Scientific Research Publishing

Modern Economy, 2026, 17(11), 1489-1517
https://www.scirp.org/journal/me
ISSN Online: 2152-7261
ISSN Print: 2152-7245

Training Digitalization and Managerial Performance in Ivorian Private Higher Education: Perceived Leader Trustworthiness and the Moderating Role of Distrust

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How to cite this paper: Allou, A. A., Kouassi, Y. R., & Tchimou, A. J. C. H. (2026). Training Digitalization and Managerial Performance in Ivorian Private Higher Education: Perceived Leader Trustworthiness and the Moderating Role of Distrust. *Modern Economy, 17,* 1489-1517.
https://doi.org/10.4236/me.2026.1711074

Received: June 28, 2026
Accepted: November 21, 2026
Published: November 24, 2026

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Abstract

This study examines how training digitalization relates to managerial performance in Ivorian private higher education institutions. It also examines the role of perceived leader trustworthiness and distrust. The design is mixed: 20 semi-structured interviews, then a questionnaire survey of 400 staff members in 45 institutions. Measurement quality was assessed by exploratory and confirmatory factor analysis. Hypotheses were tested on composite scores, with bootstrapped interaction terms. Digitalization (β = 0.66) and perceived leader trustworthiness (β = 0.60) are positively associated with perceived managerial performance. Contrary to expectations, obstacles to appropriation (β = 0.58) and distrust (β = 0.47) are also positively associated with it. Distrust weakens the associations of pedagogical transformation, perceived leader competence and perceived leader integrity with performance. No statistically detectable interaction was found for perceived benefits, facilitating factors or obstacles. The measurement models fit poorly, discriminant validity is only partly established and responses show a strong agreement tendency. The findings are therefore exploratory.

Keywords

Training Digitalization, Managerial Performance, Perceived Leader Trustworthiness, Distrust, Private Higher Education, Côte d'Ivoire

1. Introduction

Digitalization is profoundly transforming higher education. The integration of digital technologies in universities and grandes écoles is now seen as a means of optimizing teaching processes and developing both technical and non-technical skills among students (Dahman & Douieb, 2025). New training systems are also changing the learning and management practices of leaders, teachers and administrative staff, which makes digitalization a subject of study for management sciences and not only for education sciences.

In Côte d'Ivoire, the crisis experienced by the public university from the 1990s onwards, with overcrowded enrolments and inadequate infrastructure, led the State to call on the private sector to meet the demand for training. Private grandes écoles have become a recognized complement to public provision, offering long professional training programmes. The digitalization of training there constitutes both a pedagogical and a managerial challenge.

The available studies associate digitalized training with better organizational outcomes. Bennaghmouch et al. (2024) report that a study found it to be widely disseminated, with 99% of the organizations studied offering digitalized continuing professional training, and that Masie (2002, cited in Bennaghmouch et al., 2024) had already observed positive effects of such training on organizational results. Patesson et al. (2022), for their part, link the use of digital tools to the emergence of two managerial qualities: that of the unifier-disseminator manager, who gives meaning to the transformation, and that of the manager-coach, who supports the individual and collective development of their teams.

These effects, however, do not depend on tools alone. For Frimousse and Peretti (2017), the problem in Africa is not solely one of digital infrastructure: it stems above all from a lack of competent human resources, vision and strategy, and the transformation must first be human and cultural. This study starts from the idea that the reception given to a new system depends on the relationship that actors have with those who promote it: trust in leaders can facilitate the adoption of tools and participation in training, whereas distrust can lead actors to avoid them or to endure them.

Two gaps emerge. On the one hand, to our knowledge, few studies in Côte d'Ivoire have examined the link between the digitalization of training and the managerial performance of actors in private grandes écoles. Research has instead focused on the profile of leaders or on the governance of public enterprises in the digital age. On the other hand, trust is most often presented as a favourable factor, while distrust is treated as its mere opposite. Yet Lewicki et al. (1998) argue that they are distinct constructs, and Saunders et al. (2014) question whether they are opposite poles or independent, coexisting dimensions.

The research question is as follows: how is the digitalization of training associated with managerial performance in Ivorian private grandes écoles, and how do perceived leader trustworthiness and distrust intervene in this relationship? The main objective is to analyse these associations. It also assesses the direct role of

perceived leader trustworthiness and the moderating role of distrust.

The study is based on a mixed-methods approach, a qualitative phase followed by a questionnaire survey. The article comprises four parts, namely the literature review and hypotheses, the methodology, the results, and then the discussion and conclusion.

2. Literature Review and Hypothesis Development

This first part situates the study within the literature and derives the research hypotheses from it. It first sets out the theoretical framework, which draws on resource- and competence-based approaches to the firm, in particular on dynamic capabilities. It then clarifies the concepts of the model. Each concept is defined, broken down into dimensions and related to existing work. The hypotheses are formulated as these developments proceed, and are then brought together in a conceptual model presented at the end of the section.

2.1. Theoretical Framework

This research draws on resource- and competence-based approaches to the firm, which Prévot et al. (2010) present as related but distinct: resource theory, core competence theory, dynamic capabilities theory and the evolutionary approach.

Resource theory goes back to Wernerfelt (1984) and Penrose (1959). It explains performance differences between firms by the characteristics of their resources. Barney (1991) specifies that a resource provides a sustainable competitive advantage when it is valuable, rare, difficult to imitate and non-substitutable, and Peteraf (1993) distinguishes ex-ante and ex-post limits to competition. Core competence theory shifts the analysis towards the collective know-how that distinguishes a firm from its competitors (Prahalad & Hamel, 1990). The evolutionary approach of Nelson and Winter (1982) places routines at the centre of the explanation: they carry the organization's knowledge and practices and determine its adaptation to changes in the environment.

Dynamic capabilities theory extends these streams. Whereas resource and competence theories analyse the exploitation of existing competences, dynamic capabilities concern their development (Prévot et al., 2010). Teece et al. (1997) define them as a firm's ability to integrate, build and reconfigure internal and external competences to address changing environments. Eisenhardt and Martin (2000) see them as specific and identifiable processes, and Ambrosini and Bowman (2009) emphasize their nature as processes embedded in the organization, built by it and deliberate. Teece (2007) explores their microfoundations and their link with sustainable performance.

In this study, dynamic capabilities theory serves as the main framework: it is consistent with the performance objective, since digitalization makes it possible to target specific competences to improve managerial performance; it corresponds to the possibility of continuously assessing competences and adjusting training; and it accounts for the personalization of learning enabled by digital tools.

These capabilities are, however, built through the engagement of actors: digitalized training only develops new competences if people use it, share their knowledge and agree to experiment. The relational climate shapes this engagement. This study therefore retains two relational variables: perceived leader trustworthiness and distrust.

