Memorandum on the revisions made to manuscript "Chance, Strategy, and Change: The Structure of Contingency in the Evolution of the Nokia Corporation, 1986-2015"

Dear Associate Editor and Reviewers,

We wish to thank the AE and the two anonymous reviewers for their insightful comments and for the opportunity to revise our manuscript.

- We agree that the significant changes made to the empirical part of the study left other areas of the paper sorely underdeveloped.
- Now, based on the AE and the referees' insightful comments and suggestions, we have rewritten the entire paper, putting more focus on theory and analysis, thus hoping to "polish the diamond" one of the referees mentioned. Thank you for your patience in waiting for the new version; we needed extra time and effort to complete the big revision.
- The language of the paper has been edited by a native speaker throughout the revision process. We admit our writing style is not the lightest to follow but still hope the current version is an improvement on the earlier ones!

RESPONSES TO THE ASSOCIATE EDITOR

Comment AE-1:

Rewrite the introduction: The current introduction is too broad and obfuscating. Please rewrite it by efficiently defining the core concepts, presenting your research problem/gap, and succinctly arguing why this gap matters to the literature. Follow up by a short description of your case and methods, and offer a brief preview of the findings in light of the research problem. For more advice, please see several helpful comments by Reviewer 2.

Response AE-1:

Thank you; we agree that the Introduction of the previous version was too scattered and convoluted. We have now completely rewritten the Introduction following the guidance of yourself and R2. Most notably, the rewritten Introduction now:

- clearly identifies the primary substantive target literature (i.e., strategic management literature addressing chance), instead of bringing up various themes in the substantive literatures (evolution, agency, choice) and methodological literatures (abduction, deviant case, empirical sense-making, event structures), without clearly indicating which of these was the target literature
- pinpoints the main research gap in the target literature: (i) previous research's inattention to the impact of chance on strategic choices (rather than strategic outcomes); and (ii) inattention to the structure of how chance emerges and exerts its influence (rather than assuming chance to be a random exogenous shock without structure)
- explicitly defines the concept of chance and other key concepts of the study, which will be the focus of the theoretical framework and empirical analysis: the structure of the emergence of chance, including its partial interdependencies with the firm's strategy process (rather than full independence and exogeneity)
- provides a concise introduction of the empirical case – after introduction of the target literature, research gap, definition of chance, and research question (not before, at the beginning of Introduction, like in the earlier version)
- explicitly and concisely summarizes the main contributions of the present research to the primary target literatures

Comment AE-2:

Sharpen framing and motivation: As we pointed out in the last round, the motivation and framing of the research problem remains inadequate. It is still very hard for the reader to understand to what literature specifically, and with what precise findings and insights, the study contributes. Reviewer 1 makes this very clear, and expresses some frustration on your observation that "chance" has not received proper

Response AE-2:

As described in comment AE-1, we have narrowed down our target literature to strategy and organizational research on chance. We have also positioned our research to fill the research gap pertaining to (i) studying the influence of chance on strategic choices (rather than strategic outcomes, such as innovations, performance, survival) and (ii) analyzing the structure of the

treatment in the literature (without a detailed analysis of how it has been used, to what end, why prior treatment has failed to produce novel insights, and the best way forward to remedy the problems.) The Reviewer follows up by stating that ". I was however reading these as rather vague statements without any immediate urgency in terms of further research needed. In my opinion the research gap needs to be made much more evident and compelling!" While your revision has certainly followed our advice to get more focused in the review of prior work, it does not sufficiently argue for a research problem and gap of significant importance for the strategy and organization literatures. Reviewer 2 makes a critically important observation here, as well. An efficient review must be selfcontained, making the research gap understandable, intriguing, and justifiable for the reader. The Reviewer notes: "I do not mind new phenomena, theories, or methodologies, but when I find I have to go study others' writings to understand what the authors(s) are trying to do that is a warning signal." For example, when you set up your study to investigate "chance," you should demonstrate why this is warranted by telling the exact problems in prior work, and define the concept in such a way that the reader can progress to engage with your field study.

emergence and influence of chance (rather than assuming chance 'to just happen' to organizations without structure, as an exogenous independent shock).

In addition to summarizing this positioning of our research in the Introduction, we have completely rewritten the following section of the manuscript, which provides the literature review. The new literature review – or rather, literature analysis – provides a much clearer picture than before, about the research streams of strategy literature, addressing chance in one way or another. The new literature review is also much more in line with the Introduction, as it reiterates the existence of the research gaps identified in the Introduction (among/between the research streams identified). The key dimensions on which the earlier literature is analysed are: (1) the object of the impact of chance (strategic outcome vs. strategic conduct/choice); (2) the locus or level of occurrence of the chance event (individual vs. technology/innovation vs. **organization**); and (3) the nature of interdependence assumed between chance events and the actor's ongoing, emergent strategy (fully independent vs. semi-independent vs. dependent). Our research gap focuses on the bolded terms: the influence of chance on strategic choice, occurring on the organizational level, and assuming chance to be partially but not fully independent of the strategy process.

Comment AE-3:

Improve theory development: You have progressed in your theory in this version of the manuscript. Yet, I agree with the reviewer team: You need to work hard at using plain language to define your three or four most important concepts, and retain these throughout the text. Reviewer 2 suggest you can do this by the use of "refrains." The reviewers also ask you to do more formative theorizing, rather than simply displaying and categorizing your findings. According to Reviewer 1, the theory remains too descriptive and ambiguous, to constitute a sufficient contribution to the literature. You seem to stop short of making some significant leaps, such as explaining how a certain emergence in the relation between "choice" and "chance" comes about. In thinking through how this can be remedied, I think you should identify aspects of situations (more generally) that can explain such emergence within a contingency framework. One of the seminal contributions in our field that initiated such a way of theorizing on organizational adaptation, was the article by Hrebeniak and Joyce (1985). As you revisit this

Response AE-3:

First, thank you for pointing us to Hrebeniak and Joyce (1985). Their work helped us to fine-tune our argumentation, and especially, the discussion of our findings and the clarification of our contributions (in the Introduction and Discussion).

Second, we have now completely rewritten not only the conceptual discussion in the Introduction and the literature review, but also the subsequent section Theoretical framework (previously "Sensitizing framework"). This is because "[...] more formative theorizing, rather than simply displaying and categorizing your findings" required us to also create a more detailed and crisper theoretical framework to utilize in our empirical analysis. Specifically, we have now

• simplified and sharpened the definitions and explanations of "[...] three or four most important concepts": chance in general (as defined in Introduction), the focal sub-types of chance ("conjunctures" leading to closure of

paper, you may also appreciate their strong focus on the implications of their theorizing, - their attempt to answer the "so what" question. Yet, as Reviewer 2 observes, you need to take care not to claim causality where there is none (your data and analysis prevents you from doing that.) In other words, please revisit your findings and emerging theory, and identify conditions under which certain outcomes can be identified.

