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Abstract

Based on an inductive case study, we develop an emotional-temporal process model of an incumbent's strategic decision making at a platform transition. We describe the senior team's emotional response to this transition and the impact of these emotions on their strategic decision making process. During a turbulent five-month period, we describe exhausting ambiguity and painful loss leading to an unbalanced evaluation process and eventually to a quasi-analytical strategic platform choice: top managers perceived they made an analytical choice, but the premises of the choice were substantially shaped by their emotional reactions and consequent micro-behaviors. Our findings extend theory on strategic decision making at platform transitions and illustrate the impact of emotions on strategic decision making.

Keywords: Emotions, platforms, strategic decision making, strategy making, industry transitions

INTRODUCTION

Digital platform business models are transforming multiple industries (Altman et al., 2022; Kretschmer et al., 2020). Given their disruptive potential, incumbent firms must consider their approach to platforms: whether to ignore platforms and continue business as usual, create their own platform alone or in collaboration with other firms, or join someone else's platform (e.g., Adner, 2022; Furr et al., 2022). For example, in 2008, Cisco responded to other firms' cloud platforms by developing its own platform, the Fog (Khanagha et al., 2020). Conversely, instead of seeking to fight against platforms, Pharmapacks chose to compete on Amazon's platform and optimized its business model, processes, and analytics for it (Cusumano et al., 2019: 145-147). Similarly, a niche firm chose to join CASTER's machine ecosystem platform "to make the overall 'cake' [i.e., market] bigger" (Stonig et al., 2022: 16).

Platform choices have strategic and financial consequences for firms (e.g., Adner, 2022). Recent research has shown how firms' platform choices have evolved over time (e.g., Ansari et al., 2016; Cozzolino and Verona, 2022; Stonig et al., 2022) and how specific factors influence platform choices and their outcomes (e.g., Hsieh and Vergne, 2022; Toh and Agarwal, 2022). However, there is limited understanding of the processes through which incumbent firms' leaders actually make strategic platform decisions (Altman et al., 2022; Kretschmer et al., 2020). Platform studies have described these decisions without zooming in on how senior management teams made them. For example, what options did they consider, and how did they evaluate their options?

Existing research on strategy making more generally (Burgelman et al., 2018; Kaplan, 2008; Patvardhan and Ramachandran, 2020) provides a useful starting point for understanding strategic platform decision making processes. Strategic decision making consists of an interplay between analytical, social-cognitive, and emotional forces that jointly influence top management teams' decisions (Hodgkinson and Healey, 2011; Vuori and Huy, 2022; Pavićević and Keil, 2021). Emotional dynamics affect strategic decision making especially at technological transitions (Raffaelli et al., 2019;

Danneels et al., 2018; McKinley, 2022). These emotional dynamics may be accentuated at platform transitions because platform decisions differ from strategic decisions in traditional industry contexts in multiple ways (Adner, 2021; Dattée et al., 2018). For example, while aiming to become a leader almost always makes sense in traditional industry contexts, it is often beneficial to become a follower in the platform contexts (Adner, 2022). In addition, platform decisions may trigger additional emotional dynamics because firm boundaries open in platforms (Altman and Tripsas, 2015). Firms lose control over select activities, which may be perceived as "down-grading" (Stonig et al., 2022: 14), trigger identity threats and negative emotions (Lifshitz-Assaf, 2018), and generate "emotional problems" (Ozcan and Santos, 2015: 1496). Historically independent firms also need to build relationships with new partners, which may activate a range of emotions toward their newly interdependent partners and associated platforms (Altman et al., 2022; Dattée et al., 2018; Kouamé et al., 2022). How these emotional dynamics shape strategic decision making over platforms, together with analytical considerations, remains poorly understood.

We studied these platform decision making processes at Nokia between September 2010 and February 2011. Nokia's decision making process was initiated as its leaders reluctantly realized that their historically dominant Symbian platform was no longer competitive with the entries of iPhone and Android phones. Nokia's leaders recognized three platform options: Nokia's own MeeGo platform, Google's Android, and Microsoft's Windows. Over a turbulent five-month period, Nokia chose Windows, even though external advisors recommended Android. In retrospect, this decision to join the Microsoft platform was a strategic disaster for Nokia.

Based on extensive data on Nokia's senior team's decision making processes, we develop an emotional-temporal process model of Nokia's decision making at this platform transition. The entry of platform competitors in the mobile phone industry generated prolonged ambiguity, stress, and loss in Nokia's leadership team. They had to acknowledge not only that their historically dominant Symbian platform was obsolete but also that their preferred MeeGo platform was unlikely to succeed. They felt strong negative emotions and, in turn, became vulnerable to subsequent emotional influences. As top managers evaluated the firm's secondary platform options, specific qualities of the options generated more favorable emotions toward Windows than Android. These emotions contributed to an unbalanced option evaluation process—Windows received more positive attention than Android. The effects of these differential emotions on evaluation processes were amplified by self-imposed time pressures and CEO succession dynamics that further reduced the senior team's self-regulation capacity. From these observations, we induce a more general model of incumbent decision making in platform contexts.

Our process model makes three contributions at the intersection of platforms and strategy making research. First, we explicate mechanisms through which emotions shape the evaluation of platform options, going beyond the mechanisms previously recognized in the strategy literature (Hodgkinson and Healey, 2011; 2022; Raffaelli et al., 2019; Vuori and Huy, 2022). Second, we describe how the temporal dynamics of strategic platform decision making contribute to emotional exhaustion which reduces the senior teams' self-regulation capacity for high-quality strategic decision making. Third, we describe how platform options generate emotions that relate to the "ego-system trap" and partner alignment (Adner, 2021) that are unlikely to occur in traditional industry contexts.

Each of these emotional dynamics becomes particularly salient in platform strategy contexts—they emerge from the specific qualities of the platform context (Altman et al., 2022; Kretschmer et al., 2020; Adner, 2021; McIntyre et al., 2021) and go beyond the typical emotional biases and dynamics recognized in the strategy making literature (Brundin et al., 2022; Vuori and Huy, 2022; Hodgkinson and Healey, 2011). An increased understanding of these emotional dynamics helps explain why leadership teams that have successfully made traditional strategic decisions may perform poorly in platform contexts. We conclude with observations on senior team practices that might improve the quality of strategy making at platform transitions.

THEORETICAL BACKGROUND

Platform Strategy

Platform business models are ubiquitous (Kretschmer et al., 2020; Cusumano et al., 2019). A central factor driving value creation in platforms is third-party complements and network effects (e.g., Kapoor, 2018). The importance of complements makes strategic platform decisions different from traditional strategic decisions (Adner, 2021; Burford et al., 2022; Shipilov and Gawer, 2020). First, as complementors and network effects drive value creation, companies must consider if a potential platform is likely to attract a critical mass of complementors to fuel its growth. Firms must consider not only if they can succeed within a given platform but also if the platform itself is going to become large enough. These distinct issues amplify the complexity and uncertainty of platform decision making.

Second, given the importance of platform success, companies often need to consider whether they aim to become leaders on a smaller platform or followers on a bigger one (e.g., Katila et al., 2022; Furr et al., 2022; Ozcan and Santos, 2015). In traditional industry settings, aiming to become an industry leader is almost always a reasonable target. Even if the company does not become the leader, the effort pays off as the investments and developments cumulate and provide a good return on investment even for the second-best company (Adner, 2021). However, in platforms, the dynamic is reversed: leading a failing platform generates major losses for the focal company without providing significant cumulative benefits; in contrast, being a follower in a successful platform can generate substantial profits (Adner, 2022).

Third, the consideration of platform business models may generate negative emotional reactions from leaders because they threaten product-centric firms' identities (Altman and Tripsas, 2015). If a firm joins a platform, some core activities that used to be controlled by the firm are performed by entities outside the firm's boundary (Altman et al., 2022; McIntyre et al., 2021; Stonig et al., 2022). This shift in the locus of control triggers defensive emotional reactions at the firm and individual levels of analysis (Hodgkinson and Healey, 2011; Raffaelli et al., 2019). For example, adopting open-innovation platforms led to strong negative emotions within NASA's Life Sciences community. NASA's R&D professionals reported how "this [open innovation] becomes quite a slap in the face!" and " When we see opportunities like Innocentive [an open innovation platform], it's extremely frustrating . . . a feeling of 'what value am I?''' (Lifshitz-Assaf, 2018: 757, 768).

Finally, given the importance of partners, the negotiation process with potential partners becomes a more central element in platform strategy making than in traditional strategy making. Firms must consider which companies are willing to partner with them and, conversely, with whom they are willing to partner (Dattée et al., 2018). A central aspect of such negotiations is partner alignment on aspirations, goals, and incentives for each key partner in the platform (Adner, 2021). When there is high uncertainty and multiple potential partners, the negotiation and strategy making processes are complex as firms simultaneously craft, evaluate, and negotiate options with different partners.

Despite the complexities and strategic significance of platform choices, existing research offers limited insight into how incumbent firms' senior teams consider platform options when there is uncertainty over which (if any) platform(s) will dominate the industry (Altman et al., 2022; Kretschmer et al., 2020; McIntyre et al., 2021). A rare example is Stonig and colleagues' (2022) study that describes how a product manufacturer opened up its operations as a platform. Similarly, Ansari and colleagues (2016) describe how TiVo created a novel platform in the media industry and how incumbent firms reacted to TiVo's actions at different points in time. However, rather than zooming in on decision making processes that led to these strategic choices, these studies describe patterns of decisions that occurred over several years (Khanagha et al., 2020; see also, Dattée et al., 2018). As a result, they provide limited insight into how top managers considered and compared various options before deciding to join new platforms, create their own, or dismiss platform ideas.

The Process of Strategic Decision making

While the platform literature offers limited insight into the process of making strategic platform decisions, the broader literature on strategy making offers valuable insights, even as the unique elements of platform strategy trigger additional complexities. The strategy making literature describes strategic decision making as a process containing analytical, social-cognitive, and emotional factors (Eisenhardt, 1989; Gavetti and Levinthal, 2000; Vuori and Huy, 2022). Analytically, strategy making consist of (i) recognizing the need to revise a firm strategy, (ii) generating options, (iii) evaluating the options, and (iv) making a choice. In each phase, social-cognitive and emotional factors shape the outcomes of the analytical process. The four stages are also likely to occur iteratively.

Firms need to revise their strategy when external conditions change due to industry and/or technological transitions (Romanelli and Tushman, 1994; Grodal et al., 2023). Often, leaders fail to notice the need to revise their strategy due to cognitive inertia (Tripsas and Gavetti, 2000; Gilbert, 2005) and myopic attention to close rivals (Porac et al., 1989). Also, defensive emotional reactions may cause leaders to ignore external threats (Hodgkinson and Wright, 2002; Vuori and Huy, 2022). Performance decline often works as the ultimate trigger that initiates strategic search (March and Simon, 1993; Sobrepere et al., 2022). The challenge of noticing relevant external changes is accentuated when platform companies enter traditional industries because they represent a novel type of competitor (Adner, 2021). Such firms may not be within the scope of incumbent top managers' attentional engagement (Ocasio et al., 2022; Ocasio, 1997).

