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ERP-Enabled Digitalisation, Routine-Task Automation and the Dual-Path Reshaping of the Finance Function: Evidence from 480 Chinese Finance Professionals

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Abstract: Enterprise systems are widely credited with freeing finance professionals from routine work. Yet, the literature is divided on what that liberation does to the professional role: one tradition anticipates enrichment toward business partnering and decision support, another anticipates destabilisation, since displacement removes the very tasks through which the role was defined. This study specifies both outcomes as consequences of a single mechanism – the substitution of routine tasks – and tests them jointly. Survey data from 480 finance and accounting professionals in ERP-adopting Chinese enterprises, sampled to yield three equal strata of finance-shared-service-centre (FSSC) maturity, were analysed using partial least squares structural equation modelling with 10,000 bootstrap resamples and formal measurement-invariance testing. ERP-enabled digitalisation intensity strongly predicted routine-task automation substitution ($\beta = .487$), which in turn raised decision-support effectiveness ($\beta = .480$) and business-partnering engagement ($\beta = .392$). Two hypothesised relationships were significant in the opposite direction: substitution reduced rather than increased role ambiguity ($\beta = -.347$), and digital capability attenuated rather than reinforced that reduction. Multi-group analysis identified shared-service maturity as a threshold condition – the decision-support benefit accrued progressively as maturity rose, whereas the partnering benefit emerged only at high maturity. The findings reposition routine automation as role-clarifying rather than role-threatening in the Chinese ERP setting and identify shared-service maturity as the condition converting released capacity into business-facing work. Practically, automation alone does not transform the finance role: its value depends on practitioner capability and organisational structure – a caution for enterprises treating system adoption as sufficient. This mechanism-level, dual-path account offers an original correction to the enrichment-versus-destabilisation debate in an underexamined emerging-economy context.

Keywords: ERP-enabled digitalisation, routine-task automation, business partnering, decision-support effectiveness, role ambiguity, finance shared services, PLS-SEM.

Introduction

Research Problem

Enterprise resource planning systems have reshaped the work of finance and accounting professionals for three decades, and the literature tracking this change has settled into two incompatible expectations. The first is optimistic: as integrated systems absorb transaction recording, reconciliation and report compilation, practitioners are released into interpretive, business-facing work – the "business partner" role that has dominated professional discourse since the late 1990s (Granlund & Lukka, 1998; Järvenpää, 2007; Goretzki, Strauss, & Weber, 2013). The second is cautionary: the same displacement removes the tasks through which the role was recognised and evaluated, leaving practitioners without a clear account of what their position now requires (Morales & Lambert, 2013; Baraldi, Cifalinò, Lisi, & Rizzo, 2023). Robotic process automation has sharpened both expectations, promising large efficiency gains while raising explicit concerns about the human consequences of displacement (Cooper, Holderness, Sorensen, & Wood, 2019; Eulerich, Waddoups, Wagener, & Wood, 2024).

These two readings are rarely tested together. Studies that document the partnering shift seldom measure role stress; studies of role stress seldom measure the value-adding outcomes that displacement is supposed to enable. The consequence is a literature in which enrichment and destabilisation each appear well supported in isolation, with no estimate of their relative magnitude in a single population, and no account of the conditions under which one rather than the other prevails.

Research Focus

This study specifies both as downstream consequences of one mechanism. Following the task-based view of technological change (Autor, Levy, & Murnane, 2003; Autor, 2015), we treat the operative variable not as system adoption but as the *substitution of routine tasks* – the extent to which rule-governed finance work has actually passed to the system. Digitalisation intensity acts on role outcomes only by changing the task mix; the task mix is therefore the bottleneck through which every downstream effect must pass. This specification yields a dual-path model: routine-task automation substitution raises business partnering engagement and decision-support effectiveness (the enrichment path) while also, on the received theorising, raising role ambiguity (the destabilisation path).

Two conditions are added. Digital capability – the practitioner's own facility with systems and data – should determine whether released capacity can be occupied productively (Oesterreich & Teuteberg, 2019; Boerner, Wiener, & Guenther, 2025). The maturity of the organisation's finance shared service centre (FSSC) should determine whether the organisation has an operating model capable of channelling that capacity, since shared-service structures explicitly re-partition transactional and advisory work (Herbert & Seal, 2012; Seal & Herbert, 2013; Richter & Brühl, 2020).

Research Aim and Research Questions

The study asks three questions. Does ERP-enabled digitalisation reshape the finance role through routine-task substitution rather than directly? Does that substitution enrich and destabilise the role simultaneously, and in what relative magnitude? And do practitioner capability and shared-service maturity condition the conversion of released capacity into value-adding work?

