



From Invisible to Unstoppable: How AI and Digital Marketing Transform IT Consulting Start-ups

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ABSTRACT: Information technology consulting start-ups in emerging markets faced considerable challenges in establishing market visibility against well-established competitors, particularly because of limited marketing resources. Although digital marketing and artificial intelligence were increasingly presented as potential solutions, limited empirical evidence had documented their adoption within this sector and context. This study examined how a Tunisian information technology consulting start-up perceived and used digital marketing and artificial intelligence to strengthen its competitive position. Nine semi-structured interviews were conducted with members of the management team, clients, and a prospective client of a company anonymized as AlphaTech Consulting. The interview data were supplemented by a review of the relevant literature and analyzed using the thematic analysis approach proposed by Braun and Clarke. Thematic saturation was reached after the eighth interview. Five principal themes emerged. First, limited digital visibility was perceived as a major competitive constraint. Second, search engine optimization and the production of expert content were regarded as the most sustainable mechanisms for improving visibility. Third, artificial intelligence tools increased the volume, consistency, and frequency of marketing activities without requiring substantial additional resources, although systematic editorial oversight remained necessary. Fourth, a clear tension emerged between automated interactions and the relationship-based requirements of business-to-business consulting. Consequently, the company differentiated between activities managed through digital tools and those requiring direct consultant involvement. Fifth, customer data governance was viewed not merely as a regulatory obligation but also as an important indicator of credibility and trustworthiness. Based on these findings, ten managerial recommendations were developed across three implementation horizons. The study contributed to the literature on artificial intelligence adoption in the marketing practices of business-to-business service-oriented small and medium-sized enterprises in emerging markets by proposing a sequential hybridization model that combined automation with human interaction. The limitations associated with the single-case study design were also acknowledged.

KEYWORDS: Digital marketing; artificial intelligence; IT consulting; qualitative research; SMEs; emerging market; Tunisia

1. Introduction

The global market for information technology (IT) services was valued at more than \$1.3 trillion and had been growing at an annual rate of 8.3% [1]. In Tunisia, the information and communication technology (ICT) sector accounted for approximately 7% of the national gross domestic product (GDP) and employed more than 90,000 professionals [2]. Internet penetration reached 73% in 2023, while spending on digital transformation by Tunisian companies increased by 22% between 2021 and 2023 [3]. These trends reflected a growing demand for IT consulting, cybersecurity, cloud computing, digital transformation, and auditing services, thereby encouraging the entry of new service providers into the market.

At the same time, the global digital marketing market reached \$667 billion in 2024 [4]. An increasing proportion of this market was driven by artificial intelligence (AI) technologies. According to McKinsey [5], companies that integrated AI into their marketing functions achieved productivity gains averaging 15–20% compared with those that did not. These findings suggested that AI could serve as an important strategic resource for young firms with limited marketing budgets that were unable to compete directly with established competitors. However, empirical evidence supporting this proposition remained limited, particularly in the context of emerging markets and business-to-business (B2B) IT consulting.

The components of effective digital marketing strategies have been well documented, including search engine optimization (SEO), content marketing, social media marketing, email marketing, and customer journey automation [6, 7]. In the B2B context, Järvinen and Taiminen [8] demonstrated the central role of digital content in generating qualified leads. Regarding AI, Huang and Rust [9] proposed a strategic framework that distinguished three forms of intelligence—mechanical, analytical, and empathetic—which provided a useful basis for understanding both the capabilities and limitations of service automation. Similarly, Dwivedi et al. [10] documented the influence of large language models (LLMs) on marketing practices, reporting measurable productivity gains while highlighting the need to address associated quality risks.

Three major research gaps were identified. First, most studies investigating AI in digital marketing focused on large organizations operating in developed economies. Small and medium-sized enterprises (SMEs) in emerging markets, which face unique constraints related to financial resources, technical expertise, and regulatory environments, remained underrepresented in the literature [11]. Second, B2B IT consulting has rarely been examined as a distinct research context despite its unique characteristics, including extended purchasing cycles, substantial information asymmetry between service providers and clients [12, 13], and a strong reliance on interpersonal trust. Third, existing research has predominantly adopted quantitative methods or examined large organizations, providing limited insight into how managers of emerging firms perceive, evaluate, and implement AI-enabled marketing strategies.

