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***Gamified Advertising as a Driver for B2B Innovation:
The TikAdRoll Case Study***

La pubblicità gamificata come motore di innovazione B2B:
il caso TikAdRoll

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Abstract (English)

Gamified Advertising as a Driver for B2B Innovation: The TikAdRoll Case Study

This thesis examines how an early-stage digital B2B startup validates the assumptions underlying its business model as it pivots from one commercial concept to another, using the case of TikAdRoll, an Italian startup developing gamified advertising experiences for business clients, as its empirical basis. The topic matters because the entrepreneurship literature on Lean Startup and business experimentation offers extensive guidance on how ventures should test and validate strategic assumptions, but this guidance has been developed almost entirely in business-to-consumer (B2C) contexts, where the end user and the paying customer typically coincide. B2B ventures, in which a client organisation adopts a solution on behalf of end users who are themselves distinct from the person making the purchasing decision, remain comparatively underexplored, and the present case suggests that what counts as validation in such settings may differ substantially from what the existing literature assumes.

The thesis develops its argument through a qualitative, single-case reconstruction of TikAdRoll's evolution, from an initial, unlaunched multi-brand gamified advertising concept to its current business model, built around brand-exclusive gamified experiences embedded within a client company's own digital platforms. The reconstruction draws on internal documentary evidence, including the venture's commercial contract, pricing proposal, and pitch materials, read alongside the entrepreneurship literature on Lean Startup, effectuation, and business model validation.

The analysis shows that TikAdRoll's pivot toward its current B2B model followed a request for brand exclusivity from its first prospective client, made during the venture's very first sales conversation, and that reaching a signed contract subsequently required close to two years of engagement centred on exclusivity, technical integration, and the client's confidence in a small, early-stage supplier,

evidenced by the client's sustained time, collaboration, and financial commitment over that period. The client's early interest in the underlying concept is documented throughout this process, but this interest reflects the client's own assessment of a commercial opportunity, and is treated in this thesis as distinct from, and not a substitute for, independent evidence of how the games' end users actually respond to the format, which the available documentary record does not establish. Read together, these findings suggest that the conditions determining a client's adoption of a B2B innovation, exclusivity, integration, and supplier credibility, are conceptually and practically distinct both from the desirability of that innovation among end users and from the commercial viability of the business model built around it, and that a venture's efforts toward securing its first B2B client may address the former considerably more directly than either of the latter two. The thesis discusses this pattern in relation to the Lean Startup and effectuation traditions, while treating its own single-case, documentary evidence as suggestive of, rather than sufficient to establish, an effectuation-based account of the pivot, and offers its conclusions as propositions for future empirical research rather than as a statistically tested account.

Keywords: B2B Innovation; Business Model Validation; Lean Startup; Effectuation; Gamified Advertising.

Abstract (Italiano)

La pubblicità gamificata come motore di innovazione B2B: il caso TikAdRoll

Questa tesi analizza come una startup digitale B2B in fase early-stage validi le assunzioni alla base del proprio modello di business nel passaggio da un concept commerciale a un altro, utilizzando come base empirica il caso di TikAdRoll, una startup italiana che sviluppa esperienze pubblicitarie gamificate per aziende clienti. Il tema è rilevante perché la letteratura sull'imprenditorialità relativa a Lean Startup e sperimentazione aziendale offre indicazioni approfondite su come le startup dovrebbero testare e validare le proprie assunzioni strategiche, ma tali

indicazioni sono state sviluppate quasi interamente in contesti business-to-consumer (B2C), nei quali l'utente finale e il cliente pagante tendono a coincidere. I contesti B2B, in cui un'azienda cliente adotta una soluzione per conto di utenti finali distinti da sé, restano relativamente poco esplorati, e il caso qui analizzato suggerisce che cosa significhi “validare” in questi contesti possa differire sostanzialmente da quanto assume la letteratura esistente.

La tesi sviluppa il proprio argomento attraverso una ricostruzione qualitativa, basata su un singolo caso di studio, dell'evoluzione di TikAdRoll: dal concept iniziale, mai lanciato, di pubblicità gamificata multi-brand, fino all'attuale modello di business, costruito su esperienze gamificate esclusive per singolo brand, integrate direttamente nelle piattaforme digitali dell'azienda cliente. La ricostruzione si basa su evidenza documentale interna, tra cui il contratto commerciale della startup, il preventivo economico e i materiali di pitch, letta insieme alla letteratura sull'imprenditorialità relativa a Lean Startup, effectuation e validazione del business model.

L'analisi mostra che il passaggio di TikAdRoll verso l'attuale modello B2B è seguito a una richiesta di esclusiva del marchio da parte del primo cliente potenziale, avanzata durante il primissimo incontro commerciale, e che il raggiungimento di un contratto firmato ha richiesto in seguito quasi due anni di impegno concentrato su esclusiva, integrazione tecnica e fiducia del cliente verso un fornitore piccolo ed early-stage, testimoniata dal tempo, dalla collaborazione e dall'impegno economico sostenuti dal cliente in quel periodo. L'interesse iniziale del cliente verso il concept è documentato lungo tutto questo percorso, ma tale interesse riflette una valutazione del cliente stesso su un'opportunità commerciale, ed è qui trattato come distinto da, e non sostitutivo di, un'evidenza indipendente su come gli utenti finali del gioco rispondano realmente al formato, evidenza che la documentazione disponibile non consente di stabilire. Nel complesso, questi risultati suggeriscono che le condizioni che determinano l'adozione di un'innovazione B2B da parte di un cliente, esclusiva, integrazione e credibilità del

fornitore, sono concettualmente e praticamente distinte sia dalla desiderabilità di tale innovazione presso gli utenti finali sia dalla sostenibilità economica del modello di business costruito attorno ad essa, e che lo sforzo di una startup per assicurarsi il primo cliente B2B può riguardare la prima assai più direttamente delle altre due. La tesi discute questo schema in relazione alle tradizioni Lean Startup ed effectuation, pur trattando la propria evidenza, basata su un singolo caso documentale, come indicativa di una lettura in chiave di effectuation del pivot, piuttosto che sufficiente a dimostrarla, e propone le proprie conclusioni come proposizioni per future ricerche empiriche, non come un risultato verificato statisticamente.

Parole chiave: Innovazione B2B; Validazione del business model; Lean Startup; Effectuation; Pubblicità gamificata.

1. Objectives and Structure of the Thesis

Early-stage startups routinely commit to a strategic direction, and then revise it, before they have complete evidence about customer needs, the attractiveness of their value proposition, or the viability of their business model. The entrepreneurship literature offers detailed guidance on how such ventures should test and validate their strategic assumptions as they do so, but this guidance has been developed almost entirely in business-to-consumer (B2C) settings, in which a brand communicates directly with the individuals who will decide whether to buy its product. Considerably less attention has been paid to business-to-business (B2B) settings, in which a supplier's innovation is adopted, or rejected, by a client organisation acting on behalf of end users who are themselves distinct from the person making the purchasing decision. This thesis is concerned with precisely this gap. It uses the pivot undertaken by TikAdRoll, an early-stage Italian digital startup developing gamified advertising experiences for business clients, as a case through which to examine how an early-stage B2B venture tests and validates the assumptions underlying its business model as it moves from one commercial concept to another.

The objective of this thesis is to examine this question through the case of TikAdRoll. TikAdRoll offers a particularly suitable setting for this purpose. The venture began as a business-to-consumer concept, a shared, multi-brand gamified advertising space, that was never launched. It subsequently pivoted to its current business model, in which brand-exclusive gamified experiences are embedded directly within a client company's own digital platforms, following its very first substantive commercial conversation with a prospective client. This pivot followed a direct, unsolicited request for brand exclusivity from that first prospective client, made before any structured test of end-user reactions had been conducted. This sequence of events, documented in detail in this thesis, raises a question of broader theoretical interest: what does the specific path a B2B venture actually follows toward its first client relationship reveal about where genuine uncertainty lies in

that process, about what a client's early commitment can and cannot be taken to demonstrate, and about the relationship between the experimentation-based logic that dominates the entrepreneurship literature and the alternative, effectuation-based logic through which entrepreneurs act on the commitments of the stakeholders around them.

This objective matters for two connected reasons. First, from a theoretical standpoint, the entrepreneurship literature offers two influential, and only partially compatible, accounts of how ventures manage uncertainty and validate their strategic assumptions: the Lean Startup tradition, which treats assumptions as hypotheses to be tested through structured experimentation, and effectuation theory, which treats ventures as constructed through the commitments of self-selected stakeholders rather than through prediction and testing. As this thesis shows, these two accounts have rarely been examined together within the documented history of a single venture, and rarely in a B2B setting specifically, where the separation between the end user who experiences an innovation and the client organisation that pays for it introduces a further layer of complexity that the largely business-to-consumer entrepreneurship literature does not directly address. Second, from a practical standpoint, understanding what a client organisation actually needs to be convinced of, as distinct from what a venture may be inclined to test first, has direct relevance for how early-stage B2B suppliers allocate their limited time and resources when seeking their first commercial relationships.

The research question guiding this thesis is: how does an early-stage digital B2B startup test and validate the assumptions underlying its business model as it pivots from one commercial concept to another, and what does this reveal about the relationship between experimentation and effectuation in B2B innovation? This overall question is examined along three more specific themes, developed formally in Chapter 3 of this thesis: how the conditions that led a prospective client to commit to TikAdRoll relate to the effectuation-driven logic through which entrepreneurs act on stakeholder commitments, as distinct from a Lean Startup-

style test of end-user reactions; to what extent a B2B client's willingness to adopt a solution depends on supplier-level considerations, such as exclusivity, technical integration, and confidence in a small or early-stage supplier, as opposed to independent evidence of how end users respond to it; and how these adoption conditions relate to the broader viability and scalability evidence that business model validation, properly understood, would additionally require.

To address this question, the thesis adopts a qualitative, compilative research design, built around a single, in-depth case. Its empirical basis is the documented history of TikAdRoll, reconstructed from the venture's internal materials, including its commercial contract, its pricing proposal, and its commercial pitch materials, together with the researcher's own direct involvement in the venture as its founder. The thesis does not involve new primary data collection beyond this documented case; its contribution is accordingly interpretive and theoretical, reading an already-documented sequence of events through the lens of the entrepreneurship literature in order to draw out a pattern that the existing literature has not yet examined, while explicitly acknowledging where the available documentary evidence stops short of what a fuller test of the pattern would require. The methodological choices underlying this design, and their limitations, are discussed in full in Chapter 4.

The remainder of this thesis is organised as follows. Chapter 2 reviews the literature on Lean Startup, hypothesis-driven entrepreneurship, the Minimum Viable Product, effectuation, and business model validation, and identifies the specific gaps in this literature that the present research addresses, including the largely unexamined relationship between experimentation and effectuation in B2B strategic pivots. Chapter 3 develops the theoretical framework of the thesis, setting out the puzzle raised by TikAdRoll's own history and formulating a small set of research propositions rather than statistically testable hypotheses, consistent with the qualitative, single-case nature of the research. Chapter 4 describes the methodology, explaining the rationale for a compilative, single-case design, the

documentary sources on which the case reconstruction relies, and the limitations that follow from this approach. Chapter 5 presents the TikAdRoll case in full, tracing the venture's development from its original, unlaunched concept through its pivot to its current B2B model, its commercial relationship with its first client, and the managerial lessons that have emerged along the way, and closes by mapping each research proposition explicitly against the evidence available to support it and the limits of that evidence. Chapter 6 concludes the thesis, summarising its key findings, discussing its theoretical and managerial contributions, and identifying the limitations of a compilative, single-case design together with directions for future research capable of addressing them, including through new primary data collection of the kind this thesis was not able to undertake.

2. Overview of the Literature and Identification of the Research Gap

2.1 Introduction

The objective of this chapter is not to provide a descriptive survey of the literature on Lean Startup or entrepreneurial experimentation, but to critically reconstruct how the academic community has come to understand strategic validation under uncertainty, and to identify the specific dimensions of this problem that remain insufficiently addressed. Two clarifications are necessary at the outset.

First, this thesis distinguishes between entrepreneurial experimentation, that is, experimentation conducted by new ventures operating under founding-stage uncertainty (Burnell, Stevenson, Fisher, & Burch, 2025), and the broader construct of business experimentation, which recent literature increasingly extends to established organisations seeking to innovate their business models (Ghezzi & Cavallo, 2018; Silva, Ghezzi, Aguiar, Cortimiglia, & ten Caten, 2020). This thesis adopts entrepreneurial experimentation as its central construct, because its empirical context, an early-stage digital B2B startup, is squarely a founding-stage phenomenon. However, because the startup under study operates in a business-to-business market historically dominated by established organisations, the chapter also draws on the business experimentation, innovation and organisational agility literature wherever it addresses conditions (organisational structure, the separation between user and paying customer, resource constraints, environmental turbulence) that are directly relevant to B2B settings regardless of firm age.

Second, while Lean Startup, the Minimum Viable Product (MVP) and entrepreneurial experimentation occupy considerable space in this review, none of them constitutes the true object of theoretical interest. The unifying phenomenon this thesis investigates is strategic validation under uncertainty: the process through which an organisation reduces its uncertainty about the assumptions underlying a business model, namely its desirability, viability and scalability, before committing significant resources. Lean Startup, MVPs and structured experimentation are best understood as instruments developed to serve this end,

not as ends in themselves. Framing the review in this way clarifies why the chapter includes sources that, on the surface, appear unrelated to Lean Startup (Knight, 1921; McMullen & Shepherd, 2006; Alvarez & Barney, 2007; McGrath, 1999), as well as sources that directly criticise the very tools this thesis relies on (Felin, Gambardella, Stern, & Zenger, 2020; Arend, Sarooghi, & Burkemper, 2015).

The chapter is organised thematically rather than by author or publication, and each major theme is further divided into numbered subsections to allow a level of depth commensurate with the twenty-three sources now underpinning the review. Section 2 examines the theoretical foundations of decision-making under uncertainty. Section 3 traces the emergence of hypothesis-driven entrepreneurship as a structured response to that uncertainty. Section 4 examines entrepreneurial experimentation and the MVP as the operational instruments of strategic validation. Section 5 extends the discussion to business experimentation, innovation and agility in B2B and established-firm contexts. Section 6 surfaces the critical perspectives and open theoretical debates the literature has generated. Section 7 clarifies the conceptual boundary between experimental evidence and full business model validation. Section 8 synthesises these themes critically, Section 9 identifies the research gap that motivates the empirical study, and Section 10 positions the present research within the resulting academic debate. A summary table listing all twenty-three sources, their main contribution and their relevance for this thesis is provided at the end of the chapter.