2.2. Digitalization of Organizational Training

In higher education, the digitalization of training covers a variety of systems such as hybrid systems combining face-to-face and online activities (Garrison & Kanuka, 2004), flipped classrooms, serious games, collaborative learning and massive open online courses. It refers to the introduction of digital tools, that is, material devices or artefacts serving teaching and learning situations (Reuter et al., 2013), in the design, delivery and evaluation of training, and to the way actors appropriate them.

This study retains four dimensions: the transformation of the pedagogical system, which refers to the evolution of tools and actors' personal experience with digital technology; perceived benefits; the factors that facilitate appropriation; and the obstacles that hinder it.

Benefits: Dahman and Douieb (2025) note that a highly digitized educational environment improves governance, extends the educational space beyond the institution, individualizes learning, develops students' autonomy and self-management, and makes online interactions between students and teachers smoother. They specify that transition strategies must take into account the political, economic and cultural contexts specific to each country. The technology acceptance model links the use of a tool to perceived usefulness (Davis, 1989; Venkatesh & Davis, 2000), which gives perceived benefits a central role in adoption.

Facilitating factors: Patesson et al. (2022) describe the unifier-disseminator manager, who rallies teams around the project, relies on digital ambassadors and ensures continuous follow-up, as well as the manager-coach, who supports individual development and collective dynamics. Rogers (2003) points out that the diffusion of an innovation depends on how its users perceive its characteristics.

Obstacles: Frimousse and Peretti (2017) point, beyond infrastructure, to the lack of competent human resources, vision and strategy in Africa. Patesson et al. (2022) report possible effects on employee well-being, such as technostress, the risk of being dispossessed of expertise replaced by a tool, and more transactional working relationships.

The work of Masie (2002, cited in Bennaghmouch et al., 2024), Dahman and Douieb (2025) and Patesson et al. (2022) associates the digitalization of training with better organizational outcomes, competence development and specific managerial qualities. These elements lead to the formulation of the first hypothesis, broken down according to the four dimensions:

H1: The digitalization of training influences managerial performance.

- *H1a*: *The transformation of the pedagogical system positively influences man-*

agerial performance.

- *H1b*: *The perceived benefits of digitalization positively influence managerial performance*.
- *H1c*: *Factors facilitating appropriation positively influence managerial performance*.
- *H1d*: *Obstacles to appropriation negatively influence managerial performance*.

2.3. Managerial Performance

Performance is a multifaceted concept. Management sciences have defined it in various ways depending on contexts and objectives, and financial, managerial, operational, social and commercial forms are commonly distinguished. For Kaplan and Norton (1996), strategic management relies on a variety of financial and non-financial indicators.

Managerial performance refers to the way in which actors steer activities and teams to achieve the organization's objectives. In private grandes écoles, it relates to the effectiveness and efficiency of the actions of the institution's actors. In this study, it is measured by three dimensions, namely the optimization of management and evaluation processes, the acquisition and development of managerial capabilities, and managerial effectiveness and efficiency.

The management of private higher education institutions is subject to tensions specific to them. Chandini (2025), who studies the case of Cameroon, describes the dilemma between the public-service mission of education and the logic of profitability, which complicates resource management and the strategies implemented. In such a context, the ability of actors to manage their institution is a direct issue. Patesson et al. (2022) moreover link the use of digital tools to the development of specific managerial qualities, which places managerial performance at the heart of the question addressed in this study.

2.4. Organizational Trust and Perceived Leader Trustworthiness

Mayer et al. (1995) define trust as the willingness of a party to be vulnerable to the actions of another party, based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. It rests on the ability, benevolence and integrity of the person in whom it is placed. According to Guerrero and Herrbach (2009), competence and integrity carry the most weight at the beginning of the exchange relationship, whereas the attention paid by the organization becomes more important later on. The model was revisited by Schoorman et al. (2007), and Whitener et al. (1998) describe how managers initiate trust through their behaviours.

Mayer et al. (1995) distinguish trust itself, the willingness to be vulnerable, from the perceived trustworthiness of the trustee. Trustworthiness rests on ability, benevolence and integrity. The questionnaire used here measures two of these attributes: the perceived competence of leaders, assessed through the relevance and implementation of their choices, and their perceived integrity, assessed through

transparency and fairness. It does not measure willingness to accept vulnerability. The construct studied is therefore perceived leader trustworthiness, not trust in the strict sense. The meta-analysis by Dirks and Ferrin (2002) links trust in leaders to work attitudes and behaviours, including individual performance. In digitalized training, leaders decide on tools, priorities and the pace of change. Actors who see these decisions as relevant and fair have more reasons to engage in the systems, share their knowledge and experiment. We therefore formulate the second hypothesis:

H2: Perceived leader trustworthiness positively influences managerial performance.

- *H2a*: *The perception of leaders' competence positively influences managerial performance*.
- *H2b*: *The perception of leaders' integrity positively influences managerial performance*.

2.5. Organizational Distrust and Moderating Effect

Distrust has long been studied as the counterpart of trust (Deutsch, 1958). In this study, it refers to an attitude of doubt towards the intentions and decisions of leaders or colleagues. It may manifest itself through a lack of transparency in communication, which fosters rumours and misunderstandings, through scepticism towards organizational change, and through fear of losing one's security or job.

Lewicki et al. (1998) argue that trust and distrust are distinct constructs, such that low trust is not equivalent to high distrust. Saunders et al. (2014) in turn examine whether these two notions constitute opposite poles or independent, coexisting dimensions. This distinction justifies treating distrust as a fully-fledged variable in the model, and not as the inverse of trust.

When faced with organizational change, actors' attitudes are not limited to acceptance or rejection. Piderit (2000) shows that resistance is itself a multi-component attitude, with cognitive, emotional and behavioural components. The digitalization of training changes work habits and may be perceived as a threat by some employees. An actor who distrusts their leaders interprets these systems through the lens of their doubt, which may reduce their engagement and limit the expected gains from digitalization. We therefore formulate the following hypothesis:

H3: Distrust moderates the relationship between the digitalization of training and managerial performance.

- *H3a*: *A high level of distrust weakens the positive relationship between the transformation of the pedagogical system and managerial performance*.
- *H3b*: *A high level of distrust weakens the positive relationship between the perceived benefits of digitalization and managerial performance*.
- *H3c*: *A high level of distrust weakens the positive relationship between the facilitating factors of digitalization and managerial performance*.
- *H3d*: *A high level of distrust strengthens the negative relationship between obstacles to appropriation and managerial performance*.

The perceived competence and integrity of leaders only affect performance if actors believe in them. When distrust is high, these perceptions may carry less weight in the way actors engage in their work. We therefore formulate the last hypothesis:

H4: Distrust moderates the relationship between perceived leader trustworthiness and managerial performance.