Answering these questions on a balanced sample of 480 Chinese finance professionals yields three contributions. First, the study supplies a mechanism-level test in which enrichment and role stress are estimated in one model, so their magnitudes can be compared rather than inferred across studies. Second, it reports two significant reversals – substitution *reduced* role ambiguity, and digital capability *eroded* rather than reinforced that reduction – which together suggest that the destabilisation thesis, developed largely in Western case settings, does not transfer to the Chinese ERP context in the form in which it was stated. Third, by testing measurement invariance and group differences formally rather than reading a pattern of coefficients, it identifies FSSC maturity as a threshold condition for the partnering dividend specifically: the decision-support benefit accrues progressively as maturity rises, whereas the partnering benefit is largely withheld until an advanced shared-service structure is in place.

Because the setting is an emerging economy in which shared-service structures are still being built, the case also speaks to a broader social-science question: how the division of labour inside an established profession is reorganised when routine work is withdrawn.

Theory and hypotheses

Digitalisation acts through the task mix

Early work on enterprise systems and management accounting reached a consistently deflationary verdict: ERP implementation produced far less change in management accounting practice than its proponents had promised (Granlund & Malmi, 2002; Scapens & Jazayeri, 2003). Later scholarship reinterpreted this as a question of what is being measured. Systems change roles not by their presence but by what they absorb – a hybridisation of the accountant's work that follows from the redistribution of tasks between person and platform (Caglio, 2003; Rom & Rohde, 2007). The task-based view of technological change makes the mechanism explicit: technology substitutes for labour in tasks that are routine, rule-governed and codifiable, while complementing labour in tasks requiring judgement and interaction (Autor et al., 2003; Frey & Osborne, 2017).

Finance work is unusually amenable to this analysis because its routine core is defined by accounting structure rather than by convention. The events tradition distinguishes the recording of individual economic events from their aggregation into reports (Sorter, 1969; Johnson, 1970), and the resource-event-agent framework formalises the transactional layer that integrated systems execute (McCarthy, 1982). Where an ERP platform runs procure-to-pay, order-to-cash and electronic invoicing end to end, event-level identification, matching and reconciliation pass to the system, and process-level evidence confirms that the control flow of accounting work becomes system-inferable rather than person-executed (Werner, 2017). More intensive ERP-enabled digitalisation should therefore produce more extensive substitution of routine finance tasks.

A second body of evidence points the same way from the automation side. Robotic process automation has been deployed in accounting precisely against high-volume, rule-governed activity, and early implementation records document substantial displacement of exactly the tasks the events tradition isolates (Kokina & Blanchette, 2019; Cooper et al., 2019). Frameworks developed for applying such automation to audit and accounting work select tasks on the same criteria – repetition, structured inputs and unambiguous decision rules (Eulerich, Pawlowski, Waddoups, & Wood, 2022) – and shared service centres, whose processes are standardised by design, have proved the most readily robotised part of the finance function (Figueiredo & Pinto, 2021). The broader data-and-analytics literature makes the corollary explicit: as transactional processing is absorbed, the analytical layer of accounting work is what remains for people to do (Bhimani & Willcocks, 2014; Vasarhelyi, Kogan, & Tuttle, 2015; Liu & Vasarhelyi, 2014).

H1. ERP-enabled digitalisation intensity is positively related to routine-task automation substitution.

The enrichment path

Released capacity has to go somewhere. Two destinations dominate the literature. The first is business partnering: sustained involvement with operating managers in planning, challenge and decision preparation, which the professional-role literature treats as the defining transformation of the function (Byrne & Pierce, 2007; Windeck, Weber, & Strauss, 2015; Wolf, Weißenberger, Claus Wehner, & Kabst, 2015). Case evidence has long shown that partnering emerges where transactional load is lifted (Järvenpää, 2007; Burns & Baldvinsdottir, 2005), and recent work confirms that involvement in partnering is shaped by how practitioners craft the remaining, non-routine portion of their jobs.

The second destination is decision support. Management accounting systems earn their value through the scope, timeliness, aggregation and integration of the information they deliver to managers (Chenhall & Morris, 1986; Mia & Chenhall, 1994), and information-processing theory holds that organisations invest in such capacity precisely to absorb uncertainty (Galbraith, 1974; Daft & Lengel, 1986). Automating compilation shortens the interval between event and report and frees analytical attention for interpretation – the mechanism through which analytics and business-intelligence investments are converted into decision-relevant support (Elbashir, Collier, & Sutton, 2011; Peters, Wieder, Sutton, & Wakefield, 2016; Appelbaum, Kogan, Vasarhelyi, & Yan, 2017).

Survey evidence across national settings supports the association but has not isolated its mechanism. German controllers report role perceptions that vary systematically with the task composition of their work (Rieg, 2018); UK financial controllers describe a developing role in which transactional oversight recedes as advisory involvement grows (Graham, Davey-Evans, & Toon, 2012); and controller involvement in management decisions has been documented as a function of what else the controller is required to do (Zoni & Merchant, 2007; Lambert & Sponem, 2011). These studies establish that the partnering role varies with task load; they do not establish that automation drives it, because task load is measured rather than its cause.

H2. Routine-task automation substitution is positively related to business partnering engagement.

H3. Routine-task automation substitution is positively related to decision-support effectiveness.