The second stage in the analytical process is option generation. However, cognitive limitations and identity typically reduce the scope and variety of options top managers generate (e.g., Raffaelli et al., 2019). Furthermore, top managers' emotional states might influence the variety of options they can recognize (Staw et al., 1981). The challenge of recognizing or generating options might be more prominent in platform contexts than in traditional industry contexts due to the novelty and complexity of the problem space. Platforms trigger a wider variety of strategic alternatives enacted in collaboration with potential partner firms, all of whom have their own aspirations and agency (Dattée et al., 2018). Imagining and mapping such options are cognitively more taxing and emotionally difficult than in traditional industry strategizing (Altman et al., 2022).

In the third stage, top managers compare and evaluate their options. However, multiple forces influence this process and cause the evaluation to drift from analytical and objective. Cognitive biases, prior commitments, resource allocations, and emotional preferences push top managers to perceive some options as more attractive than others (e.g., Powell et al., 2011; Vuori and Huy, 2022). Furthermore, leaders may engage in "framing contests" during which they promote options that they personally prefer (Kaplan, 2008). These social-cognitive and emotional dynamics may have an even larger role in the platform contexts because there is more room for alternative interpretations due to the uncertainty and complexity associated with (a) the potential of different alternative platforms, (b) the visions and behaviors of potential collaboration partners, and (c) the focal firms potential of succeeding within each alternative platform.

In the fourth stage, top managers select their perceived best option. However, the decisions may be influenced by the emotional dynamics of the previous phases, especially because platform decisions are complex and uncertain (e.g., Hodgkinson and Healey, 2022).

In sum, incumbent firms must consider how to respond to the emergence of digital platforms. Platform strategy decisions exhibit unique features and are more complex than traditional strategic decisions. While the established research on strategy making offers valuable insights into how top managers make strategic decisions, we need more research on these decision making processes in platform contexts.

DATA AND METHOD

We examine Nokia's senior team's decision making process between mid-September 2010 and mid-February 2011. During this period, Nokia was challenged by ecosystem skepticism of its historically dominant Symbian platform. [1] Nokia's senior leadership abandoned its Symbian platform in September-October 2010.[2] They then considered three alternatives: (1) internally developed MeeGo, in which Nokia had recently started collaborating with Intel, (2) Windows, and (3) Android. They decided on Windows in early February 2011. This five-month strategic window was ideal for studying strategic platform decision making processes because the decision was extremely important for Nokia.

Nokia's Context

Nokia built sustained dominance in the mobile phone industry between 1992 and 2007 (Figure 1). Nokia's market share was consistently high in mobile phones (e.g., 38% in 2007) and first-generation smartphones (e.g., 49% in 2007) (Vuori and Huy, 2016: 16). Nokia built smartphones on its Symbian operating system between 2002 and 2010. Nokia was also developing a Linux-based operating system, MeeGo, to replace Symbian in the long term (long after 2010). Nokia built software services for its Symbian platform. It launched an application store in August 2008 (the iPhone AppStore opened on July 10, 2008). As Nokia's leaders believed in location-based services, they acquired a mapping business, Navteq, for 8.1 billion USD in 2008.

**** Insert Figure 1 about there ****

Apple introduced the iPhone in 2007, and Google introduced the Android operating system in 2008. The application ecosystems around iPhone and Android developed rapidly. Furthermore, Android was a free operating system that any phone manufacturer could use. Several companies launched Android phones and rapidly took market share from Nokia (Engadget, 2010).

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[1] For simplicity, we use the terms operating system and platform interchangeably. However, to be precise, they are different technical concepts: operating system is the software that is running the hardware, such as a phone. An operating system can be a platform if it enables other applications to operate on it. For example, iOS is the operating system of the iPhone, and it is also the platform on which the applications downloaded from the AppStore operate.

[2] Symbian's market share in smartphones had declined from 46.9% in 2009 to 37.6% in 2010 (cnet.com, 2011). Nokia continued shipping Symbian phones until 2012, as many models were already in the development process when the decision to let go of the operating system was made. These phones had minimal sales performance.

Data Collection

Our primary data collection method was 18 in-depth interviews with eight central[3] members of Nokia's top management team about the 2010-2011 period. We also repeatedly interviewed eleven other key informants, such as board members, strategy directors, and external advisors who contributed to the process, and 49 other informants who provided triangulating and contextualizing perspectives. In total, we conducted 97 interviews with 65 informants (Appendix 1). After Nokia divested its phone business in 2013, executives could discuss the processes by which they made their post-Symbian decision. We received access to a strategic decision process that would typically be kept confidential.[4] Given that the decision process had occurred relatively recently, their recollections were rich and unlikely to be overly distorted by retrospective bias. The interviews were part of a more extensive, multi-year study where the first author had formed a trusting relationship with informants.

We asked our informants to describe the decision process open-endedly (Appendix 2). Such openness leads to more accurate recollection and description of events than more focused or leading questions and mitigates potential retrospective bias (Fisher et al., 2010; Vuori, 2018; Miller et al., 1997). We also asked for elaboration, explanations ("why"), and additional examples. When we interviewed the same informant multiple times, in the latter interviews, we asked for further elaboration and clarification on select themes and additional comments on events or details we had learned from other sources. Most interviews lasted about 60 minutes, and all lasted between 30 minutes and 2 hours. The interviews were voice recorded and transcribed, except for eight, for which we took careful notes.

We complemented the interview data with media material and other documentation. These

[3] Due to anonymity concerns, we cannot reveal the exact informants. Our sample included at least four of the following five key members of the TMT: CEO, CFO, Chief Development Officer (responsible for strategy), Executive Vice President of Mobile Phones, and Executive Vice President of Internet Services (a central role for ecosystem considerations)
[4] Given that most of our key informants continue to be top-level executives in different companies, they had extremely high work demands. We, therefore, had to be flexibile in terms of interview timing—this was a compromise between gaining fuller access and following an ideal schedule for data collection. We opted to have more access rather than a rigid schedule.

sources included hundreds of news articles and journalistic books (e.g., Cord, 2014), academic articles and books (e.g., Doz and Wilson, 2017), and books by former CEOs and board members/chairs (Ollila and Saukkomaa, 2013; Kallasvuo and Rossi, 2021; Siilasmaa, 2018). Triangulating these multiple data sources allowed us to double-check claims informants made during the interviews.

Data Analysis

We analyzed the data in parallel to our data collection (e.g., Gioia et al., 2013). The first analytical technique we used was open coding: we read the interview transcripts and marked first-order codes characterizing data segments (sentences and paragraphs). The coding reflected our theoretical interests in social-cognitive, behavioral, emotional, and identity-related factors in decision making. We produced over 2,000 codes through such open coding. We kept initial codes close to the data to enable nuanced perceptions before abstracting them. The initial codes included specific themes such as "perceived Nokia would have a bigger role in Windows" and "rejected McKinsey advice."

For coding emotions, we used practices suggested in recent methodological (Kouamé and Liu, 2021; Vuori, 2018) and empirical papers (Vuori and Huy, 2022; Pradies, 2022). We inferred emotions from our informants' descriptions of specific events in the decision making process. We attended to specific cues: descriptions of specific emotions (e.g., "fear"), emotion-like constructs[5] (e.g., "quite a surprise and disappointment"), emotional charge related to issues (e.g., "a very emotional matter"), and metaphorical descriptions of emotions (e.g., "everybody was crying over the decision"), and evaluative comments (e.g., "[…] a path to clear failure. That was troubling.")

To validate our interpretations of the emotional impact of specific situations on Nokia's senior management, we used appraisal theories of emotions (Scherer and Moors, 2019). These theories predict that emotions result from individuals' perceptions of how their well-being and goal achievement are

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[5] For example, surprise and disappointment can be categorized as emotions. E.g., Ekman (2003) characterizes surprise as one of the basic emotions.

influenced by specific events. For example, if there is an event that threatens their well-being (negative influence) in a major way (high goal relevance) and they have limited coping options, they are likely to feel fear or anxiety (Lazarus, 1991). As we inferred emotions from informant statements, we always checked that the inferred emotions were consistent with what appraisal theories would predict.

In parallel to open coding, we induced first-order codes into more abstract categories (Appendix 3a and 3b). For example, through an iterative process, we ultimately grouped first-order codes that described negative emotions associated with the rejection of Nokia's internal platforms, Symbian and MeeGo, under the second-order theme "emotional shock and exhaustion." We further grouped this second-order theme under the more abstract aggregate dimension "painful loss," which also included the second-order theme "Abandoning the MeeGo and Symbian platforms." As we iteratively developed these categorizations, we also paid attention to the sequence of events (Langley, 1999). Hence, our data structure and ultimate conceptualization of the case represent not only a cross-sectional abstraction of the first-order codes but also a temporal dimension. Overall, the data analysis and theorizing process was iterative until we arrived at our emotional-temporal model presented below.

FINDINGS

The entry of novel platform competitors in 2007 triggered a period of exhausting ambiguity for Nokia's top leaders. Following this exhausting three-year period, Nokia's leaders experienced painful loss as they had to admit that their internal platform options, Symbian and MeeGo, were no longer competitive. This emotional pain made them more vulnerable to the emotional attractiveness of their secondary platform options and consumed their capacity for self-regulating their emotions. In addition, their decision making context further consumed and stunted the senior team's self-regulation capacity. Due to these emotional dynamics, they evaluated their secondary platform options, Android and Windows, in an unbalanced way. This unbalanced evaluation process contributed to a quasi-analytical strategic choice of Windows as Nokia's new platform in February 2011 (Figure 2).

**** Insert Figure 2 about here ****

Exhausting Ambiguity

Novel platform competitors create ambiguity and stress. The mobile phone industry changed radically when Apple and Google entered in 2007 and 2008. Traditionally, the industry had been dominated by specialized phone manufacturers, such as Nokia, Ericsson, and Motorolla, whose expertise was more in hardware than software. Furthermore, traditionally, the phone was primarily used for making calls, whereas the new competitors' phones prioritized applications, images, and videos:

> It was a totally different business and a totally different environment where we were. And it happened in two years. 2007 – 2009, this revolutionalized totally, this market. It was not the same business anymore. Not just the market, but we were fundamentally in a different business area. […] new things, new units, new technologies, which were substantially more complex than the rather simple mobile phone business where we had been until then […] The whole industry changed and became really different. And this birth of the service platform and the integration of those new software layers to this environment, from there came so much complexity that was totally new. (Former top manager)

Despite the massive change in the industry, Nokia's financial performance remained relatively good in 2008-2009, as it increased its market share in new areas. This added ambiguity in the situation, as performance feedback was not uniformly negative:

> Asia and India were selling well. […] Nokia grew in Africa while it was losing share in the Western countries. The global market share remained high, even though the high-end share was declining. It was thought that "let's just make the next product, and we'll get it back." There was no immediate and strong reason to react radically. […] the numbers were looking good. (Top manager #5)

While Nokia's leaders recognized the entry of the new competitors, the strategic implications remained ambiguous (see also, Aspara et al., 2023). The CEO stated in 2008: "[Nokia aims to] act less like a traditional manufacturer, and more like an Internet company," and further elaborated that he saw Apple, Google, and Microsoft as Nokia's new competitors (Gigaom.com, 2008). However, a top manager also admitted to us that "of course, we were still trying to figure out what becoming an internet company would mean for Nokia." The ambiguity in the definition of the internet company was visible to company members:

> Nokia is an "Internet company," but what does that mean, you know...when they started communicating that [vision], nobody really knew anything other than to repeat that mantra […] I'd like to know what it's really about." (Strategy middle manager #2)

The CEO also described how outsiders perceived Nokia:

> I met with Steve Jobs [in early 2010] and thought we could not discuss since we are competitors. However, Jobs said he could speak to me since "you are not my competitor." I was surprised because I thought we were competitors. I asked him, "Can you explain?" He explained that Apple is a platform company. He continued that they have been building the platform for nearly 40 years. He did not say that they are a consumer electronics company or something like that, but a platform company. He almost said that iPhone is just one detail in that platform. It is iTunes, AppStore, and so on that create the platform, and the devices are just ways to access that platform. It was a scary moment; we are not even competitors. (CEO[6])

During this 2009-2010 crisis period, McKinsey conducted an organizational health survey.[7] The results were among the worst they had ever measured in any company (multiple informants). These results reflected the extreme strategic ambiguity and stress the company members were feeling about the company's direction under the threat posed by the new platform competitors, Android and iPhone.

