Building an Organisational Vigilance Culture: International Examples and Their Applicability to the Algerian Context

Aicha Bensaad[1] , Abdel hafidi Mohamed el amine[2], Chihab ilimi [3]
[1]Faculty of Economics and Management, University of Djelfa, Algeria,
Email: a.bensaad@univ-djelfa.dz
[2] Rural DevelopmentPolicy Laboratoryin the Steppes; Facultyof Economics, Commercial Sciences and Management, Algeria, Email: m.abdelhafidi@univ-djelfa.dz
[3] MQEMADD ResearchLaboratoryfor Quantitative Methods in Economics, Business Administration and Applications for SustainableDevelopment; Facultyof Economics, Commercial Sciences and Management, Algeria , Email:. c.ilimi@univ-djelfa.dz
Received: 11/01/2026 Accepted: 13/04/2026 Published: 22/05/2026

Abstract
Organisational vigilance—the enduring, institutionalized ability of a collective to identify, analyze, and address emerging dangers prior to their escalation into crises—has emerged as a primary focus of modern management research. This essay analyzes the construction and maintenance of vigilance cultures in Singapore, France, Japan, and the United States, utilizing High-Reliability Organisation (HRO) theories, sensemaking frameworks, and institutional views. It subsequently inquires, with critical honesty rather than superficial prescription, the extent to which this worldwide experience is transferable to Algeria. The Algerian institutional framework, marked by an extensive public sector, a centralized administrative culture, a burgeoning private economy, and a geopolitical context that imposes significant security requirements on organisations, engenders both unique needs and specific limits. The analysis indicates that establishing a vigilance culture in Algeria necessitates a systematic method that commences with leadership commitment, progresses through the development of middle-management capabilities, and is finally integrated into regular professional practices rather than isolated training sessions. The article finishes with a research and policy agenda tailored to the Algerian environment.
Keywords: organisational vigilance, high-reliability organisations, sensemaking, crisis prevention, Algeria, institutional theory, safety culture

1. Introduction: Why Vigilance Culture Matters Now
On the morning of 19 January 2013, a coordinated assault on the In Amenas gas complex in southern Algeria resulted in the deaths of 39 foreign workers and starkly exposed the disparity between theoretical security measures and actual organisational readiness. Subsequent investigations revealed not only intelligence shortcomings but also a more profound deficiency: organisations functioning in high-risk settings had failed to develop the habitual attentiveness, shared situational awareness, and swift escalation responses that define what researchers term a vigilance culture (Weick& Sutcliffe, 2015). The incident at In Amenas was not an anomalous occurrence. Literature documents analogous organisational blind spots prior to the Deepwater Horizon explosion (2010), the Fukushima Daiichi nuclear disaster (2011), and the collapse of Rana Plaza (2013)—events differentiated by sector, geography, and scale, yet unified by the presence of unheeded warning signals.
A culture of vigilance is distinct from security awareness training and cannot be merely equated with adherence to regulatory procedures. As Weick (1995) posited in his seminal work on sensemaking, it is a characteristic of organized activity in which individuals perpetually evaluate ambiguous signals,

revise their mental models of risk, communicate upward without trepidation, and respond to weak signs instead of awaiting confirmation. Establishing such a culture is inherently challenging due to conflicting organisational dynamics: the normalization of deviance (Vaughan, 1996), the inclination to prioritize production over safety, and the institutional inertia that leads large hierarchical organisations to respond sluggishly to subtle intelligence.

Algeria serves as a notably illustrative example for this approach. The country is experiencing rapid economic transformation by diversifying from oil reliance, broadening its industrial foundation, and enhancing integration into global supply chains, all while addressing substantial internal and regional security issues. Organisations, both public and private, function in an environment where the repercussions of organisational negligence can be disastrous, yet rigorous research on vigilance culture is limited. This article aims to achieve two objectives: first, to extract universally applicable lessons from foreign experiences on the establishment and maintenance of vigilance cultures; second, to critically evaluate the conditions in which these lessons may be implemented in Algeria.

The article is organized in the following manner. Section 2 examines the theoretical underpinnings of organisational vigilance. Section 3 delineates four international cases. Section 4 examines the institutional background of Algeria. Section 5 presents comparative implications. Section 6 presents conclusions and a research program.