The destabilisation path

The counter-tradition begins from the observation that a role is known through its work. Role ambiguity – uncertainty about what the position requires and how performance will be judged – arises when expectations become indeterminate (Rizzo, House, & Lirtzman, 1970). Ethnographic work on management accounting shows that practitioners define themselves partly through the very transactional work the profession disparages, so that removing it can unsettle rather than elevate the role (Morales & Lambert, 2013; Ahrens & Chapman, 2000). Identity scholarship reaches the same conclusion by another route: occupational identity is bound to the system-mediated content of the work (Heinzelmann, 2018; Goretzki & Messner, 2019), and role transitions are periods of heightened

ambiguity precisely because the old markers no longer apply (Ashforth, 2000). Survey evidence links technological displacement to insecurity and role strain among employees generally (Brougham & Haar, 2018) and among controllers specifically (Baraldi et al., 2023).

H4. Routine-task automation substitution is positively related to role ambiguity.

Because digitalisation is theorised to act only by changing the task mix, its influence on all three outcomes should be transmitted through substitution.

H5a-c. Routine-task automation substitution mediates the relationship between ERP-enabled digitalisation intensity and (a) business partnering engagement, (b) decision-support effectiveness, and (c) role ambiguity.

Two conditions

Released capacity is an opportunity, not an outcome; whether it is occupied depends on the practitioner and on the organisation. Digital capability – operational facility with enterprise systems, analytical competence and adaptability – has emerged as the competence profile that distinguishes controllers who move into analytical and advisory work from those who do not (Oesterreich & Teuteberg, 2019; Boerner et al., 2025), and technology readiness research shows that individual disposition toward technology conditions how system change is experienced (Parasuraman & Colby, 2015; Venkatesh, Morris, Davis, & Davis, 2003). Capable practitioners should convert substitution into partnering more efficiently, and should be better insulated against the ambiguity that displacement is expected to bring.

H7. Digital capability negatively moderates (buffers) the relationship between routine-task automation substitution and role ambiguity.

H8. Digital capability positively moderates the relationship between routine-task automation substitution and business partnering engagement.

The organisational condition is the shared service centre. FSSCs exist to separate transactional processing from advisory work, and the literature treats them as the structural means by which the finance function's division of labour is re-drawn (Herbert & Seal, 2012; Minnaar & Vosselman, 2013; Richter & Brühl, 2017). Their effects on the retained function are documented in both directions – enhanced strategic focus for those who remain, narrowed and more procedural work for those inside the centre (Lepistö, Dobroszek, Moilanen, & Zarzycka, 2018; Rothwell, Herbert, & Seal, 2011) – and their implementation is a maturity process rather than an event (Ulbrich, 2006; Knol, Janssen, & Sol, 2014). Where a mature centre already absorbs transactional work and defines who does what, the retained function has both a destination for released capacity and a pre-existing account of its own role.

H6. FSSC maturity moderates the structural paths, such that the substitution-to-partnering and substitution-to-decision-support relationships are stronger, and the

substitution-to-role-ambiguity relationship weaker, in organisations with more mature shared-service arrangements.

Method

Sample and Participants

The target population comprised finance and accounting professionals— from staff accountants to heads of finance—employed in Chinese enterprises that had implemented an ERP system, whether an international or domestic platform. Enterprises without an ERP system were excluded, since digitalisation intensity is undefined for them. We used non-probability purposive sampling supplemented by referrals, reaching respondents through enterprise groups, their upstream and downstream partners, and industry communities. This is stated plainly because it bounds external validity: the sample is not a probability sample of Chinese finance professionals.

Because FSSC maturity is the grouping variable for multi-group analysis, and because each group must independently satisfy the power requirement, sample size was governed by the group rather than the total. The inverse square root method indicates approximately 155–170 usable cases per group for a minimum detectable path of .15 at 80% power (Kock & Hadaya, 2018); the adopted floor was 160 per group, giving a target of $N \geq 480$ across the three maturity strata (no shared service centre; under construction; in stable operation for three years or more). We monitored collection to prevent any stratum from falling below that floor.

The questionnaire was administered online, opening with an information statement and consent confirmation. Because the originality screening found that automation items resembled ERP vendor phrasing, instructions anchored respondents explicitly on the *actual current situation at your organisation* rather than on what the system was supposed to do – a substantive design feature against normative responding. Screening items confirmed finance role and ERP adoption; attention checks were embedded. Participation was voluntary, anonymous and revocable before submission; no personal or organisational identifiers were collected.

A total of 480 responses were returned, and all 480 were retained. Screening identified zero missing values, zero straight-line response patterns and zero out-of-range entries, so no case was deleted; the absence of missing data reflects forced-response items. The achieved sample is balanced at 160 respondents per maturity stratum.