Performance decline and CEO change. The perceived threats materialized rapidly. Nokia's market share declined from 38% in 2007 to 29% in 2010. The company's market valuation halved from about $48B in January 2007 to $24B in August 2010. These commercial failures triggered the board to replace the CEO in September 2010. The new CEO, Stephen Elop, was recruited from Microsoft. His experience in the software business was a key reason he was chosen (e.g., Ollila & Saukkomaa, 2013). After the CEO change, one top manager resigned while the rest of the senior team remained. The new CEO committed to introducing a new strategy by Nokia's investor day on February 11, 2011.

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[6] The person who served as the CEO from 2006 to 2010 describes the same conversation also in his autobiography (Kallasvuo & Rossi, 2021: 250), which is why we can lift the anonymity for this example.

[7] The survey was conducted among the 200 most senior vice presidents and other managers. It asks questions related to their trust in the company management, strategy, and direction.

Painful Loss

As the new CEO started, Nokia faced a double blow in terms of its strategic platform options. First, leaders had to face the reality that their prevailing Symbian platform had become outdated. Second, they also realized that their intended replacement for Symbian, the MeeGo platform, was unlikely to be competitive against the new platform competitors.

Abandoning the Symbian platform. Nokia had built its success in smartphones with its Symbian platform. Even though the platform had limitations, top managers had not entirely accepted its demise before Elop's entry:

> This is related to admitting things to yourself. So even if you understand on an intellectual level [that Symbian should be replaced], you still won't accept it. [You continued to feel that] it can't be so that you can't turn around Symbian. (Top manager #5)

> Symbian was way past its best-before day [when the new CEO started in September 2010], in desperately bad shape. The whole company knew that; everybody was talking about it [when the new CEO started]. [People had not openly spoken about it before] because of the forces coming from certain senior leaders, you weren't allowed to say it or do something about it. (Top manager #2)

In retrospect, Nokia's underperformance against Apple and Android in 2008-2010 was attributed to Symbian's fragmentation: nearly each new Nokia phone model required programmers to develop a new version of Symbian, causing duplicate work and complexities. Symbian's complexity also caused the compilation process to be excessively lengthy—what should have taken 15 minutes took up to 48 hours (Top manager #5). A board member with software expertise observed that this was a "formula for a disaster" (Siilasmaa, 2018: Kindle location 1345).

Symbian's fragmentation also alienated external developers from Nokia's platform. Nokia had enabled third-party applications in Symbian but

> External application developers complained that if you make an application for Nokia phones, it takes four times longer than for Android. And they also complained that Nokia has ten different

> kinds of Symbian phones, and [the application] must be adjusted to all of them. (Software middle manager)

While they had not fully acknowledged Symbian's problems before the entry of the new CEO, the difficulties in the development of the most important smartphones, N97 and N8, in 2009-2010, started creating unease: "the thought that Symbian is worthless became stronger during the first half of 2010" (Top manager #5). When the new CEO entered, he helped top managers and organization members see and accept Symbian's weakness. For example,

> [New CEO] came to the product development and opened his suitcase containing only Apple's products. Then he presented them, how good they are, and placed Nokia's products next to them. […] We are lagging behind quite a lot now. This was how he woke the organization. (Product development manager)

The realization that Symbian needed to be replaced was quickly acknowledged:

> [After the CEO change, Symbian's weakness was admitted because there was] a rebound or a whiplash of built-up knowledge and frustration that had not been allowed to surface before. (Top manager #2)

> Symbian's lack of competitiveness was already known [when the new CEO started], so we understood that if we were going to be competitive in the smartphone offerings, we were going to need to find an alternative. (Top manager #8)

Abandoning the MeeGo platform. While grappling with the loss of Symbian, Nokia's senior team focused on its replacement. Most top managers initially felt that Nokia's internal option, MeeGo, would be the best. The CEO also favored MeeGo as the first option (multiple informants).

> We were considering different options, Android, Windows phone, continuing with MeeGo, [board asked top management in October 2010] "What do you think our decision will become?" […] I said, "I sure hope it's about MeeGo. We have to keep the other options alive, but our internal option and owning our operating system is always the preferred solution." […] It was hugely my preference to have an internal option. (Top manager #2)

> Our desire was so that probably everybody would have wanted to get something out of MeeGo (Top manager #3)

Top managers focused their efforts on the potential of MeeGo. They considered Nokia's internal capabilities and the preferences of potential platform ecosystem partners and complementors. The CEO and the Chief Development Officer led independent internal assessments of the technological status of the MeeGo program. Both concluded that MeeGo had less potential than they expected:

> As we went through that process, it became clear that the MeeGo project had gone very badly out of control. […] Technically, the critical realization was that our internal project, that the board had all faith in, would not deliver. It was just simply on a path to clear failure. That was troubling. (Top manager #2)
>
> [We learned that] there was a competence gap in the whole [MeeGo] area, a considerable one. Much more considerable than… than at least I had realized. (Top manager #5)

In addition to evaluating their internal capabilities, top managers interacted with potential platform partners. However, these discussions led to surprising disappointments:

> For us to be able to [choose MeeGo], we would have needed support from [mobile operators] […]. To our surprise, we couldn't get any commitment from anywhere for MeeGo apart from kind words. That was actually quite a surprise and quite a disappointment as well. (Top manager #5)
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> A delegation went out to talk with the customers, to talk with other suppliers […] Then, just, unfortunately, the process ended up so that nobody supported MeeGo. We would have been entirely alone with that. Even though it would have been, like we believed, by far the best solution, of course. (Top manager #3)

There was also uncertainty about application developers' willingness to invest in a new platform:

> In the strategy process, it was understood that this is a game of ecosystems. Meaning that you have to get all of the developers to do this, right? You have to get all of the hundreds of thousands of applications into the ecosystems, and they have to be good. […] We no longer had the option to start building an [application] ecosystem around MeeGo at that point. (Top manager #3)

The outcome of these discussions and the internal capability assessment was that Nokia's preferred platform choice, MeeGo, would be infeasible:

> [Chief Development Officer] called [CEO] and announced that he was ready to express an opinion [about MeeGo's potential]. [CEO] replied that he, too, had made up his mind. "Come to my office," he invited [Chief Development Officer]. "You'll find me under my desk curled up in a fetal ball." (Board member, Siilasmaa, 2018: Kindle location 1689)

Emotional shock and exhaustion. The double blow of having to reject both Symbian and MeeGo generated emotional shocks and exhaustion among top managers. Despite the retrospective obviousness of the need to replace Symbian, it was emotionally challenging for top managers to accept its demise. It required painful decisions:

> We had, in making Symbian, 6-7000 people; then competitors were making similar things with 500-700 people. […] You cannot just say that "now, everyone, stand up, take a count to ten, and those who get one will stay, and everyone else should leave [i.e., be fired]." […] [Nokia shutting down Symbian development] was the largest downsizing process in the European business history. (Top manager #5)
>
> The Symbian decision was exceptional in the sense that it was known that the business case was bad for abandoning it [i.e., short-term financial projections were negative], that building a new operating system was much too expensive, so nobody wanted to do it. But it was just seen that it just must be done. (Strategy director #1)

Then, after rejecting Symbian, they had to reject MeeGo just a few months later. Also, this decision was emotionally painful:

> [Rejecting MeeGo] was the most painful decision for both the board and top management team [...]. Everybody would have wanted to believe in MeeGo. […] Everybody was crying over the decision. (Top manager #3)
>
> Abandoning the MeeGo option […] was a very emotional matter. It was our own thing, our own development belief. (Senior internal ecosystem specialist involved in the process)

The emotional difficulty of the decision also manifested as denial among some top managers:

> People didn't want to let go of MeeGo [even after] the final deal with Microsoft [to start using Windows had been made]. […] It was probably part of this psychology that we didn't want to completely let go of [MeeGo]. (Top manager #5)

Some top management team members described the decision as a shock:

> I arrived at the [TMT] meeting […], the decision had been made that MeeGo was not going to be able to be a competitive offering and that we're going to have to look for alternatives. […] it was a shock. (Top manager #8)

The shock was not just disappointment about being unable to make a preferred decision. In addition, it was a more fundamental realization that the central assumptions they had about the company and its potential were flawed:

> My perception [of Nokia's situation] changed quite a bit [during the first months after the appointment of the new CEO]. It changed from a company in decline needing some thoughtful change to a company that was in a much bigger crisis […]. It was really in a terrible spot. When

> you're looking for the emotional perception for me, I went through a shift from this is troubled to this is life-threatening for the company. That it was so dramatic in terms of what was going on. (Top manager #2)

> The change [from own operating system to an external one] is massive in the operative sense, psychologically massive, suddenly if you move to an external operating system, whereas earlier we were [making our own operating system]. Especially because the company self-identified as a leading [company] that produced added value and didn't only manufacture devices. (Top manager #5)

The emotional shock, combined with the exhaustion, made top managers more vulnerable to the emotional attractiveness of their secondary platform options. In addition, the exhausting period and emotional shock consumed top managers' capacity for self-regulating their emotions.

Emotional Attractiveness of Secondary Platform Options

Once MeeGo was rejected, Nokia's senior team recognized that they had two options: (1) Microsoft's Windows (4.2% market share in 2010 and 8.7% in 2009) or (2) Google's Android (22.7% in 2010 and 3.9% in 2009) (cent.com, 2011). They conducted an analytical process to evaluate these options, heavily assisted by McKinsey. They perceived Windows as emotionally more appealing than Android for three reasons. [8] These emotions, in turn, influenced their perceptions of the two options.

Ability to sustain ecosystem leadership within the platform. Nokia had been the unquestionable market leader in mobile phones for fifteen years. This leading position had become central for Nokia's leaders: "Our ambition was to be the biggest. Our ambition wasn't to be Sony Ericsson." (Top manager #3). Top managers wanted to hold on to their leadership position:

> There's a lot of nostalgia for the old dominance, and quite frankly, you didn't ask me about the time leading up to 2010, but I think that was part of the problem as well. […] People were just used to having their way and always winning. (Top manager #1)

[8] In addition to the three factors related to emotional attractiveness, short-term financial gains favored the Windows-option (related to direct payments from Microsoft as well as Nokia's chances to monetize its patent portfolio). As the impact of short-term gains is well understood and their amount was modest compared to the overall impact of the platform decision, we do not elaborate on their role in the decision making process.