- "scenarios," and "contingent scenario-eliciting events"), and the "period of collective indeterminacy" during which the chance events take place and exert their influence
- put extra effort into the consistent usage of these concepts/terms throughout the rest of the manuscript (method, empirical analysis, discussion) after their introduction in the Theoretical Framework
- drawn a completely new figure depicting the theoretical framework (Figure 1), including the key concepts and their relationships – as well as introducing similar figures for the empirical analyses, explicitly structuring the empirical observations according to one and the same theoretical framework
- taken another step away from merely describing the events to assessing whether and which events served as sufficient and necessary explanations for the focal strategic choices. This analysis is now laid out in full in the Appendix C (in the form of "Cross-Period Analysis on the Emergence of Alternative Strategic Change Scenarios," and "Cross-Period Analysis on the Closure of Alternative Strategic Change Scenarios"). Both sections include analysis tables indicating the co-incidence of certain classes of events with the eventual strategic choice that was made. The latter section also provides a taxonomy of three principal classes of conjunctures that may contribute to the convergence of strategic choice on an unexpected scenario/alternative – each principal class of conjuncture having 2-3 sub-classes.

Comment AE-4:

Elaborate on the research design: I commend you for having done extensive work on making your methods more transparent, which generally enhances the validity of your findings. Yet, Reviewer 1 poses several questions to your use of ESA that should help you to further develop this section. Reviewer 2 reiterates the request for more transparency in coding of the data, also given your use of ESA. This step will be a "must" for a successful revision. Reviewer 2 also suggests ways to further focus your methods section. You should take up this advice, while still heeding the request by Reviewer 1 to briefly discuss some strengths and weakness in using ESA (in the discussion/limitations section.)

Response AE-4:

After reading through the comments that pertain to coding and the use of ESA as a method, it is clear that in the previous manuscript version, we failed to properly explain how the method works and how our data was coded.

Following the questions raised by Reviewer 1 (Comment R1-6), we now emphasize that ESA as a method is particularly suitable for unpacking narratives and analytically reconstructing causal interpretations of how events are related (Griffin & Korstad, 1998). The systematic approach provided by ESA and the associated computer program ETHNO are especially valuable when the studied event sequences are long and require systematic analysis (Abbott, 1995). Simultaneously, ESA requires the analyst to lay bare assumptions on how events cause each other. We have attempted

to make this more explicit and transparent by including Tables B1 and B2 in the Appendix B, which explain the logic behind each event relation. We hope these additions help in making clear how ESA helps to produce "a causal interpretation of complex historical processes" (Pajunen, 2005).

Reviewer 2 raised several salient questions about coding that are inherently linked to the use of ESA as a method (Comments R2-8 and R2-9 below). We now address these issues by discussing – much more clearly and in greater depth – how the coding of events evolved throughout the analysis process. Please see our detailed responses R2-9, R2-10, and R2-11 below. We hope these additions now give a better account to readers, on how our coding and data analysis progressed during the analysis process, and how we ground each event and justify each event relation.

References:

Abbott, A. 1995. Sequence analysis: New methods for old ideas. *Annual Review of Sociology*, 21: 93-113.

Griffin, L. J., & Korstad, R. R. 1998. Historical inference and event-structure analysis. *International Review of Social History*, 43: 145-165.

Pajunen, K. 2005. Comparative Causal Analysis in Processual Strategy Research: A Study of Causal Mechanisms in Organizational Decline and Turnarounds. Szulanski, G., Porac, J. and Doz, Y. (Ed.) *Advances in Strategic Management, Vol.* 22, Emerald Group Publishing Limited, Bingley, pp. 415-456.

Comment AE-5:

Rewrite the discussion: I agree with Reviewer 2, that this section can be made more effective. Shortly restate your research problem and state why your findings resolved it. The current reiteration is too long. Then you may proceed to focus on why and how future theorizing in two or three areas must take your findings and theory into account (using your review). For example, it seems meaningful to focus on what future contributions to theory on corporate strategy/contingency, organizational adaptation, and chance/luck/serendipity should incorporate from your theorizing. Last, briefly discuss limitations of your study, and end with a few sentences on managerial implications.

Response AE-5:

We have completely rewritten the Discussion, following these guidelines. The revised Discussion section now

- does not reiterate or repeat events of the empirical case for several pages
- simply summarizes (1.5 pages) the empirical findings first, answering the research question (How might the strategic choices of a corporation unexpectedly emerge from chance?) at a higher level of abstraction and classification (rather than reiterating empirical events as such)
- after the summary of the findings, pinpoints the main theoretical contributions of the research to our target literatures in strategy and management

• ends with a discussion of the managerial implications, the limitations of the study and further research avenues.

Comment AE-6:

Involve a professional copy-editor throughout the revision: As you can see from the above points, the greatest risk facing this paper is inadequate writing. I agree with Reviewer 2 that you may want to start working as soon as possible with a copy-editor who can help you clarify and simplify your story-line and writing. Rather than asking to have someone looking at the paper at the end, I believe the manuscript would benefit from several iterations with this copy-editor.

Response AE-6:

Following this good advice, we have now worked hard and in collaboration with a native language editor to address these concerns iteratively at several stages of revising the manuscript.

We hope that the considerable structural revisions, the rewritten main sections of the manuscript, and our collaboration with a language editor with respect to the details of the body text, convince you of the value of our manuscript to the readership of the *Academy of Management Discoveries*. Thank you once more for your invaluable guidance and a roadmap for revising the manuscript!

RESPONSES TO REVIEWER 1

Comment R1-1:

Motivation and research gap. The paper aims "to establish an approach that foregrounds chance, choice, and agency" (p. 3), specifically by studying "how radical change processes in corporate strategy emerge and occur" (p. 3). While the line of argumentation pretty soon converges around the intended contribution of this paper, that is, improving our understanding about "the structure of contingency" (p. 3) as well as collective indeterminacy, I feel the question of "why" remains somewhat implicit if not even largely unanswered. In setting the backdrop for this research, the authors argue that "Why and how corporate strategy changes is one of the perennial topics in strategic management literature" (p. 5). In then further pinpointing their conclusion around extant research, it is argued that "surprisingly few pieces of research have focused on trying to understand the nature of chance and how it affects corporate strategic change" (p. 5). While I can probably fully agree with these observations, I was however reading these as rather vague statements without any immediate urgency in terms of further research needed. In my opinion the research gap needs to be made much more evident and compelling! By choosing to focus on introducing the narrative around Nokia right away, the derivation of the research question can be seen as somewhat constructed and opportunistic. As a consequence, the alleged need for better understanding how "environmental uncertainties and events of chance actually come to be addressed by top managers" reads a little artificially constructed, and not really that differentiated from what we know already. Hence, I would recommend the authors to build up the argumentation more thoroughly, making the problem around the shortcoming in prior research more evident.