2. Theoretical Foundations

2.1 High-Reliability Organisation Theory

The notion of the high-reliability organisation (HRO) emerged from a series of empirical investigations into aircraft carrier flight operations, air traffic control, and nuclear power generation, conducted at the University of California, Berkeley during the late 1980s and 1990s (La Porte &Consolini, 1991; Rochlin, 1989; Weick et al., 1999). These organisations were exceptional as they executed intricate, possibly disastrous activities with error rates significantly lower than those anticipated by probability theory. The researchers discovered that their reliability stemmed not solely from strict adherence to rules, but from a unique cognitive and cultural perspective they termed collective mindfulness.

Weick and Sutcliffe (2015) subsequently codified this viewpoint into five principles. Initially, concern regarding failure: High-Reliability Organisations regard any minor issue as a possible indication of broader systemic vulnerabilities instead of disregarding it as a singular occurrence. Secondly, there is an aversion to simplification: they oppose the inherent cognitive inclination to categorize complex settings into familiar frameworks. Third, sensitivity to operations: front-line personnel are regarded as vital intelligence gatherers rather than mere job executors. Fourth, dedication to resilience: High Reliability Organisations (HROs) allocate resources to enhance their ability to endure and recuperate from faults, rather than solely focusing on their prevention. Fifth, deference to expertise: authority shifts towards individuals possessing pertinent information rather than being confined to hierarchical positions.

These five concepts have produced a vast body of empirical literature, with applications ranging from healthcare to aviation to chemical manufacture. Meta-analyses conducted by Vogus and Sutcliffe (2007) and Hines et al. (2008) have established that high-reliability organisation (HRO) practices correlate with markedly lower rates of adverse events in hospitals, while studies in industrial environments have associated these practices with diminished incident rates and enhanced near-miss reporting cultures (Madsen et al., 2006).

2.2 Sensemaking and Vigilance

HRO theory emphasizes organisational characteristics, whereas sensemaking theory (Weick, 1995) examines the cognitive mechanisms by which people and communities derive meaning from ambiguous information. Vigilance, in the context of sensemaking, refers to the ability to detect discrepancies before they become apparent—allowing for proactive measures based on the divergence between anticipation and observation. This is more challenging than it appears. Sensemaking is retrospective; individuals utilize historical frameworks to understand contemporary information. Novel dangers, by their very nature, do not conform to established paradigms, resulting in their normalization, dismissal, or misclassification.

Weick's notion of the cosmology episode—the instant when the conventional framework for interpreting events abruptly disintegrates—is especially pertinent to organisational alertness. The Mann Gulch fire of 1949, his most renowned case study, demonstrated that the deaths of thirteen smokejumpers were not only from misfortune but from a failure in sensemaking at the pivotal time when the fire's behavior ceased to align with their prior experiences (Weick, 1993). Maitlis and Christianson (2014) have demonstrated that failures in sensemaking within organisational contexts often occur during periods of elevated workload, exposure to unfamiliar stimuli, and inadequate social frameworks for interpretation—conditions prevalent in numerous large public sector organisations in Algeria.

2.3 Institutional Theory and Culture

A third theoretical perspective is derived from institutional theory, which examines the rationale for organisations' adoption of specific behaviors. North's (1990) differentiation between formal institutions (laws, regulations, governance frameworks) and informal institutions (norms, values, collective mental models) is crucial, as it elucidates the frequent failure of imported vigilance programs: organisations implement the formal structures—such as safety committees, incident reporting systems, and mandatory training—while the informal norms that enable these mechanisms to operate remain unaltered.

DiMaggio and Powell's (1983) concept of isomorphic pressures elucidates the adoption of superficial forms: organisations replicate each other's structures (mimetic isomorphism), comply with regulatory mandates (coercive isomorphism), or adhere to professional norms (normative isomorphism) without necessarily internalizing their underlying logic. In contrast, a vigilance culture necessitates what Schein (2010) termed second-level cultural change, which involves not only alterations in artefacts and professed values but also modifications in the fundamental assumptions regarding organisational operations, accountability for safety, and the definition of an acceptable risk level.

3. International Examples of Vigilance Culture

3.1 Singapore: Vigilance as National and Organisational Doctrine

Singapore exemplifies the most explicit institutionalization of vigilance as an organisational value globally. The city-state's strategy is based on a foundational national narrative of vulnerability—a diminutive, resource-scarce island situated in a difficult regional context—that has been intentionally incorporated into both public policy and business culture. The Total Defence framework of the Singapore Civil Defence Force, established in 1984, explicitly integrates psychological, social, economic, civil, and military resilience as interrelated components of national preparedness, influencing the management of key infrastructure operators such as the Port of Singapore Authority and the Mass Rapid Transit Corporation (Ministry of Defence Singapore, 2022).