> As a company, inherently, we wanted to use our own offering […] we wanted to have control. The last thing we wanted to do was give that away to Google or Microsoft. (Top manager #8)

When they considered joining the Android platform, top managers perceived they might lose the leading position, which made them feel uncomfortable:

> There was a bias toward wanting to be a market leader. The question is do you want to be someone who leads and can change things? We believed that with Windows, you could influence the game; instead of playing with the same Legos [Android] as everyone else. It's more than… Now it is easy to see that; well, one should have seen it. But the whole Android rose only in 2009, in one year before 2010. So, why could not a new ecosystem do the same? (Top manager #5)
>
> I think that [joining Android] was just so far outside the psychological makeup of the company. It would never occur to someone to come in and present a case for being the third-best [by being one of many Android providers] […] We were so used to being the ones in charge, the ones in control [which was believed to be impossible with Android]. (Top manager #7)

In contrast, Nokia's leaders perceived that collaboration with Microsoft would allow Nokia to maintain a leading position. This increased the emotional appeal of the Windows option:

> We wanted to believe more in the Windows Phone because we believed that we could own 80 percent of the Windows Phone ecosystem. So, in a way, do the same thing that happened with Samsung and Android. Samsung took all of the profits out of the Android ecosystem. We believed that we could achieve the same role in the Windows Phone ecosystem so that we are the biggest and we get the profits. (Top manager #3)
>
> There are multiple ways to achieve greatness. […] Apple was selling less than 10% of all mobile phones, but they were beautiful and very profitable, and very successful. That's one form of greatness. It's the brand that everybody wants. […] [Similarly,] we could have some beautiful premium Windows phone products that could command great brand appeal and good profit. (Top manager #2)

Emotional resonance of potential platform partners. Android and Windows were not just technical platform choices that top managers analyzed independently with consultants. These two options were associated with the companies behind them. The interactions with the different companies evolved such that Nokia's leaders started feeling positive emotions during negotiations with Microsoft and negative ones with Google:

> Some of it is psychological, of course, in the sense that Microsoft was very willing to sell and offered a lot, and Google was willing to give us the same as [it was giving] everybody else and

> like the rules said, there's no reason why we would prevent you from using this. And I'm not exaggerating a lot here, with the difference between these two negotiation partners. […] Microsoft was prepared to do their all to prove [that Nokia can dominate the phone business with Windows], both financially and with everything else, whereas Google's approach was that you're alright to use Android, but you get nothing from us. No special treatment at all. That was a kind of hard spot. (Top manager #5)

A significant factor contributing to these emotional reactions was that Microsoft's leaders showed enthusiasm and eagerness to work with Nokia, whereas Google's leaders seemed indifferent towards Nokia or even arrogant. These partners' contrasting emotions influenced Nokia's leaders' emotions:

> Microsoft did a lot to consume our attention by being so eager. Versus Google, who were a little bit ardent, "Sure, we'll meet with you if you want us to meet with you. Yep, we're definitely interested and would like to talk to you about it." Um, but not really that eager. (Top manager #7)

> There was the emotional thinking that we thought, "this [Windows] will be the thing that saves us." They want to work with us, so let's work with them; this is really cool because Google was like, "nice that you come along, but we're not doing anyone any favors; everybody works under the same rules." And then, on the other hand, Microsoft was like, "no worries, we'll make different rules for you," so it was a tempting option. (Strategy director #1)

> Our conversations with Google, with [Google's top manager] in particular, his basic message to us was, "You will end up going Android sometime or other. The numbers are already clear; Android has won the war. It's already over." […] as arrogant as that sounds, he was largely right [in retrospect]. (Top manager #2)

A further factor contributing to emotions toward the potential partners was the CEO's background at Microsoft. Even though top managers' perceived that the CEO tried to be objective in the decision making process, they also perceived that he felt positive about Microsoft:

> [CEO] did try to be really objective in this process. Maybe [CEO] had a pretty strong Windows perspective. […] probably partly because of his background with Windows. It was human, in a way. (Top manager #3)

The CEO's perceived positive emotions toward Microsoft made his management team members feel similar emotions. As one of our informants described:

> There was definitely a buy-in, internally, to the Microsoft option [already during the decision process]. And that was driven, in part, by [CEO]. (Top manager #7)

Perceived chance to maintain the value of complementary assets. A third factor that made the Windows option emotionally more appealing to top managers was that it enabled them to continue believing that Nokia's other major assets would have ongoing value. The two most important assets were the MeeGo platform and Nokia's mapping and navigation software.

Nokia had been building the MeeGo platform for several years. Top managers perceived that adopting the Windows platform would enable them to continue developing MeeGo in parallel and, perhaps, return to using it later on:

> In the Windows Phone thing, at least, my impression is that we were negotiating for such a possibility for MeeGo, which was entirely real. It was, in my opinion, a skillfully negotiated financial option for correctly using MeeGo. […] it was a real option to use [MeeGo] and develop it. Then the fact that we didn't do it, it was maybe more of a passive decision than an active one. (Top manager #5)

> As we made the decision [to partner with Microsoft], at least I didn't have the sense that we were walking away from making our own platforms. It was positioned as temporary: "Let's get through this tight spot, and then when our stuff [MeeGo] is ready, it can complement Windows and the portfolio." Maybe that was just naiveté on my part, but it also meant that we didn't have [deep] emotional conversations. I don't think everybody in the room really knew that this meant we were getting out of the platform business [running Nokia's own platform]. I didn't realize it then. (Top manager #1)

In contrast, Nokia leaders perceived that if Nokia chose Android, the Android ecosystem would become the dominant ecosystem in the mobile phone business. This would permanently destroy Nokia's chance of relaunching MeeGo successfully later on:

> It was not that Nokia was an independent actor. If we had chosen Android, it would have become the only dominant operating system for smartphones forever. Like Windows became dominant in PCs. Remember, we would have become a hardware vendor. Then the question is how easy it would be for Google to manage us down. The only differentiating factor is price/cost. Do you really want to be that? (Top manager #5)

Nokia's second major asset was a mapping business, which it had acquired for $ 8.1 billion in October 2007 (cnet.com, 2007). However, on November 28, 2007, less than two months after Nokia had announced the acquisition, Google Maps for Mobile 2.0 was released. Google's mapping application was free for users and included turn-by-turn navigation. Hence, it dramatically reduced the competitive advantage Nokia could get with its own mapping and navigation application. If Nokia had chosen Android as its platform in 2011, its leaders would essentially have had to acknowledge that their mapping application offered no additional value compared to Google Maps:

> The downside of Google, at least the perception of the downside of Google, was that, of course, they were the leaders in location, and Nokia aspired to be the leader in location; and it was felt that if we aligned with Google, we could not realize those dreams. That was kind of the negative with them. (Top manager #1)

In contrast, because Microsoft lacked a mapping service, collaboration with Microsoft would enable Nokia's top managers to believe that their mapping application was valuable:

> There is a higher level, a second level of discussion, I like to call that the strategic chessboard where you're taking a step back and saying, "Okay, we own a phone business […], and we own this mapping and navigation business […]. You start to think through, and you have to think through, "If we make this decision with the phone, […] What do we do with Navteq that ultimately became HERE [Nokia's mapping business]? What value do they have?" (Top manager #2)
>
> If you believe that the map business and the worth of maps, in the Android world, the map isn't a part of it at all because Google has their own maps, and you would have had to throw it away at that point. So, it wasn't only a decision on the operating system, but you also looked at all of the other things, and now maybe the maps were the biggest thing. At that point, many in the Nokia management still had the strong impression that the maps were a really important element of information in the future, and they wanted to be involved in that game, which then led to, in a way, Microsoft enabled that cooperation, and we did cooperate so that Microsoft started using the HERE maps. (Strategy director #1)

Stunted Senior Team Self-Regulation

When Nokia's top managers compared Windows and Android, they had just made the emotionally painful decisions to reject Symbian and MeeGo. The emotional toll of these decisions consumed some of their capacity for regulating their emotions and made them more vulnerable to emotional influences (see above). In addition, the decision making context amplified top managers' stress and further reduced their capacity for emotional self-regulation.

Decision making context. Three contextual elements increased top managers' stress during their decision making process.

Time pressure. The MeeGo evaluation process consumed most of the time the senior team had before its deadline to announce a new strategy at Nokia investor day (February 11, 2011). As such, Nokia's senior team had little time to reflect on their emotions and potential biases in their comparisons between Android and Windows:

> In hindsight, the whole decision was too big to be made so quickly. That's the biggest mistake that was made. But I didn't say anything at that time either. I didn't say, "We need a timeout." (Top manager #4)

There was insufficient time for collecting data and reflecting on the big picture:

> [During the intense period,] there had been analysis or work that had been done in a very short space of time, potentially maybe not able to get all of the information, or at least not all the correct information, given the short space of time (Top manager #8)
>
> If you impose huge time pressure, overload people with work, and reach decisions during meetings held at night, decision-makers lose sight of the big picture […] It was impossible to complete the [strategy-formulation] process sensibly because the time span was too short. (Top manager #6)

Senior team job insecurity. As the decision making process occurred just after the CEO change, top managers still experienced uncertainty about their future roles in the company. Top managers expected that the CEO would change his team after the platform decision. They felt job insecurity:

> Most of the management team was sitting there waiting to see what [CEO's] next play was in terms of organization structure. […] an environment of nervousness as to when is he going to start killing the management team and bring in his own people. (Top manager #8)
>
> An organization had not yet been formed around [CEO], and there were no established roles, so everybody was thinking, "Who will [the CEO] replace?" (Strategy director #1)

Perceived board aggression. Top managers also perceived that some key members of the board of directors felt and displayed strong negative emotions in the situation, creating additional pressures:

> There was a bit of emotion [in the board of directors], or possibly more than a bit. But there was perhaps fear as well. [Chairman] has such a strong personality; he has his own strong opinions.