- *H4a*: *A high level of distrust attenuates the positive relationship between the perception of leaders' competence and managerial performance.*
- *H4b*: *A high level of distrust attenuates the positive relationship between the perception of leaders' integrity and managerial performance.*

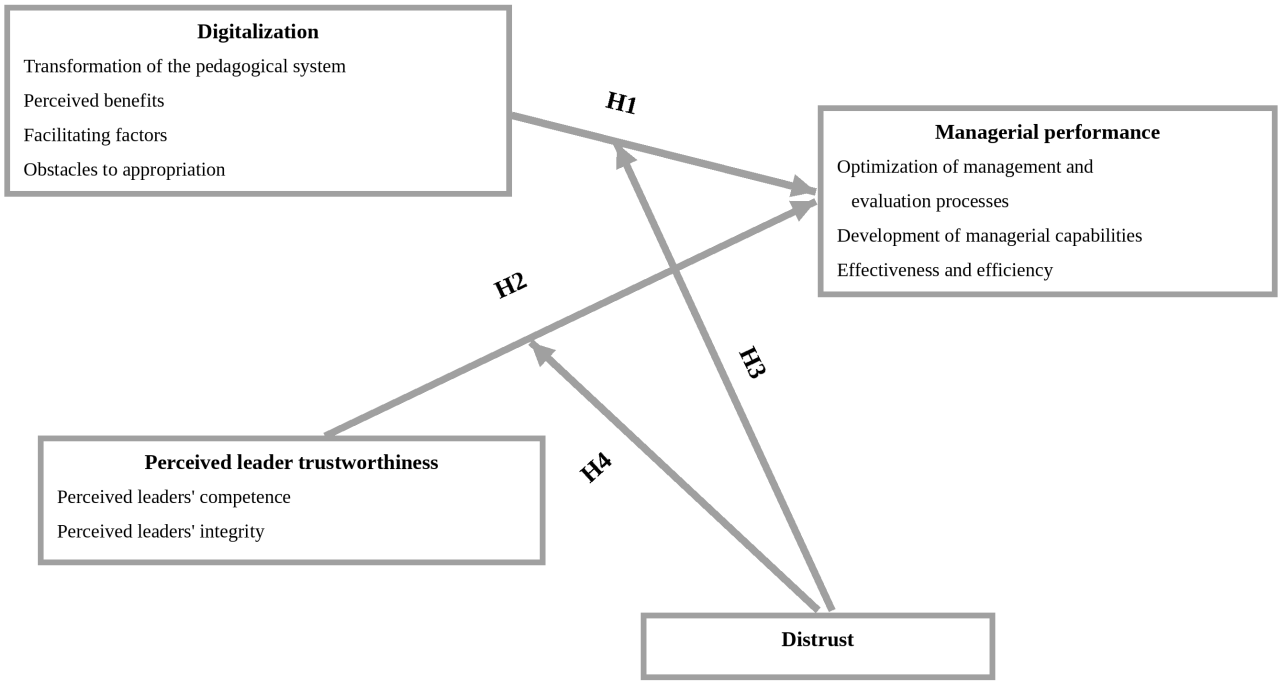
2.6. Conceptual Model and Summary of Hypotheses

The research model relates four variables. The digitalization of training, measured by four dimensions, and perceived leader trustworthiness, measured by two dimensions, are expected to influence managerial performance, which comprises three dimensions. Distrust, measured by a single dimension, is expected to moderate these two relationships. Figure 1 presents the conceptual research model and Table 1 summarizes the hypotheses.

Table 1. Summary of research hypotheses.

Hypothesis	Relationship tested
H1a	Transformation of the pedagogical system → managerial performance
H1b	Perceived benefits → managerial performance
H1c	Facilitating factors → managerial performance
H1d	Obstacles to appropriation → managerial performance
H2a	Perception of leaders' competence → managerial performance
H2b	Perception of leaders' integrity → managerial performance
H3a	Distrust × transformation of the pedagogical system → managerial performance
H3b	Distrust × perceived benefits → managerial performance
H3c	Distrust × facilitating factors → managerial performance
H3d	Distrust × obstacles to appropriation → managerial performance
H4a	Distrust × perception of leaders' competence → managerial performance
H4b	Distrust × perception of leaders' integrity → managerial performance

Source: Author.



Source: Author.

Figure 1. Conceptual research model.

3. Research Methodology

This part presents the research design, the constitution of the sample, the construction of the measurement instrument, the data analysis strategy and the ethical provisions.

3.1. Research Design

The study follows a hypothetico-deductive approach, within a post-positivist stance (Guba & Lincoln, 1994). It models and measures the relationships between digitalization, performance, trust and distrust, while recognizing that perceptions of performance and trust are socially constructed within institutions (Berger & Luckmann, 1966).

The design is mixed and sequential. An exploratory qualitative phase confronted the conceptual model, derived from the literature, with the realities experienced by actors in Ivorian private higher education institutions and provided the elements needed to design the questionnaire. A quantitative phase then tested the hypotheses with a larger sample of actors.

3.1.1. Qualitative Phase

This phase aimed to confront the conceptual model with the field and to identify the most significant facets of digitalization, performance and trust in order to build a suitable measurement instrument. The semi-structured interview was chosen because several variables in the model relate to perceptions, attitudes and organizational mechanisms that are difficult to observe directly, and because it gives

participants the freedom to develop unanticipated aspects (Blanchet & Gotman, 2007).

The interview guide, built from the literature review, covers three themes: representations of digitalization, performance indicators and manifestations of organizational trust. It was reviewed by two PhD holders in management sciences and an expert in educational technologies, and then pre-tested with five professionals in the sector.

Twenty face-to-face interviews were conducted with administrative managers, pedagogical coordinators, trainers and support staff, a number within the range of 15 to 30 generally used for qualitative studies (Miles et al., 2014) and determined according to the principle of theoretical saturation (Glaser & Strauss, 1967). They followed the guidelines of Kvale (2007) and Paillé and Mucchielli (2016), after a reminder of the objectives, the confidentiality of the exchanges and the strictly scientific use of the data.

The material was processed by thematic content analysis (Braun & Clarke, 2006; Paillé & Mucchielli, 2016), with manual and open coding combining categories defined a priori from the theoretical framework and categories constructed a posteriori from the corpus, the codes and verbatim quotes being organized in an Excel table.

3.1.2. Quantitative Phase

This phase aimed to construct and validate the measurement scales, and then to test the structural model and the hypotheses. It follows Churchill Jr.'s (1979) paradigm, adapted in three stages (Hinkin, 1998): definition of the conceptual domain of each construct, exploratory purification of the scales, and confirmatory validation. Structural equation modelling was chosen because the model combines several latent variables, direct effects and moderating effects: it incorporates measurement errors and jointly evaluates the measurement model and the structural model, which successive simple regressions do not allow (Hair et al., 2019; Kline, 2015). The study, which is both descriptive and explanatory, collects standardized information from actors to quantify perceived levels of digitalization, performance, trust and distrust.