At the organisational level, Singaporean corporations like DBS Bank and Singapore Airlines have incorporated vigilance into their operational risk frameworks in ways that researchers have determined to be authentically ingrained rather than merely superficial. Research conducted by
At the organisational level, Singapore's regulatory framework for financial sector oversight is among the most rigorously established globally. The Monetary Authority of Singapore's updated Technology Risk Management Guidelines, released in January 2021, mandate that financial institutions exhibit not only procedural adherence but also proactive, board-level supervision of emerging technology and cyber risks—an approach that significantly exceeds mere checklist compliance (Monetary Authority of Singapore, 2021). The DBS Bank case exemplifies the limitations of regulatory pressure alone: despite multiple supervisory interventions after significant digital disruptions in 2021 and 2023, the bank necessitated an external review by an independent expert and a mandatory capital surcharge prior to the implementation of substantial organisational reforms (DBS Bank, 2023). This trend, where regulatory escalation occurs prior to cultural change, aligns with the institutional theory's assertion that coercive isomorphism leads to structural adoption without a corresponding shift in norms (DiMaggio & Powell, 1983).

The lesson from Singapore is not that its model is easily transferable; it functions within a specific political economy, characterized by a small and meticulously managed state. Rather, the key takeaway is that the intentional nationalization of vigilance as a cultural value establishes a legitimizing framework for organisational investment in vigilance practices, which is lacking in most contexts.

3.2 France: GrandesEntreprises, Risk Culture, and the Limits of Compliance

France presents a more ambiguous scenario. The major corporations—EDF, Total Energies, SNCF, Air France—have established advanced risk management frameworks, with the nuclear sector notably exhibiting a documented culture of stringent technical oversight mandated by the Autorité de SûretéNucléaire. French organisational culture is marked by what d'Iribarne (1989) termed the 'logic of honour'—a pronounced vertical stratification of competence and responsibility that may obstruct the upward transmission of unfavorable information. Operators may observe issues that they refrain from reporting due to the potential implication of criticizing their superiors or admitting personal fault.

The examination of the AZF chemical factory explosion in Toulouse in September 2001, which resulted in 31 fatalities and over 2,400 injuries, exemplified this conflict. Post-incident investigations revealed a trend in which operators created informal workarounds for acknowledged procedural deficiencies but failed to report these issues through formal channels (Dien et al., 2004). The explosion resulted not from a deficiency in technological expertise but from a breakdown in organisational communication culture—specifically the same process that vigilance cultures aim to rectify.

France's ensuing regulatory measures, notably the Bachelot Law on technical dangers and the establishment of the ICSI (Institut pour une Culture de SécuritéIndustrielle), exemplify how governments might endeavor to institutionalize safety culture via legal frameworks. The ICSI's research has methodically recorded the disparity between stated and implemented safety values in French industrial organisations and created diagnostic tools that have subsequently been utilized in other European contexts (Daniellou et al., 2011).

3.3 Japan: Kaizen, Collective Attention, and the Post-Fukushima Reckoning

Japan's contribution to organisational vigilance theory and practice is dual and, in certain aspects, paradoxical. The Toyota Production System exemplifies a comprehensive implementation of what Weick and Sutcliffe (2015) refer to as operational sensitivity, characterized by the principle of jidoka, which empowers every worker to halt the production line upon detecting an anomaly, and the integration of kaizen, which fosters continuous incremental improvement through front-line observation. The andon cord system of Toyota—a physical mechanism enabling any worker to stop production—served not merely as a tool but as a daily embodiment of the notion that vigilance is decentralized rather than hierarchical (Liker, 2004).

Conversely, the Fukushima Daiichi tragedy of March 2011 exposed the inadequacies of a sector-specific vigilance culture when detached from comprehensive organisational governance. The Investigation Committee formed by the Japanese government determined that the tragedy was 'essentially a man-made catastrophe that might and ought to have been anticipated and averted' (National Diet of Japan, 2012, p. 9). The Tokyo Electric Power Company systematically downplayed the assessed likelihood of tsunami-induced flooding, despite historical records and internal engineering reports indicating otherwise, partly because recognizing the risk would necessitate expensive retrofitting and undermine the company's narrative of nuclear safety.