> (Top manager #3)
>
> [Chairman of the board] was very [challenging to deal with], you had to prove a negative with [the Chairman] because he did not have a good history with Microsoft, and I think he was quite skeptical about that [Microsoft collaboration] as well. (Top manager #7)

Stunted senior team self-regulation. The stressors and context reduced top managers' capacity to regulate their emotional biases during the decision making process. Informants described how emotional preferences entered their debates under such circumstances:

> These decisions are so complicated that you don't have perfect information about everything. And you have beliefs. And both your rational side and your emotional side affect your beliefs. […] What we were really talking about was our beliefs. Not so much, "I'm annoyed; it makes me angry." But I said, "I don't believe in this. I don't believe we will succeed this way, with this platform or this business model." And then I had rational arguments, but only in part. And the rest came from some much more profound, even emotional beliefs. (Senior internal ecosystem expert involved in the process)

Due to their job insecurity and perception that the CEO favored Windows, some top managers avoided challenging the CEO's views on the Windows option, even if they had doubts about it. This reduced the senior team's ability to regulate their emotional biases; they evaluated the Windows option less critically. In practice, some of the senior managers adjusted their communication to favor the Windows option:

> If you think about a process where you get a new CEO who says, "We'll make a new strategy, and then based on this strategy, we'll decide what our organization will look like, and here's the timespan, here's four months." So, it's crystal clear that the process might be biased [in a specific] direction because of what these subordinates believe that the boss might want to do at that point. (Top manager #6)
>
> [Perceived job insecurity] certainly had an impact on the way that we challenged the CEO around Microsoft. I think that had the team been a little bit more secure, if the team had felt more secure, there would have been a lot more challenging around the decision around Microsoft. (Top manager #8)

In addition, perceived board aggression caused top managers to feel pressure not to express disagreements in front of the board. This further reduced their capacity for regulating emotional influences in their processes. They could have leveraged board members' and their consulting firm's expertise during the process, which could have provided a sanity check and thus regulated potential emotional bias. However, due to these pressures, they were unwilling to do so:

> [Our dialogue with the board] felt a bit political. What are the board's feelings? How do we influence them? "Oh, [a board member] is going to be influential; what does he think?" so it was a little bit crazy that way. One of the board members […] sent me a note saying, "I've heard about [specific project]; what is that?" I replied to him, "Here's what's going on." Of course, I wanted him to think positively about it, and then later [CEO] screamed at me, "You are not allowed to talk to board members, blah, blah, blah, blah, blah." It was all very political. (Top manager #1)

> Of course, it's crystal clear that no management team would [express disagreement] in front of the board [laughs] because individuals who disagree wouldn't even be invited to the meeting. Or, if they were expressing strong disagreements, they most likely wouldn't be invited to subsequent meetings. (Top manager #6)

Unbalanced Evaluation Process

Top managers' painful losses, the emotional appeal of the Windows option, and their vulnerability to emotional influence, in turn, shaped the evaluation of their strategic options.

Emotion-driven option crafting. Nokia's senior leaders shaped their options through active negotiations with Google and Microsoft. The emotional appeal of the Windows option triggered more active dialogue with Microsoft than with Google:

> There was a lot more momentum happening on the Microsoft side. […] It's probably fair to say the bias, certainly from senior leaders, like [top manager] and [top manager], was more for Microsoft. (Top manager #7)

> When [Windows] started to look like it was more interesting, and psychologically there was more enthusiasm for that option, it's not so easy for the people who were very deeply involved in it to see the whole situation clearly in that moment. That doesn't mean that we acted hastily, but it just often happened that [we focused more on Windows]. (Top manager #4)

In contrast, Nokia's efforts to negotiate with Google remained modest:

> Nokia gave up quite easily on Google based on Google's initial lack of enthusiasm. We did leave some stones unturned […] it was like, "Okay, if this doesn't work, then let's take the other option [Windows]." We didn't have the will to explore a sufficient number of iterations with the same option [working with Google] before accepting that this option [did not work]. (Board member #2)

> Did we exhaust every avenue [in analyzing the Google option and negotiating with Google]? No, no, I don't think so. (Top manager #7)

In this way, Nokia's senior team spent more time crafting the Windows option:

> All outsiders thought that the Windows Phone would not succeed. Rationally, you can think about things like this, but then, if you are sitting there and you have to make the choice between do I really try to make something that might succeed happen, or will I take the path of commoditization with Android where it's more likely that we will get some sort of success, but a big success is extremely unlikely. […] The rational one leads to, "Well, I don't believe in the Windows thing, so this is doomed to failure," whereas if you yourself believe that the Windows thing might have a chance, then you might become the third player [third ecosystem], which is then a much better solution than competing in the Android world with the Chinese [companies]. (Strategy director #1)

Emotion-congruent option evaluation. Besides dedicating more effort to negotiations with Microsoft, Nokia leaders interpreted information in a way that favored selecting Windows. They evaluated the Windows option less critically than the Android option. They recognized the downside of the Android option during the process:

> The assumption was that we would never be the biggest in the Android ecosystem, at least within the next maybe five years. And that there [revenues] would be divided more evenly [than in the Windows ecosystem]. This was what made a huge difference in the figures. If you are not the biggest. (Top manager #3)
>
> And then, again, we have to remember the Koreans and the Chinese have always been really fast and efficient in productizing around some other software. So, getting into the Android game three years late and saying you're going to beat the total market leader in that platform wouldn't have been easy either. (Top manager #4)

But they failed to recognize several technological limitations of the Windows operating system:

> The evaluation of the Microsoft product was cursory. […] One nasty surprise was the language support. It turned out Microsoft only supported ten languages. That's ridiculous when Nokia was trying to sell in 180 countries, but it was one example of something that nobody checked. (Top manager #1)
>
> We believed that it's possible to produce very low-end phones with Windows, which turned out to be a false assumption. There were other technical features as well that people were just surprised weren't there. […] The level of due diligence on the Microsoft product was quite poor. (Top manager #6)

In addition, quantitative sales predictions were highly optimistic and not thoroughly scrutinized:

> There was McKinsey, and there was a tremendous amount of material [but] how did we get those basic assumptions […] at least in those board meetings where I was present, we didn't talk about them. […] We took it at face value, the whole roadmap. […] So you're not intellectually quantifying the impact of the risk, but you merely write it down. If you quantified the real impact of that risk, that might even lead to you concluding that if this is realized, the impact is so massive that we shouldn't choose this path. (Top manager #6)

Most critically, Nokia's leaders grossly over-estimated their ability to retain customers, i.e., how many current Nokia Symbian users would convert to using Nokia's Windows Phones:

> Nokia has said that it hopes to transition 200 million current Symbian users to Windows Phone. If that works out, Microsoft would move from also-ran to become the number-two phone platform in the market -- some analysts have predicted it will overtake Apple by 2015. (Business Insider, , 2011)
>
> The most significant assumption that was wrong was that Nokia's brand loyalty would be that strong. […] the owner of a Nokia phone was going to buy a Nokia phone again with a probability of x, it was always between 60 and 80. So even if you calculated and said okay, even if it would go down to 40, we have calculated enough risk. And when it fell far under those figures, so simply, the transition effort from the Symbian phone to the Windows phone was much more significant, with transferring the contacts and all that, we just didn't do enough technical work in hindsight. (Top manager #4)

Quasi-Analytical Platform Choice

Nokia's top management team voted in early February 2011 to select Windows, even though McKinsey recommended Android:

> I vividly remember the day when we made the decision because [CEO] went around the whole of the [TMT meeting participants]. It was almost unanimous in the end. […] The only person that voted against [selecting Windows] was the McKinsey guys. (Top manager #7)
>
> I'm not saying that anybody was lying; I don't believe anybody did; I think everybody genuinely voted, but again if I look back and say, what did we do wrong? I think the due diligence was wrong. (Top manager #8)

AN EMOTIONAL-TEMPORAL PROCESS MODEL OF SENIOR TEAM STRATEGIC DECISION MAKING AT PLATFORM TRANSITIONS

Generalizing from our single-case findings, we develop an emotional-temporal process model of incumbent strategic decision making during platform transitions (Figure 3). The model suggests how emotional dynamics of strategic platform decision making unfold in multiple time-dependent phases, how top management team's self-regulation becomes stunted, and factors that influence top managers' emotions toward strategic platform options. These emotional-temporal dynamics contribute to quasi-analytical strategic choices.

**** Insert Figure 3 about here ****

Temporal evolution of incumbent senior team emotions and strategic platform decision making. Our model suggests that in incumbent firms, top managers' emotions and strategic platform decision making evolve in five phases: *(1) Exhausting ambiguity* occurs when the entry of platform competitors initiates an era of ferment, during which it is unclear if and how the industry will transition (Romanelli and Tushman, 1994; Furr et al., 2022; Kretschmer et al., 2020). This period is emotionally exhausting for incumbent leaders because the fundamental logic of the industry is challenged while also under increased competitive and performance pressure (Navis and Glynn, 2010; Tripsas, 2009). This period may trigger active inertia (Gilbert, 2005; König et al., 2021; Tripsas and Gavetti, 2000; Sull, 1999) as top managers attempt to deal with the implications of new competition (Danneels et al., 2018; McKinley, 2022).

(2) Painful loss occurs when top managers realize that their company's internal solutions are no longer competitive in the industry (Danneels et al., 2018; Gilbert, 2005; Raffaelli et al., 2019; Christensen and Bower, 1996). Incumbents may have novel solutions under development, but new platform entrants may cause these solutions to become outdated even before their launch. Such losses trigger strong negative emotions. These negative emotions build cumulatively (e.g., Bechara and Damasio, 2005) on top of the emotional exhaustion top managers already feel, making them feel even worse. This increases their vulnerability to additional emotional effects in subsequent decision making phases (e.g., Lian et al., 2017; Wiehler et al., 2022).

(3) Emotion-driven option crafting: After realizing their planned internal solution has become infeasible, top managers must consider options. However, these options do not come to them as ready options but result from active internal sensemaking and negotiations with numerous potential partner firms. As uncertainty is high and top managers are emotionally exhausted due to the first two phases, emotional impulses partly drive their behaviors. They, therefore, dedicate more time and effort to options that trigger positive emotions, such as those that build on prior competencies and capabilities (e.g., Benner, 2010). As they do so, they craft and shape these options further, making or perceiving them ever more attractive for their firm.

(4) Emotion-congruent option evaluation: Partly parallel to and after creating options, top managers evaluate the options. This evaluation includes making quantitative predictions of the revenues and costs associated with each option, as well as validating assumptions and estimating risks. Top managers' emotions toward their options influence these evaluations. They are more critical in evaluating options that trigger negative emotions and less critical in evaluating options that trigger positive emotions (see also, Phelps et al., 2014). For example, they are more likely to critically scrutinize favorable assumptions related to options they dislike. In contrast, they are more likely to take favorable assumptions at face value about options they like. As there are many such assumptions and estimates to be made, top managers make a series of emotion-congruent micro-evaluations of their options that cumulatively contribute to their overall evaluations.

(5) Quasi-analytical platform choice is the outcome of this emotional-temporal decision process. Top managers compare the options based on the evaluations they have performed, attend to the outcomes of various analyses, and make what could be called an analytical or rational decision. They choose the option that seems best based on their emotionally compromised analyses. We label this choice quasi-analytical because emotions have shaped the creation and evaluation of the options, even if emotions do not directly influence the final decision.

Stunted senior team self-regulation. Our model further suggests that the emotional dynamics become more influential when the decision making context stuns top managers' self-regulation. Individual or group self-regulation of emotions refers to controlling which emotions are experienced, when they are experienced, and how they are experienced and used (Healey and Hodgkinson, 2017). Self-regulation is a limited psychological resource. As people get exhausted, they are less able to regulate their emotions (Lian et al., 2017; Baumeister, 2002). Consequently, top managers are likely to become more vulnerable to emotional influences as they continue the strategic platform decision making process after having experienced ambiguity and loss over extended periods of time. In addition, decision making contexts may contain company-internal factors that further consume top managers' limited self-regulation capacity.

Emotional attractiveness of secondary platform options. Besides these phases and temporal evolution, our model provides insight into how and why platform options trigger emotions in ways that may not occur in traditional industry strategizing. These mechanisms explain, in part, why emotional dynamics may become more salient in platform contexts.

First, the perception that a platform option would enable the incumbent firm to sustain its ecosystem leadership is likely to trigger favorable emotions among its leaders. The emotional reaction can be myopic because, even though a firm might lead a platform ecosystem if the platform itself fails (like Windows did), the firms on the platform fail (Adner, 2022). Leaders of incumbent firms may emotionally value being a big fish in a small pond (cf. Katila et al., 2022), even if a bigger pond provided more realistic opportunities for success.