A final scope clarification is useful before proceeding. This chapter does not attempt an exhaustive survey of the entrepreneurship literature as a whole, nor does it cover adjacent streams, such as opportunity recognition in its cognitive-psychology variant, entrepreneurial finance, or the broader innovation-management literature on open innovation, except where these streams intersect directly with strategic validation under uncertainty. The twenty-three sources reviewed below were selected because each addresses one of the following dimensions: the definition of uncertainty itself, the boundary between

entrepreneurial and business experimentation, the instrumental status of Lean Startup and the MVP, the B2B and organisational-agility literature, the critical and divergent perspectives on the field's two central theories, and the distinction between experimental evidence and full business model validation.

2.2 Risk, Uncertainty, and the Foundations of Entrepreneurial Action

2.2.1 The Knightian Distinction Between Risk and Uncertainty

Any discussion of entrepreneurial experimentation presupposes a clear understanding of the condition it is designed to address: uncertainty. The term has nonetheless been used loosely across the entrepreneurship literature, often as a synonym for risk, incomplete information, or simple novelty. A rigorous treatment requires returning to its origin in economic theory.

Knight (1921) provided the foundational distinction between risk and uncertainty. He classified probability judgments into three types: a priori probability, grounded in the logical structure of a situation, such as a fair coin toss; statistical probability, grounded in the empirical frequency of past occurrences within a genuinely homogeneous class of instances; and estimates, situations in which, in Knight's words, there is "no valid basis of any kind for classifying instances" (Knight, 1921, ch. VII). Only the third type, which Knight terms true uncertainty, is not reducible to a measurable probability distribution, and is therefore immune to the standard economic mechanisms, such as insurance and pooling, that convert measurable risk into a fixed cost. Knight's central argument is that profit is not the return to risk bearing as such, but specifically the return to bearing this residual, unmeasurable uncertainty: once pooled through organisational devices, "measurable uncertainties do not introduce into business any uncertainty whatever," leaving only "that higher form of uncertainty not susceptible to measurement" as the true source of entrepreneurial income (Knight, 1921, ch. VII).

This distinction is not a historical curiosity; it is the conceptual foundation on which the rest of the literature discussed in this chapter implicitly rests. Sarasvathy

(2001) builds her Effectuation Theory on an explicitly Knightian premise: entrepreneurs operate in environments where the relevant future states, and therefore their probabilities, cannot be known in advance. Because prediction is not possible under true uncertainty, Sarasvathy argues that entrepreneurs abandon causal, goal-driven reasoning, which starts from a fixed objective and selects the optimal means to reach it, in favour of effectual reasoning: starting from the means at hand, namely who they are, what they know, and whom they know, and progressively constructing objectives and markets through stakeholder interaction and affordable loss, rather than prediction.

2.2.2 From Economic Theory to Individual Entrepreneurial Action

McMullen and Shepherd (2006) make this Knightian foundation explicit and extend it to the level of individual entrepreneurial action. They argue that existing theories of the entrepreneur conflate two distinct questions: whether entrepreneurial action occurs at the level of the economic system, the question that concerned Knight, Schumpeter and Kirzner, and why a specific individual, rather than another, acts on a given opportunity. Their model resolves this by proposing that entrepreneurial action is jointly determined by (a) the amount of uncertainty an individual perceives in a given opportunity, and (b) that individual's willingness to bear the uncertainty they perceive. Reducing perceived uncertainty, for instance through market research, and increasing the willingness to bear it, for instance through confidence, prior experience, or resource slack, are, in their model, two independent and non-substitutable pathways to entrepreneurial action, a distinction that remains largely absent from more applied, tool-oriented entrepreneurship literature.

Positioning this thesis explicitly within this Knightian lineage serves two purposes. First, it clarifies why hypothesis-driven approaches such as Lean Startup, discussed in the next section, are theoretically necessary rather than merely fashionable: under true uncertainty, no amount of ex ante planning or market research can substitute for iterative, empirical testing, precisely because the

relevant probability distributions do not exist to be estimated in the first place. Second, it establishes uncertainty, not risk, and not simple lack of information, as the construct against which the value of experimentation, MVPs and business model validation must be assessed throughout the remainder of this chapter.

2.2.3 Alternative Views of Opportunity Under Uncertainty: Discovery, Creation, and Real Options

Knight, Sarasvathy, and McMullen and Shepherd do not exhaust the theoretical landscape concerning uncertainty and entrepreneurial action, and two further contributions are worth introducing here because they resurface, in different guises, later in this chapter.

Alvarez and Barney (2007) formalise a distinction that runs beneath much of the tension between effectuation and more traditional, opportunity-recognition accounts of entrepreneurship. Discovery theory treats opportunities as objective phenomena that exist independently of any entrepreneur, waiting to be found through search and analysis, much as a mountain waits to be climbed. Creation theory, by contrast, treats opportunities as social artefacts that come into existence only through the actions, choices and interactions of entrepreneurs themselves, more akin to building a mountain than climbing one. Alvarez and Barney show that these two internally consistent theories generate different, sometimes contradictory, predictions for entrepreneurial decision making, business planning and the search for financing. This distinction matters for the present thesis because Sarasvathy's effectuation and Blank and Eckhardt's hypothesis-driven Lean Startup, although often discussed together, do not sit on the same side of this divide: effectuation is squarely a creation account, in which the market is built through action, whereas the customer-discovery vocabulary of Lean Startup retains a discovery-theoretic residue, in which a pre-existing customer need is to be uncovered through testing rather than constructed through interaction. Making this residual tension visible, rather than treating the two traditions as fully compatible, is part of the more critical stance this chapter now adopts.

McGrath (1999) approaches the same underlying problem, namely how to act rationally when outcomes cannot be predicted, from the perspective of real options reasoning. Rather than treating entrepreneurial failure as a phenomenon to be avoided at all costs, McGrath argues that a portfolio of small, staged investments, each of which can be abandoned early at limited cost if early signals are unfavourable, allows a firm to capture high-variance upside opportunities while containing the downside of any single failure. This logic offers a further, complementary rationale for structured experimentation, distinct from Knight's and Sarasvathy's: an MVP-based experiment can be read not only as a device for generating validated learning, in Ries's sense, but also as a real option, an initial, deliberately limited commitment that preserves the ability to expand, redirect or abandon a venture as uncertainty is progressively resolved. This framing will be revisited in Section 6 when the limits of experimentation are discussed, since real options reasoning, like Lean Startup, has itself been criticised for encouraging excessive optimism about the reversibility of early-stage commitments.

2.2.4 Convergence Across Four Accounts of Uncertainty

Before turning to how entrepreneurs are advised to act under uncertainty, it is worth pausing to note what Knight (1921), McMullen and Shepherd (2006), Alvarez and Barney (2007) and McGrath (1999) have in common, since the four are not always read together in the entrepreneurship literature. All four reject the idea that uncertainty can be fully resolved through better information gathering alone. Knight locates this impossibility in the logical structure of probability itself. McMullen and Shepherd locate it in the individual's subjective perception of, and willingness to tolerate, that same structural condition. Alvarez and Barney locate it in the ontological status of the opportunity itself, since a creation-theoretic opportunity cannot, by definition, be discovered through better search because it does not yet exist independently of the entrepreneur's action. McGrath locates it in the temporal structure of investment decisions, arguing that the correct response to unresolvable uncertainty is not more analysis before acting but smaller, more

reversible actions over time. Read together, these four accounts converge on a single implication that motivates the remainder of this chapter: if uncertainty cannot be resolved analytically in advance, some form of action-based learning, of which hypothesis-driven experimentation is the most structured example available in the current literature, becomes not simply advisable but logically necessary.

2.3 From Uncertainty to Hypothesis-Driven Entrepreneurship

2.3.1 Lean Startup as an Actionable Theory

Given genuine, Knightian uncertainty about a venture's underlying assumptions, how should entrepreneurs act? The Lean Startup literature answers this question by proposing that entrepreneurial assumptions be treated as explicit, falsifiable hypotheses to be tested through structured interaction with the market, rather than as premises of a business plan to be executed.

Blank and Eckhardt (2024) argue that Lean Startup should not be interpreted merely as a collection of managerial tools popularised by practitioners (Ries, 2011; Blank, 2013), but as an actionable theory of entrepreneurship in its own right: a theory that explains how entrepreneurs generate reliable knowledge under uncertainty through iterative hypothesis testing, customer interaction and validated learning. This reframing is significant because it repositions Lean Startup from a set of practitioner heuristics to a testable account of entrepreneurial cognition and learning, directly continuous with the uncertainty-management problem introduced in Section 2.

2.3.2 Empirical Evidence for Hypothesis-Driven Decision-Making

Camuffo, Cordova, Gambardella, and Spina (2020) provide the most direct empirical support for this theoretical repositioning. Through a randomised controlled trial involving startup founders, they show that entrepreneurs trained to adopt scientific, hypothesis-driven reasoning make significantly different, and on several performance dimensions better, strategic decisions than founders relying primarily on intuition, including a greater propensity to pivot away from failing

initial ideas. The importance of this study for the present thesis lies less in any single performance metric than in its method: it demonstrates that hypothesis-driven experimentation is not merely a plausible normative recommendation but an empirically manipulable managerial practice, with measurable consequences. It is worth noting, and this point is developed further in Section 6, that a randomised controlled trial of this kind establishes that experimentation training changes decisions; it does not, by itself, establish that every venture that experiments will outperform every venture that does not, since the quality of the underlying hypotheses and the interpretation of the resulting evidence still matter greatly, a caveat the authors themselves acknowledge.

Camuffo, Gambardella, Messinese, Novelli, Paolucci, and Spina (2024) address exactly this generalisability concern directly, by replicating the original 2020 study at considerably larger scale: four randomised controlled trials, encompassing 759 firms across four different institutional contexts, Milan, Turin and London, run between 2016 and 2019. Their extended results confirm the original finding that a scientific approach can be taught, but add an important refinement that the single, smaller original study could not detect: the relationship between adopting a scientific approach and the number of subsequent pivots is nonlinear, with treated firms tending to make a few, carefully considered strategic changes rather than either no changes at all or repeated, unfocused ones. The authors attribute this pattern to two mechanisms operating jointly, a heightened methodic doubt that makes entrepreneurs more cautious before committing to any given direction, and a more efficient search process that helps them discard clearly unpromising ideas earlier. For the present thesis, this large-scale replication matters for two reasons: it strengthens, through independent, multi-context confirmation, the empirical foundation on which Blank and Eckhardt's (2024) actionable-theory account of Lean Startup rests, and it introduces a more nuanced view of pivoting itself, one in which the goal of hypothesis-driven experimentation is not to maximise the number of pivots a venture undergoes but to make each pivot decision, including

the one TikAdRoll itself undertook in moving from a B2C to a B2B model, better informed.

2.3.3 The Coexistence of Multiple Entrepreneurial Logics in Digital Startups

Ghezzi (2019) complicates any simple linear story running from effectuation to Lean Startup by showing, through a large-sample survey and interview study of digital startups, that founders rarely commit to a single entrepreneurial logic. Instead, effectuation, Lean Startup, that is, customer development and validation, and bricolage, the recombining of resources at hand, are combined dynamically, with the dominant logic shifting according to the venture's stage of development and the level of environmental uncertainty it currently faces. This finding is important for the present thesis because it cautions against treating Lean Startup and effectuation as mutually exclusive, competing paradigms: in practice, digital B2B startups such as the one examined in this thesis are likely to draw on both, and the relevant question is not which theory is correct but which logic dominates at which stage of validation.

Taken together, these three contributions establish hypothesis-driven entrepreneurship as the dominant academic response to the Knightian problem of uncertainty introduced in Section 2: rather than attempting to predict an unknowable future, or relying purely on effectual improvisation, entrepreneurs are advised to formulate explicit, falsifiable strategic hypotheses and test them empirically before committing resources. The remaining question, addressed in Section 4, is what, concretely, this testing process consists of, and what role the Minimum Viable Product plays within it.

2.3.4 Pivoting as the Observable Outcome of Hypothesis Rejection

One further construct, already introduced in passing through Camuffo et al.'s (2024) finding on pivot frequency, deserves closer attention in its own right, since it is the mechanism through which hypothesis-driven experimentation becomes visible as a strategic event rather than remaining an internal, largely invisible

process of belief revision: the pivot. Kirtley and O'Mahony (2023) offer the most methodologically careful account currently available of what a pivot actually is. Based on a longitudinal field study of seven early-stage energy and clean-technology firms, tracking 93 strategic decisions at risk of change over time, they show that a pivot is rarely produced by a single, discrete decision to abandon one strategy for another. Instead, it typically emerges as the cumulative product of multiple, independently triggered smaller decisions unfolding over an extended period, each responding to a specific piece of new evidence rather than to a single, comprehensive reassessment of the venture as a whole.

This finding has direct implications for how this thesis interprets TikAdRoll's own transition from an autonomous, consumer-facing gamified advertising platform to a B2B model built around client integration. Kirtley and O'Mahony's (2023) general finding, that pivots typically emerge as an accumulation of smaller decisions rather than as a single discrete event, still applies to the sequence of adjustments TikAdRoll made throughout this transition. It leaves open, however, a further question their study does not itself address: what triggers the specific decisions of which a pivot is made. Those triggers need not be hypothesis-driven in Blank and Eckhardt's (2024) sense; they may equally originate from effectual, stakeholder-driven commitments of the kind Sarasvathy (2001) describes, a possibility this thesis examines directly, using TikAdRoll's own case, in Chapter 3. This reframing also clarifies how this thesis reads TikAdRoll's own successive product demonstrations against its broader strategic trajectory: no single demonstration tested whether the pivot as a whole was correct, a question that, following Kirtley and O'Mahony, may not even be well posed, since the pivot itself is not a single testable event, but the cumulative product of several smaller decisions, each responding to a specific piece of evidence the venture encountered along the way.