3.2. Population and Sample

The target population comprises the actors involved in the training systems of private higher education institutions in Côte d'Ivoire: managerial, teaching and administrative staff. As no centralized register lists these institutions and their staff, sampling is non-probabilistic, by convenience and purposive selection, in order to bring together a variety of functions, levels of seniority and types of institutions.

The survey was conducted in Abidjan and in other university centres (Bouaké, Daloa, Korhogo, San-Pédro and Yamoussoukro), among private universities, private grandes écoles and private institutes holding a ministerial operating authorization. The database of these institutions was stratified by type, size (number of

students) and location (Kish, 1965). Forty-five of the 58 institutions contacted by official letter agreed to participate (78%). Lists of eligible staff (teachers, pedagogical managers, training coordinators and administrative staff involved in training processes) were drawn up with human resources managers or general secretariats, and quotas by professional category were then applied to balance the representation of functions (Sudman, 1976).

The questionnaire was administered to 404 staff members. Four questionnaires were excluded (three with no data at all, one for systematic non-response and obvious inconsistencies), yielding 400 usable questionnaires and a response rate of 62.5% among the people contacted. This sample size is suitable for estimating a model with several latent variables (Kline, 2015). Data collection took place from January to April 2023, in a self-administered electronic version (KoboToolbox platform, sent by professional e-mail) or in an assisted paper version, during on-site sessions led by trained enumerators, following a standardized protocol (Dillman et al., 2014). Three reminders were sent, 7, 14 and 21 days after the initial mailing.

3.3. Instrument Development and Measurement of Variables

The self-administered questionnaire translates the hypotheses into measurable items. It opens with an introduction presenting the purpose of the research and guaranteeing anonymity, then applies the funnel principle, from general questions to questions specific to each construct, in five sections each introduced by a brief explanation (Dillman et al., 2014). Once the conceptual domain of each construct had been defined, the items were drawn from scales validated in the literature, adapted linguistically and contextually, and from the results of the qualitative phase. The initial version comprises 48 items spread across ten dimensions (**Table 2**), all rated on a five-point Likert scale, from 1 ("Strongly disagree") to 5 ("Strongly agree") (Likert, 1932).

Digitalization is treated as a multidimensional variable. It refers to the integration of digital technologies into the pedagogical and managerial practices of institutions, transforming the design, delivery and evaluation of training as well as pedagogical relationships (Selwyn, 2016). Managerial performance is a second-order construct with three dimensions, since the performance of an educational institution is assessed through several facets (Cheng, 1996), which is in line with the balanced approach of Kaplan and Norton (1996). Perceived leader trustworthiness comprises two dimensions, the perceived competence and integrity of leaders, which correspond to two attributes of trustworthiness in the model of Mayer et al. (1995). Distrust is a distinct construct, since the two notions are not the extremes of the same continuum (Lewicki et al., 1998), and it is measured by a single dimension.

The instrument was tested in two stages. Cognitive interviews were first conducted with experts in management sciences to assess the content validity and theoretical relevance of the items. The questionnaire was then administered to a

pilot sample of 30 professionals from the Ivorian education sector, selected by convenience, in order to test the clarity of the items and the actual conditions of administration. This feedback led to the rewording of some items, the simplification or clarification of technical terms and the adjustment of the order of some sections.

Table 2. Dimensions measured and origin of the scales.

Variable	Dimension (code)	Initial items	Content measured	Sources
Digitalization	Transformation of the pedagogical system (TDP)	5	Evolution of teaching modalities with digital technology, shift from face-to-face to hybrid or digital formats, change in teaching and learning practices	Kirkwood & Price (2014)
	Perceived benefits of the transformation (BEN)	5	Perceived advantages: flexibility, accessibility, efficiency, quality	Davis (1989), Ifinedo (2017)
	Factors facilitating appropriation (FAC)	5	Training, technical support, usability of tools, social work environment	Venkatesh et al. (2003)
	Obstacles to appropriation (OBS)	6	Technical barriers (connection, equipment), pedagogical barriers (cognitive load, adaptation) and organizational barriers (time, additional work)	Ertmer (1999), Buabeng-Andoh (2012)
Managerial performance	Optimization of management and evaluation processes (OPGE)	5	Goal setting, performance monitoring, work evaluation, reporting	Neely et al. (2005)
	Acquisition and development of managerial capabilities (ADCM)	5	Technical, interpersonal and conceptual skills	Boyatzis (2008)
	Managerial effectiveness and efficiency (EEM)	4	Achievement of objectives, quality of decisions, optimization of resources, responsiveness	Cheng (1996)
Perceived leader trustworthiness	Perception of leaders' competence (PCD)	4	Technical, strategic and decision-making competences of leaders in steering the digital transformation	Mayer & Davis (1999), Leithwood et al. (2008)
	Perception of leaders' integrity (PID)	4	Honesty, transparency and fairness of leaders in implementing digital transformations	Mayer & Davis (1999)
Distrust	Distrust (MEF)	5	Fears, suspicions and negative expectations regarding leaders' intentions and actions in the context of digitalization	Saunders et al. (2014)

Source: Author.

3.4. Data Analysis Strategy

The original analyses were run in IBM SPSS (version 20) and Amos. During the revision, the reported fit indices could not be reconciled with the stated sample sizes. All analyses were therefore re-estimated from the raw survey data in Python 3, with semopy 2.3 for confirmatory factor analysis and statsmodels 0.15 for regressions and bootstrapping. All estimates reported in this article come from this re-analysis.

3.4.1. Analysis Samples

The sample of 400 respondents was split at random (seed 2023) into two subsamples: 160 respondents (40%) for exploratory factor analysis and 240 (60%) for confirmatory factor analysis, following a cross-validation logic (Cudeck & Browne, 1983). Hypothesis tests use the full sample (N = 400).

3.4.2. Exploratory Factor Analysis

It purifies the scales and reveals the factor structure of the constructs. The adequacy of the data was checked using Bartlett's test of sphericity, at the 0.05 threshold, and the KMO index, satisfactory from 0.70. Extraction was performed by principal component analysis, followed by varimax rotation. The number of factors retained is based on three criteria: the Kaiser-Guttman rule, the scree plot and the cumulative variance explained (Fabrigar et al., 1999). Items contributing little to the factors or correlating weakly with their construct are eliminated. The item set retained in the initial purification was kept, with TDP4, BEN2, FAC3, OBS1, PID1 and MEF5 removed. Reliability is estimated by Cronbach's alpha for each of the ten dimensions. A value of at least 0.70 is considered adequate (Nunnally & Bernstein, 1994), a threshold of 0.60 being tolerated in the exploratory phase (George & Mallery, 2003; Hair et al., 2019).