Recent qualitative research partially addressed these limitations. Tyagi et al. [14] conducted 14 semi-structured interviews with stakeholders from insurance SMEs in Oman; however, their study focused on a sector in which AI adoption remained constrained by infrastructure limitations, skill shortages, and limited regulatory awareness. In contrast, the present study examined a technology-oriented start-up that had already progressed beyond the initial adoption stage. Likewise, recent quantitative studies on B2B and SME digital marketing [15, 16] confirmed the growing importance of AI in marketing but were inherently unable to

capture the contextual decision-making processes and lived experiences of managers and clients. Consequently, the combination of an underexplored sector (B2B IT consulting), a post-adoption perspective, and both managerial and client viewpoints represented the principal novelty of the present study.

Accordingly, this study addressed the following primary research question: How did an IT consulting start-up operating in an emerging market perceive and utilize digital marketing and AI to strengthen its competitive position under conditions of limited resources and low initial market visibility? Two specific research questions were formulated: (1) What were the perceptions and digital marketing practices of AlphaTech Consulting's managers? and (2) To what extent did the integration of AI tools into the company's marketing strategy enable it to overcome its initial competitive constraints, and under what conditions?

From a theoretical perspective, this study sought to extend the literature on AI adoption in the marketing practices of B2B SMEs operating in emerging markets. Specifically, it examined the applicability of signaling theory [17] by investigating whether the production of expert digital content functioned as a quality signal capable of reducing the information asymmetry inherent in IT consulting markets. From a practical perspective, the study aimed to provide managers of IT service SMEs with concrete, prioritized recommendations that reflected the operational constraints typically encountered by resource-limited organizations.

2. Literature review

2.1. Digital Marketing Strategy.

Digital marketing strategy has been defined as the set of decisions and actions through which organizations achieve their business objectives using digital channels [6]. Kannan and Li [7] described it as a dynamic process of continuous adaptation based on performance measurement and the ongoing optimization of communication channels and marketing messages. Its principal components included search engine optimization (SEO), content marketing, social media marketing, email marketing, pay-per-click (PPC) advertising, and customer journey automation [6, 18]. Previous studies consistently suggested that flexible, data-driven strategies based on continuous experimentation and systematic testing of channels and messages were more effective than rigid marketing plans [19, 20].

For newly established firms, digital marketing posed a particular challenge because they entered search engines and social media platforms with little or no online presence while competing against firms that had accumulated years of digital visibility. Berman and Katona [21] demonstrated that targeting highly specific, low-competition keywords could reduce this disadvantage while requiring relatively modest marketing expenditures. This strategy appeared particularly suitable for business-to-business (B2B) markets, where purchasing decisions were often initiated through specialized technical searches and decision-makers actively sought expert information before contacting potential suppliers [8].

2.2. Characteristics of IT Consulting and Their Marketing Implications.

Previous studies identified several business models within the IT consulting industry, including thought leadership through expert content dissemination, standardized solution provision, qualified personnel outsourcing (body shopping), and hybrid service models such as fractional or time-sharing executive services [22, 23]. The latter model, adopted by AlphaTech Consulting through its fractional Chief Technology Officer (CTO), Chief Information Officer

(CIO), and Chief Information Security Officer (CISO) services, required marketing strategies that emphasized strategic value, expertise, and trust rather than price competition.

The B2B consulting literature consistently indicated that purchasing decisions were strongly influenced by buyers' efforts to reduce perceived uncertainty. Sharma [12] argued that clients purchasing professional services faced severe information asymmetry because service quality could not be fully evaluated until project completion. Consequently, observable signals of expertise—including professional certifications, published case studies, technical articles, and client testimonials—became critical determinants of supplier selection. This reasoning originated from Akerlof's theory of information asymmetry [13] and was later extended by Spence's signaling theory [17] to labor and service markets. Collectively, these studies suggested that for newly established consulting firms, establishing online visibility and credibility represented not merely a marketing objective but also a prerequisite for market entry. Richter and Schröder [24] further argued that IT consulting differed from general management consulting because technical knowledge could be codified, standardized, and transferred more readily. This characteristic suggested that IT consulting might be particularly well suited to AI-assisted content generation and knowledge dissemination. However, the literature had not yet comprehensively examined how AI could support marketing activities in technology-based consulting firms.