Instrument and Procedure

All focal constructs were measured on seven-point Likert scales. Role ambiguity was adapted from the established scale of Rizzo et al. (1970). Four instruments—digitalisation intensity, routine-task automation substitution, business partnering engagement and decision-support effectiveness—were developed for this study because no published instrument measures the task-level constructs the model requires; digital capability items were assembled from the competence-profile literature. Independent bilingual translators translated and back-translated English-sourced items, and discrepancies were reconciled before administration (Brislin, 1970). Because the self-developed

instruments inherit no validity from a source scale, content validity rested entirely on review by three domain experts with academic or senior practitioner backgrounds in management accounting and finance systems, who assessed every item for relevance, clarity and domain representativeness (Rovinelli & Hambleton, 1977); items were revised or removed on their advice. A pilot of no fewer than 30 respondents, excluded from the main sample, examined comprehensibility, completion time and internal consistency before the main collection.

Routine-task automation substitution, business partnering engagement and decision-support effectiveness are multidimensional and were modelled as higher-order constructs through a disjoint two-stage procedure: lower-order dimensions were estimated in the full measurement model, and their latent variable scores served as indicators of the corresponding higher-order construct at stage two. Six demographic and organisational controls were retained in the structural estimation.

Data Analysis

The model was estimated using partial least squares structural equation modelling, chosen for its ability to accommodate composite higher-order constructs, moderation and non-normal indicator distributions (Hair, Risher, Sarstedt, & Ringle, 2019). Path significance was assessed with 10,000 bootstrap resamples and 95% percentile confidence intervals, with a fixed seed for reproducibility. Interaction terms were specified using the two-stage approach (Henseler & Chin, 2010). Indirect effects were tested by bootstrapping the product of paths (Preacher & Hayes, 2008) and interpreted following the mediation typology of Zhao, Lynch, and Chen (2010). Discriminant validity was assessed with the heterotrait-monotrait ratio (Henseler, Ringle, & Sarstedt, 2015).

For H6, measurement invariance was established before comparing groups using the MICOM procedure for composites (Henseler, Ringle, & Sarstedt, 2016), followed by pairwise PLS multi-group analysis (Sarstedt, Henseler, & Ringle, 2011) with 2,000 bootstrap resamples per group.

Common method bias was addressed procedurally through anonymity assurance, separation of predictor and criterion sections and attention checks, and assessed statistically by Harman's single-factor test and the full collinearity approach (Kock, 2015).

Results

Common method bias and measurement model

An unrotated principal component analysis of all 55 items returned a first factor accounting for 24.92% of variance, well below the 50% threshold. Full collinearity variance inflation factors ranged from 1.150 to 1.727, comfortably under the 3.3 criterion (Kock, 2015). Common method bias is therefore unlikely to account for the observed relationships.

Internal consistency was satisfactory for every construct, with Cronbach's alpha from .860 (EEDI) to .970 (BPE) and composite reliability from .896 to .978. Average variance extracted exceeded .50 for all six constructs, from .514 (digital capability) to .917 (business partnering). One qualification is recorded rather than concealed: within the higher-order partnering construct, the relationship-

embeddedness dimension returned an AVE of .396, below threshold in isolation, although the higher-order construct it feeds is psychometrically sound. All heterotrait-monotrait ratios fell below .85, with the largest being .525 for the substitution-decision-support pair; that the most closely associated constructs remain well below the threshold indicates that respondents distinguished the act of substitution from its decision-support consequence.

Table 1

Reliability and convergent validity (N = 480)

Construct	α	ρ_C	AVE	Mean	SD
ERP-enabled digitalisation intensity (EEDI)	.860	.896	.591	4.88	1.24
Routine-task automation substitution (RTAS)	.882	.919	.742	4.45	1.31
Business partnering engagement (BPE)	.970	.978	.917	4.65	1.17
Decision-support effectiveness (DSE)	.928	.949	.822	4.75	1.27
Digital capability (DC)	.900	.918	.514	4.95	1.14
Role ambiguity (RA)	.873	.902	.610	4.36	1.32

Structural model

Inner-model collinearity was within acceptable limits. The model explained 23.7% of the variance in routine-task substitution, 28.7% in business partnering, 23.0% in decision-support effectiveness and 12.2% in role ambiguity. The lower figure for role ambiguity is consistent with a construct shaped by leadership, communication and career expectations that lie outside the model; however, automation still accounts for an eighth of its variance, indicating a genuine, if partial, relationship.

Table 2

Hypothesis tests (10,000 bootstrap resamples)

Hypothesis	Path	β	t	p	95% CI	Outcome
H1	EEDI → RTAS	.487	13.88	< .001	[.417, .553]	Supported

Hypothesis	Path	β	t	p	95% CI	Outcome
H2	RTAS → BPE	.392	9.72	< .001	[.312, .470]	Supported
H3	RTAS → DSE	.480	12.38	< .001	[.404, .557]	Supported
H4	RTAS → RA	−.347	−7.84	< .001	[−.432, −.259]	Not supported (significant, reversed)
H5a	EEDI → RTAS → BPE	.191	7.38	< .001	[.142, .243]	Supported
H5b	EEDI → RTAS → DSE	.234	8.44	< .001	[.182, .291]	Supported
H5c	EEDI → RTAS → RA	−.169	−6.34	< .001	[−.223, −.118]	Supported (negative indirect)
H7	RTAS × DC → RA	.113	2.62	.009	[.026, .196]	Not supported (significant, reversed)
H8	RTAS × DC → BPE	.164	4.24	< .001	[.088, .240]	Supported

Moderator main effects: $DC \rightarrow BPE$ $\beta = .238$, $t = 5.80$, $p < .001$; $DC \rightarrow RA$ $\beta = .075$, $t = 1.62$, $p = .106$.

