], and competitive positioning scales from Lieberman and Montgomery [24]. For CONI-specific dimensions not covered by existing scales, we developed new items based on our literature study. The preliminary survey questions were reviewed by all three authors to improve content validity. We conducted pilot testing with five automation practitioners, leading to refinement of ambiguous items.

The final survey consisted of four sections addressing the following constructs: Organisational Context, Current Automation Status, CONI Perception, and CONI Awareness. Responses were collected through open-ended questions, as well as single and multiple-choice questions, and a 5-point Likert scale ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree". Example items included: "Employees’ innovation potential is underutilised due to the burden of manual tasks" (Human Capital Impact) and "Competitors with higher automation levels are gaining market share" (Strategic Impact). Demographic information, including experience, role, and organisation size, was collected at the end of the survey. To minimise common method bias, we implemented procedural remedies recommended by Podsakoff et al. [31], including survey design separation and anonymity assurance.

We recruited participants from two sources: (1) the Vainu business register covering Nordic companies, and (2) authors’ professional networks in automation consulting, providing access to knowledgeable respondents across diverse industries. The survey was available online between February and May 2025 via MS Forms. We sent 723 email invitations in two iterations, receiving 108 complete responses from professionals at companies based in Europe and the US, achieving a 15% response rate typical for organisational surveys.

4 Results and Discussion

4.1 Descriptive Statistics on Respondents

The most represented sectors were Financial Services and Retail (each 20.4%), followed by Technology (18.5%) and Healthcare (14.8%). This sector distribution provides a diverse industry perspective on automation challenges.

Regarding organisation size, respondents predominantly represented companies with 251–1000 employees (40.7%), followed by companies with 51–250 employees (23.1%), companies with 1001–5000 employees (19.4%), smaller companies with 1–50 employees (13.0%), and larger enterprises with over 5000 employees (3.7%). This heterogeneity captures CONI perspectives across different organisational scales.

Respondents mostly held Senior Management roles (35.2%), followed by Technical Specialists (24.1%), Middle Management (22.2%), and C-level Executives (14.8%), ensuring strategic and technical perspectives were represented. In terms of automation knowledge, 45.4% rated themselves as experts, 34.3% reported basic awareness, and 20.4% claimed working knowledge, providing varied viewpoints on automation impacts.

Regarding automation maturity, 37.0% reported extensive automation in multiple areas, 31.5% had full automation including AI/ML, 17.6% had partially automated complex processes, and 12.0% had only basic automations. This variation from basic to advanced automation provides insights across the full automation journey spectrum.

4.2 CONI perception

We start this section by summarising our key findings on CONI dimensions in Table 1.

Operational impacts were aligned with Opportunity Cost theory. The most frequently selected evaluation criteria were competitive analysis (46.3%), strategic necessity evaluation (43.5%), and cost-benefit analysis (42.6%). Interestingly, only 35.2% use ROI analysis and 34.3% conduct risk assessment, suggesting evaluation frameworks are evolving beyond traditional financial metrics. Total Cost of Ownership (TCO) was noted by 42.6%. Only 6.5% reported uncertainty about their organisation’s evaluation methods.

When asked about factors considered in calculating the cost of not automating, the most frequently cited were customer satisfaction (45.4%), error rates

Table 1. Key findings across CONI dimensions

CONI Dimension / Finding	%	Theory
<i>Operational</i>		
Manual processes costs	75	Opportunity Cost
<i>Strategic</i>		
Competitors gain share	71	Game Theory
<i>Human Capital</i>		
Talent migration	81	Dynamic Capabilities
<i>Evaluation</i>		
Systematic consideration	16.7	Implementation Gap

(43.5%), and labour costs (41.7%), reflecting concerns about customer experience, operational precision, and workforce efficiency. Market share loss was identified by 39.8%, and employee satisfaction by 37.0%, demonstrating recognition of both competitive and internal cultural impacts. Operational inefficiencies (26.9%) and competitive disadvantage (25.9%) were selected less frequently, while 11.1% selected "I do not know."

Regarding measurement methods for costs of not automating, internal systems and reporting data were most frequently mentioned (46.3%), followed by ROI estimation tools (38.0%), business case forecasting (35.2%), and cost-benefit analysis (33.3%). Project cost estimations and strategic prioritisation processes were mentioned by 29.6%, while risk evaluation appeared in 27.8% of responses. Notably, 23.1% use unstructured or intuition-based methods, whilst 13.9% report not measuring these costs at all, revealing varying levels of measurement sophistication across organisations.