3.4.3. Confirmatory Factor Analysis

CFA tests, on the second sub-sample, the structure derived from the exploratory analysis. The fit of the measurement model is assessed by the χ^2/df ratio, considered satisfactory below 3 (Kline, 2015), by the RMSEA, excellent below 0.05 and acceptable between 0.05 and 0.08 (Browne & Cudeck, 1993), by the SRMR, expected below 0.08, and by the comparative indices CFI and TLI, expected to be at least 0.90 (Hu & Bentler, 1999). The same thresholds are applied to every model in this article. The GFI and AGFI indices are not retained, as they are sensitive to sample size, data non-normality and model complexity (Sharma et al., 2005). Construct reliability is assessed by Jöreskog's rho, whose usual threshold is 0.70 (Hair et al., 2019). Convergent validity requires significant standardized factor loadings ($|t| > 1.96$) and an average variance extracted (AVE) greater than 0.50. Discriminant validity is examined according to the Fornell and Larcker (1981) criterion: the square root of a construct's AVE must exceed its correlations with the other constructs. It is complemented by the heterotrait-monotrait ratio (HTMT), expected below 0.85.

3.4.4. Model Specification and Hypothesis Testing

Hypotheses were tested on the full sample (N = 400). The confirmatory analyses showed poor fit and weak discriminant validity (Section 3.2). A full latent structural model was therefore not retained. Each dimension was scored as the mean of its retained items and standardized. The aggregate digitalization score is the mean of the three enabling dimensions (TDP, BEN and FAC). Obstacles (OBS) were analysed as a separate dimension, because a barrier scale cannot be summed with enabling scales. Perceived leader trustworthiness is the mean of PCD and PID. Managerial performance is the mean of OPGE, ADCM and EEM. Direct effects were estimated by ordinary least squares with HC3 robust standard errors, and coefficients are standardized. Each predictor was first entered alone, in a separate model. Two joint models were then estimated: one with aggregate digitalization and perceived leader trustworthiness, and one with the six dimensions together. Measurement quality was assessed before hypothesis testing, following Anderson and Gerbing (1988) and Hair et al. (2019).

3.4.5. Moderation Analysis

Distrust is tested as a moderating variable (W) of the relationship between each dimension of digitalization or perceived leader trustworthiness (X) and managerial performance (Y). Interactions use the standardized composite scores, not latent variables. For each dimension, a separate model includes X, W and the product $X \times W$. Two further models test the aggregate scores. The significance of each interaction is assessed by a percentile bootstrap with 5000 resamples (Hayes, 2018; Aguinis et al., 2017). An interaction is considered supported when its 95% confidence interval excludes zero and the result holds in the clustering sensitivity analysis described below. Because dimensions are tested in separate models, the study does not test whether moderation differs across dimensions.

3.4.6. Control of Data Quality and Biases

Each questionnaire was examined to identify outlying responses, internal inconsistencies and systematic response patterns (Meade & Craig, 2012). Common method bias was limited through anonymity and the separation, within the questionnaire, of the measures of independent and dependent variables (Podsakoff et al., 2003). To address social desirability, particular care was taken with anonymity and item wording (Nederhof, 1985), and item polarity was varied to limit acquiescence (Baumgartner & Steenkamp, 2001). Time scales were grouped into broad intervals to reduce recall bias (Tourangeau et al., 2000). The effect of the administration mode was controlled by comparing mean scores across modes (Vannieuwenhuyze et al., 2010), and non-response bias by comparing early and late respondents (Armstrong & Overton, 1977).

Respondents are nested in 45 institutions. The questionnaire did not record an institution identifier, so standard errors cannot be clustered by institution. Two sensitivity analyses were therefore run. First, t statistics were deflated by the square root of the design effect (Kish, 1965), assuming an intraclass correlation of 0.10 and a mean of 8.9 respondents per institution (design effect 1.79). Second, stand-

ard errors were clustered on the twelve cells defined by institution type and size, which group whole institutions. With only twelve clusters, these standard errors are imprecise and conservative. Response styles were also examined. The share of variance captured by a single general factor was computed (Podsakoff et al., 2003), and respondents giving the same answer to every item were counted. The main models were re-estimated without these respondents (Meade & Craig, 2012; Baumgartner & Steenkamp, 2001).

3.5. Ethical Considerations

Institutions were approached through official letters presenting the research, its scientific objectives and its protocol, with a guarantee of confidentiality. They were included only after authorization from their management. Questionnaire participants received a cover letter setting out the objectives of the study, guaranteeing their anonymity and emphasizing the scientific importance of their participation. In the interviews, the exchanges were held in confidence, and the data were used for scientific purposes only. The data collected were anonymized, encrypted and stored on secure servers, and a data management plan documented their processing, analysis and storage.

4. Results

This part presents the results of the survey conducted among 400 actors of private grandes écoles. It describes the respondents' profile, evaluates the measurement model and the fit of the structural model, and then sets out the direct effects, the moderating effects and the summary of hypothesis testing.

4.1. Respondents' Profile

The sample comprises 243 men (60.8%) and 157 women (39.3%). Respondents under 30 years of age account for 31.0% of the sample and those aged 40 to 49 for 24.8%. The level of education is high: 30.3% hold a doctorate and 27.0% a master's degree. Pedagogical managers and training coordinators form the largest group (42.0%), ahead of administrative and support staff (35.0%) and teachers (15.5%). In addition, 42.0% of respondents have been working in their current institution for less than two years. Nearly six out of ten respondents (58.3%) use digital training tools at least several times a week, while 4.5% report never using them. Private grandes écoles (36.3%), private institutes (32.3%) and private universities (31.5%) are represented in a balanced way (Table 3).

Table 3. Respondents' profile (N = 400).

Characteristic	Category	Frequency (n)	Percentage (%)
Sex	Male	243	60.8
	Female	157	39.3

Continued

Age	Under 30 years	124	31.0
	30 to 39 years	74	18.5
	40 to 49 years	99	24.8
	50 to 59 years	59	14.8
	60 years and over	44	11.0
Level of education	Baccalaureate	126	31.5
	Bachelor's degree	45	11.3
	Master's degree	108	27.0
	Doctorate	121	30.3
Main function	Pedagogical manager/training coordinator	168	42.0
	Administrative/support staff	140	35.0
	Teacher/lecturer	62	15.5
	Other statuses	30	7.5
Seniority in the institution	Less than 2 years	168	42.0
	2 to 5 years	103	25.8
	6 to 10 years	79	19.8
	10 years and over	50	12.5
Use of digital training tools	Daily	76	19.0
	Several times a week	157	39.3
	A few times a month	66	16.5
	Rarely	83	20.8
	Never	18	4.5
Type of institution	Private grande école	145	36.3
	Private higher education institute	129	32.3
	Private university	126	31.5
Size of the institution	Fewer than 500 students	128	32.0
	500 to 1999 students	129	32.3
	2000 to 4999 students	57	14.2
	5000 students and over	86	21.5

Source: Author, re-analysis of survey data.

4.2. Evaluation of the Measurement Model

This section checks the psychometric quality of the scales before testing the structural relationships. It successively presents the exploratory factor analysis, the confirmatory factor analysis, and then the examination of convergent and discriminant validity.