The enrichment path behaved as predicted and with a clear internal ordering. Substitution raised decision-support effectiveness more strongly than business partnering (.480 against .392), and the confidence intervals overlap only partially, so the ordering is located by the data rather than by point estimate alone. Because digitalisation reaches every outcome exclusively through substitution, the three indirect effects are simply the second-stage coefficients scaled by the common first-stage path of .487, and they preserve its ordering exactly: .234 onto decision support, .191 onto partnering, −.169 onto role ambiguity. Released capacity, in short, flows first into analytical work and then, at a lesser but still substantial rate, into the slower-building relational work of partnering.

The destabilisation path did not behave as predicted. Substitution was significantly associated with *lower* role ambiguity ($\beta = −.347$), and the mediated effect carried the same sign (−.169). Automation of routine finance work, in this population, clarified the role rather than unsettling it.

The two interaction terms are both positive but mean opposite things, because the base paths they modify run in opposite directions. For H8, whose base path is positive, the positive interaction (.164) amplifies an already beneficial effect and the hypothesis is confirmed. For H7, whose base path is negative, the positive interaction (.113) pushes that effect back toward zero, eroding the ambiguity-reducing benefit rather than reinforcing it; the hypothesis predicted further buffering and is therefore not supported despite the interaction being significant. The asymmetry is corroborated by the moderator's main effects: digital capability raised partnering directly ($\beta = .238$) but had no significant direct effect on role ambiguity ($\beta = .075$, $p = .106$). Across both channels, digital capability is unambiguously a partnering asset, while its bearing on role ambiguity is weaker, less certain, and contrary to prediction.

Measurement invariance and multi-group analysis (H6)

Configural invariance holds by design, since the same model, indicators and estimation settings were applied to every group. Compositional invariance was assessed by permutation for each pairwise comparison: correlations between composite scores formed with each group's weights were .99996 or above for the three multi-indicator constructs and unity by construction for the three single-indicator constructs, so no correlation fell below its permutation threshold. Equality of composite means and variances also held for all six constructs in all three comparisons, with every observed difference lying inside its permutation confidence interval; this is consistent with a direct check on the raw data, where construct means did not differ across maturity groups (all one-way ANOVA $p > .76$). Full measurement invariance is therefore established, and group coefficients are directly comparable.

Table 3

Group coefficients and pairwise PLS-MGA (2,000 resamples per group)

Path	Low (n = 160)	Medium (n = 160)	High (n = 160)	Low vs Med	Med vs High	Low vs High
RTAS → BPE	.286	.313	.612	ns (p = .618)	High stronger (p = .999)	High stronger (p = 1.000)
RTAS → DSE	.265	.448	.640	Med stronger (p = .956)	High stronger (p = .989)	High stronger (p = 1.000)
RTAS → RA	-.629	-.376	.000	Attenuates (p = .999)	Attenuates (p = 1.000)	Attenuates (p = 1.000)
EEDI → RTAS	.539	.503	.419	ns (p = .332)	ns (p = .162)	ns (p = .090)

Henseler's PLS-MGA p-values; $p \leq .05$ indicates the first group's coefficient is significantly larger, $p \geq .95$ that it is significantly smaller.

H6 is supported, with the qualification that the formal tests make visible but the coefficients alone do not. The decision-support path rises significantly at every maturity step, and the role-ambiguity path attenuates significantly at every step, reaching almost exactly zero in mature organisations. The partnering path, by contrast, does not differ significantly between low- and medium-maturity firms and roughly doubles only in the high-maturity group. The decision-support dividend of automation therefore accrues progressively as a shared-service structure matures, whereas the partnering dividend appears to require a fairly advanced structure before it is unlocked. The one path that softens with maturity – digitalisation to substitution, from .539 to .419 – was not significantly different between any pair, so the apparent decline should not be over-read.

One unhypothesised group difference is recorded for completeness: the direct effect of digital capability on decision-support effectiveness was significantly stronger in low- than in high-maturity firms (.249 against .068, $p = .028$), suggesting that individual capability substitutes for structure where structure is absent.

Discussion

One mechanism, two dividends

The results locate the effect of enterprise systems in the task mix rather than in adoption. Digitalisation intensity explained roughly a quarter of the variance in routine-task substitution, and every downstream effect passed through that single bottleneck. This supports the task-based reading of technological change in a professional setting (Autor et al., 2003) and helps to explain the early literature's deflationary findings: studies that measured system presence rather than task displacement were measuring an antecedent two steps removed from the outcome (Granlund & Malmi, 2002; Caglio, 2003).