2.3. Artificial Intelligence in Marketing: Opportunities and Adoption Challenges.

The accessibility of artificial intelligence for marketing activities changed substantially following the emergence of large language models (LLMs) and cloud-based Software-as-a-Service (SaaS) platforms [9, 10]. Recent studies identified five AI applications that were readily accessible to small and medium-sized enterprises (SMEs) without requiring dedicated technical teams. These applications included (1) natural language processing (NLP)-assisted content creation, which reduced content production time by approximately 30–50% [10, 25]; (2) predictive analytics for forecasting customer purchasing behavior [26, 27]; (3) programmatic advertising for automated media purchasing and real-time bid optimization [28, 29]; (4) AI-powered chatbots for lead qualification and continuous customer support [30, 31]; and (5) marketing automation systems supporting lead nurturing, email campaigns, lead scoring, and event-triggered customer journeys [8, 32].

Despite these potential benefits, previous research also identified several barriers that constrained AI adoption. First, although SaaS platforms reduced technological complexity, they still required substantial investments in employee training, workflow redesign, and system configuration, costs that SMEs frequently underestimated [33]. Second, AI performance remained highly dependent on data quality. Poorly structured, incomplete, or outdated databases significantly limited the effectiveness of predictive models and automated marketing systems [34]. Third, excessive automation posed particular challenges within professional consulting services, where interpersonal relationships and trust remained fundamental to value creation. Huang and Rust [9] and Rust and Huang [35] argued that overreliance on automated customer interactions could reduce perceived service quality and weaken long-term client relationships. These findings suggested that AI should complement rather than replace human expertise within B2B consulting environments.

2.4. *The Tunisian Context: Opportunities and Constraints.*

Most empirical studies examining digital marketing and AI adoption were conducted in developed economies with relatively mature digital ecosystems, thereby limiting the generalizability of their findings to emerging markets [11, 36]. Tunisia presented several contextual characteristics that warranted specific investigation. On the one hand, opportunities included relatively high internet penetration (73%), a growing technology start-up ecosystem, and comparatively low competition for specialized IT-related search terms [3]. These conditions potentially created favorable opportunities for new firms that invested in search engine optimization during the early stages of business development.

On the other hand, several structural constraints remained evident. Marketing budgets among Tunisian SMEs were generally more limited than those available to firms in Europe or North America. Furthermore, the ecosystem supporting digital marketing education and professional training remained underdeveloped, slowing organizational capability development [33]. In addition, although Tunisia had established a legal framework governing personal data protection under Organic Law No. 2004-63, awareness and implementation of these regulations remained limited among many businesses. This situation potentially created a competitive advantage for firms that proactively adopted responsible data governance practices, an issue that the present study sought to investigate.

3. **Materials and methods**

3.1. *Research Design.*

This study adopted an interpretivist paradigm [37], which sought to understand how organizational actors perceived and interpreted their marketing practices rather than to quantify causal relationships through statistical analysis. This methodological choice was consistent with the current state of the literature. As discussed in Section 2, limited research had explored how managers of IT start-ups in emerging markets perceived and implemented digital marketing and artificial intelligence (AI) tools. Therefore, a qualitative approach was considered appropriate for developing an in-depth understanding of this relatively underexplored phenomenon before larger-scale quantitative investigations.

A single-case study design was adopted following the approach proposed by Yin [38], as it enabled an in-depth examination of a contemporary phenomenon within its real-world context. AlphaTech Consulting was purposively selected as a revealing case because it represented a recently established technology-based start-up operating in a knowledge-intensive sector while facing challenges commonly encountered by business-to-business (B2B) small and medium-sized enterprises (SMEs) in emerging markets. Furthermore, the company had already implemented a structured digital marketing strategy that incorporated AI-enabled tools, making it an appropriate case for addressing the research questions of this study.

The use of a single-case design inevitably limited the statistical generalizability of the findings. However, the objective of this research was analytical rather than statistical generalization. The case provided valuable insights into the mechanisms, decision-making processes, and managerial perceptions underlying AI-supported digital marketing practices, thereby offering theoretical propositions that may be examined and refined in future studies across different organizational and national contexts [38, 39].

3.2. Data Collection.

Data were collected through nine semi-structured interviews conducted between January and March 2024. The participants comprised two groups of informants: members of the AlphaTech Consulting management team (I1–I5) and clients or prospective clients who had interacted with the company (I6–I9). Including both internal and external stakeholders enabled the triangulation of perspectives by comparing managerial views with the experiences and perceptions of clients and prospects. This approach enhanced the credibility of the findings and reduced the risk of relying solely on organizational self-reporting (Table 1).

Table 1. Informant Profile.