4.2.1. Exploratory Factor Analysis

Principal component analysis was run for each of the ten dimensions on the exploratory sub-sample (n = 160). Each dimension yields a single component with an eigenvalue above 1, explaining 47% to 66% of the variance. Bartlett's test is significant for all dimensions ($p < 0.001$). KMO indices range from 0.580 to 0.827. Six dimensions fall below the 0.70 benchmark: TDP, BEN, FAC, OBS, PCD and PID. Cronbach's alpha ranges from 0.560 to 0.844 (Table 4). Two dimensions fall below 0.70: FAC (0.653) and PCD (0.560). PCD is also below the 0.60 threshold tolerated in exploratory work.

Table 4. Results of the exploratory factor analysis by dimension.

Dimension	Items retained	KMO	Bartlett's χ^2 (df)	Cronbach's α
TDP	4	0.675	169.191 (6)	0.715
BEN	4	0.658	165.771 (6)	0.729
FAC	4	0.580	101.728 (6)	0.653
OBS	5	0.645	166.038 (10)	0.715
OPGE	5	0.827	273.156 (10)	0.784
ADCM	5	0.772	363.690 (10)	0.844
EEM	4	0.721	191.723 (6)	0.784
PCD	4	0.671	81.743 (6)	0.560
PID	3	0.607	122.323 (3)	0.730
MEF	4	0.711	212.663 (6)	0.797

Source: Author, re-analysis of survey data.

4.2.2. Confirmatory Factor Analysis

The confirmatory analysis was run separately for each variable on the confirmatory sub-sample (n = 240). Table 5 shows that none of the four measurement models meets the retained criteria. The χ^2/df ratio ranges from 4.86 to 9.40, above the threshold of 3. RMSEA ranges from 0.127 to 0.187, above 0.08. SRMR is above 0.08 for digitalization and performance. CFI exceeds 0.90 only for perceived leader trustworthiness (0.910) and distrust (0.938), and TLI stays below 0.90 for all four variables. Composite reliability is acceptable, with Jöreskog's ρ from 0.771 to 0.915. The average variance extracted is below 0.50 for all variables (0.353 to

0.469), so convergent validity is not established. Some standardized loadings are low, down to 0.05 for one digitalization item.

Table 5. Fit indices, reliability and convergent validity of the measurement models.

Variable	χ^2/df	SRMR	RMSEA	TLI	CFI	Jöreskog's ρ	AVE
Digitalization	7.017	0.107	0.159	0.507	0.590	0.896	0.353
Managerial performance	7.627	0.091	0.167	0.638	0.705	0.915	0.451
Perceived leader trustworthiness	4.864	0.058	0.127	0.854	0.910	0.842	0.441
Distrust	9.395	0.055	0.187	0.813	0.938	0.771	0.469
Retained threshold	<3	<0.08	<0.08	>0.90	>0.90	>0.70	>0.50

Source: Author, re-analysis of survey data.

4.2.3. Discriminant Validity

Table 6. Discriminant validity (Fornell-Larcker criterion and HTMT, n = 240).

Dimension	√AVE	Highest latent correlation (with)	Highest HTMT (with)	Fornell-Larcker/ HTMT < 0.85
TDP	0.544	0.917 (BEN)	0.851 (BEN)	Not met/Not met
BEN	0.632	0.917 (TDP)	0.872 (FAC)	Not met/Not met
FAC	0.587	0.794 (BEN)	0.872 (BEN)	Not met/Not met
OBS	0.615	0.712 (OPGE)	0.774 (OPGE)	Not met/Met
OPGE	0.640	0.854 (BEN)	0.855 (BEN)	Not met/Not met
ADCM	0.720	0.798 (EEM)	0.841 (EEM)	Not met/Met
EEM	0.637	0.798 (ADCM)	0.841 (ADCM)	Not met/Met
PCD	0.647	0.920 (PID)	0.958 (PID)	Not met/Not met
PID	0.686	0.920 (PCD)	0.958 (PCD)	Not met/Not met
MEF	0.683	0.729 (PID)	0.753 (PID)	Not met/Met

Source: Author, re-analysis of survey data.

Discriminant validity was assessed with the Fornell & Larcker (1981) criterion, using a ten-factor measurement model on the confirmatory sub-sample. This model also fits poorly (χ^2/df = 8.22; RMSEA = 0.174; CFI = 0.383; SRMR = 0.115). The square root of the AVE of each dimension should exceed its correlations with the other dimensions. Table 6 shows that this condition fails for all ten dimensions, mainly because AVE values are low. The highest latent correlations are 0.92,

between PCD and PID and between TDP and BEN. For distrust and perceived leader integrity, the correlation (0.73) exceeds the square root of the AVE of both distrust (0.68) and integrity (0.69). The HTMT ratio, which is less sensitive to low loadings (Henseler et al., 2015), gives a more nuanced picture. It is below 0.85 for distrust and integrity (0.75), for obstacles, and for the pair formed by ADCM and EEM. It exceeds 0.85 for TDP, BEN, FAC and OPGE, and reaches 0.96 for PCD and PID. Distrust is therefore distinct from perceived integrity under HTMT but not under Fornell-Larcker. Perceived competence and perceived integrity are not distinct under either criterion. Dimension-level results must be read with caution.

4.3. Composite Scores and Response Styles

Hypothesis tests use composite scores on the full sample (N = 400). All composite scores are positively correlated. Aggregate digitalization correlates 0.57 with perceived leader trustworthiness. Distrust correlates positively with perceived leader trustworthiness (0.51) and with managerial performance (0.47), contrary to the theoretical expectation. A single general factor accounts for 29.3% of the variance of the 48 items. Thirty-four respondents (8.5%) gave the same answer to every item, and item means are close to 4 on the five-point scale. These patterns indicate a strong agreement tendency, which can inflate all positive associations (Podsakoff et al., 2003; Baumgartner & Steenkamp, 2001).

4.4. Tests of Direct Effects

Table 7 presents the direct effects, each estimated in a separate model. Aggregate digitalization is positively associated with managerial performance ($\beta = 0.66$; $t = 14.54$; $p < 0.001$), which supports H1. Perceived leader trustworthiness is also positively associated with it ($\beta = 0.60$; $t = 11.02$; $p < 0.001$), in line with H2. In a joint model, both remain significant (digitalization $\beta = 0.48$; trustworthiness $\beta = 0.32$; $R^2 = 0.51$).

At the dimension level, pedagogical transformation ($\beta = 0.57$), perceived benefits ($\beta = 0.59$) and facilitating factors ($\beta = 0.48$) are positively associated with performance, which supports H1a to H1c. Obstacles to appropriation are also positively associated with performance ($\beta = 0.58$). This is the opposite of the expected sign, so H1d is not supported. Perceived competence ($\beta = 0.50$) and perceived integrity ($\beta = 0.59$) are positively associated with performance, which supports H2a and H2b. When the six dimensions are entered together ($R^2 = 0.57$), facilitating factors ($\beta = 0.04$) and perceived competence ($\beta = 0.05$) are no longer significant. This reflects their strong overlap with the other dimensions.