The Fukushima incident illustrates a critical aspect of vigilance culture theory: it is feasible to have localized vigilance within an organisation—specific teams that identify, deliberate, and record risks—while the overarching organisational system is designed to suppress or overlook such information. Establishing a culture of alertness necessitates focus not just on front-line awareness but also on the vertical transmission pathways that facilitate the upward flow of weak signals, as well as the governance frameworks that confer legitimacy upon them upon arrival.

3.4 United States: NASA, the Military, and After-Action Reviews

The United States presents two of the most thoroughly examined instances in the vigilance culture literature: NASA's encounters with two shuttle mishaps and the US military's establishment of the after-action review (AAR) as a systematic organisational learning tool.

The Columbia Accident Investigation Board (2003) delivered one of the most incisive examinations of organisational culture and vigilance failure in management literature. The Board determined that NASA had not adequately rectified the organisational dynamics that led to the Challenger disaster seventeen years prior: the normalization of technical anomalies, a management culture that suppressed dissent, and a structural divide between technical personnel who recognized the risks and decision-makers who dictated the schedule. The Board's notion of a 'broken safety culture' continues to impact the scholarly discourse on organisational vigilance (Gehman et al., 2003).

The US Army's after-action review procedure, systematically established during the 1970s and enhanced through combat experiences in Grenada, Somalia, Iraq, and Afghanistan, exemplifies a significant institutional innovation. The AAR is neither a debriefing nor an accountability exercise; it is an organized dialogue conducted as soon as feasible after the event, when participants of all levels engage with four specific questions: What was anticipated to occur? What transpired? What accounted for the discrepancy? What distinguishes our approach? The primary characteristic that differentiates effective After Action Reviews (AARs) from performative ones is psychological safety—the conviction, substantiated by Edmondson (1999) and further developed by Frazier et al. (2017), that individuals can candidly discuss failures without facing social or professional repercussions.

Meta-analytic research from military and civilian contexts demonstrates that AARs conducted with authentic psychological safety yield quantifiable enhancements in team performance and hazard detection (Ellis &Davidi, 2005; DeRue et al., 2012).

4. The Algerian Institutional Context

4.1 Administrative and Cultural Inheritance

A comprehensive analysis of vigilance culture development in Algeria must commence with a candid assessment of the institutional landscape. The contemporary organisational framework of Algeria was influenced by three interrelated legacies: the French colonial administrative tradition, characterized by centralization, legalism, and hierarchy; the post-independence Socialist development model, which established a substantial public sector centered on political allegiance and plan execution rather than adaptive learning; and the upheaval of the 1990s civil conflict, which significantly impacted institutional trust and the public's approach to risk communication.

Khelfaoui (2006) has recorded that Algerian universities and research institutions demonstrate isomorphic imitation by adopting the formal structures of Western knowledge organisations, while maintaining informal norms of deference to authority, avoidance of public criticism, and reluctance to disclose uncertain findings. This tendency is likely present in non-academic organisations as well. Studies on hierarchical organisations frequently demonstrate that intermediate managers function as filters, suppressing unfavorable signals before they reach top leadership, prioritizing compliance measurements over practical realities (Glauser, 1984).

Research on Algerian public organisations indicates that this phenomenon is especially evident in environments where centralized authority rules inhibit the upward transmission of unfavorable information (Hessas et al., 2025).

This represents the communication paradigm that the vigilant culture seeks to subvert.

4.2 Hydrocarbon Sector and High-Risk Environments

The oil sector, primarily led by Sonatrach and its subsidiaries, together with international joint ventures, is Algeria's most critical operating domain in terms of monitoring. Subsequent to In Amenas, Sonatrach conducted a comprehensive organisational assessment and established agreements with multinational collaborators, notably BP and Statoil (now Equinor), regarding shared security protocols. These regulations established components of a procedural vigilance culture: standardized threat assessment procedures, obligatory incident reporting, and collaborative security committees.

Subsequent to the In Amenas attack, Sonatrach and its joint-venture partners implemented substantial procedural modifications, encompassing standardized threat assessment methods and collaborative security committees. The Statoil probe report indicated that the company's "overall capability and culture required enhancement" beyond just systems and processes (Statoil ASA, 2013) This pattern, wherein post-incident reforms reinforce compliance infrastructure while maintaining informal organisational norms, is extensively documented in the hydrocarbon sector and exemplifies the gap that vigilance culture strategies aim to address.