Second, besides considering the qualities of the external platform options, an incumbent's leaders are also likely to feel emotions toward the firms and leaders representing those options. Such emotions emerge because platform strategizing involves active interactions with potential platform partners to create collaboration beneficial for both firms (Adner, 2021). Our findings suggest that partner behaviors and the focal firm's leaders' prior relationship with the potential partner influence their emotions toward the partner. Potential partners that display eagerness, flattery, and other positively perceived behaviors are likely to generate favorable emotions in the focal decision makers via emotional contagion (Barsade, 2002), emotional energy (e.g., Fan and Zietsma, 2017), and other social mechanisms (e.g., Santos and Eisenhardt, 2009).

Third, given that platform companies often perform services in novel ways, incumbent firms' assets may rapidly lose value (e.g., Cusumano et al., 2019). Incumbent top managers are, therefore, likely to be highly concerned about whether their platform options maintain the value of their complementary assets; these concerns and potential means for addressing them likely trigger emotions. As industry boundaries blur and old technologies get replaced by novel solutions, incumbents might have assets that have de facto lost (most of) their value but continue to hope that they could extract value from them (cf. Staw, 1981). They might, therefore, emotionally prefer platforms that, in theory, enable them to provide substantial value but, in reality, have marginal chances of success.

DISCUSSION

Theoretical Contributions to Strategic Decision Making at Platform Transitions

The primary theoretical contribution of our paper is that we induce emotional-temporal dynamics associated with strategic platform decisions in incumbent firms. Research on platform strategy has recognized unique platform challenges that result from network effects, the need to align partners, and the lack of hierarchical control (Adner, 2021; Altman et al., 2022; Cusumano et al., 2019; McIntyre et al., 2021). Studies have also described how firms' platform strategies have evolved over several years (Khanagha et al., 2020; Ansari et al., 2016; Stonig et al., 2022; Garud et al., 2022). Ours is among the first to focus on a single, major strategic platform decision and describe and theorize the process leading to the decision. Our findings suggest emotional dynamics that are likely to be particularly prevalent in platform contexts and distinct from emotional dynamics of strategy making in traditional settings (Brundin et al., 2022; Raffaelli et al., 2019; Vuori and Huy, 2022; Hodgkinson and Healey, 2011). Our findings extend our understanding of how emotional dynamics emerge and influence different stages of platform strategy making and how these influences are distinct in platform contexts (Danneels et al., 2018; McKinley, 2022).

Emotional-temporal influences on strategic platform decision making. Our findings suggest that leaders' emotions do not directly influence their decision but rather shape the process through which leaders create, craft, negotiate, and evaluate their strategic platform options. In Nokia's case, it was the unbalanced process that over time "helped" top managers perceive that the option that triggered their positive emotions would be the best one. These findings increase understanding of how and why firms may become influenced by emotions during strategic platform decision making. More generally, prior research on how emotions influence strategic decisions (e.g., Døjbak Håkonsson et al., 2016; Hodgkinson and Healey, 2011) has de-emphasized the option refinement and evaluation process.

In addition, much of the research on emotions and strategy making has tended to focus on overall emotional states or dispositions (e.g., Delgado-García and De La Fuente-Sabaté, 2010) rather than emotions toward specific strategic options. It is well-known, for example, that psychological safety and positive emotions facilitate more open dialogue and integrative strategizing (Liu and Maitlis, 2014; Veltrop et al., 2021). But strategic decision making is fundamentally about making choices (e.g., Rumelt, 2012). If emotions toward options differ, they are likely to shape the decision making process differently than generic emotional states. We show that option-specific emotions influence (a) how much effort top managers put into crafting and refining a potential strategic option and (b) how critically they evaluate the option. These influences should be integrated into our theories of strategic decision making.

Perhaps more broadly, our results suggest that emotions and associated compromised strategic decision making may be behind extant explanations of organizational inertia (see also, Hodgkinson and

Healey, 2011). It may be that negative emotions associated with technological transitions drive competency traps (Rosenbloom and Christensen, 1994), resource allocation processes (Christensen and Bower, 1996), threat perception (Gilbert, 2005; König et al., 2021), commitment processes (Sull, 1999), and mental models (Tripsas and Gavetti, 2000). Perhaps emotions have been left out of extant strategic decision making research because access to senior teams at these transitions is so difficult.

Cumulative strain and stunted senior team self-regulation. While previous research has recognized that platform strategy making often occurs over several years (Khanagha et al., 2020; Ansari et al., 2016; Stonig et al., 2022; Garud et al., 2022), there has been a limited understanding of the cumulative mental effects of such long-term processes. At the same time, research and theorizing on the emotional effects on strategic decision making has mainly been cross-sectional or a-temporal (Hodgkinson and Healey, 2022; 2011; Raffaelli et al., 2019). Our findings showed how ambiguity, stress, and the ultimately experienced loss consumed Nokia's top managers' mental energy. Top managers had very little left when they would have needed to create new options for MeeGo and when they were making their final decision between Android and Windows. Similarly, in other incumbent firms, the ultimate decisions about platforms are unlikely to occur in a neutral context. Rather, they are likely to occur after years of efforts in making sense of new platform competitors and (failed) attempts to respond in different ways. It is, therefore, important to integrate time and associated cumulative emotional dynamics into our theories of strategic decision making.

Platform-related emotions. Our third contribution to the intersection of platform strategy and emotions is that we show how top managers may experience emotions that are relatively unique to platform contexts. Such platform-specific emotion relates to "ego-system traps"; the tendency of firms to imagine that other firms are willing to become their followers in new ecosystems (Adner, 2021). In Nokia's case, the leaders strongly preferred Windows because it would have allowed Nokia to become the central firm in the platform and maintain the value of its complementary assets. This expected leadership position generated positive emotions among Nokia's leaders, whereas the loss of leadership associated with Android generated negative ones. Such emotions associated with evaluations of leadership-within-a-platform as opposed to the absolute size or overall market performance of firms seem specific platform contexts.

Our findings also highlight social interactions between potential partners as an emotional trigger that is particularly salient in platform contexts. Even though scholars have recognized that some options might be emotionally more appealing (Hodgkinson and Healey, 2011), the role of the potential partner firms' leaders as embodying the focal firm's strategic options has been under-theorized. Rather, scholars have described the substance of the options as sources of emotional resonance (Raffaelli et al., 2019; Vuori and Huy, 2022). Yet, partner firms' leaders can trigger emotions that are significant in platform strategizing where partner alignment is crucial (Adner, 2021).

Theoretically, the importance of partner emotional resonance on partnership formation expands the literature that has considered how firm leaders seek to influence potential partner firms (e.g., Huy and Zott, 2019; Santos and Eisenhardt, 2009; Kouamé et al., 2022). While previous research has focused on relatively unambiguous settings in which the focal firm is seeking to convince the other firm to collaborate with it, our study focused on a setting in which the focal firm was simultaneously seeking to influence the potential partner firm and evaluate whether they should collaborate in the first place (Adner, 2021). This simultaneous persuasion and evaluation created more complicated dynamics between the firms and carved open more room for possible emotional bias in the evaluation process.

In addition, the findings regarding partner emotional resonance complement prior research on platform choice and inter-firm network tie formation. At the intra-organizational level, previous studies have recognized that network ties are substantially influenced by emotional dynamics, above and beyond competence (Casciaro and Lobo, 2015; Casciaro and Lobo, 2008). Our findings suggest that similar dynamics might also occur at the inter-organizational level, influencing which firms collaborate (see also, Di Stefano and Micheli, 2022). Prior research on inter-firm networks and platform ecosystems has mainly looked at structural, economic, and capability-related factors as predictors of firm collaboration (see e.g., Shipilov and Gawer, 2020: for a review). Adding emotional dynamics between leaders might increase explanatory power.

Limitations

This research is obviously limited in its focus on Nokia at a particularly important point in its evolution. However, we do benefit from our unique access to a senior team grappling with a platform transition. With this idiosyncratic setting, our findings reveal novel mechanisms related to the emotional-temporal dynamics of strategic platform decision making. This opportunistic setting also suggests that platform strategic decision making may be differentially more susceptable to emotional dynamics compared to extant research on technology transitions (McKinley, 2022).

We have theorized how emotions influenced the strategic decision making process that ended with Nokia choosing the Windows platform. The Windows platform was, ex-post, not successful. However, we can not establish if Nokia would have been better off by choosing Android. Furthermore, there is no empirical certainty about why the Windows platform failed. In any event, our findings reveal novel mechanisms related to emotional-temporal dynamics of strategic platform decision making independent of the actual decision outcomes.

Managerial Implications

This research highlights the impact of emotional-temporal dynamics on strategic platform decision making and how they compromise analytical decision making (Pham, 2007; Vuori and Huy, 2022). What might innoculate senior teams from these dynamics?

At platform transitions, clear board support for funding and organizing substitute platforms seems crucial. The fact that Nokia's board was ambivalent about the Symbian transition, underfunded the MeeGo platform, and pushed for a rapid decision all undermined the senior team's ability to deal with threats of Apple and Google. Earlier agency and action to substitute for the Symbian platform, more sustained resources, and structural separation for MeeGo might also have provided the time and legitimacy for a substitute platform (O'Reilly III and Tushman, 2021).

Further, the board's choice of an outside CEO without further senior team change reinforced ambivalence in the senior team. The new CEO had to deal with his predecessor's emotionally exhausted and conflicted senior team. One way to reduce the damage caused by cumulative stress and loss would be to initiate sweeping change in the top management team (Romanelli and Tushman, 1994). Obviously, new leadership team members would not be exhausted, but, on the other hand, they would have to learn the new decision making context. Deviant insiders and their new teams might have both fresh energy and knowledge of the specific context to lead strategic change (Bower, 2007).

Finally, as incumbents deal with platform transitions, the role of outside trusted advisors seems particularly important. Such independent allies could help create safe spaces for strategic reasoning and can provide process feedback to the senior team (e.g., Fubini, 2020). They could also shape practices to include time for recovery to ensure optimal mental capacity for option creation and evaluation.

Conclusion

Platform companies are transforming multiple industries, creating existential threats to incumbent firms. Our findings have shown how strategic platform decision making is infused with emotions. Top managers experience ambiguity and loss and can become emotionally exhausted even before comparing their short-listed platform options. Furthermore, the unique qualities of platform options trigger emotions in new ways and may cause top managers' option evaluation process to become unbalanced. In addition, if the decision making context stunts top managers' self-regulation capacity, these emotional effects are amplified. Managing emotions is, therefore, crucial for high-quality strategic platform decision making.

