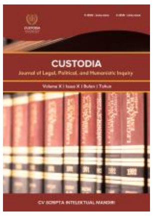

Custodia: Journal of Legal, Political, and Humanistic Inquiry
Vol 2 No 1 September 2026, Hal 200-212
ISSN: 3123-2116 (Print) ISSN: 3123-2108 (Electronic)
Open Access: https://scriptaintelektual.com/custodia

Digital Wage Failures Expose Distinct Legal Boundaries Among Underpayment, Enforcement Escalation, Corporate Attribution, and Criminal Culpability

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Article Info :
Received:
04-08-2026
Revised:
24-08-2026
Accepted:
03-09-2026

Abstract

Digital wage underpayment in technologically mediated workplaces presents a layered legal problem because payment outcomes may arise from interactions among scheduling systems, timekeeping tools, payroll rules, managerial practices, and organisational controls. This study examines how law should distinguish causal system failure, wage-law breach, enforcement escalation, corporate attribution, and criminal culpability within the Australian federal workplace framework, using hospitality as the principal sectoral context. Employing doctrinal legal research, interdisciplinary synthesis, and functional comparative analysis, the study evaluates wage entitlement, regulatory significance, organisational responsibility, and offence-specific fault. The findings show that the cause of a payment shortfall must remain separate from the legal question of whether remuneration due has remained unpaid. Stronger enforcement becomes more compelling when verified notice, effective control, remedial capacity, organisational response, and avoidable persistence converge. Corporate attribution requires independent examination of systems, policies, safeguards, audits, and organisational practices, while criminal liability further requires proof of applicable physical and fault elements. The framework preserves doctrinal boundaries while improving analytical precision in digitally managed workplaces where information, control, intervention, and corrective capacity are distributed across multiple actors and technological systems.

Keywords: *digital wage underpayment, algorithmic management, wage-law enforcement, corporate attribution, criminal culpability*.

INTRODUCTION

Digital transformation has reshaped the organisation of work by integrating scheduling, timekeeping, payroll administration, performance monitoring, and workforce allocation into increasingly interconnected technological systems. In labour-intensive service sectors, these technologies can improve operational coordination while simultaneously creating new pathways through which recorded working time and remuneration may become disconnected. Research on hospitality employment demonstrates that unpaid labour can arise through managerial and organisational practices that extend working time beyond formally compensated hours (Cole et al., 2024). The growing reliance on digital timekeeping further complicates this issue because preset rounding, automatic deductions, and system-based modifications may alter the amount of compensable working time recorded for employees (Tippett, 2018).

The hospitality industry provides a particularly significant context for examining digitally mediated wage outcomes because workforce requirements frequently fluctuate in response to changing levels of service demand. Flexible labour arrangements have traditionally been used to reconcile variations in demand with staffing requirements and organisational productivity, creating close relationships among working-time allocation, labour costs, and operational performance (Park et al., 2016). More recently, intelligent scheduling systems have enabled hotels to integrate demand forecasts with employee allocation and other workforce constraints, thereby expanding the role of digital systems in employment decision-making (Li et al., 2026). Consequently, wage outcomes in hospitality may emerge from interactions among operational demand, algorithmic scheduling, managerial intervention, time-recording processes, and payroll rules rather than from an isolated payroll transaction.

Algorithmic management intensifies this complexity because technological systems increasingly perform functions that were traditionally exercised through direct managerial decision-making. Algorithms may influence job design, task allocation, scheduling, performance assessment, and compensation by embedding organisational rules into the inputs, processes, and outputs through which work is administered (Parent-Rocheleau & Parker, 2022; Meijerink & Bondarouk, 2023). Evidence from the hospitality sector further indicates that frontline managers remain important in interpreting, contextualising, calibrating, and correcting algorithmically mediated decisions, demonstrating that technological and human control frequently coexist within the same organisational architecture (Jianu et al., 2025a, 2025b). Digital wage outcomes should therefore not be attributed automatically to technology itself because they are produced through distributed relationships among configured systems, organisational policies, managerial practices, and human intervention.

These organisational conditions are important because wage underpayment is not necessarily generated by a single form of conduct or organisational motivation. Employer non-compliance with wage law may arise from heterogeneous financial, institutional, normative, managerial, and organisational circumstances, making it inappropriate to infer intention or awareness solely from the existence of an underpayment (Clibborn & Hanna-Osborne, 2023). Connelly (2025) similarly conceptualises wage theft as an organisational phenomenon that may be associated with workplace policies and managerial practices rather than merely with individual payroll errors. Accordingly, causal explanations concerning inaccurate inputs, defective configuration, system malfunction, managerial intervention, or organisational practice must remain analytically distinct from the legal question of whether remuneration that was legally due remained unpaid.