Response 1-1:

Thank you for these thoughtful comments and guidance. In response, we have completely rewritten the introduction, the literature review and theoretical framework. Following your guidance, we no longer begin the introduction with the discussion of Nokia. Instead, we first identify the target literature where we contribute to the strategic management literature on chance. Furthermore, we immediately identify the research gap in that literature: (i) lack of attention to the impact of chance on strategic choices (rather than strategic outcomes); and (ii) lack of previous attention to the structure of how chance emerges and exerts its influence (rather than assuming chance to be a random exogenous shock without structure, called "structure of contingency" in our paper).

Still, before even mentioning Nokia's case, we now provide the definition of our key concept, chance, as well as underline the key conceptual aspects of this concept, which the theoretical framework and empirical analysis will focus on: the structure of the emergence of chance, including its partial interdependencies with the firm's strategy process (rather than the traditional full independence and exogeneity).

After this, we briefly introduce Nokia, as our empirical case and context. The rest of the introduction pinpoints the contributions of our research.

Beyond the rewritten introduction, we have rewritten the literature review section. Importantly, we restructured that section to reiterate and elaborate on the same research gaps identified in the introduction.

Comment R1-2

Organization of the paper. I believe one way to remedy the issue in my abovementioned point is to re-organize the paper into a more traditional structure. While I on the one hand find the authors' approach of starting off the paper with the narrative around Nokia rather refreshing and indeed quite inductive, I at the same time find the authors are making it hard for the paper to return to a logical flow where both narrative and theorizing have their own place. As it stands, I find the

Response R1-2:

Thank you for this valuable advice. We have restructured the introduction towards a more traditional way of framing of our research – as described in response R1-1. In addition, we have streamlined the introduction by removing some of the distracting references to substantive literatures (evolution, agency, choice) and methodological literatures (abduction, deviant case, empirical sense-making, event structures) – which were less

organization of the paper rather complex, a lot is going on, and it is not always entirely clear where you're going. In addition, bearing in mind the editorial mission of AMD, I think it is fair to say the paper would benefit from an introduction to a more general management-oriented audience. With the current setup, the reader is being taken from a snapshot throughout the history of a technology corporation right into the perils of abductive logic, collective indeterminacy and the structure of contingency. I think starting off a little more broader will make things less challenging both for the reader as well as for the authors.

relevant to the focal phenomenon (the role of chance in strategic management). At the same time, we condensed the detailed account of Nokia's history. We hope that the new introduction is now much easier to read and understand.

Comment R1-3:

Theoretical contribution and novelty. While I very much enjoyed being taken through the narrative of Nokia, I remain a bit puzzled where this paper leaves us. I believe this can be partly explained by the rather blurry research question (cf. my previous point), where it consequently becomes equally fuzzy to understand what gap in research now is getting filled, and in what way. On the one hand, some parts of the findings seem a bit trivial (e.g., "In some cases, strategies succeed or fail," p. 8, or there is a balance between chance and choice), at least to a reader who is rather uninformed around the literature of contingency. The fact of consequences of deliberately initiated activities leading to a dynamic of its own seems somehow intuitive.

Response R1-3:

In hindsight, we might have been perhaps a bit too excited over our empirical findings and discoveries, while neglecting some equally important issues of analysis, theorizing and academic writing. Being somewhat wiser now, we have put considerable effort into:

- rewriting and redrawing the theoretical framework to provide sharper theoretical concepts, to serve as a basis for theorizing and theoretical contributions
- completely rewritten the empirical analyses, based on and to match with the considerably revised theoretical framework
- taken one further step away from merely describing the empirical events to assessing whether and which events served as sufficient and necessary (quasi-)causes for the focal strategic choices (please see response R1-4;)
- completely rewritten the discussion section, with the same improvements and streamlining as in the introduction: (a) removing much of the reiteration of the Nokia-specific events (instead summarizing the empirical observations at a more abstract level); and (b) explicitly carving out the theoretical contributions of our research and findings for the target literature of strategic management (the role of chance in strategic choices) and for other, secondary literatures of management (e.g., evolution, adaptation, agency).

By focusing more closely on the theoretical aspects of chance and strategic choice, we believe that the revised manuscript now makes a much more solid theoretical contribution than the previous version.

Comment R1-4:

Response R1-4:

On the other hand, I feel that the part of the findings where it gets interesting remain somewhat underdeveloped. The authors make a remarkable effort in structuring their findings both in terms of coding on a very granular level and illustrating events in a temporal and causal order. However, they chose to remain rather descriptive, and I was asking myself the question about "so what" here and there. The authors offer a contribution to "reveal a contingency as an endogenous characteristic of change processes, exhibiting an identifiable and partly chance-based structure" (p. 4) and "find that contingency in strategy change processes emerge from moments of collective indeterminacy" (p. 4). How exactly does this 'emerging' take place? Just about where the discussion of the findings is being left off, I was asking myself whether this would be exactly the point where one would like to further theorize, draft a model, suggest some patterns for how different scenarios intersect, or the like. Is there something more surprising we can tell out of these findings than simply displaying them? For example, are some situations or outcomes more predictable than others, and if so, why? Did you see any patters between what types of events intersecting with each other increasing the likelihood for certain types of outcomes?

Thank you for pointing out the descriptive nature of our analysis and results in the previous version. We agree. In response, we have thoroughly reanalysed our empirical materials and rewritten the analyses parts of the manuscript:

- As mentioned, we have completely revised our "theoretical framework," with clear definitions of all the key concepts (e.g., conjunctures; scenarios; parallel event sequences; contingent scenario-eliciting events, periods of collective indeterminacy). Furthermore, we have made sure that the empirical analysis part closely follows the structure and concepts introduced in the framework. To this end, we have added summary figures (Figures 2 and 3) of the key events of the two periods of time studied in the empirical study—and aligned these figures with the structure of the a priori theoretical framework (Figure 1).
- Besides the analysis of the empirical events according to the theoretical framework (Figure 1), we now complement them with a detailed comparative analysis regarding both of the periods that is provided in Appendix C. This section provides a classification of the key events within and across the two periods and analyses the necessity and sufficiency of certain classes of events for the strategic choice outcomes. The two analyses provided in the Appendix are titled "Cross-Period Analysis on the Emergence of Alternative Strategic Change Scenarios," and "Cross-Period Analysis on the Closure of Alternative Strategic Change Scenarios." Both analyses include tables indicating the (quasi-)causal coincidence of certain classes of events with the eventual strategic choice that was made. The latter section also provides a taxonomy of three principal classes of conjunctures that may contribute to the convergence of strategic choice on an unexpected scenario—each principal class of conjuncture having 2-3 subclasses.

Finally, as mentioned in response R1-3, we have developed a much better discussion section, which highlights the novelty and relevance of our findings to specific streams of earlier research.