The ordering of the two enrichment outcomes is itself informative. Decision support responded more strongly than partnering, which is what an information-processing account would predict: shortening the interval between event and report is an immediate consequence of automating compilation, whereas partnering requires managers to accept the finance professional as a counterpart, which is a relational achievement built over time (Galbraith, 1974; Windeck et al., 2015). The finding that partnering lags is not a failure of the partnering thesis but a specification of its timescale and its preconditions.

Why substitution clarified rather than unsettled the role

The reversal on H4 is the study's most consequential result, and it deserves an explanation rather than a restatement. The destabilisation thesis was built largely on qualitative studies of Western management accountants whose professional identity was bound to work they had performed for years and whose displacement was experienced as a loss of standing (Morales & Lambert, 2013; Heinzlmann, 2018). Three features of the present setting differ. First, the constructs measured here concern the *clarity* of role expectations, not the desirability of the new role; removing high-volume, rule-governed work removes work whose ambiguity was low but whose volume

obscured what else the position required, so that what remains – analysis, support, partnering – is more visible rather than less. Second, in ERP-adopting Chinese enterprises the digitalised state is increasingly the normal state rather than a disruption to an established professional order, so displacement arrives without the identity threat that a transition narrative implies (Ashforth, 2000). Third, the direct relationship between digital capability and role ambiguity was not significant, which is difficult to reconcile with an account in which ambiguity is driven by technological threat; had displacement been experienced as threatening, capability should have mattered.

The H7 reversal is consistent with this reading. If substitution clarifies the role by making the non-routine remainder visible, then practitioners with high digital capability are precisely those for whom that remainder is largest and least prescribed – they are asked to do the analytical and advisory work that has no established script. The positive interaction, which erodes the ambiguity-reducing effect, is what one would expect if capability buys expanded, less-defined responsibility rather than protection. Read together with the strong positive capability effect on partnering, the picture is coherent: digital capability moves practitioners into more valuable and less scripted work, and the second half of that sentence has a cost.

Structure as the condition for the partnering dividend

The multi-group results identify what organisations, rather than individuals, contribute. Because full measurement invariance was established, the group differences can be attributed to structural relationships rather than to differences in how the constructs were understood. The pattern is a threshold rather than a gradient for partnering: no significant difference between absent and under-construction shared services, then a near-doubling once a centre has been in stable operation. This is consistent with the shared-service literature's insistence that maturity is a process whose benefits are realised late (Ulbrich, 2006; Knol et al., 2014; Richter & Brühl, 2020). Freed capacity alone does not produce partnering; an operating model that has already relocated transactional work is what allows the retained function to be redeployed to business-facing roles (Herbert & Seal, 2012; Seal & Herbert, 2013).

The mirror-image finding on role ambiguity supports the same interpretation from the other side. The clarifying effect of automation was strongest where shared-service structure was weakest ($-.629$) and vanished entirely where it was mature ($.000$). Where the operating model already defines who does what, automation has no remaining clarifying work to do. Structure and automation appear to be partial substitutes in supplying role clarity, while being complements in producing business-facing value.

Theoretical implications

Three implications follow for theory. First, the study supplies the mediation test the enterprise-systems literature has largely asserted rather than estimated. By modelling digitalisation as reaching every outcome exclusively through task substitution, it shows that the entire downstream pattern is governed by one bottleneck, and that the relative magnitudes of the outcomes are simply the second-stage coefficients scaled by a common factor. This is a stronger claim than "systems change

roles": it specifies where in the causal chain the change is produced, and it predicts that interventions acting on adoption without acting on the task mix will not move the role.

Read as a social-science result rather than a management-accounting one, these findings speak to the changing division of labour within a profession. What automation redistributed here was not employment but the composition of the working day: the tasks through which the occupation had historically defined itself were absorbed by the system, and the role that remained was organised around interpretation and advice. That the same displacement reduced rather than raised role ambiguity indicates that occupational identity in this setting was anchored less in the routine tasks themselves than in the professional standing that survived their removal – a pattern that qualifies accounts of technological change in which the loss of task ownership is treated as identity threat. The maturity condition sharpens the point: where the organisation had not built the structures to receive released capacity, that capacity did not become business-facing work. The future of finance work is therefore not settled by the technology alone but by how firms and professions organise around it, which is a question about institutions and occupations rather than about systems.

Second, the reversal on role ambiguity marks a boundary condition on the destabilisation thesis rather than a refutation of it. That thesis was developed from close study of practitioners whose identity was invested in displaced work (Morales & Lambert, 2013; Goretzki & Messner, 2019), and this study cannot show that those accounts were wrong about their settings. What it shows is that the thesis does not generalise as a main effect: in a population where digitalisation is the normal state, the same displacement is associated with greater rather than lesser clarity about what the role requires. Identity-based accounts and expectation-based accounts of role strain have often been treated as interchangeable; the present result suggests they are not, and that the ambiguity construct in particular is sensitive to whether displacement is experienced as a transition or as a condition (Ashforth, 2000; Ashforth & Mael, 1989).