This distinction has become increasingly important within the Australian regulatory environment, where federal workplace law regulates wage-payment obligations and provides mechanisms for responding to contraventions of those obligations. The *Fair Work Act 2009* establishes the principal federal framework governing workplace entitlements and wage compliance, while contemporary enforcement scholarship demonstrates that the practical effectiveness of labour standards depends not only on formal legal powers but also on how enforcement authorities exercise those powers in practice (Galvin et al., 2026). Responsive regulation further suggests that detection, regulatory response, enforcement, assessment, and modification should be understood as related but distinct stages rather than as a single undifferentiated regulatory process (Baldwin & Black, 2008; Nielsen & Parker, 2009). An established wage shortfall therefore does not automatically determine the intensity of regulatory intervention because the organisation's knowledge, effective control, capacity for correction, and subsequent response may materially affect the regulatory significance of continued non-compliance.

The legal analysis becomes more demanding when persistent underpayment raises questions concerning responsibility at the corporate level. Contemporary corporate-liability scholarship emphasises that organisational systems, policies, practices, internal controls, safeguards, and corporate culture may provide evidence relevant to attributing conduct or states of mind to a corporation (Bant, 2023; Bant & Faugno, 2024). At the same time, criminal-law principles require careful differentiation among forms of wrongdoing because regulatory seriousness, organisational involvement, recurrence, or financial advantage cannot independently establish the elements of a criminal offence (Cornford, 2022; Horder, 2025). In the specific context of wage theft, the normative label attached to unpaid wages must therefore remain distinct from the doctrinal requirements governing corporate attribution and offence-specific culpability (Green, 2020).

Technological mediation creates a further evidentiary problem because information and practical control may be distributed across workers, managers, software systems, technical specialists, and external service providers. Research on algorithmic workplaces demonstrates that algorithmic control can reorganise managerial authority and worker autonomy while producing complex distributions of information and decision-making power (Jarrahi et al., 2021; Duggan et al., 2023; Krzywdzinski et al., 2025). Formal human oversight is not necessarily sufficient where the responsible reviewer lacks access to relevant information, meaningful authority, or the practical capacity to intervene in algorithmically generated outcomes (Green, 2022). These conditions make it necessary to identify not only how a wage shortfall was technically produced but also where knowledge, effective control, intervention capacity, and corrective capability were located within the organisation.

Despite substantial scholarship on wage theft, labour-law enforcement, algorithmic management, and corporate criminal liability, these literatures largely address different stages of the legal problem rather than integrating them within a single analytical structure. Existing research therefore leaves an important gap concerning how causal system failure, an established wage-law breach, regulatory escalation, corporate attribution, and criminal culpability should be distinguished when wage outcomes arise from distributed technological and organisational processes (Clibborn & Hanna-Osborne, 2023; Bant & Faugno, 2024; Horder, 2025). This study addresses that gap by developing a staged legal framework that reconstructs the production of digitally mediated wage outcomes, identifies whether legally protected remuneration remains unpaid, evaluates the circumstances supporting stronger regulatory intervention, and separately assesses corporate attribution and offence-specific culpability. Australian federal workplace law provides the principal doctrinal setting, hospitality serves as the primary sectoral context, and functional comparison is employed to examine the conditional portability of these distinctions across differently organised digital workplaces rather than to presume equivalent legal consequences (Mahy, 2016; Michaels, 2019).

RESEARCH METHOD

This study employed doctrinal legal research as its primary methodological approach, supported by a structured synthesis of interdisciplinary scholarship and functional comparative analysis. The doctrinal inquiry was grounded in Australian federal workplace law governing wage payment, enforcement, serious contraventions, corporate attribution, and criminal underpayment, particularly the *Fair Work Act 2009* and the *Criminal Code Act 1995* (Bhat, 2020; Theil, 2025). The analysis focused on five interrelated questions: how digitally mediated wage outcomes are produced, whether legally protected remuneration remains unpaid, when an established wage breach acquires greater regulatory significance, whether relevant conduct or states of mind can be attributed to the corporation, and whether the requirements of the applicable criminal offence are independently satisfied. Hospitality was selected as the principal sectoral context because fluctuating demand, workforce allocation, digital scheduling, and managerial intervention create multiple points at which operational and remuneration processes may interact, while functional comparison was used to assess the analytical portability of these distinctions without presuming doctrinal equivalence across different regulatory settings (Mahy, 2016; Michaels, 2019).