Comment R1-5:

As a final thought on this, the authors argue that "contingency enables an understanding of what could have happened and what conditioned the actualization

Response R1-5:

We provide a much stronger indication of "what is surprising" and "what we did not know before," in restructuring and rewriting the contributions of the of an outcome" (p. 41). Having that said, it seems rather implicit that contingency mainly is related to considerations ex post, that is, analyzing events in retrospect as we are doing here in the case of Nokia. Against this background, though, might there be an opportunity to learn from your findings in order to develop a more ex ante perspectives, that is, can we make forwardlooking recommendations, for example, for managers to make better decisions? In sum, throughout the paper, but specifically in the discussion, I was lacking a more to-the-point summary of key insights: what is surprising here, what is counterintuitive? What do we know now that we did not know before?

present research in the discussion section. In particular, we contribute:

- To research on the influence of chance the process of making strategic choices: "Chance appears as a relatively mundane element in strategy processes. This is especially due to its processual nature. Our results suggest that firms may endogenize chance and its effects efficiently and transform them into decisionmaking parameters in the strategy process, such as in the work of eliminating competing choice scenarios. From a practical perspective, it is interesting but not surprising that chance (from random pure chance to almost predictable contingencies) can become endogenous to an organization's strategy process. Classically, military strategy and tactics have always dealt with chance and contingency as an inherent characteristic of the strategy process. Our findings reveal the processual richness associated with the endogenization process and, subsequently, demonstrate the sensitivity of strategy processes to move from indeterminacy to completely novel directions."
- To strategy research addressing chance in general: "...our findings demonstrate that chance can influence outright strategic choices of organizational decision-makers. This complements the few earlier studies that address the influence of chance on strategic behaviors (Baum et al., 2003; de Rond & Thietart, 2007; Korn & Baum 1999) by showing that chance may not only open up new strategic choice alternatives for the firm (de Rond & Thietart 2007) but it may also close down alternatives earlier regarded as dominant ones. Accordingly, our findings emphasize that chance may not only influence strategic choices by generating mutations and variations in strategic alternatives and options (Denrell et al., 2015; MacKay & Chia, 2013), but it may also centrally affect the selection process between strategic alternatives, and even the retention of chosen strategies."
- Extending literature on the relationship between chance and agency: "Previous research (e.g., Cattani, 2006; de Rond & Thietart, 2007; Lane et al., 2021) has seen the influence of chance to be realized by unexpected macroenvironmental incidents on organizations. In contrast, our research implies that chance may also exert its influence through the unexpected agency of different actors. In the case of Nokia, chance was realized through the agency of the representatives of large shareowners, former and new CEOs and chairmen of the board, current and prospective business partners, and

new competitors entering the industry. At the same time, our findings question whether strategic choices are really made by the top management of the firm, since the external actors' agency often exerts such a decisive influence on those choices through chance. In other words, chance affecting top managers' choices may originate in the unexpected agency of (semi)external actors."

Comment R1-6:

Productivity of the method. How effective is ESA as a method, and what insights does it bring that we couldn't get without? In many instances of your findings, I was asking myself whether we really need ESA for this, or whether we couldn't come up with the same insight without. For example, following the intersection of the two independent causal event series (business change events vs. changes in the configuration of key actors). Nokia ended up divesting its previous core businesses (TV/CE, IS, cables), thereafter focusing on NMP and networks (cf. p. 27). Yes, it is an observation of two events intersecting, as well as an outcome (i.e., divesting the core), but how exactly is this link explained? Is there more of a mechanistic relationship between cause and effect, rather than the mere observation of their co-occurrence? It is hard for me to follow out of this reasoning why Nokia "as a result" ended up divesting it. It still is only an observation, and I fail to see the explanation here. I was asking myself whether ESA (or then some other approach) may shed more light on uncovering the 'black box' behind the causality.

Response R1-6:

Thank you for raising this issue regarding the added-value of using ESA as a method. It seems that this aspect was underdeveloped in the previous version of this paper.

First, the value of ESA resides in its capacity to unpack historical narratives and analytically reconstruct them as causal interpretations of what has happened and why (or at least, how) things happened the way they did (Griffin and Korstad, 1998). In doing so, ESA mitigates some of the challenges residing in narrative explanations where causality between events remains tacit or unspecified which ESA helps make explicit (Griffin, 1993). We now note this on page 20 of the manuscript:

"After identifying periods of collective indeterminacy and alternative scenarios through the development of narratives, we used event structure analysis (ESA; Corsano & Heise, 1990; Griffin, 1993; Heise, 1989) to trace event sequences that led to the emergence of alternative scenarios (Ermakoff, 2015). ESA is a particularly suitable method for this tracing since it forces the researcher to systematically unpack narratives into events and then reconstruct causal interpretations of how the events are related to each other (Griffin & Korstad, 1998). This is done by determining which previous event are required for the current event to occur that ultimately produces a diagram of event relations (Heise, 1989)."

Second, ESA requires the researcher to specify which events and event sequences are required for a specific event to occur. Analysing long event sequences without the help of a computer-assisted procedure such as ETHNO would be very challenging considering the number of possible relationships that need to be analysed for each

individual event. We now note this in the following way (p. 21):

"The strength of using ETHNO is that it forces the analyst to systematically consider whether each previous event is required for the current event to occur (Griffin, 1993) which is done by answering a series of yes/no questions. In practice, the computer-assisted analysis process moves forward in the event chronology while simultaneously identifying which of the previous events are prerequisites for any given event that has happened."

Third, using ESA helps to lay bare the assumption that one makes when analysing event relations. To make our assumptions transparent, we have included Tables B1 and B2 in the Appendix B that describe each of the events in our event analyses, outlines the prerequisite events for each of the events, and spells out the logic why these events are required for that specific event to occur.

When it comes to explaining event relations, ESA assumes a production system logic where actions are governed by if-then rules (Heise, 1989). What this means is that prerequisite events cause the focal event. The event sequence therefore constitutes "a causal interpretation of complex historical processes" (Pajunen 2005) where causation serves an explanatory function.

Finally, it needs to be emphasized that in the big picture, we used ESA in the same way as Ermakoff (2015) in his analysis on the structure of contingency. That is, ESA provided us with the analysis of the raw events and their interrelationships and sequences that served as the building blocks of a more theoretical analysis. Indeed, following Ermakoff (2015), we also analysed the raw events identified with ESA on a higher abstraction/categorization level (what Ermakoff referred to as "generalization" analysis of the event sequences), and matched this analysis with our theoretical framework. As explained in our response R1-4, we conducted two additional analyses, raising the abstraction level even further. These analyses are provided in Appendix C and they focus on comparing the emergence and closure of Alternative Strategic Change Scenarios.

References:

Ermakoff, I. 2015. The structure of contingency. *American Journal of Sociology*, 121: 64–125.