Code	Profile	Function	Seniority	Duration
I1	Founder	Managing Director / CTO	2 years	72 min.
I2	Partner	Director of Operations	2 years	65 min.
I3	Internal framework	Marketing & Communication Manager	18 months	58 min.
I4	Internal framework	Senior Cybersecurity Consultant	14 months	52 min.
I5	Internal framework	Business Development Manager	12 months	48 min.
I6	Customer	CIO, banking sector	14 months	61 min.
I7	Customer	Managing Director, Manufacturing SME	8 months	55 min.
I8	Customer	IT Manager, Healthcare	6 months	42 min.
I9	Prospect	Purchasing Manager, Distribution Sector	—	48 min.

An interview guide structured around five thematic areas was developed to ensure consistency across interviews: (A) perceptions of digital marketing in IT consulting; (B) current digital marketing practices and communication channels; (C) adoption and use of AI tools; (D) customer relationships and trust; and (E) data governance and ethical considerations. The interview guide was pilot-tested with an external industry professional prior to data collection to improve the clarity and relevance of the interview questions. The interviews lasted an average of 56 minutes (range: 42–72 minutes). All interviews were audio-recorded with the participants' informed consent and subsequently transcribed verbatim. The interview data were complemented by an analysis of internal company documents provided by AlphaTech Consulting, including marketing plans, digital performance dashboards, and examples of marketing content developed with and without AI-assisted tools. These documents served as a secondary data source to triangulate the interview findings, compare participants' accounts with actual organizational practices, and provide contextual understanding of the emerging themes.

3.3. Data Analysis.

The interview transcripts were analyzed using the six-phase thematic analysis framework proposed by Braun and Clarke [40], comprising (1) familiarization with the data, (2) generation of initial codes, (3) theme development, (4) theme review, (5) theme definition and naming, and (6) report production. Coding was conducted in two independent rounds separated by a one-week interval to reduce the potential influence of confirmation bias. To enhance analytical

reliability, an external academic researcher independently reviewed approximately 30% of the coded transcripts. The resulting inter-coder agreement reached 84%, which was considered satisfactory according to Krippendorff's reliability criteria [41]. Thematic saturation, defined as the point at which additional interviews yielded no new themes or substantive codes, was achieved after the eighth interview.

3.4. Ethical Considerations.

All participants provided written informed consent before participating in the study. The consent form explained the objectives of the research, data collection and processing procedures, confidentiality measures, and participants' right to withdraw from the study at any stage without consequence. To protect organizational and individual confidentiality, the participating company was anonymized using the pseudonym *AlphaTech Consulting*, while all interview participants were identified only by their respective codes (I1–I9). Any information that could directly or indirectly reveal the identity of the organization or participants, including personal names, client names, addresses, and specific locations, was removed or anonymized during transcription. Audio recordings were retained securely and scheduled for permanent deletion following the data retention period specified in the approved research ethics protocol.

4. Results

The thematic analysis identified five principal themes. Table 2 presents the thematic saturation matrix, indicating whether each theme was discussed extensively (✓) or mentioned only briefly (○) by each informant. The following sections present each theme, supported by representative interview excerpts.

Table 2. Thematic Saturation Matrix.

Theme	I1	I2	I3	I4	I5	I6	I7	I8	I9
T1. Initial Digital Invisibility	✓	✓	✓	✓	✓	✓	✓	✓	✓
T2. SEO and Expert Content	✓	✓	✓	○	✓	✓	✓	○	✓
T3. AI as a Marketing Multiplier	✓	✓	✓	✓	✓	○	○	○	○
T4. Balancing Automation and Human Relationships	✓	✓	○	✓	✓	✓	✓	✓	✓
T5. Data Governance and Trust	✓	✓	✓	✓	○	✓	○	✓	○

Note: ✓ = Theme discussed extensively or emerged naturally during the interview; ○ = Theme mentioned briefly or in passing.

4.1. T1. Initial Digital Invisibility: A Structural Barrier to Market Entry.

All nine informants identified AlphaTech Consulting's initial lack of online visibility as a significant challenge. Rather than being viewed merely as a marketing issue, participants consistently described digital invisibility as a structural barrier that constrained the company's ability to attract prospective clients and generate new business opportunities during its early stages of operation.

I1: "No matter how technically competent we were, prospects had no way of finding us. A competitor that had been active for ten years, with two hundred blog posts, effortlessly eclipsed us on search engines. We simply did not exist for anyone searching our target keywords."

This perception was echoed by external stakeholders.