The research materials comprised Australian federal legal sources in force as of 20 August 2026 and peer-reviewed scholarship in labour law, corporate criminal law, human resource management, hospitality management, and algorithmic management. Sources were identified through targeted searches of scholarly databases, publisher and journal platforms, official legal databases, institutional repositories, and citation chaining, using terms related to digital wage underpayment, wage theft, timekeeping and payroll systems, hotel scheduling, algorithmic management, wage-law enforcement, corporate attribution, criminal liability, and digitally managed workplaces. Analysis proceeded sequentially by reconstructing the production of wage outcomes, determining whether remuneration legally due remained unpaid, evaluating the regulatory significance of an established breach, and subsequently assessing corporate attribution and offence-specific culpability, while competing explanations such as system malfunction, defective inputs, external technical constraints, limited effective control, or genuine remediation were retained as limiting considerations. Primary legal authority was preferred for propositions of law, while interdisciplinary and comparative literature was used to explain organisational and technological conditions relevant to information, control, intervention, and corrective capacity without independently determining legal breach, attribution, or criminal culpability (Clibborn & Hanna-Osborne, 2023; Baldwin & Black, 2008; Nielsen & Parker, 2009).

RESULTS AND DISCUSSION

Digital Wage Underpayment and the Preservation of Wage Entitlement

Digital wage outcomes in hospitality work emerge from an interconnected sequence of operational demand, workforce allocation, time recording, payment rules, system processing, and managerial intervention. Fluctuations in customer demand influence staffing requirements, while flexible labour arrangements enable hotels to adjust workforce deployment in response to changing operational conditions (Park et al., 2016). Contemporary intelligent scheduling systems further translate demand forecasts into staffing decisions by incorporating labour requirements and employee-related constraints into digitally mediated allocation processes (Li et al., 2026). These developments demonstrate that remuneration outcomes are increasingly produced through an organisational architecture in which operational decisions and technological systems interact rather than through an isolated payroll function.

The growing use of algorithmic management strengthens this interdependence because digital systems can perform functions related to scheduling, compensation, task allocation, and broader job design. Parent-Rocheleau and Parker (2022) explain that algorithms increasingly operate as work designers by embedding managerial rules into the processes through which jobs are organised, while Meijerink and Bondarouk (2023) identify a dual relationship between algorithmic control, employee autonomy, and organisational value creation. In hospitality settings, algorithmic systems therefore influence not merely administrative efficiency but also the sequence through which working time can ultimately be translated into remuneration. Nevertheless, the existence of algorithmic mediation does not establish that a wage shortfall was caused by technology alone because the outcome remains dependent on organisational rules, input quality, system configuration, and human intervention.

Frontline management remains particularly important within this digital architecture because managers continue to interpret, calibrate, contextualise, and correct algorithmically generated processes. Jianu, Ashton, and Lugosi (2025) show that the integration of algorithmic management in hotels creates both challenges and opportunities for frontline managers, indicating that managerial discretion remains relevant even where workforce decisions are increasingly automated. Jianu, Tussyadiah, and Miller (2025) similarly emphasise the need to humanise algorithmic management systems, reinforcing the continuing role of human intervention within digitally structured workplaces. Wage outcomes should consequently be understood as jointly produced by technological configuration and organisational action rather than as the autonomous output of an algorithm.

The causal origin of a wage shortfall may also differ substantially across cases. Digital underpayment can arise from inaccurate inputs, preset system rules, defective integration between timekeeping and payroll processes, managerial practices, external technical constraints, or combinations of these conditions (Tippett, 2018; Connelly, 2025). Tippett (2018) demonstrates that digital timekeeping practices such as automatic deductions and preset rounding can alter recorded compensable time, showing that technology may systematically influence wage calculations without necessarily malfunctioning. At the organisational level, Connelly (2025) further indicates that wage theft can be predicted through organisational conditions, illustrating why payment failures cannot always be reduced to a discrete technical error.

A critical analytical distinction must therefore be drawn between system malfunction and configured system operation. A malfunction occurs when a system produces an outcome inconsistent with its intended operation, whereas configured operation occurs when the technology produces precisely the result generated by an embedded rule or parameter. Preset rounding and automatic deductions illustrate the latter possibility because a payment-related discrepancy may arise through programmed rules rather than an unpredictable technical failure (Tippett, 2018). This distinction is essential for reconstructing causal provenance, although neither form of causation independently determines whether the resulting payment outcome constitutes a legal wage breach.