Griffin, L. J. 1993. Narrative, event-structure analysis, and causal interpretation in historical sociology. *American Journal of Sociology*, 98: 1094–1133.

Griffin, L. J., & Korstad, R. R. 1998. Historical inference and event-structure analysis. *International Review of Social History*, 43: 145-165.

Heise, D. R. 1989. Modeling event structures. *Journal of Mathematical Sociology*, 14: 139–169.

Pajunen, K. 2005. Comparative Causal Analysis in Processual Strategy Research: A Study of Causal Mechanisms in Organizational Decline and Turnarounds. Szulanski, G., Porac, J. and Doz, Y. (Ed.) *Advances in Strategic Management, Vol.* 22, Emerald Group Publishing Limited, Bingley, pp. 415-456.

Comment R1-7:

As a final remark, the authors are presenting Nokia as a deviant case. It was not entirely clear to me against what. I would recommend the authors to be more explicit in explaining the status quo from which Nokia as a case is deviating, and why this is important given the nature of the research question at hand.

Response R1-7:

The sections referring to Nokia as a "deviant case" have now been rewritten. Following your point, we are no longer using that term. Thank you for pointing this issue out!

Comment R1-8:

The relationship between Stephen Elop being an ex-Microsoft manager and the outcome of the strategic choice being the collaboration around the Windows Phone ecosystem raises curiosity, and it would be nice if you could elaborate more on this (if your data allows you to). Did Mr. Elop have any particular agenda in mind, when joining the firm, or did even the board have, by hiring Mr. Elop?

Response R1-8:

None of our informants or the historical documentation at our disposal indicated this to be the case. Around the time when Mr. Elop was hired, partnership with Microsoft and Windows Phone had emerged as one (at that time a longshot) option, but our empirical materials don't indicate that this would have been among the reasons to hire Mr. Elop or that he would have had the personal agenda to make this happen.

Comment R1-9:

I very much appreciate the authors' willingness to challenge the reader with an impressive command of concepts. However, I would recommend the authors to be more economical in their use of terminology and, at least sometimes, spell things out more in layman's terms (e.g., "ontoepistemological assumptions," p. 18).

Response R1-9:

Thank you for this important reminder. We have now critically assessed the need for each concept and (jargony) term introduced in the paper. And more importantly, we have explained and defined the key concepts and terms in ways that hopefully even laypeople could understand!

We hope that this revision and clarification, on the micro-level of terms and body text, in combination

	with the substantial restructuring and rewriting of all the main sections of the manuscript, make you more confident of the value of our manuscript to the readership of AMD.
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RESPONSES TO REVIEWER 2

Comment R2-1:

As a reviewer I have a few related litmus tests/questions and one is "Would I assign this in a doctoral seminar?" I would not, yet. A second litmus test is "Would I recommend that someone else read your work because of "X." I would not, vet. A third and related litmus test is "Do I think that someone will keep reading your manuscript after the early pages and if the answer is no then why would the journal accept this. Think of this third question as having to get through quick sand to get to the jewels—you would never make it. I do not mind new phenomena, concepts, theories, or methodologies, but when I find I have to go study others' writings to understand what the author(s) are trying to do that is a warning signal. The deeper into the manuscript that it takes for that clarity to surface the greater the warning. This last question/test for you is the primary root cause of the key problem that exists in your manuscript and the other two questions are symptoms.

Comment R2-2:

FIRST AND FOREMOST, I found your manuscript frustrating to read and then it smoothed out, but it took too long to do so. Because of my frustration, I initially wanted to write a few short reasons on why it should be rejected. While I admit that I have been a poor role model for being timely with your review, as a reviewer or reader this should not be the case—plain and simple. This can happen when a rewrite is so different than the first version that it is a new manuscript and feels more like a first round than a potential second round revision. In your case, you are missing basics and nuts and bolts that will make it extremely difficult for a reader to want to continue reading your manuscript.

The front end of your manuscript is simply obtuse without any guidance for your reader. When you have research that is complicated because you have such a long historical time period or research that engages in true triangulation across diverging research questions and methodologies (vs. stacked similar studies) you have to offer the key to unlock the secrets , become crisp, precise, and have perfect transitions and reminders (I call these reminders "refrains" as in those repeated lines used

Response R2-1

Thank you for your insightful comments on the previous round and now again! Prior to submitting the previous revision, our (co-)writing process was a bit chaotic (or more chaotic than normal). We made our key theoretical discoveries rather late in the writing/revision process, and as the deadlines were closing in, we did not have sufficient time to write them in a format that was understandable and reader-friendly.

In this latest round of revisions, we took your comment extremely seriously and again rewrote the entire manuscript, restructuring the main sections and the empirical analyses. We did all this by keeping your third principle in mind: simplifying, clarifying, and improving the readability of the manuscript to keep the readers on the same page with us from beginning to end. We hope and believe that our efforts have been successful this time, and that they give positive answers to all three of your litmus questions.

Response R2-2:

We agree – and sincerely apologize – that we submitted a half-ready manuscript revision on the previous round. You are quite right in your analysis that the previous revision had big problems especially in its front end: lack of a defined target literature, lack of a specific research gap, ambiguous definitions of key concepts, and a lack of consistent use of those concepts in the empirical analyses.

We have now put considerable effort into solving these problems, by completely rewriting the manuscript: the introduction, literature review, and theoretical framework; the description of the method; the empirical analyses; and the discussion.

As described in more detail in response R2-3, our main focus has been to define from the outset the broad concept of "chance," to present a clear and coherent theoretical framework about the subconcepts related to chance (and their interrelationships), and then to structure the method description and empirical analyses tightly and consistently around those concepts. As a result, we hope and believe that the overhauled manuscript now provides the "refrains" to the

in music) to help your reader trace the ideas and events/concepts from the start to finish of the manuscript. Obviously, this is true for all research writing, however, it is imperative to succeed at research that is complex and/or covers a lot of ground (such as your range of historical time with so much going on). You still need to tighten your language and anything that is extraneous or sounds like a new idea or even a mild word change has to

readers, and keeps them the same page with us throughout the manuscript.

Comment R2-3

For the first three pages of text you never define a single concept. When you bring up contingency on page 9, it is not clear if contingency is "like" another term or if you are presenting the actual definition. The sentence attached to footnote one needs to be restructured and simplified. You treat chance and contingency as polar opposites when they could each be a single concept that ranges from low to high (see page 9 again). You do not define the meaning of each and you confound them and that is a disservice to make sense of your research. You also cannot define your key concepts that delineate what your research is all about by example. You need definitions that illuminate what the meaning is. These cannot be tautologies. Then you can offer examples.