I6: *"What prompted me to contact them was an article I found on LinkedIn. I didn't know the company beforehand. Without that article, I would never have known they existed."*

Internal participants described the company's first months as a period during which business development relied primarily on personal networks and direct referrals, a strategy that participant I5 referred to as *"the word-of-mouth of the first six months."* Although this approach generated initial business opportunities, participants generally regarded it as insufficient to sustain long-term organizational growth beyond existing professional networks. Consequently, recognition of this limitation became a primary motivation for investing in a structured digital marketing strategy. From a theoretical perspective, these findings suggested that digital invisibility represented a barrier to market entry rather than merely a communication deficiency. Within professional service markets, where service quality cannot be evaluated before purchase, the absence of credible online signals prevented prospective clients from assessing a firm's expertise or legitimacy [13, 17]. Accordingly, Theme 1 constituted the foundation for the signaling process examined in Section 5.2, rather than representing an isolated operational challenge.

4.2. T2. SEO and Expert Content: The Most Sustainable Driver of Digital Visibility.

To address the challenge of limited digital visibility, AlphaTech Consulting prioritized search engine optimization (SEO) and the production of expert content as the foundation of its digital marketing strategy. Participants justified this approach on three grounds: its lower long-term cost compared with paid advertising, its cumulative impact over time, and its ability to enhance organizational credibility by demonstrating technical expertise.

I3: *"Paying to appear works only as long as you keep paying. As soon as we stop the advertising budget, we disappear. A well-ranked article, however, continues generating traffic for months. We therefore chose to build our authority through content before investing in paid advertising."*

Similarly, participant I2 emphasized the importance of strategic keyword selection.

I2: *"We conducted a thorough keyword analysis. We identified search terms for which our competitors had very limited visibility in Tunisia—for example, 'SME cybersecurity audit Tunisia.' There was almost no serious local competition, so we concentrated our efforts there."*

The findings further suggested that expert content served not only to increase website traffic but also to strengthen prospective clients' perceptions of organizational competence before any direct interaction occurred.

I7: *"Before contacting them, I had already read three or four of their articles. I already had a reasonable idea of who they were and how they worked. That gave me the confidence to make the first call. In our industry, we simply do not work with strangers."*

These findings supported signaling theory [13, 17], indicating that expert digital content functioned as a credible signal of competence that reduced clients' perceived uncertainty before purchase.

4.3. T3. Artificial Intelligence as a Marketing Multiplier.

4.3.1. AI-Assisted Content Creation.

Internal participants consistently described AI-assisted content generation as a major improvement in the company's editorial workflow. The primary benefit was a substantial reduction in content production time, enabling more frequent publication without increasing staffing levels.

I3: *"Previously, writing a technical article took an entire day. With the AI tool, I produced a first draft in about twenty minutes. I then refined it by adding our field experience, practical examples, and critical analysis before publication. We increased our publishing frequency from one article per month to one article per week."*

However, participants also emphasized that AI-generated content required careful human review before publication. Rather than replacing professional expertise, AI was viewed as a tool that accelerated the drafting process.

I1: *"AI provides the skeleton, but our expertise adds the substance. If you publish AI-generated content without revision, it looks like everyone else's. What differentiates us is our practical experience, client cases, and critical perspective."*

These findings suggested that AI complemented rather than substituted professional expertise in knowledge-intensive consulting services.

4.3.2. Marketing Automation and Lead Nurturing.

Participants also reported that implementing a customer relationship management (CRM) system with automated email sequences significantly improved lead management. Automation reduced the likelihood of losing qualified prospects because follow-up communications no longer depended solely on manual intervention.

I5: *"Previously, if someone downloaded our white paper and I forgot to follow up during the week, that lead was essentially lost. Now the system automatically sends a sequence of three emails over five days. The conversion rate for these leads has increased considerably."*

Although participants perceived clear operational benefits, the effectiveness of automation remained dependent on the quality of the content and the relevance of customer segmentation.

4.3.3. AI Chatbots for Initial Customer Qualification.

The company also implemented an AI-powered conversational assistant to qualify website visitors outside regular business hours. Participants who interacted with the chatbot generally reported positive experiences, provided that requests were transferred promptly to a human consultant.

I8: *"I first interacted with the chatbot. It understood the main purpose of my request and informed me that a consultant would contact me within two hours. Two hours later, someone actually called me. The process felt smooth; I never felt as though I was talking to a machine."*

These findings suggested that AI-supported customer interactions were positively perceived when automation served as an entry point rather than as a replacement for human communication.