Table 1. Analytical Sources of Digitally Mediated Wage Shortfalls and Their Legal Significance

Dimension of wage production	Identified condition in the literature	Analytical significance	Supporting source
Operational	Fluctuating demand	Explains changes in	Park et al. (2016)

demand	changes staffing requirements	workforce allocation but does not establish unlawful underpayment	
Digital scheduling	Demand forecasts are translated into workforce allocation	Connects operational requirements with digitally mediated staffing decisions	Li et al. (2026)
Algorithmic work design	Rules are embedded in scheduling and compensation-related processes	Shows that managerial functions may be incorporated into digital systems	Parent-Rocheleau & Parker (2022); Meijerink & Bondarouk (2023)
Timekeeping configuration	Preset rounding or automatic deductions alter recorded compensable time	Distinguishes configured operation from random technical malfunction	Tippett (2018)
Organisational practices	Managerial and organisational conditions contribute to payment outcomes	Indicates that wage failures may have organisational rather than purely technical origins	Connelly (2025)
Human intervention	Frontline managers interpret, calibrate, and correct digitally mediated processes	Demonstrates that practical organisational control may coexist with automation	Jianu, Ashton, & Lugosi (2025); Jianu, Tussyadiah, & Miller (2025)
External or distributed control	Technological and organisational authority may be distributed across different actors	Qualifies assumptions that one actor necessarily controls the entire payment process	Collins & Atkinson (2023)
Legal entitlement	Remuneration legally due remains the substantive reference point	Separates the cause of a shortfall from the existence of a wage-law breach	*Fair Work Act 2009* (Cth); Davidov (2016)

Once the causal pathway has been reconstructed, the analysis must shift from technological explanation to legal entitlement. The substantive wage obligation is not altered merely because remuneration is generated through scheduling software, digital timekeeping, payroll automation, or algorithmic management. Under the Australian federal workplace framework, the relevant question is whether remuneration legally payable in relation to work has in fact remained unpaid under the *Fair Work Act 2009* (Cth). This distinction reflects the purposive character of labour-law protection, under which technological complexity does not displace the substantive rights that labour regulation is designed to protect (Davidov, 2016).

Digitalisation nevertheless changes the informational environment within which wage entitlement must be verified and enforced. Employees may observe only the final amount paid, while the underlying data inputs, configured rules, processing logic, override decisions, or correction mechanisms remain distributed across different parts of the organisation or its technological infrastructure (Tippett, 2018; Jarrahi et al., 2021). Research on algorithmic management shows that information and decision-making authority may be unevenly distributed among organisations, managers, workers, and technical systems, making the production of an adverse outcome more difficult to reconstruct (Jarrahi et al., 2021). Transparency and auditability consequently become important procedural conditions because the pathway from work performed to remuneration paid must remain sufficiently identifiable to allow a suspected shortfall to be examined and contested.

Greater transparency, however, cannot substitute for the substantive obligation to pay wages correctly. Rosin and Parviainen (2025) demonstrate the importance of transparency requirements in algorithmically managed work, particularly where workers require information about systems that materially influence employment conditions. Yet disclosure of algorithmic processes does not itself correct an unpaid entitlement, just as formal human oversight does not necessarily provide effective protection where the person exercising oversight lacks adequate information, authority, or practical capacity to intervene (Green, 2022). The legal relevance of transparency therefore lies in improving the ability to reconstruct, identify, challenge, and correct digital wage outcomes rather than diminishing the underlying wage obligation.

A similar limitation applies to organisational reliance on risk-management approaches. Digital workforce systems may legitimately be designed to optimise staffing, respond to demand, and improve operational performance, but efficiency objectives cannot transform an unpaid statutory entitlement into an acceptable residual risk. Gaudio (2026) argues that algorithmic-management regulation must reconcile risk-based governance with the protection of workers' rights, highlighting the danger of treating legally protected interests solely as variables within technological risk assessment. In the wage context, this means that system efficiency, predictive accuracy, or operational benefit cannot independently justify an outcome in which remuneration legally owed to a worker remains unpaid.

The hospitality context illustrates why this distinction between organisational efficiency and legal entitlement is especially important. Cole et al. (2024) identify different forms of unpaid labour time in hospitality work, demonstrating that uncompensated work can emerge through organisational practices surrounding the working day rather than only through a conventional payroll mistake. Such findings support the need to examine how working time is recorded, recognised, and converted into remuneration while avoiding the assumption that every underpayment necessarily demonstrates identical organisational motivation or culpability. The legal concept of wage theft must similarly be used with doctrinal precision because the descriptive or normative force of the term does not by itself determine the applicable legal classification (Green, 2020).