Barriers to automation implementation revealed an important paradox: while initial investment costs scored lowest (3.78), implementation complexity (4.21) and expertise gaps (4.13) scored highest. Security concerns (4.18), uncertain ROI (4.10), regulatory compliance (4.07), organisational culture (4.03), and resource constraints (4.00) also scored highly. Employee resistance (3.99) and legacy system integration (3.87) were rated lower. This suggests organisations now recognise capability-building challenges over financial constraints, supporting our Dynamic Capabilities argument that delayed adoption creates cumulative skill gaps.

Operational Impact. Approximately 67% agreed that postponing automation investments increases operational costs, and 64% perceived that delays exacerbate efficiency gaps with competitors. Manual processes are viewed as increasingly expensive to maintain (75% agreement), with slower process execution contributing to lost market opportunities (65% agreement). Insufficient automation undermines service quality (70% agreement) and organisational agility, with 75% agreeing that delayed automation hampers swift market response. Additionally, 70.4% highlighted that delays result in increased downtime and business process disruptions. These operational perceptions strongly support our opportunity cost component.

Strategic Impact. The majority (71%) agreed that competitors with higher automation levels are gaining market share. This perception aligns with our Game Theory component. Over half (52%) agreed their organisation misses data-driven decision-making opportunities, whilst 40% remained neutral, indicating varying strategic awareness levels. Manual processes limit innovation capability (73% agreement), negatively impact customer satisfaction (61% agreement), and create operational scaling difficulties (71% agreement). Delayed automation investments reduce strategic flexibility and hinder competitive response capabilities (75% agreement). Moreover, 74% perceive lost first-mover advantages, confirming the strategic dimensions of CONI.

Human Capital Impact. The strongest consensus emerged around workforce issues: 67% agreed that outdated processes hinder recruitment of skilled personnel, 68% believed manual and repetitive tasks affect employee satisfaction. Staff turnover is higher in low-automation areas (70% agreement), and training costs are increasing due to complex manual processes (72% agreement). Workforce productivity is limited by lack of automation (77% agreement), with repetitive manual tasks hindering employees' innovation potential (74% agreement). Most strikingly, 81% believe valuable employees leave for competitors with better automated processes, our highest agreement rate, establishing talent migration as the most visible CONI manifestation.

4.3 CONI awareness

A critical implementation gap emerged: Among 108 respondents, only 16.7% reported always systematically considering strategic costs, whilst 42.6% indicated often considering them. 23.1% noted such considerations occur sometimes, whilst 13.0% rarely and 4.6% never consider them. This reveals a significant gap between theoretical importance and practical application.

Regarding formal evaluation methods, 33.3% have partial methods or are developing them, 31.5% reported fully established methods, whilst 29.6% have no formal method, and 5.6% have no consideration at all. These findings highlight the nascent state of CONI evaluation practices.

Organisations identified clear priorities for improving CONI evaluation: ROI calculators (70.4%), case studies (69.4%) and industry benchmarks (64.8%). Better measurement tools were identified by 58.3%, whilst external consulting (45.4%) and specialised training (39.8%) were less commonly selected. The strong demand for ROI calculators and case studies indicates practitioners seek practical tools for CONI quantification.

4.4 Theoretical Implications and Managerial Insights

Our findings provide support for the CONI cascade framework. Figure 1 illustrates how survey findings map to our model, demonstrating the sequential nature of automation delay costs.