2.4 Entrepreneurial Experimentation and the Minimum Viable Product as Instruments of Strategic Validation

2.4.1 Experimentation as a Structured Managerial Process

If entrepreneurial assumptions are to be tested rather than assumed, two further questions arise: what does rigorous entrepreneurial experimentation actually involve, and what artefact is used to generate evidence from the market? This section addresses both questions. Experimentation is the process, and the MVP is one possible artefact used within that process. The two are related but not interchangeable, and conflating them, as much practitioner literature does, obscures exactly the design choices this thesis investigates.

Burnell et al. (2025) offer the most comprehensive conceptual synthesis of entrepreneurial experimentation currently available, integrating close to four decades of prior research into a unified theoretical framework. Rather than treating experimentation as a single undifferentiated activity, they decompose it into three interdependent phases: designing an experiment, that is, translating a strategic assumption into a testable hypothesis and selecting a treatment, a comparison condition and a metric; conducting the experiment; and interpreting the resulting evidence in light of the original hypothesis and decision rule. Crucially for this thesis, Burnell et al. also review evidence on the social and reputational consequences of experimentation: failed experiments, if visible to external stakeholders, can be interpreted as signals of poor product quality rather than as legitimate scientific learning, and the perceived legitimacy of experimentation itself depends on the venture being seen as having a flexible, informal organising structure. This is a first indication, developed further in Sections 5 and 7, that the value of an experiment cannot be assessed independently of the audience interpreting it, a point directly relevant to a B2B context in which the interpreting audience, a client company's decision-makers, is distinct from the participants generating the underlying data, the end users.

Selecting the metric attached to an experiment deserves particular emphasis, since Burnell et al. (2025) treat it as one of the three constitutive elements of a properly designed experiment, alongside the hypothesis and the decision rule, yet the metric is frequently the element left most implicit in practitioner accounts of Lean Startup. A metric is meaningful, in Burnell et al.'s sense, only if a specific, pre-registered outcome would change the strategic decision at hand; a metric that moves regardless of the underlying hypothesis being true or false generates activity without generating validated learning. This requirement becomes considerably more demanding in a B2B setting: because, as Brecht et al. (2021) show, the person generating the metric, the end user, and the person the metric is ultimately meant to persuade, the client-side decision-maker, are different actors, a metric adequate for a B2C experiment (for instance, a simple conversion rate) may need to be reinterpreted, or supplemented with qualitative evidence, before it can meaningfully inform a B2B strategic decision. This issue is addressed directly in Section 7 and again in the thesis's own methodology.

2.4.2 The Minimum Viable Product as a Learning Artefact, Not a Prototype

Lenarduzzi and Taibi (2016) address the second question through a systematic mapping study of how the term Minimum Viable Product is actually used in both academic and practitioner sources. Their central finding is one of definitional ambiguity: the literature attributes markedly different objectives and characteristics to the same label, and a significant share of usages treat the MVP, incorrectly in the authors' view, as a simplified or incomplete product rather than as an experimental artefact whose purpose is to maximise validated learning relative to the resources invested in building it. This finding matters for the present thesis for a specific reason: it implies that an MVP's value should not be assessed by its technical sophistication or completeness, but by whether it is embedded within a properly designed experiment, in Burnell et al.'s sense, with an explicit hypothesis, metric, threshold and decision rule attached. An MVP without these

elements is, by Lenarduzzi and Taibi's own account, not yet an experiment; it is simply an early product.

2.4.3 From Tools to Capability: Strategic Agility as the Unifying Frame

Ghezzi and Cavallo (2018) extend this instrumental framing one step further by connecting Lean Startup Approaches explicitly to the concept of Strategic Agility. Based on an exploratory multiple-case study of three digital multisided-platform startups, they propose a unified framework in which Lean Startup tools and Agile Development practices function as the operational mechanisms through which digital ventures achieve ongoing Business Model Innovation. Their contribution reinforces the central claim of this chapter: Lean Startup, MVPs and Agile methods are not, in themselves, the phenomenon of theoretical interest, but the operational machinery through which a more fundamental strategic capability, the ongoing validation and reconfiguration of a business model under uncertainty, is enacted. This concept of Strategic Agility, and its precise theoretical origin, is developed further in Section 5, since it is also the construct through which established B2B firms, not only startups, have been shown to manage uncertainty.

Read together, this section establishes that entrepreneurial experimentation is best understood as a structured managerial process (Burnell et al., 2025), of which the MVP is one possible artefact (Lenarduzzi & Taibi, 2016), deployed in service of a broader strategic capability (Ghezzi & Cavallo, 2018). This instrumental framing clarifies that Lean Startup, MVP and experimentation are not themselves the object of study; strategic validation under uncertainty is, and these are its currently best-documented instruments.

2.5 Extending Experimentation Beyond the Startup: Business Experimentation, Innovation and Agility in B2B and Established-Firm Contexts

2.5.1 The Structural Specificities of B2B Experimentation

The literature reviewed so far is overwhelmingly generic with respect to market structure: Ries (2011), Blank and Eckhardt (2024), Camuffo et al. (2020) and

Ghezzi (2019) develop and test their arguments primarily in consumer-facing or undifferentiated digital-startup contexts. Yet the present thesis is concerned with a business-to-business (B2B) setting, in which, as this section demonstrates rather than merely asserts, the generic experimentation literature is measurably thinner, and where several structural features of the B2B relationship complicate the direct transfer of Lean Startup prescriptions.

Brecht, Hendriks, Stroebele, Hahn, and Wolff (2021) provide the most direct evidence of this gap and, simultaneously, one of the few frameworks explicitly designed to close it. They observe that B2B ventures face at least two structural conditions absent from the generic Lean Startup playbook: because a much larger share of revenue is typically generated by a much smaller number of customers, achieving statistical significance in B2B experiments is substantially harder than in high-volume B2C settings; and because the person who decides to purchase a solution, the client company's decision-maker, is frequently not the person who uses it, the end user, evidence generated at the user level cannot be automatically read as evidence of purchasing intent at the client level, a distinction this thesis returns to directly in Section 7. To address these conditions, Brecht et al. propose a four-step B2B-Startup Experimentation Framework, namely a measurement system, hypothesis development and prioritisation, discovery, and validation, which they apply to a single German B2B startup through a design-science methodology. While the framework's generalisability is limited by its single-case design and by the short, low-budget nature of the underlying experiments, limitations the authors themselves acknowledge, it remains, to date, one of the few peer-reviewed contributions that operationalises entrepreneurial experimentation specifically for a B2B audience.

Methodologically, it is worth noting that Brecht et al. (2021) do not adopt the randomised controlled trial logic of Camuffo et al. (2020), discussed in Section 3.2, but a design-science approach, in which the framework itself is treated as the artefact under evaluation, built, applied to a real venture, and iteratively refined

based on what the application reveals. This methodological choice is itself informative for the present thesis: it suggests that, in a single-case, resource-constrained B2B setting, a build-and-evaluate logic focused on the quality and interpretability of the resulting framework may be more feasible, and arguably more appropriate, than a between-subjects experimental design of the kind more easily implemented in high-volume B2C contexts.

2.5.2 Strategic Agility and Business Model Innovation in Established B2B Firms

The professor supervising this thesis specifically requested coverage of innovation and agility in B2B contexts beyond experimentation narrowly defined, and this subsection responds directly to that request by turning from single-case, startup-specific evidence to the broader literature on organisational agility in established firms, many of which operate in B2B markets.

Doz and Kosonen (2010) introduced the concept of Strategic Agility as a response to a structural tension familiar to established firms: over time, efficient organisations tend to develop increasingly stable, and therefore increasingly rigid, business models, precisely as their competitive environment becomes less predictable. Based on detailed research across a dozen companies engaged in business model renewal, they propose that this tension can be resolved through three meta-capabilities: strategic sensitivity, the ability to notice and interpret weak signals of change early; leadership unity, the ability of a top management team to make bold decisions quickly without becoming trapped in internal negotiation; and resource fluidity, the ability to reallocate people, capital and capabilities rapidly across the organisation. Although Doz and Kosonen's original study was not restricted to B2B firms, their meta-capabilities framework has since become the dominant reference point for subsequent B2B-specific research on business model renewal under uncertainty, including the study discussed next.

Clauss, Abebe, Tangpong, and Hock (2019) provide large-sample, quantitative evidence directly relevant to established B2B firms. Analysing survey data from

432 German firms in the electronics industry, a sector with a substantial business-to-business component, they find that firm-level strategic agility is positively associated with the adoption of business model innovation, and that this relationship is strengthened under conditions of higher environmental turbulence, that is, precisely the conditions of elevated uncertainty this chapter has been concerned with throughout. Their results further indicate that business model innovation mediates the relationship between strategic agility and firm performance, although, somewhat unexpectedly, one specific type of business model innovation they examine, value capture innovation, is negatively associated with firm performance in their sample. This last finding is a useful corrective to any overly optimistic reading of the agility literature: agility and business model experimentation are not unconditionally beneficial, a point this chapter returns to in Section 6.

Read alongside Ghezzi and Cavallo (2018), whose exploratory case evidence was discussed in Section 4, Doz and Kosonen (2010) and Clauss et al. (2019) show that Strategic Agility functions as a genuine bridge construct between the startup-focused entrepreneurial experimentation literature and the established-firm business experimentation literature: the same underlying capabilities, sensing uncertainty, deciding quickly, and reallocating resources, are theorised to matter regardless of firm age, even though the specific tools used to enact them, an MVP experiment in a startup, a formal business model innovation process in an established electronics firm, differ considerably.

2.5.3 Demonstrating, Rather Than Asserting, the B2B Gap

The scarcity of B2B-specific experimentation research is not merely Brecht et al.'s own claim; it is independently corroborated by two systematic literature reviews included in this chapter's expanded reference base. Gamón-Sanz, Alegre, and Chiva (2024), reviewing 113 papers on Lean Startup adoption across industries and organisational types following the PRISMA protocol, identify only two frameworks explicitly designed for B2B contexts, namely Brecht et al.'s own B2B-

Startup Experimentation Framework and Nashaat, Ghosh, Miller, Quader, and Marston's (2019) M-Lean framework for B2B predictive systems using machine learning, out of the entire population of sector- and context-specific frameworks they catalogue. Silva, Ghezzi, Aguiar, Cortimiglia, and ten Caten (2020), analysing a separate, independently assembled set of 71 papers on Lean Startup, Agile Methodologies and Customer Development, do not surface B2B as a distinct analytical category anywhere in their thematic concept map. Taken together, these two independent systematic reviews provide converging, demonstrable evidence, rather than a mere assertion, that B2B contexts remain a substantially underexplored area within the entrepreneurial and business experimentation literature narrowly defined.

This picture is nuanced, but not overturned, by the broader organisational agility literature reviewed in Section 5.2: Doz and Kosonen (2010) and Clauss et al. (2019) show that established B2B firms have received considerably more attention under the heading of strategic agility and business model innovation than under the heading of entrepreneurial experimentation as such. The gap this thesis addresses is therefore best stated precisely: it is not that B2B firms are absent from management research in general, but that the specific mechanics of experimentation, translating an assumption into a hypothesis, choosing a metric, running a small-sample test, and interpreting the result for a client-side decision-maker, remain, as Sections 5.1 and 5.3 have shown, addressed by only a handful of studies, most of them single-case, for early-stage B2B ventures specifically.

2.6 Critical Perspectives and Open Debates

2.6.1 The Limits of Lean Startup

The literature reviewed in Sections 2 through 5 might, if read in isolation, suggest a relatively settled academic consensus in favour of hypothesis-driven, experimentation-based entrepreneurship. This impression would be misleading. Both of the theoretical pillars this thesis relies upon, Sarasvathy's (2001) Effectuation Theory and the Lean Startup tradition formalised by Blank and

Eckhardt (2024), have been the subject of serious, unresolved academic criticism, which this section surfaces explicitly rather than leaving implicit.

Felin, Gambardella, Stern, and Zenger (2020) offer the most direct critique of Lean Startup available in the peer-reviewed literature. Their central argument is that Lean Startup's emphasis on rapid, readily observable feedback systematically biases entrepreneurs toward incremental ideas that are easy to test, while undervaluing exactly those entrepreneurial insights that are, in Edwin Land's phrase which the authors invoke approvingly, startling and unexpected, and not amenable to any immediately recognisable experiment. In their view, Lean Startup provides no *ex ante* mechanism for generating genuinely novel hypotheses in the first place; it is well suited to refining an already-identified opportunity, but poorly suited to discovering non-obvious ones. This critique does not invalidate the use of Lean Startup tools in the present thesis, since TikAdRoll's core hypotheses are not radically novel in Felin et al.'s sense, but it does require this thesis to acknowledge, rather than ignore, that the experimentation paradigm it adopts has known theoretical limits, particularly regarding the kinds of validated learning it is and is not well suited to generate.

2.6.2 The Contested Status of Effectuation

Effectuation has faced an equally direct challenge. Arend, Sarooghi, and Burkemper (2015) apply a purpose-built theory-assessment framework, the so-called 3E framework, to Sarasvathy's (2001) theory and conclude that, despite over a decade of scholarly use, Effectuation displays significant theoretical gaps, since several of its foundational assumptions are, in their reading, either underspecified or empirically unsupported, and has not been subjected to sufficient empirical testing. They are not alone in this assessment: they cite prior critics including Chiles, Bluedorn, and Gupta (2007), Baron (2009), and Perry, Chandler, and Markova (2012). This critique, however, did not go unanswered. Read, Sarasvathy, Dew, and Wiltbank (2016), the original architects of Effectuation, responded directly, arguing that Arend et al. apply a positivist assessment

framework, built on falsifiability and stable, predictable states of the world, to a theory that is explicitly pragmatist in its philosophical foundations, and is concerned precisely with a world that is unpredictable and made rather than found. They further report that their own independent search of the effectuation literature, 287 pieces identified across ProQuest, JSTOR and Google Scholar, suggests Arend et al.'s original review omitted a substantial share, by their count roughly three quarters, of the relevant published work.

The Arend et al. (2015) and Read et al. (2016) exchange is, for the purposes of this thesis, more valuable as evidence of an unresolved paradigm-level disagreement than as a verdict in either direction. It demonstrates that the choice between causal, positivist assessment criteria and pragmatist, action-oriented ones is not a peripheral methodological detail but a live and consequential dispute within the entrepreneurship field, one this thesis does not attempt to resolve. What the exchange does allow this thesis to do is state plainly that Effectuation is deployed here as a useful, but contested, theoretical lens, not as an uncontroversial, settled foundation.