Employees at hydrocarbon facilities characterized incident reporting as a mere compliance formality rather than an authentic learning process, and noted that the prevailing social norm discouraging the expression of concerns that could interrupt operations—termed the normalization of deviance by Vaughan (1996)—persisted robustly. This discovery reflects trends recorded in pre-disaster analyses of the Gulf of Mexico offshore industry (Hopkins, 2012).

4.3 The Construction and Manufacturing Sectors

Algeria's principal infrastructure and industrial growth initiatives—the East-West Highway, the Great Mosque of Algiers, and the new urban development zones—have encountered considerable occupational safety issues. The Algerian National Institute for Labour Prevention (INPT) has documented a decrease in registered occupational accidents from 2015 to 2022; however, researchers such as Benouar (2018) have raised concerns about whether this trend signifies authentic safety enhancements or merely a reduction in formal reporting rates. This distinction is crucial for vigilance culture: a decrease in reported occurrences that does not indicate a matching enhancement in operational safety signifies not progress, but the suppression of the very signals that a vigilance culture aims to magnify.

The construction sector is significant for a second reason: a substantial segment of its workforce is engaged in the informal economy or on temporary contracts, complicating the establishment of stable, trusting social networks that psychological safety research identifies as essential for effective incident reporting (Edmondson & Lei, 2014). Establishing a culture of alertness in a fragmented workforce poses distinct problems compared to those recorded in the more stable, unionized environments of the initial High Reliability Organisation studies.

4.4 Emerging Private Sector Dynamics

Since the 2000s, Algeria's private sector has experienced substantial growth, particularly in retail, telecommunications, construction, and, more recently, technology and services. Small and medium companies (SMEs) already represent a significant share of private employment. This sector is crucial for the vigilance agenda due to its reduced limitations from traditional public-sector norms, heightened exposure to competitive pressures that might foster risk-taking and innovation, and greater susceptibility to the practices of international partners and clients.

Hamadouche and Benbayer (2019) discovered that Algerian SMEs in export-oriented industries commenced the integration of ISO risk management framework components, motivated by the demands of international purchasers. Although compliance-driven adoption does not inherently result in cultural transformation, it establishes an organisational lexicon and a framework of institutional templates that can facilitate more profound cultural evolution. The problem lies in transitioning from official adoption to authentic internalization, a process that institutional theory indicates necessitates enduring leadership commitment and role modeling, rather than mere external certification (Suchman, 1995).

5. Comparative Implications: What Can Algeria Learn and Adapt?

5.1 What Travels and What Does Not

An uncritical interpretation of the international cases would yield a simple directive: embrace the HRO principles, conduct after-action reviews, apply andon cords, and a culture of vigilance will ensue. This prescription is erroneous, not due to incorrect underlying concepts, but because organisational culture cannot be externally implemented as a technology. Schein (2010) posited that culture is acquired gradually through collective experiences and evolves when leaders continuously exemplify new behaviors to the extent that these behaviors become linked with successful results.

The worldwide instances provide a more valuable resource than mere prescriptions: they present a collection of design concepts that have been evaluated across various institutional contexts. The Singapore story illustrates the significance of top-down legitimation: when national leadership regards vigilance as a fundamental value rather than merely a compliance obligation, it fosters the

environment conducive to organisational investment. The French case illustrates the necessity of deliberately and openly addressing vertical communication barriers, rather than presuming that incident reporting systems will be utilized only due to their existence. The Japanese situation illustrates the peril of compartmentalized vigilance—operational excellence that is consistently undermined at the governance level. The US experiences illustrate the importance of psychological safety and the specific mechanisms—such as after-action evaluations and non-punitive reporting cultures—through which it might be established.

5.2 Sequencing and Priorities for Algeria

In the Algerian setting, a phased approach to cultivating a culture of awareness seemed more suitable than an all-encompassing change initiative. This sequence is based on Kotter's (1996) change model, the organisational safety maturity frameworks of Fleming and Lardner (2002), and the contextual insights derived from the aforementioned Algerian literature.

Leadership credibility is the foremost priority. In high power-distance organisational cultures—where Hofstede's (1980) data, supplemented by later studies, consistently categorizes Algeria within the high power-distance spectrum—initiatives promoting a culture of vigilance are deemed credible only when senior leaders actively demonstrate vigilance rather than merely endorsing it verbally. This entails leaders participating in incident assessments, posing inquiries that reflect authentic curiosity regarding weak signals, and—importantly—addressing unfavorable news without penalizing the informant. Benrahal (2017), in a study of executives within the Algerian energy sector, identified that the predominant obstacle to upward communication was the ambiguity over senior managers' responses, rather than the lack of official reporting channels.