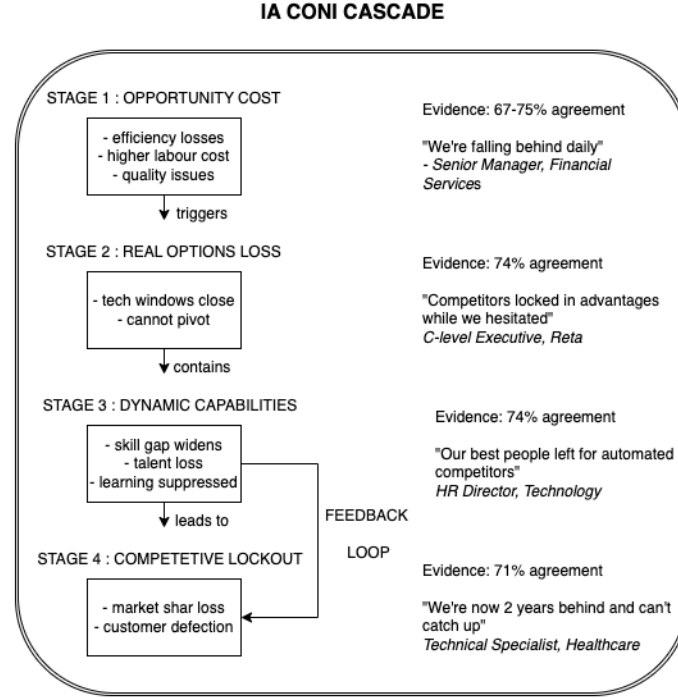


Fig. 1. The CONI Cascade Model: Sequence From Independent Costs to Compounding Consequences

The pattern emerged across three dimensions. First, operational costs (67-75% agreement) confirm the opportunity cost foundation. The respondents recognise immediate efficiency losses from maintaining manual processes. This aligns with van der Aalst et al. [1] who found 60-80% efficiency gains from RPA implementation, suggesting our respondents accurately perceive foregone benefits. However, unlike Ylä-Kujala et al. [39] who focus on quantifiable ROI metrics, our respondents emphasise qualitative costs like service quality degradation (70% agreement), indicating practitioners consider broader impacts than traditional frameworks capture.

Second, lost flexibility concerns (74% perceive lost first-mover advantages) support the real options component. This extends Trigeorgis and Reuer's [37] real options framework by revealing automation-specific option expiry patterns. Whilst they emphasise uncertainty reduction over time, our findings suggest automation options expire more rapidly due to talent migration and competitive lock-in. Benaroch's [3] finding that only 20% of the firms use real options analysis contrasts sharply with our 74% awareness of option value, suggesting practitioners intuitively understand flexibility loss even without formal frameworks.

Third, the 81% agreement on talent migration validates the human capital dimension of dynamic capabilities. This finding extends Teece et al.’s [36] dynamic capabilities framework, which focuses on organisational routines rather than human capital flight. Our results align with Manyika and Miremadi [25] who identify workforce transformation as critical, but go further by showing talent migration as a cascade trigger rather than isolated consequence. Interestingly, whilst Qureshi and Syed [32] found employees resist automation, our data suggest they actively seek automated environments, a reversal possibly reflecting generational shifts in automation attitudes.

The gap between high CONI awareness (67-81%) and low systematic consideration (16.7%) reflect Osmundsen et al.’s [29] finding that despite recognising digital transformation importance, only 23% of organisations have formal digital strategies. However, our gap is more pronounced, possibly because CONI evaluation requires integrating multiple theoretical perspectives. The 33.3% using informal methods echoes Kedziora and Penttinen’s [20] observation that even successful RPA implementations may lack systematic governance.

Our barrier analysis reveals surprising contrasts with existing literature. Whilst Hofmann et al. [14] identify cost as the primary automation barrier, our respondents rank initial investment costs lowest (3.78/5), prioritising implementation complexity (4.21) and expertise gaps (4.13) instead. This inversion suggests organisations now recognise capability-building challenges over financial constraints. Similarly, contrary to Mendling et al.’s [27] emphasis on technical integration challenges, our respondents worry more about organisational readiness, indicating a shift from technology-centric to capability-centric concerns.

The human capital findings extend beyond existing automation literature. Whilst Isaza and Cepa [15] document how automation reshapes tasks, they do not address workforce mobility. Our results reveal a new phenomenon: automation-driven talent markets where skilled workers actively select employers based on automation sophistication. This finding represents a novel automation-specific dimension of employer attractiveness.

Our findings offer practitioners three specific considerations:

1. Developing cascade metrics, as not just direct costs should be tracked, but also option expiry dates (when competitors lock in advantages), capability development timelines (skill-building requirements), and talent retention indicators (automation’s role in recruitment). This extends beyond traditional metrics suggested by Dos Santos [9] by incorporating temporal dependencies.
2. Creating decision triggers. Rather than periodic reviews, thresholds should be established when talent turnover exceeds specific levels, when competitors achieve certain automation milestones, or when process costs rise beyond targets that prompt immediate CONI evaluation. This operationalises Zhu and Weyant’s [40] game-theoretic timing insights for practical use.
3. Mapping interdependencies. It should be documented how operational delays affect future flexibility, how reduced flexibility constrains capability building, and how capability gaps influence competitive position. This addresses

the integration gap between theories that Felsberger et al. [10] identify in Industry 4.0 contexts.