Overall, the findings establish that digital wage underpayment should be analysed through two sequential but distinct inquiries: causal reconstruction and legal classification. The first inquiry identifies how operational demand, scheduling, system configuration, organisational practice, technical constraints, and human intervention combined to produce the payment outcome, whereas the second asks whether remuneration legally due remained unpaid regardless of how the shortfall originated. Maintaining this distinction prevents genuine system malfunction, configured operation, managerial practice, and organisational policy from being treated as legally equivalent forms of causation while simultaneously preserving the substantive wage entitlement protected by labour law. Accordingly, technological complexity should be treated as a factor that increases the evidentiary and organisational difficulty of reconstructing wage outcomes, not as a basis for reducing or redefining the worker's underlying legal entitlement.

Labour-Law Non-Compliance and Regulatory Enforcement Escalation

An established wage shortfall must first be classified according to the legal entitlement that remains unpaid rather than according to an assumed motive of the employer. Under the *Fair Work Act 2009* (Cth), remuneration payable in relation to work remains subject to statutory payment obligations regardless of whether the shortfall arose through manual administration, digital processing, or organisational error. The existence of underpayment therefore answers a different legal question from whether the employer acted intentionally, recklessly, negligently, or through an administrative failure. This separation is particularly important in digitally managed workplaces because the technological origin of a shortfall may explain how non-compliance occurred without independently determining the seriousness of the employer's regulatory responsibility.

Empirical and doctrinal scholarship supports caution against treating every instance of wage-law non-compliance as evidence of identical organisational motivation. Clibborn and Hanna-Osborne (2023) show that employer non-compliance can arise from heterogeneous financial, institutional, normative, and organisational conditions, making it inappropriate to infer awareness or intention merely from the existence of an unpaid amount. This heterogeneity is especially relevant where scheduling, timekeeping, payroll, and managerial processes operate through interconnected digital systems that may distribute information and responsibility across different organisational actors. Accordingly, legal analysis should identify the wage breach first and only subsequently assess the circumstances that may justify a stronger regulatory response.

This distinction is consistent with the broader theory of responsive regulation, which treats regulatory intervention as a graduated process rather than an automatic consequence of every detected breach. Baldwin and Black (2008) argue that effective regulation must remain responsive not only to regulated actors but also to institutional environments, regulatory performance, and changing compliance conditions. Nielsen and Parker (2009) similarly demonstrate that responsive regulation depends on how enforcement strategies interact with the conduct and characteristics of regulated organisations. In wage regulation, this means that the same underlying legal breach may acquire different enforcement significance depending on the organisation's knowledge, practical control, capacity to correct the violation, and response after the problem is identified.

The availability of formal enforcement powers likewise does not guarantee effective labour-law compliance. Galvin et al. (2026) distinguish regulatory powers from the practices through which labour standards are actually enforced, demonstrating that institutional authority must be translated into operational enforcement activity to influence workplace behaviour. This observation is important for digitally mediated wage failures because regulators may possess legal authority while still confronting complex questions concerning data access, system architecture, organisational knowledge, and the location of effective control. Regulatory escalation should therefore be informed by the factual circumstances surrounding an established breach rather than by the mere existence of formal enforcement authority.

The manuscript identifies five interconnected considerations that shape the regulatory significance of an established wage breach: verified notice, effective control, remedial capacity, organisational response, and avoidable persistence. Verified notice concerns whether sufficiently reliable information existed to identify the shortfall, while effective control concerns whether the organisation possessed practical authority over the process responsible for the outcome. Remedial capacity addresses whether correction was realistically possible, and organisational response examines what was actually done after the problem became known. Avoidable persistence then considers whether non-compliance continued after notice, control, and feasible correction had converged and the organisation had been afforded a reasonable opportunity to respond.

Table 2. Considerations Relevant to the Escalation of an Established Wage Breach

Consideration	Meaning within the analysis	Regulatory significance	Supporting authority
Verified notice	Reliable information identifies or substantiates the wage shortfall	Establishes whether the organisation had a sufficient informational basis to recognise the problem	*Fair Work Act 2009* (Cth); Clibborn & Hanna-Osborne (2023)
Effective control	Practical authority exists over the system, process, or organisational practice producing the shortfall	Distinguishes situations in which corrective intervention is realistically within organisational control	Baldwin & Black (2008); Nielsen & Parker (2009)
Remedial capacity	The organisation can realistically calculate, repay, correct, or otherwise restore compliance	Indicates whether continued non-compliance could reasonably have been prevented or terminated	Galvin et al. (2026)
Organisational response	Measures are taken after the shortfall becomes known	Distinguishes genuine investigation and remediation from inaction or ineffective compliance responses	Clibborn & Hanna-Osborne (2023); Galvin et al. (2026)
Avoidable persistence	Non-compliance continues after notice, control, corrective capacity, and reasonable opportunity converge	Increases the regulatory significance of an established breach without itself establishing criminal culpability	Baldwin & Black (2008); Nielsen & Parker (2009)