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FIGURES

Figure 1: Nokia's evolution 1992-2015 and the focus of our study

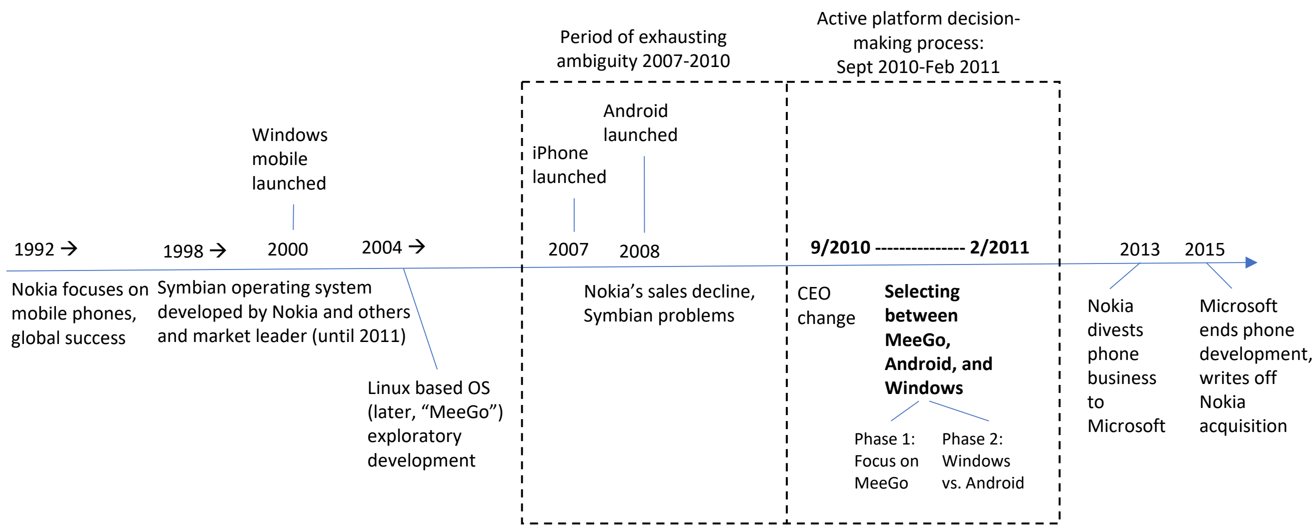


Figure 2: Emotional-temporal dynamics of Nokia's strategic decision making at its Symbian to Windows transition

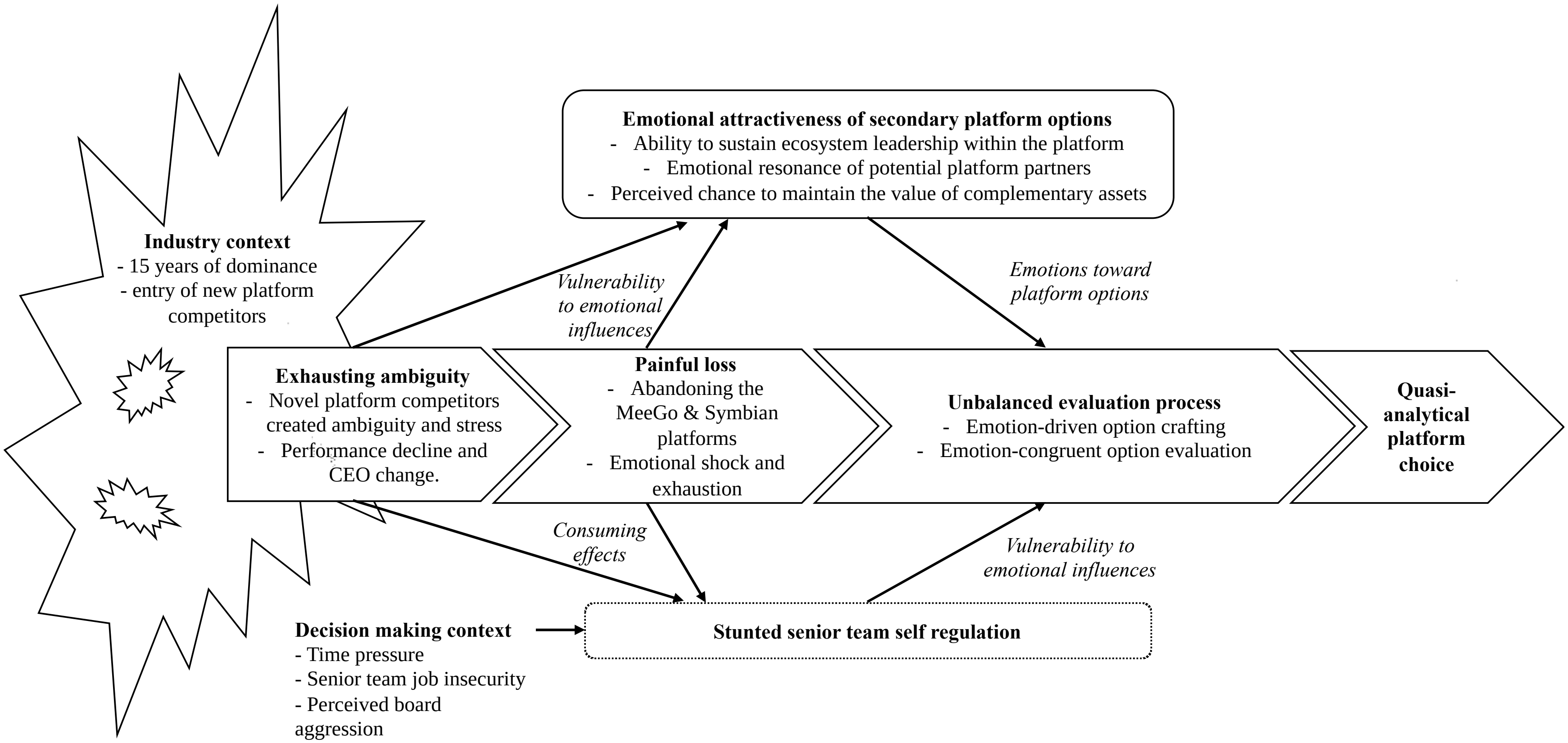
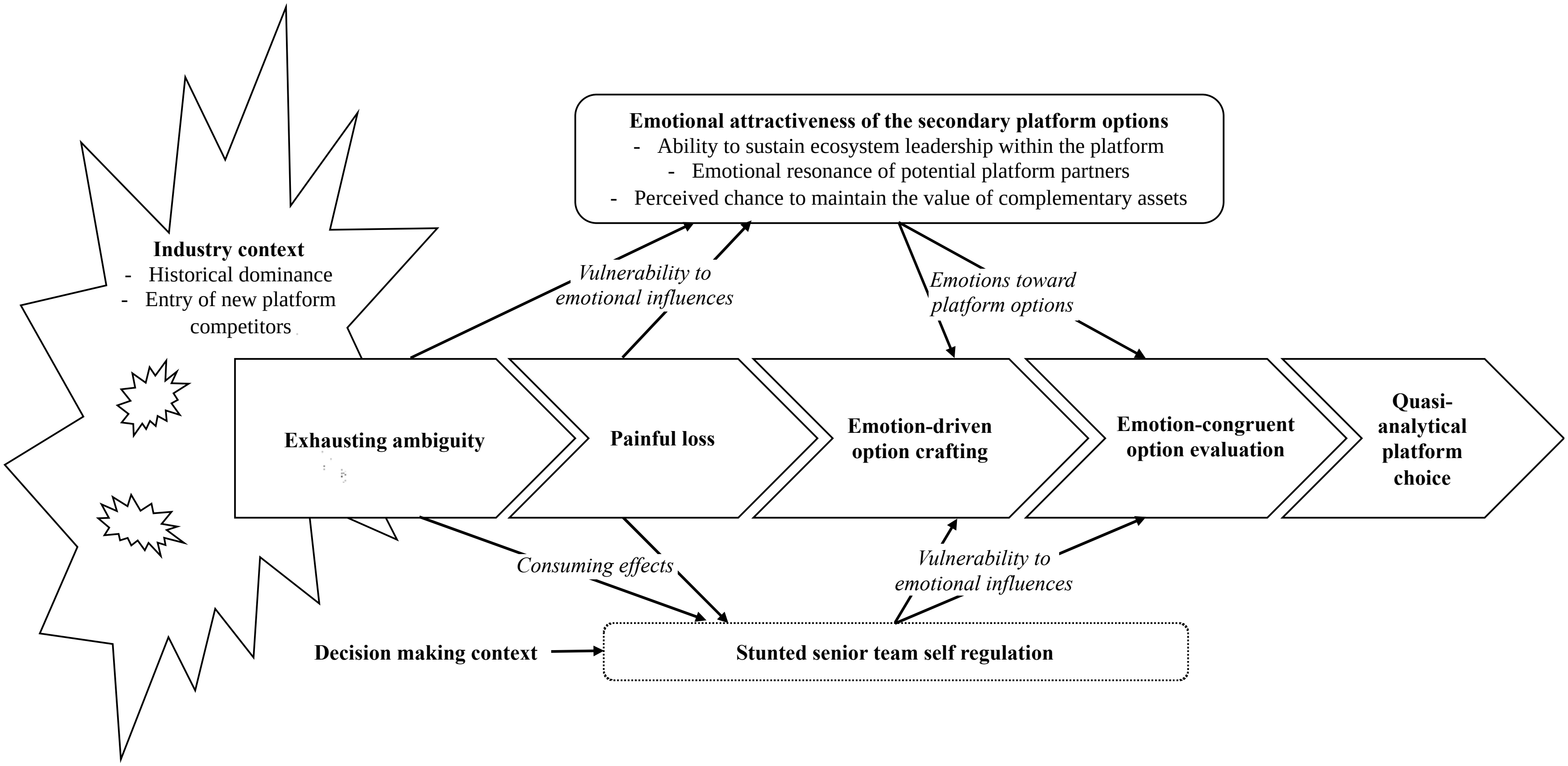


Figure 3: An emotional-temporal process model of incumbent senior team decision making at platform transitions



Appendix 1: Informants and interviews

Informants	Number of interviews	Year of interviews
Top management team (N=8)	*18*	*2013-2022*
Top manager #1	1	2016
Top manager #2	1	2016
Top manager #3	4	2015-2021
Top manager #4	1	2017
Top manager #5	4	2013-2017
Top manager #6	4	2013-2021
Top manager #7	2	2016-2017
Top manager #8	1	2022
Other key informants (N=11)	*24*	*2013-2018*
Former top manager	5	2013-2015
Internal ecosystem specialist, in TMT after our study period	2	2016-2017
Board member #1	4	2014-2018
Board member #2	1	2017
Strategy director #1	3	2016-2018
Strategy director #2	2	2016
Relevant vice president #1	2	2016
External advisor #1	1	2013
External advisor #2	2	2015
External advisor #3	1	2015
External advisor #4	1	2022
Other informants for triangulation and contextualization (N=49)	*55*	*2012-2018*
Senior strategy and business middle managers (e.g., Senior Vice Presidents) (N=12)	15	2013-2016, 2018
Senior software middle managers (N=14)	19	2013-2016
Other middle managers (N=20)	26	2012-2015
External advisors (N =)	5	2013, 2015, 2019
All informants combined (N=65)	97	2012-2022

Appendix 2: Illustrative interview protocol

- Could you please describe how you reacted to the news about the iPhone?
- Can you describe the strategy making process after iPhone's entry?
- Elaborating questions such as:
    - Can you please provide an example?
    - Why did you think/do like that?