Response R2-3

Thank you for pinpointing these problems in the previous version. We have now addressed this issue by first defining the concepts of chance, conjuncture, and contingency in the third paragraph of the introduction in the following way:

"In studying the mechanisms and processes which link chance and strategic choice, we use the concepts of chance, conjuncture, and contingency. Building on de Rond and Thietart (2007: 535), by chance we refer to "...an event happening in the absence of any obvious design." When it comes to the precise content of chance events, this definition is flexible as long as the event itself is unforeseen to the actors. Chance takes effect through the conjuncture of events (Ermakoff, 2015), which is the intersection of two events or event sequences. However, this definition says little about the content of this intersection, and it is this content which is examined in more detail in our empirical study. Finally, contingency is a weak form of chance since it enables one to understand the potential events that could happen, the actualization of which is dependent on adjacent events. Contingency also becomes realized through conjunctures of events."

To keep the introduction straightforward, we do not delve deeper into the nature and definition of our other chance-related concepts. Yet, we do underline those aspects of the definition of chance, on which our present research focuses: the structure of the emergence of and influence by chance, however unobvious, as well as its partial interdependency with the firm's strategy process (rather than full independence and exogeneity). At the same time, we imply – as you propose – that these matters are more matters of degree than

on/off issues: both the existence of a structure/design behind chance and its unexpectedness can vary from case to case.

In a newly outlined Theoretical Framework, we introduce the reader to the special variants of "chance" (defined above in broad terms), which is the focus of the present research. Most notably, we focus on "contingent" events which are not fully exogenous chance events but still largely unforeseeable to the management a priori. At the same time, we focus on "conjunctures." They are conceptualized as unexpected intersections between "parallel event sequences," on one hand, and event sequences pertaining to the firm's strategy process and the strategic change scenarios emerging therein, on the other. Both these fit the definition of 'chance' since they feature the unexpectedness of design/structure in them. At the same time, there may also be *some* prior interdependence with the firms' strategy process. This is why we distinguish contingencies and conjunctures, following Ermakoff (2015) from "pure" chance, occurring when two fully independent event sequences intersect.

Finally, when explicating these concepts, we now avoid giving excessive examples, in order not to cloud the general explication of the concepts.

Comment R2-4:

So, what is contingency? What is collective indeterminacy (you define on page 13 but use it much earlier and then again by page 22)? You have to get in front of your definitions, use refrains so you are creating a bread crumb trail or trace for your reader. This is really fascinating how you then study it but it takes too long to see what you are doing too late in the paper to then have the "ah ha" moment where the light bulb goes on. The first time you use these words they need to be defined up front and clear. What is the difference between structural contingency vs. contingency? Do we need to use the term structural contingency? Are there other forms of contingency? Not an essay but definitions and clarity. What is a chance event vs. a non-chance event vs. a cognitive event? What is a contextual occurrence vs. an event? I need a map or scaffolding to read your paper. I have to slog through your literature and methods and then get to your analysis and results to go "ah... ha..." Definitions are not the same as offering theory to test deductive hypotheses but they are the key to unlocking the ability to read your research. Think

Response R2-4:

In addition to our response R2-3 about the content of contingencies and conjunctures (as non-pure variants of "chance"), we now try to explain the entire idea of a "structure of contingency" (following Ermakoff, 2015) much better in the manuscript. In brief, the "structure of contingency" is not a concept of its own. Rather, the main concepts remain "contingency" and "conjunctures," while the *structure* of contingency merely refers to the assumption that these particular variants of non-pure chance have a certain structure, which can be analysed. This contrasts with "pure" chance, whose emergence and influence on actors tend to lack any structure (as they "just happen").

We have clarified these definitions and distinctions in the newly outlined Theoretical Framework section. In the same section, including Figure 1, we also define and explain the other key concepts of our analysis (e.g., parallel event sequences, strategic change scenarios, periods of collective indeterminacy). Most importantly, we ensured the

about the plainest and simplest language for your definitions as you tend to introduce too many new terms or jargon that muddles meaning rather than adds clarity. This is part of the "obtuseness and frustration" that really existed in the first version of your manuscript and this completely new version. For example, on page 19 you define your events by example rather than by meaning.

disciplined and consistent use of these terms throughout the rest of the manuscript. Most notably, the rewritten empirical analyses are now consistently structured along these concepts, which gives the reader constant "refrains" and reminders about the concepts, and improves the logical flow and coherence of the different parts of the manuscript.

Comment R2-5:

Find a copy editor who is more than someone who works on grammar if that is what it takes. Another tip is that you can cite the work of others and if they are essentially talking about the same concept or phenomena but use a different label, roll your point into your language and not theirs. It will stream line your writing. You can add a footnote or comment and say, "X studied Z, what we refer to as Y..." and stay in your language. Your map will become clear.

Response R2-5:

Thank you. We have followed your advice and hired a native language copy-editor to help us in the writing process – at an earlier stage of the revision process than the final grammar/language editing. Thank you also for your advice when it comes to citing concepts and terms of other. We have heeded this advice as well, and now stick to our own terminology throughout the manuscript (only occasionally adding a note about terminology of others).

Comment R2-6:

SECOND, still on this introduction, I strongly recommend dropping the section (p. 5) on dynamic capabilities as it does not add to the front end or to the paper. It feels stuck there from pages 5 to 7. This can be super simplified to a paragraph or a key point. This section is a distraction, meandering and you have other material to make your case that understanding chance events is not well understood and are not the same as luck other aspects of uncertainty or although can be referred to in the same space. Why start with literature that does not focus on chance? Why do I care? Your section, "Strategic Management Literature Focusing on Chance" is much more constructive for your goals and more direct.

Response R2-6:

Thank you for this good suggestion. We have now dropped this section and other sub-sections from the front-end, which are not necessary for our arguments and theorization.

Our rewritten literature review now identifies different streams of research, in strategy and management research, that address or touch upon chance.

Comment R2-7:

THIRD, when you get to page 10 and put forth the three notions you need to be super careful about the idea of causality of events vs. making predictions that concept A causes concept B. You have not analyzed the data in a manner that is about causal predicts. The nuance is critical and just take care parting the waters more or digging a deeper mote.

Response R2-7:

We agree with you that our material doesn't allow for making conclusive inferences about causality. While rewriting and clarifying the Theoretical Framework (previously "Sensitizing Framework"), we noticed, however, that our earlier text referred unnecessarily much to the word "causal" (e.g., "causal background," "causal scene," "causal series/sequence of events"). While these terms were originally borrowed from other key authors (Ermakoff 2015, Rond and Thietart 2007), we now see that the overuse of the word "causal" was unnecessary and confusing. Therefore, in the new

Theoretical Framework, we have toned down the use of the word "causal," and instead refer more to "event sequences" rather than "causal sequences of events."