Verified notice is particularly important because regulatory significance cannot be assessed solely by examining the final wage deficit without considering what the organisation knew and when reliable information became available. A complaint, audit result, payroll discrepancy, or other verified information may alter the regulatory position once it provides a sufficiently credible basis for investigation, but notice alone does not demonstrate that immediate correction was technically or organisationally possible. Effective control must therefore be examined separately because an organisation may possess information about a shortfall while lacking direct technical authority over one element of an externally supplied or distributed system. Responsive regulation requires sensitivity to this distinction because regulatory expectations should reflect both knowledge and the practical capacity to influence the relevant compliance process (Baldwin & Black, 2008; Nielsen & Parker, 2009).

Remedial capacity and organisational response become increasingly significant once the shortfall has been reliably identified and the organisation possesses meaningful control over the relevant process. Genuine remediation may require verification of affected working time, calculation of unpaid remuneration, repayment, investigation of the underlying cause, and correction of the process that generated the shortfall. Galvin et al. (2026) emphasise the significance of enforcement practice in shaping labour standards compliance, while Clibborn and Hanna-Osborne (2023) demonstrate that organisational responses to wage law cannot be understood independently of the conditions producing non-compliance. Prompt investigation and effective correction therefore indicate a different regulatory trajectory from prolonged inaction after the organisation possesses both knowledge and a realistic means of restoring compliance.

Avoidable persistence provides the analytical connection between an established breach and the justification for stronger enforcement. Persistence becomes more significant where reliable notice, practical control, remedial capacity, and a reasonable opportunity for correction are present but the organisation nevertheless fails to restore compliance. Repetition alone remains insufficient because recurring shortfalls may still result from unresolved technical defects, defective data inputs, external constraints, or corrective efforts that have not yet produced an effective solution. The relevant regulatory question is therefore not simply whether a breach occurred more than once, but whether continued non-compliance became increasingly avoidable in light of the organisation's information, control, corrective capacity, and subsequent conduct.

The wider compliance environment may also influence the practical capacity of organisations to prevent and correct wage-law violations. Chircop et al. (2026) demonstrate that government contracting can interact with wage compliance, illustrating how external institutional mechanisms may shape organisational incentives and compliance behaviour. This finding is consistent with responsive-regulation scholarship because effective enforcement can operate through combinations of regulatory monitoring, organisational controls, contractual conditions, and institutional incentives rather than through punitive intervention alone (Baldwin & Black, 2008; Nielsen & Parker, 2009). Such mechanisms do not alter the underlying wage entitlement, but they may affect how effectively organisations detect, prevent, and remedy non-compliance.

Taken together, the findings indicate that regulatory escalation should be understood as a distinct analytical stage following the identification of a wage-law breach. The existence and amount of an unpaid entitlement establish non-compliance under the governing workplace framework, while the intensity of regulatory intervention depends on the surrounding combination of notice, control, remedial capacity, organisational response, and avoidable persistence. Stronger enforcement becomes increasingly defensible where these factors converge, but none of them individually constitutes a fixed legal test or a substitute for the requirements of criminal liability. This boundary is essential because even serious or persistent wage-law non-compliance must remain analytically separate from corporate attribution and offence-specific culpability under the *Criminal Code Act 1995* (Cth), which are examined independently in the subsequent subsection.

Corporate Attribution and Criminal Culpability in Digitally Mediated Wage Failures

Corporate attribution constitutes a distinct analytical stage that must follow, rather than collapse into, the identification of an underlying wage-law breach. The existence of unpaid remuneration establishes a compliance problem, but it does not by itself establish that the relevant conduct or state of mind should be attributed to the corporation for criminal-law purposes. Under the *Criminal Code Act 1995* (Cth), corporate criminal responsibility requires attention to the applicable rules governing attribution together with the physical and fault elements of the relevant offence. This separation is essential because the seriousness or persistence of a wage breach cannot substitute for the legal requirements that determine whether criminal liability is established.