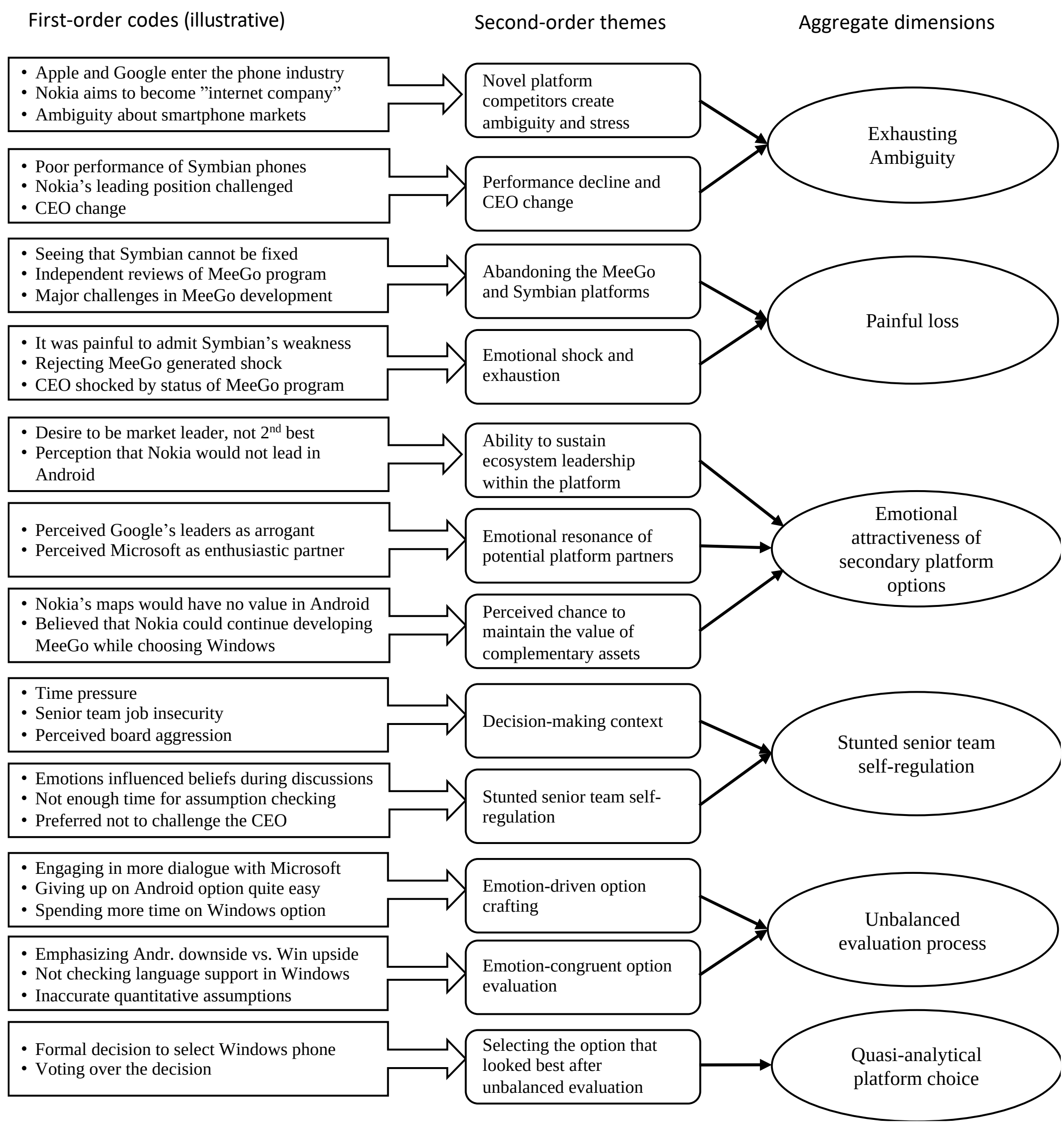
- Could you please describe the decision making process that started after Elop's entry to Nokia?
- Elaborating questions such as:
    - What were some of the key elements of the process?
    - Why did you [take that specific action or think about it like that?]
    - How did you consider the risks associated with each option?
    - Did everyone agree or where there different perspectives?
    - How was the board of directors involved in the process?
    - How did you reach the final decision?

- [questions about the 2012-2013 decision making process that led to the divestment of the phone business – this part of the interview is outside the scope of this study]

- How would you compare the 2012-2013 decision making process that led to the divestment of the phone business to the decision making process that led to the selection of Windows in 2011?
- Elaborating questions such as:
    - You said that [xxx]. Can you provide an example?
    - What do you think caused [a specific difference] in the processes?
    - How do you think [a specific difference] influenced the process?

APPENDIX 3: Data structure and additional data

Appendix 3a: Data structure



Appendix 3b: Additional data

Aggregate dimension / *second-order theme*	Illustrative interview quotes and other data
Exhausting ambiguity	
Novel platform competitors create ambiguity and stress	One thing is that [the CEO until 2010] told […] that now he understands the true essence of the business at the moment. He had just had a meeting with Google's or Facebook's young CEO […] in Silicon Valley, as they had sat face to face. The 25-year-old guy had sat opposite to him, in loose jeans and very laid-back presence. And started to throw ideas to him, and he had thought, while tightening his tie, that maybe, I don't know, he had to transform. [laughter] (Finance director) [CEO spoke about] how we become an internet company. We create a new vision. And if someone asked him, "what does it mean at the more detailed level?" the answer typically was that don't challenge me, but implement. But in which direction should we implement? (Strategy middle manager #1)
Performance decline and CEO change	Trustedreviews.com review on N97 smartphone, which was announced on Dec 2008 and launched in Jun 2009: "the touch version of Symbian feels as if it is running to catch up with the best of the competition and lagging some way behind." https://www.trustedreviews.com/reviews/nokia-n97 Nokia announced in September 2010 that replaces CEO Kallasvuo with Microsoft's Elop https://www.theguardian.com/business/2010/sep/10/nokia-replaces-kallasvuo-microsoft-stephen-elop
Painful loss	
Abandoning the MeeGo and Symbian platforms	[Nokia announced in June 2010 that it will stop using Symbian in its N-Series high-end smartphones after the release N8 smartphone (which was ultimately released in Sept 2010)] https://www.is.fi/taloussanomat/art-2000001677071.html When [new CEO] came in, there was a desire to do a deep dive on strategy and what our best options were. […] [EVP] came back with an analysis that said it [launching MeeGo successfully] would be very difficult and we would probably be late and not competitive. (Top manager #1)
Emotional shock and exhaustion	[None of the board members] had suspected that things were as bad as they were when [CEO] dropped the bomb: MeeGo was a bust. […] The air went out of the boardroom. Without Symbian or MeeGo, Nokia didn't have anything to carry the company forward. I was so stunned by the news that I could hardly think straight. Looking around at the others, I could see they felt the same way. (Board member, in his book, Siilasmaa, 2018: Kindle location 1689) It ultimately came down to some presentation. I think, disappointingly, the MeeGo option was kind of taken off the table right away based on [EVP's]

	analysis that we were not going to be competitive, which I think ended up being a mistake. (Top manager #1)
Emotional attractiveness of secondary platform options	
Ability to sustain ecosystem leadership within the platform	There was the emotional thinking that we thought that "this [Windows] will be the thing that saves us." They want to work with us, so let's work with them, this is really cool because Google was like, "nice that you come along, but we're not doing anyone any favors; everybody works under the same rules." And then, on the other hand, Microsoft was like, "no worries, we'll make different rules for you," so it was a tempting option. (Strategy director #1) With the Windows ecosystem, we felt that we could […] be an orchestrator, a very strong partner to Microsoft, to create something that was not only Microsoft's but also ours. […] there was this perception that we would be a bigger, stronger player of [Windows ecosystem] than ultimately it ended up being. (Top manager #8)
Emotional resonance of potential platform partners	It was, of course, obvious that [CEO] had good contacts with Microsoft. And that might have been the case. … it's possible he had a bias towards Microsoft, and usually, the CEO, of course, should have a vision. (Top manager #4) We felt that we would just become a minion to Android, and Google would then be the puppet master, and we would just be doing everything that they want. (Top manager #8)
Perceived chance to maintain the value of complementary assets	We decided on Windows because, at that point, Nokia's and Microsoft's assets were very much complementary. For example, Microsoft didn't have maps, and Nokia had HERE, and so on. So, they fit well together. (Top manager #4) Everybody felt that this [the deal with Microsoft] was a temporary arrangement. We had signed a 10-year contract, but we had […] put in these breakpoints so that we wouldn't lose control over our destiny. Most of us who'd been there for a while were very hopeful that we could manage our way out of the situation. (Top manager #7)
Stunted senior team self-regulation	
Decision making context	*Time pressure:*[During the intense period,] there had been analysis or work that had been done in a very short space of time, potentially maybe not able to get all of the information, or at least not all the correct information, given the short space of time, and then we were back again kind of making decisions, again, just literally a few days later. (Top manager #8) *Senior team job insecurity:* There was a high level of sensitivity within the [TMT] […] waiting for him to kind of make some decisions where he would start to sack the management team. So everyone was a little bit hesitant; not everybody was going to be so open, and put themselves out there completely, because there was this general kind of (Top manager #8) *Perceived board aggression:* The chairman was characterized as a "short-tempered, raging, and angry" person by several former Nokia leaders in a newspaper article in 2015: https://www.kauppalehti.fi/uutiset/jorma-ollila-

	akkipikainen-meuhkaava-pitkavihainen-mies/c7ad3bdb-823d-35b4-a533-664b34d559c7
Stunted senior team self-regulation	I detected some tension between the chairman and the CEO. I later learned that the relationship was not evolving in a positive direction. [Chairman] had, for instance, forbidded [CEO] to talk with the board members without the chairman present, and [CEO] felt that was not a sustainable way for him to act. […] No wonder the new CEO seemed a bit on edge. (Siilasmaa, 2018: Kindle location 1630) The discussion among the board was peculiar. […] It [selecting Windows] was handled without any discussion. Completely without discussion. So, it was like, a comment or two [on top management's proposal to select Windows] and then it was [accepted] […] It felt really odd. I and my colleagues in leadership talked about this afterward, and we thought it was a very peculiar event. (Top manager #4)
Unbalanced evaluation process	
Emotion-driven option crafting	We had done our homework […]. But the momentum never really got going with Google […] I remember getting a little frustrated at one point because [the person leading Android analyses inside Nokia] had not involved anybody from my team [even though we could have contributed substantially]. (Top manager #7) The Microsoft option got quite a bit more weighting in our consideration. (Top manager #2)
Emotion-congruent option evaluation	It was a surprise, for example, that the Windows platform didn't support an external memory card. Here in the Western world, it doesn't matter […], but in India, the phone is your only computer; it makes a huge difference. So those things came up. (Top manager #4) We were asked to do the analysis on Google. And when we did the analysis on Google, we presented it, but there's always a bias, right? You know, you can sway very objective data until it's compelling. I think when the management and [top manager] and [top manager] were biased towards Microsoft [this happened]. (Top manager #7)
Quasi-analytical platform choice	
Selecting the option that looked best after unbalanced evaluation	[Nokia announced on Feb 11, 2011, that it will form an exclusive partnership with Microsoft and start producing Windows phones.] https://www.wired.com/2011/02/microsoft-and-nokia-team-up-to-build-windows-phones/ With one exception, they all [top managers] voted for Microsoft. […] The one person who disagreed was the McKinsey consultant. (Siilasmaa, 2018: Kindle location 1786)