5 Conclusion

This study introduced *Cost of Not Investing* (CONI) as a cascading cost mechanism in IPA decisions, revealing a critical gap between theoretical understanding and practical application. Whilst 67-81% of respondents recognise operational, strategic, and human capital risks from delayed automation, only 16.7% systematically consider these costs in decision-making, suggesting organisations make suboptimal investments by focusing on direct costs while overlooking cascading effects. The human capital implications are particularly striking, with 81% believing talent migrates to better-automated competitors, indicating workforce dynamics may be the most visible CONI case.

Our study makes two key contributions. First, we introduce and operationalise the CONI concept, extending traditional IT investment evaluation beyond financial metrics to include strategic flexibility, dynamic capabilities, and competitive positioning dimensions. By sequencing Real Options Theory, Dynamic Capabilities perspective, and Game Theory, we provide a framework for understanding how automation investment delays cascade rather than simply accumulate. Second, our empirical investigation reveals how organisations perceive delayed automation costs across three distinct CONI dimensions (operational, strategic, and human capital), whilst identifying that 70.4% desire ROI calculators and 69.4% want case studies for evaluation improvement.

IPA CONI is a decision construct that captures these time-sensitive lenses. Specifically, it differs from traditional opportunity cost by capturing cascading interdependencies: foregone options limit future flexibility (Real Options), which constrains capability development (Dynamic Capabilities), that in turn determines competitive positioning (Game Theory). This temporal sequencing reveals why delays compound rather than simply accumulate. Opportunity Cost clarifies the foregone current value from known inefficiencies. Real Options adds the value of managerial flexibility that decays as uncertainty resolves and rivals move; unexercised options can expire or become dominated [37]. Dynamic Capabilities explains how delay erodes a firm’s ability to sense, seize, and transform: data that would have trained models are not collected; process telemetry that would have informed redesign is not captured; and complementary routines are not learned [12]. Game-theoretic timing underscores that when competitors adopt earlier, payoff asymmetries widen through experience effects, switching costs, and reputation signals [40]. Our key theoretical assumption is that these mechanisms form a cascade: postponement shrinks option value, which slows capability accumulation, which magnifies competitive payoff gaps, including human-capital frictions as digitally skilled workers gravitate to environments where their productivity and learning are higher. Hence, we formally define CONI as a time-varying expected cost function that aggregates four theoretically distinct yet measurable components: (i) operational inefficiencies relative to a feasible IPA baseline; (ii)

lost option value as flexibility windows close; (iii) capability erosion from deferred sensing/seizing/transforming; and (iv) strategic interaction losses driven by rival adoption and market responses.

Several limitations should be acknowledged. Our sample of 108 respondents from Europe and the US may not reflect automation challenges in Asian or other markets. The cross-sectional design captures perceptions at a single point rather than tracking how CONI evolves over time. We rely on self-reported perceptions rather than objective CONI measures, and our focus on IPA may not generalise to broader AI workplace technologies. The varying levels of automation knowledge amongst respondents (34.3% with only basic awareness) may affect response reliability. Most critically, we cannot establish causal relationships between perceived CONI and actual business outcomes, i.e. validation that requires longitudinal research with objective performance metrics.

Future research should address three priorities. First, validate the cascade mechanism through longitudinal studies tracking how initial delays compound over time. Second, develop objective CONI metrics using process mining data, talent analytics, and competitive benchmarking rather than perceptions. Third, test whether organisations using cascade-aware evaluation frameworks make better automation timing decisions than those using traditional ROI methods.

By formalising CONI and demonstrating its cascading nature, we extend IS investment evaluation beyond near-term ROI to include compounding penalties of inaction. In IPA-intensive environments where data and learning effects compound, delay can degrade option value, slow capability formation, and widen pay-off gaps. Treating CONI as cascading, rather than additive, allows organisations to make timing decisions that account for trajectories, not only snapshots, and to align automation roadmaps with both productivity goals and talent strategy. As automation becomes central to competitive advantage, understanding and measuring CONI will become increasingly critical for strategic decision-making.

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