Organisational systems provide one important source of evidence in determining whether unlawful conduct reflects a broader corporate practice rather than an isolated technical or administrative failure. Bant (2023) develops the concept of systems intentionality as a means of understanding how corporate states of mind may be inferred from patterns embedded in organisational structures, systems, and decision-making arrangements. Bant and Faugno (2024) similarly argue that corporate culture and systems intentionality are relevant components of a regulator's toolkit because organisational practices may reveal how conduct is actually generated, maintained, and tolerated within the corporation. In the context of digitally mediated wage failures, default settings, payroll rules, audit arrangements, escalation procedures, and corrective mechanisms can therefore become evidentially significant when evaluating the organisational character of the conduct.

The distinction between technical malfunction and configured operation remains especially important at the attribution stage. A system that unexpectedly departs from its intended operation carries a different evidential meaning from a system that produces an adverse wage outcome because it is operating exactly as configured. Tippett (2018) demonstrates how preset rounding and automatic deductions may affect compensable time through programmed rules, thereby illustrating how wage consequences can arise from system design rather than random technical error. Where the organisation becomes aware of such consequences, retains practical authority to alter the relevant configuration, and nevertheless maintains the arrangement, the evidential case for organisational attribution may become stronger.

Nevertheless, the mere existence of a configured rule that produces an adverse outcome does not itself establish corporate culpability. Corporate liability analysis must remain capable of distinguishing harmful organisational maintenance from situations involving genuine error, defective data, external technical constraints, or limited effective control. Organisational knowledge, practical control, and the capacity to intervene therefore remain central to evaluating whether a particular system architecture can fairly be treated as evidence of corporate responsibility (Bant, 2023; Bant & Faugno, 2024). This approach avoids treating technological design as an automatic proxy for fault while still allowing the structure and operation of digital systems to inform the attribution inquiry.

Human oversight also requires substantive rather than merely formal evaluation when wage outcomes are generated through algorithmic systems. Green (2022) shows that policies requiring human oversight may fail where the designated reviewer lacks adequate information, authority, or the practical ability to alter algorithmically produced outcomes. Similar concerns arise in digitally managed workplaces where managers may nominally supervise scheduling, timekeeping, or payroll systems without exercising meaningful control over the relevant technical process. Corporate attribution must therefore examine whether human intervention was genuinely capable of identifying and correcting the wage-producing mechanism rather than assuming that formal managerial involvement automatically establishes effective control.

Table 3. Evidentiary Factors Relevant to Corporate Attribution and Criminal Culpability

Evidentiary factor	Potential significance for attribution	Limiting consideration	Supporting authority
System configuration	May show that a wage-affecting result was produced through an embedded organisational rule	Configuration alone does not establish the required fault element	Tippett (2018); Bant (2023)
Organisational policies and practices	May indicate that the payment process reflects a maintained corporate arrangement	Must be connected to the relevant conduct and attribution rules	Bant & Faugno (2024)
Verified organisational knowledge	May strengthen the inference that the corporation was aware of the adverse consequence	Knowledge must still be linked to the legally required state of mind	*Criminal Code Act 1995* (Cth); Horder (2025)
Effective control	May show that the corporation had practical capacity to alter	Control may be distributed across	Collins & Atkinson (2023);

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	or terminate the relevant process	external technical or organisational actors	Green (2022)
Audit and safeguard arrangements	Effective controls may weaken an inference of organisational maintenance	Formal controls are insufficient if they are ineffective in practice	Bant & Faugno (2024)
Repetition or persistence	May increase evidential significance when combined with knowledge and control	Repetition alone cannot establish criminal culpability	Green (2020); Cornford (2022)
Financial benefit	May form part of the factual context surrounding the conduct	Financial advantage cannot substitute for offence-specific fault	Horder (2025); Cornford (2022)
Remediation and correction	Genuine investigation and effective correction may weaken an inference of maintained unlawful conduct	Correction does not erase an already established wage breach	Baldwin & Black (2008); Galvin et al. (2026)

Preventive arrangements, functioning audits, and effective safeguards may operate in the opposite evidential direction by weakening the inference that unlawful wage outcomes reflected an organisationally maintained course of conduct. Bant and Faugno (2024) emphasise the importance of examining corporate culture and systems as a whole, which necessarily includes evidence capable of supporting both inculpatory and exculpatory interpretations. Genuine investigation, prompt system correction, effective repayment, and remedial organisational changes may therefore indicate that an adverse outcome resulted from error rather than a deliberate or institutionally sustained practice. Attribution analysis should consequently assess the totality of organisational systems and responses rather than selectively relying only on evidence that supports blameworthiness.