It is worth adding that the empirical record on effectuation is itself more developed than Arend et al.'s (2015) critique might suggest in isolation. Read, Song, and Smit (2009), in a meta-analysis combining 48 independent samples and data on 9,897 new ventures published prior to their review, report statistically significant, positive associations between several effectuation principles, including means-based reasoning and affordable loss, and new venture performance. This body of evidence complicates a simple reading of the Arend et al. versus Read et al. debate as one side having empirical support and the other having none: effectuation does have a non-trivial, if largely correlational, empirical base, even as Arend et al. (2015) are correct that this base had not, at the time of their critique, been organised into a fully specified, rigorously falsifiable theoretical structure. Both observations can be true simultaneously, and this thesis treats them as such rather than resolving the tension in either direction.

2.6.3 Further Sites of Theoretical Disagreement

Two further tensions, introduced earlier in this chapter, deserve to be named explicitly as open debates rather than left as passing observations. First, the discovery versus creation distinction developed by Alvarez and Barney (2007) implies that Lean Startup's customer-discovery vocabulary and effectuation's market-creation vocabulary are not, in fact, fully compatible descriptions of the same underlying process, even though both are frequently invoked together, including in Ghezzi's (2019) account of how digital startups combine them. A researcher committed to a strict discovery-theoretic view would expect an MVP experiment to reveal a pre-existing customer preference; a researcher committed to a strict creation-theoretic view would expect the same experiment to partially constitute that preference through the very act of exposing customers to a novel offering. This thesis does not adjudicate between these positions, but it does treat the tension as real, and returns to it when interpreting TikAdRoll's documented history in the chapters that follow.

Second, McGrath's (1999) real options reasoning, introduced in Section 2.3 as a further rationale for staged, reversible experimentation, is itself not free of criticism in the broader strategy literature: subsequent scholars have argued that framing early-stage investments as options can encourage a false sense of reversibility and excessive optimism about a firm's ability to exit a failing initiative cheaply, a risk directly analogous to the reputational costs of failed experiments documented by Burnell et al. (2025) in Section 4.1. Taken together with the findings of Clauss et al. (2019) in Section 5.2, that at least one form of business model innovation is negatively associated with firm performance, this subsection reinforces a point made at the outset of Section 6: the literature underpinning this thesis is not a story of uniformly beneficial tools, but a body of contested theory whose limits and boundary conditions must be treated as seriously as its benefits.

Taken together, Sections 2 through 6 present a balanced picture: hypothesis-driven experimentation and effectual reasoning are the dominant academic responses to

entrepreneurial uncertainty, but both rest on theoretical foundations that remain actively and legitimately contested.

It is worth adding one final, practical observation to close this section of the chapter. None of the critiques discussed above amount to an argument against experimentation as such; McMullen and Shepherd (2006), whose model was introduced in Section 2.2, would characterise the appropriate response to Felin et al.'s (2020) critique not as abandoning hypothesis-driven experimentation but as recognising that experimentation reduces perceived uncertainty about incremental assumptions specifically, leaving the separate question of an entrepreneur's willingness to bear the residual, non-experimentally-reducible uncertainty surrounding a genuinely novel idea untouched. Framed this way, Felin et al.'s critique and McMullen and Shepherd's two-factor model are complementary rather than contradictory: an MVP experiment can be a rigorous, well-designed test of a specific hypothesis, in Burnell et al.'s (2025) sense, while still leaving open the prior, more fundamental question of whether the hypothesis being tested was itself worth testing in the first place. This chapter's case-based successor addresses the latter question directly, by examining which of TikAdRoll's assumptions actually carried uncertainty at the point of its pivot; it does not, and does not claim to, resolve the former, more general question for entrepreneurship as a whole.

2.7 From Experimentation to Validation: Desirability, Viability, and the Limits of Evidence

2.7.1 What a Business Model Actually Requires

A further conceptual clarification concerns the relationship between running an experiment and validating a business model. The two are not synonymous, and the literature reviewed above provides the elements needed to state precisely why.

Teece (2010) offers a useful academic anchor for this discussion. He defines a business model as management's hypothesis about what customers want, how they

want it, and how the enterprise can organise to meet those needs, get paid for doing so, and ultimately make a profit. Read alongside the hypothesis-driven entrepreneurship literature discussed in Section 3, Teece's definition makes explicit that a business model is itself already a bundle of hypotheses, and that validating it therefore requires testing not one assumption but several, spanning value creation, that is, whether the offering is desirable to customers, and value capture, that is, whether the enterprise can convert that desirability into a profitable and durable revenue stream.

2.7.2 Desirability Is Not Viability

Brecht et al.'s (2021) B2B-Startup Experimentation Framework is explicit on this point in a way that is easy to overlook: the framework is designed to discover and validate a business model's desirability, that is, whether a target customer finds a proposed solution attractive, and does not, by the authors' own account, extend to validating commercial viability, whether the business can be run profitably at the proposed price and cost structure, or scalability, whether the model can be replicated across a larger customer base without a proportional loss of unit economics. An increase in user engagement, promotional recall, or intention to reuse a product, the kinds of outcome measures common to MVP experiments, including the one designed for this thesis, is therefore, at best, evidence of desirability. It is not, on its own, evidence that a client company is willing to pay for the underlying solution, that the venture's unit economics are sustainable, or that the model can scale. This distinction is reinforced by Burnell et al.'s (2025) observation, discussed in Section 4.1, that experimental evidence is filtered through the interpretation of an audience: in a B2B setting, that audience is the client company's decision-makers, whose criteria for viability and scalability are not necessarily the same as, and are not directly observable from, end-user engagement metrics. Clauss et al.'s (2019) finding, discussed in Section 5.2, that value capture innovation was negatively associated with firm performance in their sample, is a further, independent illustration of the same underlying point: even

successfully validated value creation, in Teece's sense, does not automatically translate into successful value capture.

This distinction can be made concrete by considering the specific outcome measures used in comparable MVP experiments, including user engagement, perceived innovativeness, customer experience, promotional recall, intention to reuse an application, and intention to redeem an offer. All six are, in the terms established in this section, desirability measures: each captures some aspect of how an end user responds to an offering, and none of them, individually or in combination, directly measures a client company's willingness to pay, the venture's achievable margin, or the cost of acquiring and serving additional client companies at scale, which is what viability and scalability, in Teece's (2010) sense, actually require. This does not make such measures uninformative. Following Burnell et al.'s (2025) audience-dependent view of experimental evidence, discussed in Section 4.1, these measures can still be strategically useful, provided their evidential status is stated accurately: they support inference about whether end users respond positively to an offering, which is itself a necessary, but not sufficient, condition for a B2B client to judge the offering commercially viable. Treating a positive result on these measures as if it settled the viability question would repeat exactly the conflation this chapter has argued against throughout. Chapter 3 develops one further refinement of this distinction specific to early-stage B2B relationships: viability judgments in such relationships may depend less on product-level desirability and more on supplier-level considerations, such as a client's confidence in a small or early-stage supplier's ability to deliver, a dimension the literature reviewed in this chapter has not yet examined directly.

2.7.3 A Methodological Note on Practitioner Frameworks

It is worth noting, as a matter of methodological transparency, that the popular desirability-viability-feasibility framework often invoked in professional and consulting contexts to describe this same triad originates from design-practice sources associated with IDEO rather than from peer-reviewed academic research.

In keeping with the methodological guidance followed throughout this thesis, this chapter therefore does not treat that label as an academic construct in its own right; where the underlying distinction between validating desirability and validating economic viability is used, it is grounded instead in the peer-reviewed treatments provided by Teece (2010) and Brecht et al. (2021), with the practitioner terminology, where used at all, flagged explicitly as such.

This distinction is directly consequential for how this thesis reads the TikAdRoll case. TikAdRoll's own successive product demonstrations, examined in the chapters that follow, are capable, in principle, of speaking to desirability, that is, whether a gamified advertising format is one that end users respond to positively. They are not, by themselves, capable of validating the viability or scalability of TikAdRoll's B2B business model; that judgment, as the case shows, was formed by Gruppo Romano through an entirely separate set of considerations, concerning exclusivity, technical integration and supplier credibility, documented directly in the venture's own commercial history rather than elicited through a purpose-built research instrument. Making this distinction explicit, rather than allowing evidence of user-level enthusiasm to stand in silently for business model validation, is one of the central contributions this thesis aims to make to the literature reviewed in this chapter.

2.8 Critical Analysis and Emerging Consensus

The literature examined in this chapter traces a coherent, if contested, intellectual trajectory. Knight (1921) establishes that entrepreneurial profit originates in the bearing of true, unmeasurable uncertainty rather than measurable risk. McMullen and Shepherd (2006) translate this economic insight into an individual-level model of entrepreneurial action, jointly determined by perceived uncertainty and the willingness to bear it. Alvarez and Barney (2007) and McGrath (1999) add, respectively, an alternative discovery-versus-creation lens and a real-options lens onto the same underlying problem. Sarasvathy (2001) proposes effectuation as one behavioural response to this condition, acting from available means rather than

predicting outcomes, an empirical base subsequently reinforced by Read, Song, and Smit's (2009) meta-analysis, while Blank and Eckhardt (2024), supported empirically by Camuffo et al. (2020) and its large-scale replication by Camuffo et al. (2024), propose hypothesis-driven experimentation as a complementary, more structured response. Ghezzi (2019) shows these logics are combined dynamically in practice rather than adopted in pure form, and Kirtley and O'Mahony (2023) show that the pivot decisions a venture makes are themselves cumulative rather than singular events, without settling whether any given pivot originates from experimentation, from effectual commitments, or from both.

Burnell et al. (2025) and Lenarduzzi and Taibi (2016) clarify what rigorous experimentation and a properly designed MVP actually require, while Ghezzi and Cavallo (2018) connect these tools to the higher-order capability of Strategic Agility, a construct traced to its origin by Doz and Kosonen (2010) and tested at scale in established B2B firms by Clauss et al. (2019). Brecht et al. (2021), together with the systematic reviews of Gamón-Sanz et al. (2024) and Silva et al. (2020), demonstrate that this entire apparatus has been developed and tested overwhelmingly outside B2B contexts, narrowly defined, even though the broader strategic agility literature shows established B2B firms are far from neglected in management research generally. Felin et al. (2020) and the Arend et al. (2015) and Read et al. (2016) exchange demonstrate that neither Lean Startup nor Effectuation commands unanimous theoretical support. Finally, Teece (2010) and the desirability-versus-viability distinction clarified in Section 7 show that even a well-designed experiment addresses only part of what business model validation requires.

Several points of convergence nonetheless emerge across this otherwise heterogeneous literature. First, uncertainty is consistently treated as a condition to be managed through iterative learning rather than eliminated through prediction. Second, strategic assumptions are increasingly treated as falsifiable hypotheses requiring empirical evidence rather than as premises to be simply asserted. Third,

the MVP is best conceptualised as a learning device embedded within a properly specified experiment, with an explicit hypothesis, metric, and decision rule, rather than as an early or incomplete product. Fourth, the evidence generated by any single experiment is bounded in scope: it typically speaks to desirability far more directly than to viability or scalability, and its interpretation depends on the audience receiving it.

At the same time, the literature reveals substantial and unresolved disagreement: on whether Lean Startup's experimentation logic systematically favours incremental over genuinely novel opportunities (Felin et al., 2020); on whether Effectuation meets conventional standards of scientific theory or whether those standards are themselves inapplicable to a pragmatist account of entrepreneurial action (Arend et al., 2015; Read et al., 2016); on whether business model innovation and strategic agility uniformly improve firm performance, given Clauss et al.'s (2019) finding that one specific form of business model innovation did not; and, most directly relevant to this thesis, on how experimentation frameworks developed overwhelmingly in B2C and generic digital-startup contexts should be adapted, rather than merely applied unchanged, to B2B settings characterised by small effective samples and a structural separation between the end user and the paying decision-maker.

One further implication follows from this synthesis and is worth stating explicitly, since it anchors the methodological choices made later in this thesis. Because the literature reviewed in this chapter is genuinely divided, on the discovery versus creation status of customer evidence, on whether Effectuation meets conventional theoretical standards, and on whether agility and experimentation uniformly improve outcomes, this thesis does not treat any single theoretical tradition as a sufficient lens on its own. Instead, it draws on Knightian uncertainty and the hypothesis-driven tradition to justify why experimentation matters to entrepreneurial ventures at all, on the B2B-specific literature of Section 5 to interpret the structural conditions TikAdRoll's own case unfolded within, and on

the desirability and viability distinction of Section 7 to justify how the case's evidence is read, while treating the critical perspectives of Section 6 as boundary conditions to be kept in view rather than objections to be dismissed.

2.9 Research Gap

The literature reviewed in this chapter demonstrates that experimentation has become one of the central mechanisms through which ventures reduce uncertainty and support strategic decision-making, and that this mechanism rests on well-established, if contested, theoretical foundations concerning uncertainty, entrepreneurial action and hypothesis-driven learning. However, the existing body of knowledge remains fragmented along precisely the dimensions relevant to the present thesis.

First, as Section 5 demonstrates through two independent systematic reviews rather than through assertion, B2B contexts remain substantially underrepresented in the entrepreneurial and business experimentation literature narrowly defined; the only two dedicated frameworks identified (Brecht et al., 2021; Nashaat et al., 2019) are based on single-case or narrowly scoped applications, and even the broader strategic agility literature (Doz & Kosonen, 2010; Clauss et al., 2019), while substantial, addresses established firms rather than early-stage ventures, leaving considerable room to examine how B2B experimentation specifically is designed and interpreted by founding teams.

Second, while Burnell et al. (2025) provide a comprehensive conceptual account of what rigorous experiment design requires in principle, namely explicit hypotheses, meaningful metrics, and defensible decision rules, relatively little empirical research documents how early-stage digital B2B startups actually translate broad strategic assumptions into this kind of testable structure in practice.

Third, and most centrally, Section 7 establishes a conceptual distinction, between validating desirability and validating viability or scalability, that the reviewed literature acknowledges in principle (Teece, 2010; Brecht et al., 2021) but rarely

operationalises empirically, particularly regarding how user-level experimental evidence is translated, interpreted, and either accepted or discounted by B2B decision-makers evaluating a purchasing decision.