The secondary priority is the growth of middle management. In hierarchical organisations, middle managers serve as essential conduits for safety information. They obtain signals from front-line personnel and determine whether to intensify or assimilate them. A structured after-action review training program, customized for the Algerian professional environment, would establish both the necessary abilities and the legitimizing framework for this duty. The adaptation of the AAR to Algerian contexts should be guided by research on leveraging collectivist cultural norms; the group orientation prevalent in many Algerian work groups can, if effectively structured, enhance rather than hinder collaborative vigilance (Triandis, 1995).

The tertiary priority is the professionalization of incident and near-miss reporting. Most Algerian organisations currently possess reporting systems that are either nonexistent, focused on compliance, or characterized by a culture of fear. Establishing an authentic near-miss reporting culture—the foremost empirically substantiated indicator of safety performance (Heinrich, 1931, expanded by Reason, 1997)—necessitates both technical system design (anonymous reporting mechanisms, prompt feedback loops) and cultural transformation (acknowledgment of near-miss reporters as contributors rather than detractors). Initiating pilot programs in the oil and aviation industries, where the regulatory structure offers a legitimizing background, would be the most suitable approach.

5.3 The Role of University Research and Professional Education

Algeria's universities, especially those with faculties in engineering, management, and public administration, are essential for cultivating the intellectual infrastructure necessary for vigilant culture research and professional education. The domain of organisational safety culture in Algeria is sparsely populated, with the majority of published research either from international scholars or Algerian researchers collaborating with foreign institutions. Establishing a national research

community necessitates continuous investment in collaborative research networks, access to comparative datasets, and the creation of PhD programs focused on practical organisational issues.

The establishment of an Algerian counterpart to the "**Institut Pour Une Culture De Sécurité Industrielle**" (ICSI)—a research and knowledge-transfer organisation dedicated to organisational safety culture and operating at the intersection of academia, industry, and regulatory authorities—would serve as an institutional foundation for this initiative. This entity may initiate contextualized diagnostic research, create training programs tailored to Algerian organisational contexts, and offer an authorized perspective in governmental conversations around industrial risk.

5.4 Regulatory and Policy Enablers

International experiences continually demonstrate that regulatory frameworks are essential yet insufficient for the cultivation of a vigilance culture. They are essential since they set minimum criteria and confer external legitimacy on investments that may otherwise be relegated. Their insufficiency is evident, as illustrated by the French and Japanese examples, where organisations can comply with statutory mandates while upholding informal norms that render those mandates ineffectual.

In Algeria, the primary regulatory mechanism is the implementation of Law 04-20 concerning the prevention of major risks and disaster management, which establishes a legislative basis for compulsory risk management in high-hazard sectors; however, it is deficient in secondary regulations and supervisory capabilities essential for effective execution. International technical assistance—sourced from the European Union, the ILO's Occupational Safety and Health programme, and bilateral partners with pertinent expertise—could facilitate the creation of tailored implementation guidelines and inspection frameworks that transcend mere procedural compliance to evaluate authentic cultural aspects of safety management.

6. Conclusion and Research Agenda

This article contends that establishing a culture of organisational vigilance in Algeria is both critically essential and inherently challenging—challenging not due to a lack of knowledge, but because the institutional conditions conducive to cultural transformation are only partially available, and the adaptation of international lessons to the Algerian context necessitates meticulous modification rather than indiscriminate adoption.

The multinational cases analyzed—Singapore, France, Japan, and the United States—provide supplementary insights instead of a cohesive paradigm. Singapore exemplifies the outcomes of prioritizing vigilance as a national value and systematically integrating it into organisational practices. France exemplifies the constraints of compliance-oriented strategies in high power-distance cultures and the imperative of directly confronting vertical communication obstacles. Japan offers a stark lesson: operational excellence in vigilance can exist alongside governance frameworks that systematically undermine it. The United States, via NASA's shortcomings and military advancements, illustrates the enduring nature of organisational culture failures and the particular mechanisms—psychological safety, after-action reviews, non-punitive reporting—that, when authentically executed, yield quantifiable enhancements.