4.4. T4. Balancing Automation and Human Relationships.

This theme emerged consistently across both internal participants and clients. Although participants recognized the operational advantages of AI, they also emphasized the importance of maintaining authentic human interactions throughout the consulting process. Internal participants expressed concerns that excessive automation could undermine the company's value proposition, whereas clients emphasized the need for personalized communication and professional responsiveness.

I1: *"Consulting is built on trust, and trust cannot be automated. We can automate lead generation, qualification, and nurturing, but contracts are ultimately signed because one person convinces another. We must be realistic about what AI can and cannot do."*

I4: *"Our clients do not want to feel as though they are moving through an automated marketing funnel. They want to be treated as individuals with unique needs. Automation should support relationships, not replace them."*

This perspective was reinforced by client experiences.

I6: *"Automation brings you to the front door, but it is still a human being who opens it."*

To manage this balance, AlphaTech Consulting established a clear operational distinction between activities supported by AI and those requiring direct consultant involvement. Automation was primarily applied during the awareness and initial qualification stages of the customer journey (top and middle of the marketing funnel), whereas proposal development, commercial negotiations, and ongoing client relationship management remained entirely human-led. Participants described this boundary as an evolving operational guideline rather than a fixed organizational rule.

4.5. T5. Data Governance as a Strategic Differentiator.

Participants viewed customer data governance not merely as a regulatory obligation but also as an integral component of the company's competitive positioning.

I1: *"Our clients trust us with highly sensitive information. If we failed to manage their data responsibly in our own marketing systems, it would completely contradict the services we provide. For us, compliance is primarily about credibility, not simply legal compliance."*

Similarly, participant I2 emphasized the importance of maintaining strict data governance standards across all digital marketing platforms.

I2: *"No external platform processed client data without a signed data processing agreement that complied with our internal policies. This was non-negotiable. We advised clients on compliance, so we had to demonstrate the same standards ourselves."*

Interestingly, this positioning was valued most strongly by participants working in highly regulated industries such as banking and healthcare, whereas respondents from less regulated sectors rarely identified data governance as a primary selection criterion. These findings suggested that the strategic value of responsible data governance was contingent upon clients' regulatory environments and organizational contexts rather than being universally perceived as a competitive advantage.

5. Discussion

5.1. AI as a Driver of Competitiveness: Partial Confirmation Under Specific Conditions.

The findings partially aligned with those of Williams and Garcia [42] and Taiminen and Karjaluoto [20], who suggested that AI enabled small and medium-sized enterprises (SMEs) to achieve levels of marketing sophistication previously attainable only by larger organizations. In the case of AlphaTech Consulting, the automation of lead nurturing, accelerated content production, and AI-assisted lead qualification enabled a small team to operate with greater marketing efficiency than would have been possible through manual processes alone.

However, the findings revealed two important nuances. First, these benefits were conditional. They materialized only when the customer relationship management (CRM) database contained sufficiently rich and reliable data [34], the AI tools were properly configured, and human editorial oversight was maintained throughout the content creation process. AI did not replace these prerequisites; rather, it amplified their effectiveness when they were already in place. Second, within the context of B2B IT consulting, automation enhanced access to human interaction but did not replace it. This finding was consistent with the work of Huang and Rust [9], who discussed the limitations of AI in relationship-intensive services, and with De Keyser et al. [35], who emphasized the continued importance of human interaction during critical service encounters.

This generally positive picture should nevertheless be interpreted alongside recent evidence indicating that AI adoption in SMEs was frequently constrained rather than merely conditional. Tyagi et al. [14], using a comparable qualitative approach to study insurance SMEs in Oman, found that AI adoption often stalled before reaching the implementation stage observed at AlphaTech Consulting because of fragmented digital infrastructure, workforce skill shortages, and uncertainty regarding return on investment. Similarly, Enshassi et al. [15], in a partial least squares structural equation modeling (PLS-SEM) study involving 301 Malaysian SMEs, demonstrated that perceived barriers significantly reduced AI adoption intentions despite high levels of perceived usefulness. When considered together with the present findings, these studies suggested that AlphaTech Consulting did not represent a typical SME adopting AI but rather a technology-oriented organization that had largely overcome the technical and data-literacy barriers reported elsewhere. Consequently, the findings indicated that the observed marketing benefits were likely contingent upon favorable organizational capabilities rather than being universally attributable to AI adoption alone. Future comparative research should therefore treat these organizational capabilities as explicit boundary conditions rather than implicit assumptions.