A fourth, more specific gap follows directly from Section 4.1: because meaningful metrics are, by Burnell et al.'s (2025) own account, audience-dependent, and because the B2B literature reviewed in Section 5 shows the relevant audience for a B2B venture is structurally split between end user and paying client, existing guidance on metric selection for entrepreneurial experiments offers little direction on how a metric calibrated to end-user response should be transferred, reinterpreted, or supplemented for a client-side audience whose decision criteria are not directly observable in the experiment itself. This is a narrower, more methodological gap than the first three, and it is one the case-based, compilative design of this thesis can only illustrate rather than resolve directly.

A fifth gap follows from Section 3.4 and Section 6 together. Hypothesis-driven experimentation (Blank & Eckhardt, 2024) and effectuation (Sarasvathy, 2001) are each well documented individually, and Section 6 has shown that neither commands unanimous theoretical support on its own terms. What remains largely unexamined is how the two relate to one another within a single venture's strategic history: specifically, whether the pivot that redefines a B2B venture's business model is itself the product of a designed experiment, or of an effectual response to an early, committed stakeholder's constraint, and what this implies for which of a venture's assumptions actually get tested, formally or informally, as a result. This is the gap most directly addressed by the theoretical framework developed in the next chapter.

This research aims to contribute precisely to these five areas. It does not aim to demonstrate whether gamified advertising is effective in some general sense; rather, it investigates, through a single, richly documented B2B startup case, how business experimentation relates to strategic validation under genuine, Knightian

uncertainty, explicitly distinguishing, throughout, between the desirability evidence a venture's own product demonstrations can generate and the viability and scalability judgments that ultimately determine business model validation, and explicitly examining the relationship between that evidence and the effectual processes that may have shaped the venture's strategic trajectory independently of it.

2.10 Positioning of the Research

The present research is positioned within the literature reviewed in this chapter as a compilative, qualitative study of a single early-stage digital B2B startup, a context that Section 5 has shown to be measurably underrepresented in the existing literature. Rather than asking whether a specific startup is successful, the research addresses a broader managerial and theoretical question:

How does an early-stage digital B2B startup test and validate the assumptions underlying its business model as it pivots from one commercial concept to another, and what does this reveal about the relationship between experimentation and effectuation in B2B innovation?

This question is examined through the TikAdRoll case along three more specific themes, developed in full in Chapter 3: how the conditions that led TikAdRoll's first client to commit relate to the effectuation-driven logic through which entrepreneurs act on stakeholder commitments, as distinct from a Lean Startup-style test of end-user reactions; to what extent a B2B client's willingness to adopt a solution, as documented in TikAdRoll's own commercial history, depends on supplier-level adoption conditions, such as exclusivity and confidence in a small or early-stage supplier, as opposed to independent evidence of end-user desirability; and how these adoption conditions relate to the broader viability and scalability evidence that business model validation, properly understood, would additionally require.

To address this question, the research adopts the case of TikAdRoll as the empirical context through which the broader theoretical constructs developed in

this chapter, namely uncertainty, hypothesis-driven experimentation and effectuation, the MVP as a learning artefact, strategic agility, and the distinction between desirability and full business model validation, can be observed and analysed. TikAdRoll is not the object of investigation in itself; it is, in the terms established throughout this chapter, the empirical setting through which a more general managerial phenomenon is examined. As Chapter 5 documents in detail, TikAdRoll offers a particularly suitable setting for this purpose: its pivot to a B2B model followed a prospective client's request for exclusivity during the venture's first substantive sales conversation, made before any independent test of end-user reactions, making it possible to examine the relationship between experimentation and effectuation identified as a gap in Section 9 using a concrete, traceable sequence of events, while treating the client's own interest in the concept as distinct from, and not a substitute for, verified evidence of end-user desirability.

The study is built around a single source of evidence: a qualitative reconstruction of TikAdRoll's strategic evolution and the assumptions and events underlying its pivot toward a B2B model, grounded in the venture's internal documentary record, including its commercial contract, pricing proposal, and pitch materials, and in the researcher's own direct involvement in the venture as its founder. This reconstruction operationalises, in the empirical part of the thesis, the conceptual distinction established in Section 7 of this chapter and its extension in Chapter 3, by tracing how desirability, exclusivity, integration, and supplier credibility actually featured in a real, documented B2B negotiation. In line with the methodological guidance followed throughout this research, TikAdRoll is introduced only from this point forward; the theoretical foundations established in this chapter were developed, and are here presented, independently of the case.

Positioned in this way, the present research responds to each of the five gaps identified in Section 9, within the interpretive, case-based scope that a compilative study of this kind allows. Against the first gap, it examines B2B experimentation in a second, independently documented early-stage venture, complementing the

single-case evidence currently available from Brecht et al. (2021). Against the second gap, the qualitative reconstruction of TikAdRoll's strategic assumptions provides an explicit, traceable account of how broad strategic uncertainty was, in practice, encountered and addressed, a translation step Burnell et al. (2025) call for but do not themselves document empirically. Against the third gap, the case reconstruction traces directly how desirability evidence was received by Gruppo Romano's decision-makers over an extended, documented negotiation, rather than assuming that positive early reactions settle the matter. Against the fourth gap, the same documented negotiation allows this thesis to trace how commercial and technical considerations, rather than the user-level metrics a generic experiment might have produced, actually proved relevant to a real client-side decision, illustrating, if not exhaustively resolving, the metric-transfer problem identified in Section 9. Against the fifth gap, the case reconstruction and the theoretical framework developed in Chapter 3 together trace how TikAdRoll's own pivot originated from an effectual response to a stakeholder's commitment rather than from a designed experiment, directly addressing the unexamined relationship between hypothesis-driven experimentation and effectuation identified above.

In summary, this chapter has moved from the foundational, century-old distinction between measurable risk and true uncertainty (Knight, 1921), through the individual-level, discovery-versus-creation, and real-options accounts of entrepreneurial action under that uncertainty, to the hypothesis-driven experimentation paradigm that currently dominates both academic and practitioner treatments of entrepreneurship, before demonstrating, through two independent systematic reviews, that this paradigm remains underdeveloped for B2B contexts specifically, surfacing the genuine theoretical controversies that qualify its two main pillars, and finally clarifying the precise, limited evidential status of the experimental evidence such a paradigm produces. Together, these steps establish the theoretical apparatus, uncertainty, hypothesis-driven experimentation and

effectuation, the MVP as instrument, B2B specificity, critical balance, and the desirability/viability distinction, that the remainder of this thesis relies upon.

2.11 Literature Summary Table

The table below lists, in the order discussed in this chapter, all twenty-three sources underpinning the literature review, together with their main contribution and their specific relevance for this thesis.

Source	Main Contribution	Relevance for This Thesis
Knight (1921)	Distinguishes measurable risk from true, unmeasurable uncertainty; profit as the return to bearing the latter.	Defines the foundational construct of uncertainty on which the whole thesis rests.
McMullen & Shepherd (2006)	Models entrepreneurial action as a function of perceived uncertainty and willingness to bear it.	Bridges Knightian economics to individual-level entrepreneurial decision making.
Alvarez & Barney (2007)	Distinguishes discovery theory from creation theory as alternative accounts of opportunity formation.	Clarifies a hidden tension between Lean Startup's discovery vocabulary and effectuation's creation logic.
McGrath (1999)	Real options reasoning for managing entrepreneurial failure under uncertainty.	Offers an alternative, staged-investment rationale for MVP experimentation.
Sarasvathy (2001)	Effectuation theory: acting from available means rather than predicting outcomes.	Theoretical foundation already central to the thesis; now explicitly linked to Knightian uncertainty.
Blank & Eckhardt (2024)	Reframes Lean Startup as an actionable theory of entrepreneurship, not merely a toolkit.	Establishes hypothesis-driven entrepreneurship as the central operational construct.

Source	Main Contribution	Relevance for This Thesis
Camuffo et al. (2020)	RCT evidence that hypothesis-driven reasoning improves entrepreneurial decisions.	Empirical support for the effectiveness of structured experimentation.
Ghezzi (2019)	Shows digital startups combine effectuation, Lean Startup and bricolage dynamically.	Cautions against treating entrepreneurial logics as mutually exclusive.
Burnell et al. (2025)	Integrative framework decomposing experimentation into design, conduct and interpretation.	Defines the standard against which TikAdRoll's own product testing and pivot are read.
Lenarduzzi & Taibi (2016)	Systematic mapping study showing MVP is often misunderstood as a prototype rather than a learning device.	Clarifies the MVP construct central to the thesis's empirical design.
Ghezzi & Cavallo (2018)	Connects Lean Startup Approaches to Strategic Agility via a multiple-case study.	Reframes MVP/Lean Startup as instruments of a broader strategic capability.
Brecht et al. (2021)	Design-science B2B-Startup Experimentation Framework; validates desirability, not viability.	Direct precedent for B2B experimentation and the desirability/viability distinction.
Doz & Kosonen (2010)	Introduces Strategic Agility (sensitivity, unity, fluidity) for business model renewal.	Theoretical origin of the agility construct linking startups and established B2B firms.
Clauss et al. (2019)	Large-sample evidence that strategic agility drives business model innovation in B2B-relevant firms.	Empirical, large-N counterpart to the case-based B2B agility literature.

Source	Main Contribution	Relevance for This Thesis
Gamón-Sanz et al. (2024)	PRISMA review of 113 papers; catalogues only two B2B-specific Lean Startup frameworks.	Independent evidence that the B2B gap is real, not merely asserted.
Silva et al. (2020)	Systematic review of 71 papers; B2B does not appear as a distinct category.	Second, independent confirmation of the B2B gap.
Felin et al. (2020)	Critiques Lean Startup for biasing entrepreneurs toward incremental, easily-tested ideas.	Core critical counterweight required to balance the thesis's use of Lean Startup.
Arend et al. (2015)	Applies a theory-assessment framework to conclude Effectuation has significant theoretical gaps.	Core critical counterweight required to balance the thesis's use of Effectuation.
Read et al. (2016)	Rebuts Arend et al., arguing a positivist/pragmatist paradigm mismatch and an incomplete literature review.	Shows the Effectuation debate remains genuinely open, not settled.
Read, Song & Smit (2009)	Meta-analysis of 48 samples (9,897 ventures) linking effectuation principles to venture performance.	Provides empirical grounding for the Effectuation debate discussed in Section 6.2.
Camuffo et al. (2024)	Large-scale replication of Camuffo et al. (2020) across 759 firms in 4 RCTs; nonlinear pivot effect.	Strengthens the empirical base for hypothesis-driven entrepreneurship and nuances the concept of pivoting.
Kirtley & O'Mahony (2023)	Longitudinal field study showing pivots emerge from cumulative small decisions, not single events.	Provides the academic account of pivoting; Chapter 3 examines whether TikAdRoll's B2C-to-B2B

Source	Main Contribution	Relevance for This Thesis
		decisions were hypothesis-driven or effectually triggered.
Teece (2010)	Defines a business model as management's hypothesis about value creation and value capture.	Academic anchor for the desirability/viability distinction, replacing practitioner DVF language.

Table 2.1. Summary of the sources underpinning the literature review.

3. Theoretical Framework and Research Propositions

3.1 From the Literature to a Puzzle

This thesis is guided by the question of how an early-stage digital B2B startup tests and validates the assumptions underlying its business model as it pivots from one commercial concept to another. Chapter 2 established two logics through which entrepreneurs manage the uncertainty such a pivot involves. The first is Lean Startup's hypothesis-driven experimentation, in which strategic assumptions are made explicit and tested against market evidence (Blank & Eckhardt, 2024; Camuffo, Cordova, Gambardella, & Spina, 2020). The second is Sarasvathy's (2001) effectuation, in which entrepreneurs act from the means and commitments already available to them, constructing the venture through stakeholder interaction rather than through prediction and testing. These two logics are frequently treated in the literature as complementary tools that a venture can draw on at different moments, and the research question above could, on that reading, be answered primarily by describing the experimentation TikAdRoll undertook.

TikAdRoll's own history, reconstructed in full in Chapter 5, complicates that reading and sharpens the research question rather than replacing it. As the remainder of this chapter argues, TikAdRoll's actual pivot to a B2B model cannot be fully understood through Lean Startup's experimentation logic alone: the documented sequence of events surrounding the pivot is more consistent with a client responding to a commercial opportunity through direct engagement than with a venture testing a predefined hypothesis. Answering the research question for this specific case therefore requires considering both logics together, and asking, with appropriate caution given the limits of the available evidence, what each can and cannot be said to explain. This chapter sets out that argument.

3.2 The Puzzle: Client Interest, Adoption Conditions, and the Open Question of End-User Desirability

A close reading of TikAdRoll's first market contact, described in Section 5.3, reveals something that is easy to overlook. When the founding team first presented

an early, technically unrefined version of its gamified concept to Gruppo Romano in September 2024, the client's reaction was positive from the outset, and the objection it did raise concerned exclusivity, namely that it did not want its branded game to appear within a shared, multi-brand space, rather than any expressed doubt about whether the format would appeal to its own customers. This is a meaningful fact about the negotiation, but it needs to be read carefully. Gruppo Romano's interest reflects a client organisation's own assessment of a commercial opportunity, formed by people who were not themselves the eventual end users of the game; it is not, and this thesis does not treat it as, independent evidence of how those end users would actually respond to the format. Whether the gamified experience is genuinely desirable to end users therefore remains an open question that the documentary record on which this thesis relies does not resolve.

This creates a genuine puzzle for how this thesis reads TikAdRoll's own history. If a client's early interest in a concept is not, by itself, evidence of end-user desirability, then the venture's path toward its first signed contract must have been driven substantially by something other than confirmed desirability. As Section 5.3 and Section 5.5 document, what the negotiation with Gruppo Romano actually turned on, over nearly two years, was exclusivity, technical integration, and the client's confidence in a small, early-stage supplier, considerations this thesis refers to collectively as adoption conditions. The puzzle this chapter investigates is therefore not why a well-validated product succeeded, but why a venture whose path to its first client centred on these adoption conditions continued, in its own commercial materials, to present its demonstrations in the language of product testing, without the explicit hypotheses, metrics, or decision rules that would make this language precise.