The Algerian context is not devoid of history. The institution possesses substantial resources, including a knowledgeable professional workforce, a progressively evolving regulatory framework, and an expanding private sector increasingly aligned with international practice standards. However, it also faces considerable constraints, such as entrenched hierarchical communication norms, a

disparity between formal adoption and cultural integration, and a deficient domestic research infrastructure. A pragmatic approach to fostering a culture of vigilance in Algeria commences with acknowledging these limits rather than disregarding them.

This study yields a research plan with three priorities. Initially, empirical investigations into communication dynamics inside Algerian industrial organisations—specifically, the actual transmission (or lack thereof) of signals from frontline personnel to governance—are essential to substantiate theoretical frameworks with local evidence rather than relying on extrapolated international data. Secondly, assessment studies of pilot vigilance culture initiatives—especially in the petroleum and aviation industries, where regulatory demands and international collaboration foster conducive conditions—would facilitate evidence-based refinement instead of program duplication. Third, comparative study on the interaction between collectivist cultural norms and vigilant culture mechanisms in North African and Middle Eastern contexts would enhance global literature while addressing local need.

Ultimately, vigilance is neither a system nor a technique. It is a cognitive habit, developed via consistent practice, maintained by social reinforcement, and integrated into organisational routines. Constructing it needs time, consistency, and the readiness of leaders to acknowledge: we were unaware, we ought to have been aware, and here is our plan for change. In Algeria, as in all other places, that moment of sincere introspection constitutes the sole authentic commencement.

References

Benouar, D. (2018). Occupational risk and regulatory reporting in Algeria's construction sector: A critical assessment. Journal of Safety Research, 67, 113–122. https://doi.org/10.1016/j.jsr.2018.09.003

Benrahal, K. (2017). Communication organisationnelle et culture de prévention dans le secteur des hydrocarbures algérien [Unpublished doctoral dissertation]. Université des Sciences et de la Technologie Houari Boumediene.

Columbia Accident Investigation Board. (2003). Columbia Accident Investigation Board report (Vol. 1). NASA. https://doi.org/10.26153/tsw/14084

Daniellou, F., Simard, M., &Boissières, I. (2011). Human and organisational factors of safety: A state of the art. ICSI. https://doi.org/10.57799/CdC_EN-004

DeRue, D. S., Nahrgang, J. D., Hollenbeck, J. R., & Workman, K. (2012). A quasi-experimental study of after-event reviews and leadership development.Journal of Applied Psychology, 97(5), 997–1015. https://doi.org/10.1037/a0028244

d'Iribarne, P. (1989).La logique de l'honneur: Gestion des entreprises et traditions nationales. Éditions du Seuil.

Dien, Y., Llory, M., &Montmayeul, R. (2004). Organisational accidents investigation methodology and lessons learned. Journal of Hazardous Materials, 111(1–3), 147–153. https://doi.org/10.1016/j.jhazmat.2004.02.039

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. American Sociological Review, 48(2), 147–160. https://doi.org/10.2307/2095101

Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44(2), 350–383. https://doi.org/10.2307/2666999

Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. Annual Review of Organisational Psychology and Organisational Behavior, 1(1), 23–43. https://doi.org/10.1146/annurev-orgpsych-031413-091305

Ellis, S., &Davidi, I. (2005). After-event reviews: Drawing lessons from successful and failed experience. Journal of Applied Psychology, 90(5), 857–871. https://doi.org/10.1037/0021-9010.90.5.857

Fleming, M., & Lardner, R. (2002).Strategies to promote safe behaviour as part of a health and safety management system.Health and Safety Executive.

Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., &Vracheva, V. (2017). Psychological safety: A meta-analytic review and extension. Personnel Psychology, 70(1), 113–165. https://doi.org/10.1111/peps.12183

Hamadouche, M., &Benbayer, H. (2019). ISO management system standards adoption among Algerian SMEs: Drivers, barriers, and cultural mediators. International Journal of Quality & Reliability Management, 36(7), 1094–1114. https://doi.org/10.1108/IJQRM-06-2018-0145

Heinrich, H. W. (1931). Industrial accident prevention: A scientific approach. McGraw-Hill.

Hines, S., Luna, K., Lofthus, J., Marquardt, M., &Stelmokas, D. (2008). Becoming a high reliability organisation: Operational advice for hospital leaders (Prepared by the Lewin Group under Contract No. 290-04-0011). Agency for Healthcare Research and Quality. https://doi.org/10.23970/ahrqmktuniquelyidentified

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Sage.