Based on these findings, a sequential hybridization model was proposed in which AI-driven automation primarily supported the awareness and lead qualification stages of the marketing funnel (top and middle of the funnel), whereas the decision-making and customer retention stages (bottom of the funnel) continued to depend on direct human interaction. This

model was consistent with the hybrid service logic proposed by Wirtz et al. [43] and extended its application to the context of B2B IT consulting firms operating in emerging markets.

5.2. Expert Content as a Quality Signal: An Interpretation Through Signaling Theory.

AlphaTech Consulting's strategic emphasis on search engine optimization (SEO) and expert content aligned with previous findings reported by Järvinen and Taiminen [8] regarding the value of digital content in B2B marketing and by Berman and Katona [21] concerning niche SEO strategies. While this result was broadly consistent with earlier research, the interview data provided additional insight into the role that expert content played in clients' decision-making processes. Several participants (I6 and I7) explicitly stated that reading AlphaTech Consulting's published content reduced their uncertainty regarding the company's expertise before any direct interaction occurred. This mechanism closely reflected the principles of signaling theory proposed by Spence [17]. In markets where buyers cannot directly evaluate service quality before purchase, credible signals that are costly to imitate reduce information asymmetry between buyers and sellers [13, 17]. In the present case, the continuous production of technically rigorous content functioned as such a signal because it required sustained expertise, consistency, and professional experience that competitors lacking genuine capabilities could not easily replicate.

The findings further suggested that AI functioned as a signal amplifier rather than a signal generator. By reducing the marginal cost of producing high-quality content, AI enabled the company to communicate expertise more frequently without proportionally increasing resource requirements. This observation extended signaling theory in two important respects. First, traditional interpretations of signaling theory [17, 44] generally viewed signal costs as static characteristics associated with credentials or certifications that were difficult to imitate. In contrast, the present findings indicated that credibility could also arise through the sustained production of expert knowledge over time. AI reduced the cost of maintaining this continuous signal without reducing the difficulty of convincingly demonstrating genuine expertise, as participants emphasized that clients ultimately evaluated content quality rather than publication frequency. Second, whereas Bashir et al. [16] conceptualized AI competencies as organizational capabilities that directly enhanced B2B marketing performance, the present findings positioned AI one step earlier in the process, functioning primarily as an amplifier of an existing signaling mechanism rather than as a capability in its own right. This represented a novel contribution to the literature on signaling theory in B2B service marketing [44], although further research across different organizational and cultural contexts is required before broader generalizations can be made.

5.3. Data Governance: Transforming Compliance into a Signal of Credibility.

Participants described data governance not merely as a legal or regulatory obligation but also as a strategic positioning mechanism. This finding differed from the dominant perspective in the literature, which generally treated regulatory compliance as an external organizational constraint [45]. Instead, the evidence suggested that within the IT consulting industry, particularly in cybersecurity and compliance services, organizations that advised clients on regulatory compliance perceived a strong obligation to demonstrate those same standards internally. Making these practices visible strengthened organizational credibility and reinforced clients' trust.

This interpretation was consistent with the concept of alignment between organizational values and operational practices [46]. However, the findings also indicated that the strategic value of data governance depended on client characteristics. Participants from highly regulated industries, particularly banking and healthcare (I6 and I8), spontaneously recognized responsible data governance as a significant source of trust. In contrast, participants from less regulated sectors (I7 and I9) rarely identified it as an important selection criterion. Consequently, the strategic importance of data governance appeared to be context-dependent rather than universally applicable across all client segments.

5.4. Transferability Beyond the Tunisian Context.

The mechanisms identified in this study were not unique to Tunisia; however, their effectiveness appeared to depend on institutional and market conditions that varied across emerging economies. Three contextual factors seemed particularly important for assessing transferability. First, the level of competition within digital search markets influenced the effectiveness of SEO strategies. The relatively low competition for specialized IT-related keywords in Tunisia enabled AlphaTech Consulting to achieve visibility relatively quickly. In contrast, more saturated digital markets or sectors characterized by well-established incumbents, such as the insurance sector examined by Tyagi et al. [14], would likely require substantially greater effort before similar outcomes could be achieved.