Nevertheless, in the empirical analysis, we have taken a modest step away from merely describing the events to assessing whether and which events served as necessary and sufficient (quasi-)causes for the focal strategic choices. This analysis is now provided in Appendix C (and focus on "Cross-Period Analysis on the Emergence of Alternative Strategic Change Scenarios," and "Cross-Period Analysis on the Closure of Alternative Strategic Change Scenarios"). This kind of analysis of necessary and sufficient quasi-causal conditions leading to an outcome draws from set-theoretic, configurational analysis approach, which can be use qualitative data as well (e.g., Ragin, 2006). We hope this analysis, albeit still pre-theoretical in line with the AMD approach, adds to the value of our paper.

References:

Ragin, Charles C. (2006). Set relations in social research: Evaluating their consistency and coverage. *Political Analysis*, 2006, pp. 291-310.

Comment R2-8:

FOURTH you attempt to waive off the issue of retrospective reports and coding data and reliability in general (e.g., on page 70 of your responses). Just because you have moved from concepts/variables to events, you are coding data that needs to be trusted and clearly explained. Your change here does not alleviate the concerns I generally raised in your first version manuscript. What exactly are the categories of events and what differentiates an event from a concept? I do not need to see an elaborate explanation in your manuscript, but you need more "bridges" and key transitions, and definitional clarity. You imply or seem to believe that because you are using ESA for analysis the notion of delineating your coding is no longer needed (such that I understand what you mean and could code events as well). You have categories or classes of different events. It is still coding and the rules of the coding and what goes in what bucket has to be clear and trusted. It clearly is not.

I do not find your description of your coding events on pages 19 and 27 helpful or informative. In addition, this can be done one time and

Response R2-8:

We agree that the explanation of coding in the previous version of the manuscript left many questions unanswered. We have addressed the issue of coding on two fronts.

First, we have enhanced the description of how the data was coded when performing ESA. The key distinction that we have tried to convey in the revised manuscript is that in contrast to the previous version that used the Gioia method which focuses on analytical categories, coding events when using ESA culminates around the identification of necessary events that are required for each of the events to occur. Therefore, coding takes place in an iterative manner as events and their relations are analysed, when new necessary events are identified, and when unrelated events are removed from the sequences (Heise, 1989). In this way, Abbott (1995), for instance, describes the use of ESA as being chiefly aimed at justified coding of events and their relations.

Our initial coding of event was made on the basis of the historical narratives that were written at the start of the analysis process to make sense of the effectively prior to any episode section and in lieu of the odd appendage on page 18 per the "Assessment ... " section.

events. This follows from the idea that ESA enables the systematic analysis of narratives (Griffin, 1993). In the first stage of ESA that focused on the emergence of alternative scenarios, we focused on events related to Nokia's emergent strategy where we included key events from the narratives that were either external to Nokia, partly internal and partly external, and events that were internal happenings. The coding also enabled us to triangulate the events across sources. On page 20, we explain the initial coding in the following manner:

"The initial coding of events was based on the historical narratives developed in the previous analytical stage and covered the two periods in full. To identify relevant events from the narratives, we paid attention to a wide variety of events: incidences external to Nokia (e.g., the collapse of the USSR), occurrences partly external and partly internal to Nokia (e.g., the mounting losses of a business unit), and internal events (e.g., change of business unit leader; prior strategic decision). Coding the events also enabled us to triangulate them across multiple sources in order to reduce the limitations that reliance on singular sources can generate (Kipping et al., 2014)."

This initial coding was then used as a basis of constructing the event sequences. After the initial event sequences had been constructed by one of the authors, the other authors double-checked the analysis in order to identify whether any necessary prerequisite events were missing. This follows the idea that coding and analysing data when using ESA go hand-in-hand as events are iteratively added and removed during the analysis process so that all prerequisites for each of the events are met (Heise, 1989). This is now explained in the following manner (p. 21):

"After the initial event sequences had been constructed by one of the authors, the other authors checked the initial analysis together. While assessing the initial analysis, new events were iteratively added to the sequences so that all prerequisites for oncoming events were met, while events that were not part of a sequences were removed. This followed the procedure of iterative addition and removal of events and re-interpretation of event relationships during the analysis

process (Heise, 1989). The analysis process was continued until the model fit our data and necessary antecedents were specified for each of the events."

In the following stage, when we analysed the closure of scenarios, we applied similar procedures and focused on the events and event sequences that exerted significant influence on the viability of scenarios. This is noted at the beginning of this section in the following way (p. 22):

"The next stage of the ESA aimed to identify events and event sequences that were not directly related to Nokia's emergent strategy but exerted significant influence on the viability of alternative strategic change scenarios. While the previous stage focused on the emergence of different scenarios, this stage focused on the "closure of alternative futures" (Ermakoff, 2015: 111), and the eventual decision to realize one of them."

We hope this provides a sufficient description of how events were coded during the analysis process.

Second, to show transparency in our coding and analysis, we have constructed Tables B1 and B2 in the Appendix B. These tables describe each of the events, identify data sources that were used to triangulate each of the events and outlines the prerequisite events for each of the events to occur, accompanied by a description of the logic underlying the prerequisite events.

Finally, we used ESA as Ermakoff (2015) did in his analysis of the structure of contingency. ESA provided us with the analysis of the raw events. their interrelationships and sequences that served as the building blocks of a more theoretical analysis. Following Ermakoff (2015), we also analysed the raw events identified with ESA on a higher level of abstraction/categorization (what Ermakoff termed "generalization" analysis of the vent sequences), and matched this analysis with our theoretical framework. Specifically, we did this matching – or "bridging" – by identifying the alternative strategic change scenarios; zooming in on the events that immediately preceded the scenarios (and assessing whether they were contingent, unforeseeable events, or noncontingent, foreseeable events); identifying those events that later substantially increased or decreased the viability of those scenarios; and

assessing whether those events were part of the emergent strategy process or, rather, of "parallel event sequences." These analyses are described in detail in Appendix C.

References:

Abbott, A. 1995. Sequence analysis: New methods for old ideas. *Annual Review of Sociology*, 21: 93-113.

Griffin, L. J. 1993. Narrative, event-structure analysis, and causal interpretation in historical sociology. *American Journal of Sociology*, 98: 1094–1133.

Heise, D. R. 1989. Modeling event structures. *Journal of Mathematical Sociology*, 14: 139–169.

Comment R2-9:

Related to retrospective reports and conducting interviews, you do this (i.e., "hand waving) again with your answer concerning interviews and retrospective reports by suggesting that because you just use a few quotes this is also not a risk.

Response R2-9:

This is clearly our mistake. In the revised manuscript, we note that we have triangulated the events used in the ESA across multiple sources to deal with the challenges of using single sources (p. 20):

"Coding the events also enabled us to triangulate them across multiple sources in order to reduce the limitations that reliance on singular sources can generate (Kipping et al., 2014)."

In addition, we now cite the sources that were used in the triangulation of each of the events in Tables B1 and B2 that are provided in Appendix B. We hope that this increases transparency regarding which in-situ and retrospective data sources were used to analyse each of the events.