3.3 Client Commitment and an Effectuation-Compatible Reading of the Pivot

The reconstruction in Chapter 5 shows that TikAdRoll's pivot away from its original, vertical-scrolling, multi-brand concept followed a specific, unsolicited request from Gruppo Romano, its first prospective client, for brand exclusivity, made during the venture's very first substantive sales conversation, which the founding team then accommodated by redesigning the offering. Responding to a client's request in this way is compatible with Sarasvathy's (2001) effectuation, in which ventures are constructed through the commitments of self-selected stakeholders rather than through prediction and testing, but compatibility is not proof: a single request, on its own, could equally be described in more conventional terms, as a piece of customer feedback that any responsive founder would act on. What lends the effectuation reading more weight in this case is the extent of what Gruppo Romano committed to afterward, over the course of a negotiation lasting close to two years: sustained engagement across its administrative, marketing, commercial, and technical functions, a period of active collaboration in refining the offering, and financial commitments to the venture, first an informal reimbursement made before any contract existed, and subsequently a formal contract fee paid in two instalments tied to specific commercial milestones. These are the kinds of concrete, costly commitments effectuation theory treats as constitutive of a venture's direction, and they are considerably more informative, for the purposes of this thesis, than the initial request for exclusivity taken on its own.

This reading is offered here as a plausible and, in the view of this thesis, better-supported interpretation of TikAdRoll's pivot than a purely Lean Startup-style account would provide, rather than as a conclusion this single, compilative case can be said to establish beyond dispute. Where existing entrepreneurship literature, reviewed extensively in Chapter 2, tends to treat Lean Startup and effectuation as alternative or complementary logics operating at the same level, the TikAdRoll case is consistent with a pattern in which the two operate at different levels within

a single venture's history: a client's concrete commitments shaping the strategic pivot itself, while the venture continues, downstream of that pivot, to describe its own product demonstrations in the language of Lean Startup-style testing. Figure 3.1 summarises this reading, while the limits of the evidence supporting it are discussed explicitly in Section 5.11 and in Chapter 6.

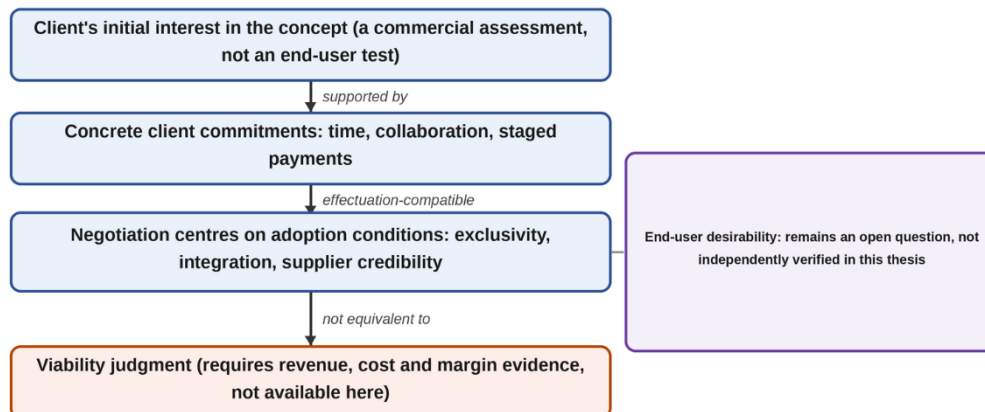


Figure 3.1. Conceptual model: the client's initial interest and concrete commitments support an effectuation-compatible reading of the pivot; the resulting adoption conditions are conceptually distinct from both end-user desirability, which remains unverified, and commercial viability.

3.4 Locating Uncertainty Differently in B2B: Adoption Conditions Versus Viability

Chapter 2 established a distinction between validating desirability and validating viability or scalability, grounded in Brecht et al.'s (2021) observation that, in B2B settings, the end user generating desirability evidence is structurally separate from the decision-maker who evaluates viability. The TikAdRoll case suggests a further refinement of that distinction, developed here as this thesis's second theoretical contribution. In an early-stage B2B relationship, a client's willingness to adopt a solution may depend less on product-level desirability and more on what this thesis terms adoption conditions: supplier-level considerations such as exclusivity, technical integration, and confidence that a small, largely unincorporated supplier can deliver and sustain the relationship over time. It is important to state precisely what these adoption conditions do and do not establish. They are conditions a client

evidently requires before committing to a relationship at all; they are not evidence of commercial viability in the sense of demonstrated revenue, cost, or margin performance, which this thesis, lacking data of that kind, does not claim to assess. TikAdRoll's first signed contract documents a genuine commercial commitment, and the venture's retained ownership of its underlying technology creates the structural possibility of scaling that commitment across future clients, but neither fact demonstrates that the resulting business model is, in practice, profitable or scalable. This thesis therefore treats adoption conditions, end-user desirability, and commercial viability as three distinct dimensions, examined with different degrees of confidence through the documented course of TikAdRoll's negotiation with Gruppo Romano in Chapter 5.

3.5 Research Propositions

Consistent with the qualitative, single-case design adopted in this thesis (Chapter 4), the theoretical framework developed above is expressed as a small set of research propositions rather than as statistically testable hypotheses. Propositions of this kind are intended to guide the collection and interpretation of qualitative and descriptive evidence; they are not intended to be confirmed or rejected through inferential statistical testing, and no claim of statistical generalisability is made for them.

RP1. Because Gruppo Romano's early interest in TikAdRoll's concept concerned a commercial opportunity rather than confirmed end-user reactions, this thesis expects that end-user desirability for the gamified format was, at the point of the pivot, an assumption still open to verification rather than one already resolved by the available evidence.

RP2. B2B decision-makers' willingness to adopt TikAdRoll's solution is expected to depend more heavily on adoption conditions, exclusivity, technical integration, and confidence in TikAdRoll's ability to deliver and sustain the relationship, than

on independent evidence of end-user desirability, which this thesis is not in a position to provide.

RP3. Satisfying a client's adoption conditions is expected to function as a distinct, and likely prior, step to establishing commercial viability, consistent with the distinction developed in Chapter 2 and extended in Section 3.4 above; this thesis does not treat evidence of adoption as evidence of viability.

These three propositions are examined through a single, common source of evidence: the documented reconstruction of TikAdRoll's own history developed in Chapter 5 and analysed in Chapter 4. Because that evidence is compilative and drawn primarily from the researcher's own involvement in the venture, it speaks most directly to RP2 and RP3, for which the documented course of the Gruppo Romano negotiation provides a reasonably detailed record; it speaks only indirectly, and inconclusively, to RP1, since no independent measure of end-user response is available within the scope of this thesis. Section 5.11 maps each proposition explicitly against the specific evidence available for it and against the limits of that evidence.

4. Research Methodology

4.1 Research Design and Methodological Fit

This thesis adopts a qualitative, single-case research design, in which TikAdRoll constitutes the case and the entirety of the thesis's empirical evidence is drawn from a single source: a documented reconstruction of the venture's strategic history. The design follows Edmondson and McManus's (2007) methodological fit framework, which relates the appropriate balance of evidence to the maturity of prior theory in the area under investigation. Chapter 2 showed that the constructs this thesis draws on, Lean Startup, effectuation, and the desirability-viability distinction, are individually well established, but that their specific interaction in a B2B pivot, formalised as the research propositions in Section 3.5, has not been documented empirically. Following Edmondson and McManus, this kind of nascent, interaction-level theory calls for a qualitative design capable of generating rich, contextualised evidence, rather than for a confirmatory quantitative design built around statistical hypothesis testing. This thesis is accordingly compilative in nature: it does not involve new primary data collection, and its contribution rests on a close, theory-informed reading of an already-documented sequence of events rather than on newly generated experimental or interview data.

The overall design is an embedded, single-case design (Yin, 2018; Eisenhardt, 1989), in which TikAdRoll is the case and its documented history is analysed to establish the sequence of events and assumptions that motivate, and provide evidence for, the research propositions developed in Section 3.5.

A further methodological consideration follows from the nature of the case itself. The researcher conducting this study is also the founder of TikAdRoll, which places this research within what the methodological literature terms insider research, research conducted by a full member of the organisation under study (Brannick & Coghlan, 2007). Brannick and Coghlan argue that insider status is not, in itself, a threat to validity, provided the dynamics it introduces, preunderstanding, privileged access, and the researcher's dual role as practitioner

and observer, are made explicit rather than left unexamined. In this thesis, insider status is treated as an asset: it grants access to internal material an external researcher could not obtain, and it is what makes a compilative, document-based approach of this kind possible within the time available for this research. It is also, however, a limitation to be stated plainly rather than left implicit, and Section 4.4 returns to it directly.

4.2 The Case Study Component

A single-case design is appropriate, following Eisenhardt (1989), when the case under study offers a revelatory opportunity to observe a phenomenon that is otherwise difficult to access. TikAdRoll, an early-stage digital startup observed in the course of a strategic pivot from an autonomous, consumer-facing gamified advertising platform to a B2B model built around client integration, offers this kind of access: the strategic assumptions underlying the pivot, and the sequence of events that actually produced it, can be reconstructed while the venture is still in a pre-launch phase, rather than retrospectively once the outcome of the pivot is already known.

The qualitative reconstruction, developed in full in Chapter 5, covers the origin of the venture's idea, its initial resources, its original strategic assumptions, its first business model, its early market interactions and the feedback received, the pivot itself and the events that precipitated it, the evolution of the value proposition, the development of the product demonstrations used over the course of TikAdRoll's commercial development, the commercial process and pricing logic, the venture's legal incorporation, its first client contract, its current pre-launch phase, and the managerial learning accumulated in the process.

4.3 Documentary Evidence and Sources

The reconstruction in Chapter 5 is grounded in verifiable material rather than presented as an unverified narrative account. The principal sources are the venture's signed commercial contract with its first client, its pricing and scope-of-

work proposal, and the commercial pitch materials used throughout its sales process, supplemented by the researcher's own direct, contemporaneous involvement in the events described as TikAdRoll's founder. Where a claim in the case rests on the researcher's own recollection rather than on a dated document, this is treated with appropriate caution: figures and dates capable of independent verification, such as the venture's date of incorporation or the terms of its first contract, are checked against the underlying documents, while broader factual claims about market conditions external to the venture itself, such as a client's revenue or footprint, are checked against publicly available sources and cited accordingly.

This documentary approach has a direct bearing on how the research propositions in Section 3.5 are examined. Because no new experiment or interview was conducted for this thesis, RP1 through RP3 are not tested against independently generated data; they are examined against what the existing documentary record of TikAdRoll's own history shows about the sequence in which its assumptions were, in fact, resolved. This is a deliberate and disclosed limitation of the present design, discussed further in Section 4.5, rather than an incidental one.

4.4 Data Analysis Plan

The case material is analysed qualitatively, following the general logic of thematic analysis described by Braun and Clarke (2006), adapted here to documentary and narrative material rather than to interview transcripts. The analysis proceeds by identifying, within the documented sequence of TikAdRoll's development, the specific points at which a strategic assumption was raised, tested informally, confirmed, or overturned, and by tracing which of these points concerned end-user desirability as opposed to supplier-level considerations such as exclusivity, integration, and credibility.

This analysis is structured directly around the three research propositions developed in Section 3.5. RP2 and RP3 are examined by tracing, in detail, the two-

year negotiation between TikAdRoll and Gruppo Romano documented in Chapter 5, identifying which considerations, adoption conditions such as exclusivity, integration, and supplier credibility, as opposed to desirability, actually appear to have shaped the client's willingness to proceed at each stage of that negotiation. RP1 cannot be examined in the same way: the documentary record includes only the client's own, indirect account of end-user reactions, gathered informally and after the fact, rather than any independent measurement of end-user response, and this thesis reports that limitation explicitly rather than treating the available record as sufficient evidence either way.

4.5 Validity, Reliability and Ethical Considerations

The use of a single case limits the external validity, in the statistical sense, of the case-based findings, a limitation consistent with, and expected of, a single-case design chosen for its revelatory rather than representative qualities (Eisenhardt, 1989); this thesis accordingly makes claims about the specific mechanism observed in this case, rather than statistical claims about B2B startups in general.

A further, more specific limitation follows from the compilative nature of this design. Because the thesis does not draw on any evidence collected independently of the researcher's own involvement in the venture, the account in Chapter 5, and the propositions it supports, cannot be corroborated by an external participant's perspective in the way a study incorporating interviews with, for instance, Gruppo Romano's own decision-makers could achieve. This limitation is treated in this thesis as a boundary condition on the strength of the claims made, rather than as a reason to withhold the interpretation the case nonetheless supports: the documentary record used, correspondence, contracts, and dated commercial materials, still provides a verifiable, third-party-referenced account of what was agreed and when, even though it cannot report, from the client's own voice, why those agreements were reached. Addressing this limitation directly, through interviews with B2B decision-makers who were not part of TikAdRoll's own

history, is accordingly identified in the concluding chapter of this thesis as the most direct avenue for future research building on the propositions developed here.

On reliability, the case reconstruction is supported, where possible, by respondent validation, whereby key factual passages are checked against the underlying documentary evidence and, where relevant, against the recollection of other individuals involved in TikAdRoll's early development, to reduce the risk that the reconstruction reflects the founder's perspective alone.

On ethics, consistent with confidentiality requirements agreed for this research, no detailed pricing information, individual manager names, commercially sensitive information, or proprietary TikAdRoll materials are disclosed beyond what is necessary to support the thesis's academic argument.

5. The TikAdRoll Case

5.1 Origins and Founding Team

TikAdRoll originated in June 2023, when its founder, together with Giuseppe Pera, a computer engineer, began exploring a first, unrefined concept: an application that would externalise the advertising a user would otherwise encounter inside other mobile applications, allowing that advertising to be viewed separately, in a dedicated space, rather than interrupting the original application's content. This initial concept did not resolve into a viable business proposition. Between June 2023 and January 2024, the founding team engaged in an extended process of brainstorming to identify a market-relevant reformulation of the underlying intuition, namely that advertising could be made into something users actively choose to engage with rather than passively tolerate.