Second, the digital maturity of the workforce influenced AI adoption. AlphaTech Consulting's technology-oriented employees adopted AI tools with relatively limited resistance, a condition that might not exist in more traditional or highly regulated industries [14, 15]. Third, differences in national data protection regimes affected the strategic value of responsible data governance. In Tunisia, where enforcement of Organic Law No. 2004-63 remained relatively limited (Section 2.4), proactive compliance provided a source of competitive differentiation. In countries with more mature regulatory systems, however, similar practices would likely be regarded as standard organizational requirements rather than distinctive competitive signals.

Collectively, these observations suggested that the sequential hybridization model proposed in Section 5.1 would be most readily transferable to technology-intensive B2B service SMEs operating in emerging markets with similar levels of digital maturity and workforce capabilities. Its applicability would likely be more limited in industries characterized by lower digital readiness or stronger regulatory constraints, where the barriers identified by Tyagi et al. [14] and Enshassi et al. [15] would be expected to constrain AI adoption before signaling or hybridization mechanisms could generate measurable benefits.

5.5. Research Limitations.

Four limitations should be acknowledged. First, the single-case study design did not permit statistical generalization. The findings should therefore be interpreted as analytically generalizable, providing theoretical insights and explanatory mechanisms that require validation in broader organizational contexts [38, 39]. Second, interviews with internal participants were potentially subject to social desirability bias, as managers may have portrayed their organization's strategic decisions more positively than warranted. Although this limitation was partially mitigated through data triangulation involving client interviews and documentary evidence, it could not be eliminated entirely [47]. Third, data collection occurred approximately 18 months after the company's establishment. Consequently, the findings reflected a specific stage of organizational development and may differ as the company matured. Finally, marketing performance indicators, including organic traffic, conversion rates, and customer

acquisition costs, were based on participant reports and could not be independently verified. Accordingly, these quantitative outcomes should be interpreted with appropriate caution.

5.6. Synthesis of Managerial Recommendations.

The two overarching insights developed in this study were translated into ten managerial recommendations, summarized in Table 3 and organized according to three implementation horizons. Section 6 discusses how these recommendations may be adapted according to the size, maturity, and strategic context of B2B consulting firms.

Table 3. Managerial recommendations according to three time horizons.

No.	Recommendation	Theme(s)	Horizon	Priority
R1	Building the SEO foundation before any paid advertising	T1, T2	0–6 months	Review
R2	Establish a weekly thematic editorial calendar	T2	0–6 months	Review
R3	Deploy a CRM with nurturing automation	T3	0–6 months	High
R4	Integrate a qualification chatbot on the website	T3	0–6 months	High
R5	Formally delineate the automation and human contact phases	T4	6–18 months	High
R6	Train teams to oversee AI-generated content	T3	6–18 months	Moderate
R7	Formalize a marketing data governance policy	T5	0–6 months	Review
R8	Communicating compliance as a differentiator	T5	6–18 months	Moderate
R9	Set up a monthly dashboard of digital KPIs	Q1–Q3	0–6 months	High
R10	Conduct an annual review of the digital strategy	All	> 18 months	Strategic

6. Conclusion

This study examined how a young Tunisian IT consulting company adopted digital marketing and artificial intelligence (AI) to strengthen its competitiveness. Based on nine semi-structured interviews and a review of internal documents, five key themes were identified. The findings indicated that AI did not create competitive advantage independently; instead, it enhanced the effectiveness of a well-designed digital marketing strategy supported by professional expertise. Sustainable digital visibility depended primarily on high-quality, consistent, and targeted content, while AI improved efficiency by accelerating content production and marketing automation. However, human oversight remained essential to ensure content quality, maintain customer trust, and manage client relationships effectively. The study also demonstrated that data governance extended beyond regulatory compliance and functioned as a strategic source of organizational credibility. Organizations that consistently aligned their internal practices with the services they offered were perceived as more trustworthy, particularly in highly regulated industries. From a managerial perspective, firms should prioritize building a strong SEO foundation, producing expert content consistently, implementing AI-assisted marketing tools with appropriate human supervision, establishing clear boundaries between automated and human interactions, and integrating robust data governance into their marketing practices. These actions can improve digital visibility while preserving trust and service quality. The study contributed to the literature by proposing a sequential hybridization model in which AI complemented rather than replaced human expertise throughout the customer journey. Future

research should validate this model using comparative, quantitative, and longitudinal studies across different industries and emerging-market contexts.

Authors' contributions.

Conceptualization: Rym KHANFIR; Methodology; Data collection; Data analysis; Writing, editing and editing. All authors have read and approved the final version of the manuscript.

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Conflicts of interest.

No conflict of interest was declared by all the authors.

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