Criminal classification requires an additional step because corporate attribution does not independently satisfy the elements of a criminal offence. Horder (2025) demonstrates in the broader field of corporate criminal liability that attribution mechanisms must operate together with the substantive requirements of the relevant offence rather than function as substitutes for those requirements. The *Criminal Code Act 1995* (Cth) accordingly requires an offence-specific inquiry into both the physical conduct and the applicable fault element before criminal responsibility can be established. Organisational involvement may therefore provide a basis for examining responsibility, but it cannot dispense with the need to prove the mental and physical elements required by law.

The conceptual language of "wage theft" must also be used carefully at this stage of the analysis. Green (2020) explains that wage theft functions as a powerful legal and normative concept, yet the use of that label cannot independently establish the constituent elements of a criminal offence. Cornford (2022) similarly highlights the importance of offence differentiation and fair labelling, supporting the proposition that different forms and degrees of wrongdoing should not be treated as legally equivalent where their culpability differs. A persistent or financially beneficial wage breach may therefore attract stronger normative condemnation while still requiring independent proof of the statutory elements necessary for criminal liability.

Repetition, financial advantage, and algorithmic mediation should consequently be treated as contextual evidence rather than as autonomous indicators of criminal fault. Repeated underpayment may become more significant where it continues after verified notice, effective control, and feasible correction are established, yet recurrence can also remain compatible with unresolved defects, ineffective remediation, or externally constrained technical systems. Financial benefit may similarly form part of the surrounding factual circumstances without proving that the corporation possessed the state of mind required by the applicable offence. Preserving this distinction prevents serious regulatory non-compliance from being converted automatically into criminal wrongdoing without the evidentiary and doctrinal basis required by criminal law.

The distribution of control across digital workplaces further complicates attribution because organisational authority may be shared among managers, technical specialists, external providers, and algorithmic systems. Collins and Atkinson (2023) demonstrate that algorithmic management can reshape worker voice and organisational control, while Jarrahi et al. (2021), Duggan et al. (2023), and Krzywdzinski et al. (2025) show that algorithmic workplaces distribute authority, information, and participation across multiple actors in ways that challenge conventional assumptions about managerial control. These conditions require the attribution inquiry to identify where relevant knowledge, decision-making authority, intervention capacity, and corrective power were actually located. Nominal organisational involvement therefore carries limited evidential value where meaningful technical or managerial control lies elsewhere.

Taken together, the findings support a staged model in which corporate criminal liability can arise only after three analytically separate thresholds are addressed: an underlying wage breach, an adequate basis for corporate attribution, and offence-specific culpability. Organisational systems, defaults, policies, audits, safeguards, repeated outcomes, and remedial responses are relevant because they may strengthen or weaken inferences concerning how the corporation organised and maintained the payment process, but none of these factors independently replaces the legal elements of the offence. The framework therefore preserves the distinction among technical failure, unlawful underpayment, avoidable organisational persistence, corporate attribution, and criminal culpability while allowing their evidential relationships to be examined within a coherent legal analysis. Such precision is particularly necessary in digitally managed workplaces, where technological complexity increases the difficulty of locating information and control but does not alter the requirement that criminal responsibility be grounded in proper attribution and proven offence-specific fault.

CONCLUSION

This study concludes that digitally mediated wage underpayment must be analysed through a sequence of legally distinct but interconnected inquiries rather than treated as a single form of organisational wrongdoing. The causal origin of a payment shortfall must first be reconstructed by examining operational demand, workforce allocation, timekeeping, system configuration, payroll processes, managerial intervention, and organisational controls, while the legal existence of underpayment remains determined independently by whether remuneration legally due has remained unpaid. The regulatory significance of an established breach increases where verified notice, effective control, remedial capacity, organisational response, and avoidable persistence converge, although no single factor constitutes a fixed legal test for enforcement escalation. This distinction ensures that technological malfunction, configured system operation, administrative error, organisational practice, and persistent non-compliance are not assigned equivalent legal significance without sufficient evidentiary justification.

Corporate criminal liability requires an additional and independent inquiry beyond the establishment of a wage breach and the justification for stronger regulatory intervention. Organisational systems, policies, default settings, audit arrangements, safeguards, repeated outcomes, and corrective responses may strengthen or weaken corporate attribution, but repetition, financial benefit, algorithmic mediation, or organisational involvement cannot substitute for the physical and fault elements required by the applicable criminal offence. The resulting analytical framework therefore preserves the doctrinal boundaries among causal system failure, wage-law non-compliance, enforcement escalation, corporate attribution, and criminal culpability while recognising their evidentiary relationships. Its relevance extends conditionally beyond hospitality to other digitally managed workplaces in which comparable distributions of information, control, human intervention, and corrective capacity can be identified, without presuming identical legal consequences across different organisational and regulatory settings.

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