The founding team combined complementary academic backgrounds, in economics and management on one side and computer engineering on the other, together with prior professional exposure to software development, since Giuseppe Pera was, at the time, and remains, employed at Reply, an information technology and digital services firm. Beyond formal qualifications, the founders describe personal disposition and sustained personal interest in the underlying problem as the more decisive resource in the venture's earliest phase, given the near-complete absence of financial capital available at the outset. Two further collaborators subsequently joined the team on an informal basis as the venture's technical needs grew: a backend developer responsible for server-side infrastructure and API integration, and a game designer responsible for game logic, scoring systems, and user interface design. Both continue to contribute to the venture without formal equity participation, a structural feature of the venture's organisation discussed further in Section 5.6.

Date	Milestone
June 2023	Initial concept (advertising-aggregation app) conceived with co-founder Giuseppe Pera
June 2023 to January 2024	Reformulation into the vertical-scrolling, multi-brand playable advertising concept
Early 2024	Figma mock-up of the vertical-scrolling concept developed
September 2024	First market contact with Gruppo Romano; exclusivity request triggers the pivot
2025	University of Pavia entrepreneurship competition won; Web Summit Lisbon participation
Throughout 2026	Generic anonymised demonstration developed and used in commercial outreach
18 December 2025	Formal incorporation of TikAdRoll S.r.l. Unipersonale
25 March 2026	Contract signed with Gruppo Romano for the Il Centesimo implementation
1 September 2026	First public deployment of the branded gamified experience

Table 5.1. Key milestones in TikAdRoll's development.

5.2 The First Business Model: A Vertical-Scrolling Playable Advertising Space

The brainstorming process conducted between mid-2023 and early 2024 produced the venture's first coherent business model. The concept centred on a vertical-scrolling mobile application in which brands would pay to have a branded, playable game inserted into a shared promotional feed. Users scrolling through the application would encounter a sequence of such branded games from different advertisers, each offering discounts or gifts redeemable at physical points of sale

upon completion. A central mechanic of this first model was cross-exposure: because the feed combined games from multiple brands within a single scrolling space, a user who opened the application to engage with one brand's promotional game would inevitably also be exposed to other brands present in the same feed.

This concept was translated into a Minimum Viable Product in the form of a mock-up built in Figma, used to communicate the idea to prospective clients ahead of any working technical implementation. This first business model was never launched; it was abandoned, in its entirety, as a direct result of the market contact described in Section 5.3 below.

5.3 First Market Contact and the Exclusivity Request That Triggered the Pivot

The venture's first market contact took place in September 2024, when the founder, introduced through a personal connection, presented the vertical-scrolling concept directly to the chief executive and members of the marketing team of Gruppo Romano, the company operating the Il Centesimo supermarket chain. The presentation was built around an early, technically unrefined set of branded games situated within the proposed shared scrolling space. The reception was strongly positive from the outset: Gruppo Romano expressed clear, immediate interest in the underlying concept of gamified promotion, with no objection raised regarding whether end users would find the format engaging.

The objection Gruppo Romano did raise proved decisive for the venture's subsequent trajectory, and is central to the theoretical argument developed in Chapter 3: it did not want its own branded game to appear within a shared space alongside games from other, potentially competing, advertisers, and requested instead an exclusive, dedicated implementation. Gruppo Romano did not raise the appeal of the format itself as an objection at this stage, though this thesis treats that absence of objection as a fact about the negotiation rather than as evidence that end users would, in practice, find the format engaging. Rather than continuing to develop a shared promotional feed, the founding team redesigned the offering

around dedicated, brand-specific gamified experiences, embedded directly within each client company's own digital properties. This redesign was a direct, immediate response to a single stakeholder's commitment-conditional demand, rather than the outcome of a designed experiment or a predicted hypothesis, and Chapter 3 discusses this sequence as compatible with an effectual, rather than a purely Lean Startup-driven, account of the pivot.

5.4 The Current TikAdRoll Model: Value Proposition and Data Strategy

Following the pivot, TikAdRoll's value proposition centres on interactive, gamified experiences that are embedded directly into a client company's existing digital touchpoints, including mobile applications, websites, private customer areas, landing pages, and campaign-specific pages, without requiring the end user to migrate to a separate application. In its first client implementation, this takes the concrete form of a branded game embedded as a WebView page directly within the Il Centesimo mobile application itself, rather than as a link out to an external site or a separate download. This design choice, summarised internally as requiring no user migration and no new application, directly addresses the exclusivity objection described in Section 5.3: each client's gamified experience is dedicated to that client alone, carries that client's branding throughout, and is not situated within any shared, multi-brand space of the kind envisaged in the original, unlaunched vertical-scrolling concept described in Section 5.2.

The value proposition rests on an explicit reframing of the relationship between advertising and the user. Conventional digital advertising exposes users to promotional content they have not requested, that a large share of users have learned to ignore, and that typically offers nothing in return for the attention it captures. TikAdRoll's model inverts this relationship: the user actively chooses when to engage with the promotional content, in the form of a short game, and receives a concrete return for doing so, in the form of a discount, a gift, or loyalty benefit. The underlying premise is that advertising becomes more effective, and more acceptable to the user, when engagement is voluntary and reciprocal rather

than imposed and one-directional. Whether this premise holds for TikAdRoll's own end users, as opposed to for the client organisation that found the underlying concept commercially appealing, is precisely the open question this thesis identifies as RP1 in Chapter 3, examined against the limited evidence available in Chapter 4.

The games themselves draw on a library of adaptable mechanics, including match and memory formats, tap and swipe interactions, timed challenges, and obstacle-course formats, which are reskinned with a client's branding, product imagery, and reward structure rather than built from scratch for each engagement. The first implementation developed for Gruppo Romano uses a match-based mechanic in which players match grocery product icons within a time limit, styled around the Il Centesimo brand and reward catalogue. Game outcomes are linked to a client's existing loyalty and discount infrastructure, so that user performance within the game translates directly into coupons, discounts, or gifts redeemable through the client's own loyalty programme. Beyond the mobile application itself, the same underlying mechanic can in principle be surfaced through other physical or digital touchpoints, for instance via a QR code displayed at a point of sale, extending the same opt-in, reciprocal logic beyond the app.

A second, related element of the value proposition concerns data. As users progress through a gamified experience, they make choices, for instance selecting which product categories they are most interested in receiving offers for, that are captured and linked to individual user profiles. This generates a proprietary data asset on user preferences and behaviour that complements the client's existing analytics, positioning the game not only as a promotional instrument but also as an unobtrusive mechanism for preference elicitation, providing insight beyond simple exposure metrics such as impressions or click-through rates.

5.5 Demo Development and Commercial Process

Following incorporation, the founding team initially developed bespoke demonstrations for individual prospective clients, presented in dedicated sales calls to illustrate how a gamified experience might be tailored to that specific brand. This client-specific approach was subsequently consolidated into a single, generic, anonymised demonstration inspired by the large-scale retail and grocery sector, used consistently across prospective clients from 2026 onward. The generic demonstration combines a mock application interface built in Framer with playable game logic built in Unity, integrated through a WebView component so that the experience can be accessed instantly from a smartphone browser without requiring a separate download.

Commercial outreach follows a deliberately intensive, multichannel approach. Contact information for relevant decision-makers, typically in marketing, innovation, or business development functions, is sourced through professional contact databases and professional networking platforms, followed by direct email outreach, scheduling of demonstration calls, and direct telephone contact, including, where a specific contact could not be identified in advance, calls placed directly to a prospective client company's main switchboard. Over the course of the venture's commercial development, this process has been applied to a substantial number of companies operating in the retail and large-scale distribution sector. In commercial communications, TikAdRoll positions the value of this approach to prospective clients around four points: an increase in the time users spend interacting with the brand's digital touchpoints relative to passive advertising formats; the provision of rewards, benefits, and branded content as part of the interaction itself; the incorporation of the client's brand identity directly into the gaming experience rather than alongside it; and instant accessibility without any additional download.

The commercial process with Gruppo Romano illustrates the extended nature of this negotiation in a B2B context of this kind. Reaching a signed agreement

required close to two years and successive rounds of engagement across the client's administrative, marketing, commercial, and technical functions, including periods in which the relationship came under visible strain. Rather than a discrete testing episode, this period functioned as a joint, iterative evolution of the original concept into its current form, with Gruppo Romano contributing time, active collaboration, and financial commitment, first through an informal reimbursement made well before any formal contract was signed, and subsequently through the formal contract fee described in Section 5.6, paid in instalments tied to specific commercial milestones. Notably, over the course of this extended negotiation, the topics that visibly occupied the two parties, documented in the surviving correspondence and in the successive versions of the commercial agreement, concerned exclusivity, technical integration, and commercial terms; no comparable documentary trace exists of a discussion focused on whether end users found the game engaging. This asymmetry in what the negotiation is documented to have addressed is treated in this thesis as suggestive of, rather than conclusive proof of, the reading developed in Chapter 3.

5.6 Pricing Logic, First Contract, and Legal Incorporation

TikAdRoll's pricing approach with its first client reflects a deliberate penetration strategy rather than an attempt to capture the full value of a comparable hyper-personalised digital solution. The agreement with Gruppo Romano was priced substantially below prevailing market rates for equivalent bespoke, fully integrated gamification projects, reflecting the strategic priority of securing a first reference client and a verifiable market implementation rather than maximising short-term revenue. Subsequent client engagements are priced on an increasing scale as the offering matures and as a track record of delivered implementations accumulates.

The formal agreement, signed on 25 March 2026, governs the design, development, configuration, and provision of a branded digital game for integration into Gruppo Romano's existing loyalty application, together with associated technical support and corrective maintenance, for a term of four months

from signature, with terms payable in two instalments, one upon signature and one upon publication of the game, a structure that, as discussed in Section 5.5, itself functions as a marker of the client's staged, concrete commitment to the relationship. A structurally important clause for the venture's business model concerns intellectual property: while the client acquires a time-limited licence to use the specific branded implementation delivered to it, ownership of the underlying software architecture, game mechanics, and technical know-how remains with TikAdRoll, which retains the right to reuse this underlying technology, suitably rebranded, for other clients. This provision creates the structural possibility for TikAdRoll to reuse a single underlying technical platform across multiple client-specific, exclusively branded implementations, rather than requiring a bespoke technical build for every new client relationship. It is a precondition for scalability, not evidence that scaling would be profitable: this thesis has no revenue, cost, or margin data with which to assess whether replicating this model across further clients would, in fact, be commercially viable.

TikAdRoll S.r.l. Unipersonale was formally incorporated on 18 December 2025, with its founder as sole shareholder. The two collaborators who contributed to backend development and game design, together with the co-founder involved from the venture's earliest stage, continue to participate in the venture on an informal basis rather than as formal equity partners.

5.7 Scale Asymmetry and Supplier Credibility

The relationship between TikAdRoll and Gruppo Romano illustrates the structural asymmetry that Chapter 3 identifies as the more consequential source of uncertainty in this case. TikAdRoll entered this relationship as a single founder operating with no meaningful starting capital, supported by an informal, unincorporated team, seeking to become a supplier to a company generating revenues in the region of 300 million euros, according to the most recently published figures, and operating well over one hundred points of sale across Sicily under its various retail banners (Giornale di Sicilia, 2020). Within Gruppo

Romano's own supplier base, TikAdRoll is plausibly among the smallest suppliers by size and resources. Unlike a conventional small supplier providing an input that individual customers may or may not notice at the point of purchase, however, TikAdRoll's deliverable is a customer-facing, branded digital experience, surfaced directly under Gruppo Romano's own brand to the entire base of users of the Il Centesimo application, on the order of two hundred thousand end users. The venture's technical and creative output is therefore not a background input to Gruppo Romano's operations but a visible extension of its brand toward its full customer base.

This asymmetry between the size of the supplier and the visibility and scale of what it is asked to deliver is precisely the supplier-credibility dimension of the adoption conditions introduced in Section 3.4, conceptually distinct from the commercial viability of the resulting business model. From Gruppo Romano's perspective, any impression of end-user enthusiasm for the gamified format is only one input into a decision that also has to account for the operational risk of depending on a very small, early-stage, single-founder supplier for a brand-visible customer touchpoint. The documented course of the negotiation, analysed in Chapter 4, is used specifically to trace how Gruppo Romano appears to have reasoned about this kind of risk, as distinct from any assessment of the promotional format's appeal to its own customers.

5.8 Recognition and Ecosystem Engagement

Across its development, TikAdRoll has received consistently positive informal reception from the parties it has approached commercially, tempered by slow decision-making processes attributed to broader organisational conservatism among some prospective clients. This reception concerns how prospective business clients and event audiences have reacted to TikAdRoll's pitch and business concept, and is reported here as part of the venture's commercial history rather than as evidence bearing on how the games' end users experience the format. Alongside its direct commercial development, the venture has accumulated a

number of instances of external recognition: it was awarded a university entrepreneurship competition at the University of Pavia; it took part in the Web Summit in Lisbon in 2025, with a further participation planned for 2026 under the patronage of the Italian Trade Agency (ICE); and it has established a collaboration with the Contamination Lab programme at the University of Catanzaro's department of economics, through which the founder contributes testimonials and guest lectures. Separately, a company based in Caltanissetta expressed formal interest, through a letter of intent, in a five-figure equity investment that would have brought TikAdRoll into its corporate group; this opportunity was not pursued further and contact subsequently lapsed.

5.9 Launch

TikAdRoll's first client implementation went live within Gruppo Romano's *Il Centesimo* application on 1 September 2026, as scheduled. Section 5.10 reports the operational indicators available for the first days following this launch. In parallel with this first deployment, the venture continues to pursue additional prospective clients within the retail and large-scale distribution sector, applying the same commercial process described in Section 5.5, with the intention of using the Gruppo Romano implementation as a verifiable reference case in subsequent sales conversations.

5.10 Early Post-Launch Indicators

In the six days following the 1 September 2026 launch described in Section 5.9, up to and including 6 September 2026, the *Il Centesimo* application recorded 30,346 game sessions initiated by 3,993 distinct loyalty-card holders. Of these sessions, 69.3 per cent were completed through to a final score, and 30.7 per cent were abandoned before completion. Players who returned to the game averaged 7.6 sessions each over the period; 71.1 per cent of players played three or more times, 8.8 per cent played exactly twice, and 20.2 per cent played only once. Some 79.4 per cent of players opened the game more than once within at least one single

day, and 25.1 per cent returned to play on a calendar day different from their first, the measure the underlying reporting system defines as retention. Cashback points were assigned in 99.5 per cent of eligible user-days, indicating that the loyalty integration described in Section 5.4 functioned as intended from launch. The percentage of Il Centesimo's total loyalty app user base that engaged with the game cannot be calculated from the data available for this thesis, since the total size of that user base was not obtained.