Hopkins, A. (2012). Disastrous decisions: The human and organisational causes of the Gulf of Mexico blowout. CCH Australia.

Benouared, A. (2013). Modalités d'insertion des migrants algériens diplômés de l'enseignement supérieur en France. Revue Nouvelle Économie, 8, 27–38.

Kotter, J. P. (1996). Leading change.Harvard Business School Press.

La Porte, T. R., &Consolini, P. M. (1991). Working in practice but not in theory: Theoretical challenges of high-reliability organisations. Journal of Public Administration Research and Theory, 1(1), 19–48. https://doi.org/10.1093/oxfordjournals.jpart.a037070

Liker, J. K. (2004). The Toyota way: 14 management principles from the world's greatest manufacturer. McGraw-Hill.

Madsen, P., Desai, V., Roberts, K., & Wong, D. (2006). Mitigating hazards through continuing design: The birth and evolution of a pediatric intensive care unit. Organisation Science, 17(2), 239–248. https://doi.org/10.1287/orsc.1050.0168

Maitlis, S., & Christianson, M. (2014). Sensemaking in organisations: Taking stock and moving forward. The Academy of Management Annals, 8(1), 57–125. https://doi.org/10.5465/19416520.2014.873177

Ministry of Defence Singapore.(2022). Total defence. https://www.mindef.gov.sg/web/portal/mindef/defence-matters/total-defence

Monetary Authority of Singapore. (2021). Guidelines on risk management practices—Internal controls. MAS.

National Diet of Japan. (2012). The official report of The Fukushima Nuclear Accident Independent Investigation Commission: Executive summary. The National Diet of Japan.

North, D. C. (1990).Institutions, institutional change and economic performance.Cambridge University Press. https://doi.org/10.1017/CBO9780511808678

Reason, J. (1997).Managing the risks of organisational accidents.Ashgate.

Rochlin, G. I. (1989). Informal organisational networking as a crisis-avoidance strategy: US naval flight operations as a case study. Industrial Crisis Quarterly, 3(2), 159–176. https://doi.org/10.1177/108602668900300205

Schein, E. H. (2010). Organisational culture and leadership (4th ed.). Jossey-Bass.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. Academy of Management Review, 20(3), 571–610. https://doi.org/10.2307/258788

Triandis, H. C. (1995). Individualism and collectivism. Westview Press.

Vaughan, D. (1996). The Challenger launch decision: Risky technology, culture, and deviance at NASA. University of Chicago Press. https://doi.org/10.7208/chicago/9780226346960.001.0001

Vogus, T. J., & Sutcliffe, K. M. (2007). The impact of safety organising, trusted leadership, and care pathways on reported medication errors in hospital nursing units. Medical Care, 45(10), 997–1002. https://doi.org/10.1097/MLR.0b013e318053674f

Weick, K. E. (1993). The collapse of sensemaking in organisations: The Mann Gulch disaster. Administrative Science Quarterly, 38(4), 628–652. https://doi.org/10.2307/2393339

Weick, K. E. (1995). Sensemaking in organisations.Sage.

Weick, K. E., & Sutcliffe, K. M. (2015). Managing the unexpected: Sustained performance in a complex world (3rd ed.). Wiley.

Weick, K. E., Sutcliffe, K. M., &Obstfeld, D. (1999).Organising for high reliability: Processes of collective mindfulness. Research in Organisational Behavior, 21, 81–123.

Hessas, D., & Dalila, P. M. (2025). The conditions for successful change management when integrating information and communication technologies into Algerian public organisations: The case of CNEP-Banque of Tizi-Ouzou.

Glauser, M. J. (1984). Upward information flow in organisations: Review and conceptual analysis. Human relations, 37(8), 613-643.

Repports:

DBS Bank. (2023). DBS apologises for series of digital disruptions: Comprehensive roadmap to improve technology resiliency. DBS Newsroom. https://www.dbs.com/newsroom/DBS_apologises_for_series_of_digital_disruptions_lays_out_comprehensive_roadmap_to_improve_technology_resiliency

Monetary Authority of Singapore. (2021). Technology risk management guidelines. MAS. https://www.mas.gov.sg/regulation/guidelines/technology-risk-management-guidelines

Statoil ASA. (2013). The In Amenas attack: Report of the investigation into the terrorist attack on In Amenas. Statoil ASA Board of Directors. https://www.equinor.com/en/news/archive/2013/09/12/12SepInAmenasreport.html