All direct effects remain significant in the two clustering sensitivity analyses ($p \leq 0.003$ with cell-clustered errors). Two complementary associations, not formulated as hypotheses, are also observed. Digitalization is positively associated with perceived leader trustworthiness ($\beta = 0.57$; $t = 12.79$). Distrust is positively associated with managerial performance ($\beta = 0.47$; $t = 8.34$) and with perceived leader trustworthiness ($\beta = 0.51$; $t = 10.21$).

Table 7. Direct effects on managerial performance.

Hypothesis	Relationship	β	t	*p*
H1	Digitalization → Managerial performance	0.66	14.54	<0.001
H1a	Transformation of the pedagogical system → Managerial performance	0.57	10.88	<0.001
H1b	Perceived benefits → Managerial performance	0.59	13.38	<0.001
H1c	Facilitating factors → Managerial performance	0.48	9.67	<0.001
H1d	Obstacles to appropriation → Managerial performance	0.58	11.69	<0.001
H2	Perceived leader trustworthiness → Managerial performance	0.60	11.02	<0.001
H2a	Perception of leaders' competence → Managerial performance	0.50	8.69	<0.001
H2b	Perception of leaders' integrity → Managerial performance	0.59	11.74	<0.001

Source: Author, re-analysis of survey data.

4.5. Moderation Analysis

Table 8 presents the interactions between distrust and each dimension. All interaction coefficients are negative: when distrust is high, the positive associations with performance tend to be weaker. The main effect of each dimension remains significant in all models.

Table 8. Moderating effects of distrust on managerial performance.

Hypothesis	Moderated relationship	β (interaction)	95% CI (bootstrap)	Model R^2
H3a	Distrust × transformation of the pedagogical system	−0.10	[−0.162, −0.040]	0.41
H3b	Distrust × perceived benefits	−0.06	[−0.136, −0.002]	0.43
H3c	Distrust × facilitating factors	−0.01	[−0.070, 0.051]	0.30
H3d	Distrust × obstacles to appropriation	−0.05	[−0.114, 0.015]	0.37
H4a	Distrust × perception of leaders' competence	−0.16	[−0.263, −0.054]	0.36
H4b	Distrust × perception of leaders' integrity	−0.12	[−0.162, −0.074]	0.40

Source: Author, re-analysis of survey data.

For the aggregate digitalization score, the interaction is significant (β = −0.13; 95% CI [−0.223, −0.073]). At the dimension level, it is significant for pedagogical transformation (β = −0.10; 95% CI [−0.162, −0.040]), which supports H3a. For perceived benefits, the bootstrap interval barely excludes zero (β = −0.06; 95% CI [−0.136, −0.002]), but the result does not hold with robust standard errors (p = 0.086) or with the design-effect correction. H3b is therefore not supported. There is no statistically detectable interaction for facilitating factors (β = −0.01; 95% CI [−0.070, 0.051]) or for obstacles (β = −0.05; 95% CI [−0.114, 0.015]). H3c and H3d are not supported, and H3 is partially supported.

For perceived leader trustworthiness, the aggregate interaction is significant (β = −0.18; 95% CI [−0.249, −0.106]). It is also significant for perceived competence (β = −0.16; 95% CI [−0.263, −0.054]) and for perceived integrity (β = −0.12; 95% CI [−0.162, −0.074]). H4, H4a and H4b are supported. These interactions remain significant after the design-effect correction and after excluding the 34 respondents with identical answers. With standard errors clustered on the twelve type-by-size cells, no interaction remains significant (p from 0.09 to 0.92). Uncertainty may therefore be understated if responses are strongly clustered within institutions.

4.6. Summary of Hypothesis Testing

Of the eight direct-effect hypotheses, seven are supported (H1, H1a to H1c, H2, H2a and H2b). H1d is not supported because the association has the opposite sign. Of the six dimension-level moderation hypotheses, three are supported (H3a, H4a and H4b) and three are not (H3b, H3c and H3d). H3 is partially supported and H4 is supported. Table 9 summarizes these results.

Table 9. Summary of hypothesis testing.

Hypothesis	Statement	Result
H1	The digitalization of training influences managerial performance.	Supported
H1a	The transformation of the pedagogical system positively influences managerial performance.	Supported
H1b	The perceived benefits of digitalization positively influence managerial performance.	Supported
H1c	Factors facilitating appropriation positively influence managerial performance.	Supported
H1d	Obstacles to appropriation negatively influence managerial performance.	Not supported (opposite sign)
H2	Perceived leader trustworthiness positively influences managerial performance.	Supported
H2a	The perception of leaders' competence positively influences managerial performance.	Supported
H2b	The perception of leaders' integrity positively influences managerial performance.	Supported
H3	Distrust moderates the relationship between the digitalization of training and managerial performance.	Partially supported
H3a	A high level of distrust weakens the relationship between the transformation of the pedagogical system and managerial performance.	Supported

Continued

H3b	A high level of distrust weakens the relationship between perceived benefits and managerial performance.	Not supported
H3c	A high level of distrust weakens the relationship between facilitating factors and managerial performance.	Not supported
H3d	A high level of distrust strengthens the negative relationship between obstacles to appropriation and managerial performance.	Not supported
H4	Distrust moderates the relationship between perceived leader trustworthiness and managerial performance.	Supported
H4a	A high level of distrust attenuates the relationship between the perception of leaders' competence and managerial performance.	Supported
H4b	A high level of distrust attenuates the relationship between the perception of leaders' integrity and managerial performance.	Supported

Source: Author.

5. Discussion

This part compares the results with existing work and draws out their contributions to research and practice. It reviews the observed effects, interprets the moderations, and then presents the theoretical implications, the practical implications and the limitations of the study.

5.1. Summary of the Main Results

This study examined how training digitalization relates to managerial performance in Ivorian private grandes écoles, and the role of perceived leader trustworthiness and distrust. Digitalization ($\beta = 0.66$) and perceived leader trustworthiness ($\beta = 0.60$) are positively associated with perceived managerial performance. Pedagogical transformation, perceived benefits and facilitating factors point in the same direction. Contrary to expectations, obstacles to appropriation ($\beta = 0.58$) and distrust ($\beta = 0.47$) are also positively associated with performance. Distrust weakens the associations of pedagogical transformation, perceived competence and perceived integrity with performance. No statistically detectable interaction was found for perceived benefits, facilitating factors or obstacles.

These results must be read in light of the measurement problems. The measurement models fit poorly, AVE values are below 0.50 and the Fornell-Larcker criterion fails for all dimensions. HTMT separates distrust from perceived integrity but not perceived competence from perceived integrity. Responses also show

a strong agreement tendency. The findings are therefore exploratory.