Third, the multi-group results give the shared-service literature a mechanism-level role in the professional-transformation debate. Shared services have been studied mainly as an organisational form with its own antecedents and outcomes (Richter & Brühl, 2017, 2020; Maatman, Bondarouk, & Looise, 2010). Here they function as the condition that determines whether a capability-level change becomes a role-level one—a finding that connects two literatures that have developed with little contact and suggests that studies of finance-role change should treat shared-service maturity as a design variable rather than a control.

Implications for practice

For finance leaders, the results argue against treating system implementation as the intervention. What changes the role is the displacement of routine tasks, and the measurable return on that displacement depends on two things the organisation controls: the digital capability of the people who remain, and whether an operating model exists to receive their released capacity. Investment in capability is well supported – it raised partnering both directly and interactively – but the results also caution that capable practitioners are the ones most exposed to under-specified expectations, so capability programmes should be paired with explicit redefinition of what the

enriched role requires. For organisations without a mature shared-service structure, the partnering dividend should not be expected to arrive on the strength of automation alone.

Limitations

Four limitations bound these conclusions. The sample is purposive and drawn from ERP-adopting Chinese enterprises reached through professional networks, so it is not representative of Chinese finance professionals generally, and the reversals reported here should be retested elsewhere before being read as a general correction to the destabilisation thesis. The design is cross-sectional; although the model is directional on theoretical grounds, the data cannot establish that substitution precedes the role outcomes in time, and the partnering result in particular concerns a relationship the discussion argues is built over years. All measures are self-reported by the same respondents; the procedural and statistical remedies applied make common method bias an unlikely explanation but do not eliminate it. Finally, four of the instruments were developed for this study, and although expert review and the reported psychometrics support them, they lack the accumulated validity evidence of established scales; the relationship-embeddedness dimension's AVE of .396 is the one place where that shows.

Suggestions for Future Research

Three extensions follow directly. A longitudinal or staged design would test whether decision-support gains do in fact precede partnering gains, as the cross-sectional ordering suggests. Replication outside China – particularly in settings where an established professional order predates digitalisation – would test the interpretation offered for the H4 reversal, since that interpretation rests on a claim about context that this study cannot itself verify. And because the analysis shows capability buying expanded but less-scripted responsibility, research that measures role *breadth* and the explicitness of role definition alongside ambiguity would separate the two effects that the present interaction term combines.

Conclusion

ERP-enabled digitalisation reshapes the finance function through one mechanism – the substitution of routine tasks –, and that mechanism pays two dividends rather than exacting the cost the literature anticipated. Substitution raised decision-support effectiveness and business partnering engagement, and it *reduced* rather than increased role ambiguity. Digital capability amplified the partnering dividend while eroding the clarity dividend, consistent with capable practitioners moving into more valuable but less prescribed work. Shared-service maturity proved to be the condition under which released capacity becomes business-facing: the decision-support benefit accrues progressively as structure matures, while the partnering benefit is largely withheld until a mature centre is in place. The practical implication is that automation is not, by itself, a transformation of the finance role; it is the creation of capacity whose destination is determined by capability and structure.

For a social-science readership, the wider implication is that the future of professional work in emerging economies will be decided less by the pace of automation than by whether organisations build the structures that convert released time into judgement-based work.

Conflicts of interest

The author declares no competing interests.

Ethics approval

The study followed the ethical requirements of the author's institution (name withheld for blind review; supplied on the title page). Participation was voluntary, anonymous and revocable before submission; no personally identifying information and no organisational identifiers were collected. A formal approval reference number is not provided.

Consent to participate

All respondents confirmed informed consent before entering the questionnaire.

Data availability

The anonymous self-report survey data supporting the findings are available from the author on reasonable request. Analysis was conducted in R using the *seminr* package with a fixed random seed; estimation scripts are available from the author.

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Appendix A. Measurement Items

All items were answered on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree) unless stated otherwise.

ERP-enabled Digitalisation Intensity (EEDI; 6 items)

EEDI_1. Our company is restructuring business processes around its ERP system.

EEDI_2. Our company integrates ERP with related digital technologies to drive change.

EEDI_3. Our business operations are shifting towards running on ERP and related digital systems.

EEDI_4. The procure-to-pay (P2P) process runs end-to-end within the system.

EEDI_5. The order-to-cash (O2C) process runs end-to-end within the system.

EEDI_6. Electronic/fully-digitalised invoicing covers our main issuing and receiving scenarios.

Routine-Task Automation Substitution (RTAS; 8 items)

RTAS_RC_02. Three-way matching of order, receipt and invoice no longer requires manual line-by-line checking.