These figures are reported descriptively, and this thesis treats them with considerable caution rather than as a test of end-user desirability in the sense discussed in Chapter 3. No comparison condition exists, since no conventional, non-gamified promotional format was run alongside the game for the same audience over the same period, so the figures cannot establish that the gamified format outperforms an alternative, only that it was used. The observation period is six days, one of them only partially captured, which is short even by the standards of descriptive engagement reporting and does not support conclusions about sustained interest beyond a first, novelty-driven period of use. The repeat-play and same-week return figures are, on their face, consistent with a positive initial response on the part of players who chose to engage, but they remain a partial, short-term, and methodologically limited form of evidence, and this thesis does not treat them as resolving the open question of end-user desirability identified in RP1.

5.11 Mapping Propositions to Evidence

Table 5.2 summarises, for each of the three research propositions developed in Chapter 3, the specific evidence available within this thesis, its documentary source, and the interpretation this thesis draws from it together with the limits of that interpretation. The table is intended to make explicit, in one place, the distinction this chapter has drawn throughout between what the TikAdRoll case documents directly and what remains an open question for future research.

Proposition	Evidence	Source	Interpretation and Limitation
RP1 (end-user desirability remains open)	Gruppo Romano's early interest concerned the commercial concept, not a tested user reaction; six days of post-launch usage data show high completion and repeat-play rates but no comparison condition.	Sections 5.3, 5.5; post-launch dashboard, Section 5.10	Consistent with, but far short of establishing, positive end-user desirability. No independent, controlled measurement of end-user response exists within the scope of this thesis.
RP2 (adoption depends on supplier-level conditions)	Nearly two years of negotiation documented as concerning exclusivity, technical integration, and supplier credibility, with no documented discussion of end-user appeal.	Sections 5.3, 5.5, 5.7; commercial contract	Well supported by the documentary record of this single case. Cannot be generalised to other clients or ventures without further cases.
RP3 (adoption conditions are distinct from viability)	A signed contract and a reusable technical architecture; no revenue, cost, or margin data.	Section 5.6; commercial contract and pricing proposal	The distinction is conceptually supported, but this thesis has no financial data with which to assess whether the business model is, in fact, viable or scalable.

Read together, the evidence summarised in Table 5.2 is strongest for RP2, moderately informative for RP3 as a conceptual distinction, and weakest, though not absent, for RP1, where the case offers suggestive rather than conclusive material. This distribution of evidential strength across the three propositions is itself a finding of this thesis, discussed further in Chapter 6.

5.12 Managerial Learning

Reflecting on the venture's development to date, its founder identifies two lessons that connect directly to the theoretical argument developed in Chapter 3. The first concerns the choice of legal form and jurisdiction: given the administrative and fiscal burden associated with operating a limited liability company in Italy, relative to the comparatively low direct cost of delivering the venture's core technical service, the founder indicates that, if founding the venture again, a sole proprietorship structure would have been preferred, or incorporation outside Italy would have been considered. The second concerns the sequencing of validation itself: in hindsight, the founder notes that the venture's path toward its first client was concentrated almost entirely on satisfying Gruppo Romano's adoption conditions, exclusivity, technical integration, and confidence in the supplier, while comparatively little of that same effort was directed at obtaining independent evidence of how the games' end users would actually respond to the format, a question that, as Section 5.10 shows, remained substantially open even after the client relationship was secured. This asymmetry between where the venture's validation effort was concentrated and where independent evidence is, in fact, available is the empirical starting point for the theoretical argument developed in Chapter 3.

6. Conclusions

6.1 Brief Summary of Aims and Theoretical Background

This thesis set out to examine how an early-stage digital B2B startup tests and validates the assumptions underlying its business model as it pivots from one commercial concept to another, using the case of TikAdRoll, an Italian startup developing gamified advertising experiences for business clients. The thesis situated this question within two accounts of how entrepreneurs manage uncertainty that the literature has typically treated as complementary rather than as a source of tension: Lean Startup's hypothesis-driven experimentation, in which strategic assumptions are made explicit and tested against market evidence, and Sarasvathy's effectuation theory, in which ventures are constructed through the commitments of self-selected stakeholders rather than through prediction and testing. Building on the desirability-viability distinction developed in the literature review, the thesis further argued that a client's willingness to adopt a B2B innovation depends on adoption conditions, such as exclusivity, technical integration, and confidence in a small or early-stage supplier, that are conceptually distinct both from the desirability of the offering among end users and from the commercial viability of the business model built around it. These arguments were examined through a qualitative, compilative reconstruction of the case of TikAdRoll, using its documented commercial history rather than newly collected experimental or interview data, supplemented by a small amount of short-term, descriptive usage data collected after the venture's first client implementation went live during the writing of this thesis.

6.2 Key Findings

The case reconstruction presented in Chapter 5 offers evidence, of varying strength, for the three research propositions developed in Chapter 3. Regarding RP1, the documentary record shows that TikAdRoll's first prospective client reacted positively to the underlying concept from its very first presentation in September 2024 onward, and that the venture's short post-launch usage data,

reported in Section 5.10, shows high completion and repeat-play rates over its first days of operation. This evidence is suggestive of a positive end-user response, but it falls well short of establishing it: the client's early interest reflects a commercial assessment made by people who are not themselves the game's end users, and six days of unreplicated, uncontrolled usage data cannot substitute for an independent, controlled measurement of desirability. Whether TikAdRoll's gamified format is genuinely desirable to the end users who play it therefore remains, on the evidence available to this thesis, an open question.

Regarding RP2, the documented negotiation between TikAdRoll and Gruppo Romano, its first client, shows that the considerations which actually appear to have shaped the client's willingness to proceed, exclusivity, technical integration with its existing digital platforms, and confidence in a single-founder, largely unincorporated supplier, were adoption conditions of this kind, documented at each stage of the negotiation, rather than further evidence of end-user desirability. The scale asymmetry documented in Section 5.7, a single founder with no meaningful starting capital seeking to supply a company generating revenues in the region of 300 million euros, made this supplier-level scrutiny a substantive part of the negotiation rather than a formality, consistent with the nearly two years the negotiation required and the successive rounds of engagement it involved across Gruppo Romano's administrative, marketing, commercial, and technical functions.

Regarding RP3, the available evidence is consistent with treating client interest as necessary but insufficient for adoption: interest in the concept was present from Gruppo Romano's very first reaction, yet close to two years of further engagement, addressing exclusivity, integration, and trust, was still required before a contract was signed on 25 March 2026. This thesis is careful, however, not to overstate what that contract itself demonstrates. Its terms, including the intellectual property clause that allows TikAdRoll to reuse its underlying technology across future clients while granting Gruppo Romano an exclusive, time-limited licence, resolve the adoption conditions that this specific client required; they do not constitute

evidence that TikAdRoll's business model is commercially viable or that it would remain profitable if scaled to further clients, a question this thesis has no financial data with which to address.

Taken together, these findings indicate that TikAdRoll's pivot to its current B2B model followed a direct, unsolicited request from its first prospective client, for brand exclusivity, made during the venture's very first substantive sales conversation, well before any independent test of end-user reactions had been conducted. This sequence is compatible with an effectuation-based reading, in which a venture is constructed around a self-selected stakeholder's concrete commitments, rather than with a Lean Startup account in which a hypothesis is tested and confirmed before a strategic decision is made, though this thesis treats that reading as well supported rather than as definitively proven by a single, compilative case. The venture continued, downstream of this pivot, to rely on commercial product demonstrations that used the language of testing without the explicit hypotheses, metrics, or decision rules that would make a Lean Startup account of them precise.

6.3 Theoretical Contributions

This thesis makes three connected contributions to the entrepreneurship literature reviewed in Chapter 2. First, it provides a documented illustration of how Lean Startup-style experimentation and effectuation can operate at different levels within a single venture's history, rather than functioning as alternative, mutually exclusive logics: a client's concrete commitments appearing to shape the strategic pivot itself, while the venture continues to describe its narrower, downstream product decisions in Lean Startup-style language. Existing literature has documented each of these logics extensively in isolation; this thesis contributes a case-based illustration of how they can coexist, offered as a basis for further research rather than as an established finding.

Second, this thesis extends the desirability-viability distinction developed in prior B2B experimentation research by proposing adoption conditions, exclusivity, technical integration, and supplier credibility, as a further dimension logically prior to both desirability and viability: a dimension a client may require satisfied before a relationship can begin at all, but one that this thesis explicitly does not treat as evidence of either desirability or viability in their own right. This distinction responds to a literature that has, to date, been developed almost entirely in business-to-consumer contexts, where the end user and the paying customer typically coincide, and offers a starting point for future research examining how adoption conditions, desirability, and viability interact across a broader range of B2B relationships than the single case examined here.

Third, this thesis offers a case-based illustration relevant to the critical debates surrounding both of its central theoretical traditions, reviewed in Chapter 2. Felin, Gambardella, Stern, and Zenger's (2020) critique of Lean Startup argues that an emphasis on rapid, readily observable feedback can bias entrepreneurs toward incremental, easily-tested ideas; TikAdRoll's history is consistent with a related but distinct risk, namely that a venture may describe its commercial demonstrations in the language of testing even where no comparably rigorous evidence was, in fact, generated about the assumption that most needed resolving. Equally, Arend, Sarooghi, and Burkemper's (2015) critique of effectuation, and Read, Sarasvathy, Dew, and Wiltbank's (2016) response to it, leave open whether effectuation constitutes a fully specified theory or a looser, pragmatist sensibility; this thesis does not resolve that debate, but it does offer one documented instance in which a venture's most consequential strategic decision is more consistent with effectual, commitment-driven terms than with the hypothesis-testing terms the venture itself, and much of the surrounding literature, might more readily reach for.

6.4 Managerial Implications

For founders of early-stage B2B ventures, this thesis suggests that validation effort is not always well allocated by following Lean Startup guidance uncritically. Where TikAdRoll is concerned, the client's own early interest in the concept, though not itself evidence of end-user desirability, was accompanied by a considerably longer and more demanding process of addressing the client's concerns about exclusivity, technical integration, and the credibility of a small, unproven supplier; it was this second process, not further reassurance about the product's appeal, that determined whether the venture secured its first client. Founders operating in similarly asymmetric B2B relationships, in which their own venture is considerably smaller than the client organisations they are seeking to serve, may benefit from explicitly asking, early in a sales process, whether a prospective client's hesitation actually concerns the offering itself or the supplier providing it, since the two call for different responses: further product refinement in the first case, and reassurance, references, or contractual safeguards in the second.

This thesis also points to more specific practices that appear, in TikAdRoll's case, to have helped address supplier-level concerns directly. Consolidating a generic, reusable demonstration, rather than continuing to build bespoke materials for every prospective client, allowed the venture to present a more polished, less improvised impression to subsequent prospects once its first client relationship was underway. Structuring its commercial contract to retain ownership of its underlying technical architecture, while granting each client an exclusive licence to a specific branded implementation, addressed the client's exclusivity concern without requiring the venture to rebuild its core technology for every relationship, a design choice that other small suppliers negotiating with disproportionately larger clients may find directly transferable. Finally, external recognition of a kind unrelated to any specific client relationship, competition wins, participation in recognised international events, and academic partnerships, appears, in this case, to have

functioned as an indirect but accumulating source of supplier credibility, that is, of the client's confidence in the venture itself rather than of end-user desirability, and may be worth pursuing deliberately by comparable ventures rather than treated as incidental recognition.

6.5 Policy Recommendations

Although this thesis is not primarily concerned with public policy, its findings offer a modest, indirect implication for programmes that support early-stage digital entrepreneurship, of the kind TikAdRoll itself engaged with over the course of its development, including university-based entrepreneurship competitions and internationally oriented trade-promotion initiatives. To the extent that adoption conditions such as supplier credibility, rather than product desirability alone, appear in this case to have limited a small venture's ability to secure its first B2B client, support programmes aimed at early-stage suppliers may usefully complement product-oriented mentoring with mechanisms that directly address this credibility gap, such as facilitated introductions to reference clients, structured accreditation schemes, or public recognition of the kind a competition win or an internationally recognised trade fair can provide, rather than focusing solely on refining the underlying product or service.

6.6 Limitations and Suggestions for Future Research

This thesis is subject to several limitations that follow directly from its compilative, single-case design. The use of a single case limits the extent to which its findings can be generalised beyond the specific venture and client relationship examined, a limitation consistent with, and expected of, a single-case design chosen for its revelatory rather than representative qualities. Because the thesis does not draw on any evidence collected independently of the researcher's own involvement in the venture as its founder, its account cannot be corroborated by an external participant's perspective in the way a study incorporating interviews with Gruppo Romano's own decision-makers could achieve; the documentary record

used, correspondence, contracts, and dated commercial materials, provides a verifiable account of what was agreed and when, but not, in the client's own voice, why those agreements were reached. Most importantly, this thesis has no independent, controlled measure of end-user desirability: the short post-launch usage data reported in Section 5.10 is suggestive but methodologically limited, lacking any comparison condition and covering only a few days of operation, and it should not be read as resolving RP1. The research propositions developed in this thesis are accordingly offered as a contribution to future empirical research rather than as conclusions already established beyond this single case.

Future research could address these limitations directly, most immediately through semi-structured interviews with B2B decision-makers who were not part of TikAdRoll's own history, examining whether the adoption-conditions dimension identified in this thesis holds across a broader range of early-stage B2B ventures and client relationships. A further, complementary avenue would involve a controlled comparison of end-user responses to gamified and conventional promotional formats, of the kind this thesis was not able to conduct within the time available for this research, to establish, independently and for the first time, whether the positive but methodologically limited signals reported in Section 5.10 reflect a genuine desirability effect rather than a short-term novelty response. Finally, future research could examine whether the pattern identified here, effectuation appearing to govern a venture's strategic pivot while Lean Startup-style language continues to describe its downstream product decisions, holds across other early-stage B2B ventures, or whether it is instead a feature specific to ventures whose pivot was triggered by an unusually early and decisive client commitment, as was the case for TikAdRoll.

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