5.2. Interpretation of the Results

The positive association between digitalization and managerial performance is consistent with the dynamic capabilities framework: digital tools appropriated by actors can support the ability to integrate and reconfigure competences (Teece et al., 1997). It is also in line with work linking digitalized training to better organizational outcomes (Masie, 2002, cited in Bennaghmouch et al., 2024) and to the development of managerial qualities (Patesson et al., 2022). The positive associations of pedagogical transformation, perceived benefits and facilitating factors match the adoption literature on the perceived characteristics of innovations (Rogers, 2003) and on facilitating conditions (Venkatesh et al., 2003). The positive association of obstacles contradicts accounts based on cognitive load (Sweller, 1988) and on the lack of competent human resources in Africa (Frimousse and Peretti, 2017). Staff who use digital tools most may also meet more obstacles. The agreement tendency in the data may also inflate all associations, whatever their theoretical sign (Baumgartner & Steenkamp, 2001).

The positive association of perceived leader trustworthiness matches the meta-analysis by Dirks and Ferrin (2002), which links trust in leaders to individual performance. It is compatible with social exchange accounts (Blau, 1964; Guerrero & Herrbach, 2009): actors who see their leaders as competent and honest have more reasons to engage in the systems these leaders introduce. Competence and integrity are two attributes of trustworthiness in the model of Mayer et al. (1995). In these data, however, the two dimensions are almost indistinguishable (latent correlation 0.92). Their separate effects should not be over-interpreted.

Distrust is positively associated with both perceived leader trustworthiness ($\beta = 0.51$) and performance ($\beta = 0.47$). This contradicts the view of distrust as a negative relational climate. It is consistent with the idea that trust and distrust can coexist (Lewicki et al., 1998; Saunders et al., 2014). However, the size of the overlap and the failed Fornell-Larcker test suggest that the distrust scale partly captures the same agreement tendency as the other scales. A dedicated validation of the distrust measure is needed.

The moderation results show a consistent direction: all interaction coefficients are negative, so distrust tends to weaken the positive associations with performance. Only three dimension-level interactions are robust: pedagogical transformation, perceived competence and perceived integrity. Because dimensions were tested in separate models, the difference between significant and non-significant interactions does not show that moderation differs across dimensions (Aguinis et al., 2017).

A possible mechanism is that pedagogical transformation and the choices of leaders are decisions and signals coming from management. A distrustful actor may read them as instruments of control rather than support. This is consistent with the idea that reactions to change combine cognitive, emotional and behav-

ioural components (Piderit, 2000). The study does not measure this mechanism directly.

For perceived benefits, facilitating factors and obstacles, the study found no statistically detectable interaction. This does not show that distrust leaves these relationships unchanged. Larger samples and better-separated measures would be needed to detect smaller interactions. Perceived benefits are central in technology acceptance models (Davis, 1989; Venkatesh & Davis, 2000), and their link with distrust deserves further testing.

Perceived competence and perceived integrity both lose part of their association with performance when distrust is high. Whitener et al. (1998) describe perceived integrity as the product of consistent behaviour and good communication. The present data cannot separate competence from integrity, so the study cannot say which attribute is more exposed to distrust.

5.3. Theoretical Implications

This study makes three cautious contributions. The first concerns the digitalization of training, broken down into four dimensions. The enabling dimensions and obstacles were all positively associated with performance. In self-reported data, obstacles may therefore reflect intensity of use rather than barriers alone. Approaches based on dynamic capabilities should test this with objective measures.

The second concerns trust and distrust. The study separates perceived leader trustworthiness from trust itself, following Mayer et al. (1995) and Schoorman et al. (2007). It treats distrust as a distinct variable, as suggested by Lewicki et al. (1998) and Saunders et al. (2014). Distrust was positively related to trustworthiness, and its distinctness from perceived integrity holds under HTMT but not under Fornell-Larcker. Its measurement in this context needs further work.

The third concerns technology adoption. Models centred on perceived usefulness and facilitating conditions (Venkatesh et al., 2003) explain part of the appropriation of tools. The negative interactions found here suggest that the relational climate may condition some of these associations. The study also documents a little-studied context, that of Ivorian private grandes écoles.

5.4. Practical Implications

For institutional leaders, the results suggest that digital investments should be accompanied by work on the relational climate. Frimousse and Peretti (2017) point out that, in Africa, digital transformation must be human and cultural before being technical.

Since distrust tends to weaken the association between pedagogical transformation and performance, leaders would benefit from making their intentions explicit: why a tool is introduced, how the data will be used and what role teams play in decisions. Training and technical support are more likely to work when they are seen as support rather than control. Co-construction with staff can help. The roles of the unifier-disseminator manager and the manager-coach described by

Patesson et al. (2022) offer benchmarks.

Distrust also weakens the association between perceived leader trustworthiness and performance. Technical competence is therefore not enough: consistency between words and deeds and transparent decisions matter as well. Obstacles call for direct action on equipment, connectivity and user training, even though their association with performance was not negative in these data.

5.5. Limitations and Future Research Directions

This study has several limitations. The measurement models fit poorly, AVE values are below 0.50, the Fornell-Larcker criterion fails and HTMT exceeds 0.85 for several pairs, so dimension-level results are fragile. Responses show a strong agreement tendency, which may inflate all associations. All variables come from the same questionnaire, which exposes the study to common method bias and social desirability. The cross-sectional design does not allow causal conclusions, and links may be reciprocal over time. Non-probability sampling limits generalization. Respondents are nested in 45 institutions, but no institution identifier was recorded. The moderation results are not robust to conservative cell-level clustering. Interactions were tested in separate models and assumed linear. Performance is measured through perceptions only.

These limitations open up several avenues. Longitudinal designs would make it possible to track the joint evolution of digitalization, trust and performance. Objective indicators and multiple sources would reduce dependence on self-reports. Revised scales with reverse-keyed items and a recorded institution identifier would allow response styles and clustering to be modelled directly. A replication in other countries, in public universities or in other sectors would test the robustness of the moderating role of distrust. Mixed or in-depth qualitative methods could test the mechanisms proposed in Section 4.2 and a dedicated validation of the distrust scale. The coexistence of trust and distrust (Lewicki et al., 1998) and the role of variables such as digital literacy are other avenues to explore.

6. Conclusion

This study analysed, in Ivorian private grandes écoles, how training digitalization relates to managerial performance, and the role of perceived leader trustworthiness and distrust. Based on a survey of 400 staff members, digitalization and perceived leader trustworthiness are positively associated with perceived managerial performance. Obstacles and distrust are also positively associated with it, contrary to expectations. Distrust tends to weaken the associations of pedagogical transformation, perceived competence and perceived integrity with performance. No statistically detectable interaction was found for the other dimensions. Poor model fit, weak discriminant validity, a strong agreement tendency and the lack of an institution identifier make these findings exploratory. Future work should use validated scales, multi-source data and clustered designs before firm conclusions are drawn.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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