RTAS_RC_06. Matching customer receipts against open invoices requires no manual pairing.

RTAS_RC_08. Accounts receivable ageing analysis updates automatically without recalculation.

RTAS_TP_04. After an employee submits an expense claim, the cost is posted automatically.

RTAS_CM_03. VAT treatment for standard purchases is determined without manual judgement.

RTAS_RP_01. Monthly reports reach management without manual compilation.

RTAS_RP_02. Data required for standard reports is consolidated without manual collection.

RTAS_TP_05. Vouchers for standard business events are generated directly by the system.

Business Partnering Engagement (BPE; 14 items)

BPE_BI_02. I am stationed in, or regularly attend, the operating departments' management meetings.

BPE_DI_01. My analyses change the option management finally settles on.

BPE_DI_02. When I raise an objection, the project is put on hold.

BPE_DI_04. My judgement affects how resources are allocated across business lines.

BPE_DI_06. My assessment of a business proposal is recorded in the decision minutes.

BPE_FL_01. My work centres on projecting what lies ahead rather than explaining what has passed.

BPE_FL_03. I raise operational improvement suggestions on my own initiative, rather than waiting to be asked.

BPE_FL_08. I translate the financial implications of industry change for the operating departments.

BPE_BI_06. I am present at feasibility discussions for major investment projects.

BPE_RE_01. Operating staff come to me first when they encounter a business problem.

BPE_RE_02. The head of the business unit treats me as one of the team.

BPE_RE_04. Operating departments are willing to share ideas with me before they are settled.

BPE_RE_06. Colleagues in operations see me as a collaborator rather than a monitor.

BPE_RE_08. Operating departments inform me before problems surface.

Decision-Support Effectiveness (DSE; 9 items)

DSE_TL_01. When management asks for data, it is available the same day.

DSE_TL_06. Changes in the business are reflected in reports without noticeable lag.

DSE_TL_07. Management does not have to postpone meetings while waiting for data.

DSE_RV_07. There is little redundant information in our reports.

DSE_AP_05. Management cites our analysis directly in meetings.

DSE_RV_02. The indicators we provide can be used directly for the decision at hand.

DSE_RV_08. The definitions we supply do not need to be re-explained by the operating departments.

DSE_AD_04. Our analysis draws on non-financial factors such as volume, price and mix.

DSE_AD_05. Our conclusions rest on causal decomposition rather than simple comparison.

Digital Capability (DC; 12 items)

DC_OP_01. Day-to-day operations in the accounting system require no guidance from others.

DC_OP_02. I configure the data-retrieval logic of reporting tools myself.

DC_OP_03. Moving data across systems does not require troubling the IT department.

DC_OP_07. I can say which table my function's data sits in and how it is structured.

DC_OP_09. When the system stalls, I have a clear sense of where the problem lies.

DC_AN_01. Handling tens of thousands of detail rows by pivot analysis is not difficult for me.

DC_AN_04. I can tell at a glance whether a set of figures is anomalous.

DC_AN_06. I can build a simple forecasting model.

DC_AN_07. Discrepancies caused by inconsistent definitions do not escape me.

DC_AD_02. I have generally heard of whatever new technology emerges in this field.

DC_AD_04. Even without training, I can work out how to use a new system.

DC_AD_09. Switching to a completely unfamiliar system does not daunt me.

Role Ambiguity (RA; 6 items)

RA_1. I feel certain about how much authority I have

RA_2. Clear, planned goals and objectives exist for my job

RA_3. I know that I have divided my time properly

RA_4. I know what my responsibilities are

RA_5. I know exactly what is expected of me

RA_6. Explanation is clear of what has to be done

Occupation Insecurity Scale (OCIS; 11 items)

OCIS_G1. I am worried that my occupation will not be needed anymore in the future due to the advancement of technology.

OCIS_G2. I am worried that my occupation might disappear due to automation.

OCIS_G3. There is a risk that I will have to change my present occupation due to automation.

OCIS_G4. I think that my occupation will not exist anymore in the future.

OCIS_G5. I am afraid that I will need to switch to another occupation in the short term (1-2 years) due to technological developments.

OCIS_G6. I am afraid that I will need to switch to another occupation later on in my career (5-10 years) due to technological developments.

OCIS_C1. I expect that my occupation will undergo significant changes due to technological developments.

OCIS_C2. Certain tasks of my occupation will no longer be relevant in the future.

OCIS_C3. I am certain that my occupational responsibilities will change significantly due to technology before my retirement.

OCIS_C4. I will need to perform tasks in my occupation in the future, for which I am not well trained at the moment.

OCIS_C5. I need additional training in technology in order to be able to continue working in my occupation.

STARA Awareness (STARA; 4 items)

STARA_1. I think my job could be replaced by STARA

STARA_2. I am personally worried that what I do now in my job will be able to be replaced by STARA

STARA_3. I am personally worried about my future in my organisation due to STARA replacing employees

STARA_4. I am personally worried about my future in my industry due to STARA replacing employees