Comment R2-10:

Anything in the past, is retrospective where interviews are involved. Given the time periods you asked the executives about (1986-1996; 2006-2015) as described on page 16, very few of these years can be considered recent.

Response R2-10:

Thank you. We agree. However, we want to emphasize two issues. First, interviews are not the primary material for 1980-2010. Second, we have source-triangulated each event to maximize reliability.

Comment R2-11:

As part of this thread, I want to send you to the Ambos and Schlegelmilch (2007) article. It is a gem in taking enormous complexity in a study with tons of data and making it "seeable." Regardless of topic, read it.

Response R2-11:

We have read the A&S paper and tried to learn from it. Even if their quantitative survey data were different from our qualitative-historical data, we found the paper very well-structured and written. For the current revision, we were especially

inspired by the straightforward, concise, and informative introduction of A&S. We have rewritten our introduction to be equally straightforward, concise, and informative (especially pinpointing the planned contributions of our research).

Comment R2-12:

FIFTH, the section on page 18, "Assessment of research approach" feels like you have gone off on a tangent. You do not then demonstrate how you achieve each of these requirements. This is an appendage dropped in from nowhere. Drop it as it is distracting and not helpful. It could take a full manuscript to demonstrate you meet each of these criteria.

Response R2-12:

Following your suggestion, we have removed this section from the revised manuscript.

Comment R2-13:

SIXTH, top management changes (i.e., replacement of top executives is a trigger for further change events, but rather a yawn event; it is what comes after that matters per page 10 and also over emphasized in your introduction) are one category of events that can and often result in change. Yet this is not surprising or interesting per se. Yes, you need to capture the sequence of events that follow or are triggered because of this event type. However, stay focused on chance vs. choice, contingency and indeterminacy. Think about the proportion of what you are emphasizing and why you care about this research. Over emphasizing the executive changes is not what is key it is what follows that is key to you what you are studying.

Response 2-13:

We agree that the previous manuscript gave the impression of over-emphasizing the role of executive replacements. In the revised manuscript, including the rewritten and restructured empirical analyses, we have put considerable effort into not giving this impression.

In addition to this, we have added detailed crossperiod analyses to the manuscript that are provided in Appendix C and inform our conclusions. They raise the abstraction level of the analysis from descriptions of events to a classification of the key events within and across the two periods, and to an analysis of the sufficiency and necessity of certain types/classes of events for the strategic choice outcome. The two sections in Appendix C are "Cross-Period Analysis on the Emergence of Alternative Strategic Change Scenarios," and "Cross-Period Analysis on the Closure of Alternative Strategic Change Scenarios". Both of these analyses include tables indicating the (quasi-) causal co-incidence of certain classes of events with the eventual strategic choice made. The latter section also provides a taxonomy of three principal classes of conjunctures that may contribute to the convergence of strategic choice on an unexpected scenario/alternative—each principal class of conjuncture having 2-3 sub-classes.

In addition to the unexpected changes of top executives, this taxonomy now identifies the following categories of conjunctures contributing to the unexpected strategic choice: unexpected changes in other stakeholders' behavior or preferences, as well as scenario domino effects. Among the unexpected changes in other

stakeholders' behavior or preferences, there were disruptive decisions of key business partners; performance disruptions of key business partners; and sudden, newly-emerged preference alignment of major owners. In turn, the scenario domino effects refer to conjunctures where the scenario intersected by the unexpected parallel event sequence was either a key means for another scenario, or a key remaining alternative to another scenario.

We further emphasize that the strategic choices at Nokia were not determined by any of these conjunctures alone. Several of these conjunctures needed to coincide *together and in combination*, and reduce or eliminate the viability of alternative scenarios, for the strategic choice to converge on the remaining one scenario. At the end of the section, we explain this as follows (p. 100):

"In other words, if multiple lowprobability events and the resulting conjunctures could all, alone, lead to the same surprising choice outcome, then adding up the probabilities across the conjunctures would mean that the sum of the low probabilities would in fact become very high—and the unexpected outcome would actually become an expected one. In contrast, our main finding is that all or at least most of the those low-probability conjunctures needed to co-occur to actually decrease the viability of all but one of the strategic choice scenarios. This means that we should rather think in terms of multiplying the low probabilities of the conjunctures with each other than in terms of adding up their probabilities. Multiplying several low probabilities with each other leads to a very or extremely low probability of the outcome event (e.g., 0.1 * 0.1 = 0.01). This provides an additional explanation as to why the eventual choice of divesting the core businesses at Nokia was a highly chancebased strategic choice with very low overall probability to occur at the first place. Yet, through the developments described and analyzed above in detail, these strategic choices took place."

Comment 2-14:

SEVENTH, please on page 19 foreshadow what is coming for your reader with your sections.

Response 2-14:

We very much agree that especially in a long and complex manuscript like this, it is important to

Delineate the exact structure of your analysis presentation. Tell the reader explicitly for each strategic change episode you will first cover background, then the period of collective indeterminacy and alternative forward looking scenarios, then the change that emerged. This organizing structure that you then repeat is super good. Help the reader see what to expect (i.e. better breadcrumbs and refrains). This type of map or bread crumbs truly helps the reader and can enhance your manuscript (yet so simple to execute). The use of foreshadowing, transitions, and refrains can go a very long ways in taking a good manuscript and making it "sing."

provide navigational guidance to the reader, and foreshadow how the following sections are structured.

In response, we have now added more explanation about the structure of the following sub-sections to the beginning of the two main sections of empirical analyses: EMERGENCE OF STRATEGIC CHANGE SCENARIOS IN THE TWO PERIODS (p. 24), and CLOSURE OF SCENARIOS THROUGH CONJUNCTURES IN THE TWO PERIODS (p. 33).

In addition, in the former main section, in transitioning between key sub-sections, we now provide more guidance to the reader between sub-sections "Background events.." and "Noncontingent events...". Within the latter main section of empirical analyses, we offer some additional guidance, in transitioning between the sub-sections "First period..." and "Second period". We hope all this makes it easier to read our manuscript.

Comment R2-15:

EIGHTH, when you describe the Nokia divisions or units, etc. please use precisely the same labels and be obsessively consistent. As you describe events, the unit labels are confusing sometimes (i.e., especially TV, electronics, PC, data, cable, computers, networks, information systems businesses, tele networks, mobile phones, multimedia, enterprise solutions, etc.). The problem exists within time periods not just across.

Response R2-15:

Thank you for noting this; we agree that the inconsistent use of the business area labels diminished the reader-friendliness of the previous version.

We have taken care to make the labels of the business areas consistent throughout the manuscript text.

Note, however, that in the full ESA tables and figures in the Appendices, certain variants of these labels remain. This is because in the detailed events reported in the Appendices, it occasionally remains necessary to refer to more detailed product category names, rather than the broader but more vague labels used by Nokia itself (e.g., partnership negotiations with Hitachi were conducted on "TV business" in particular, not "Consumer Electronics" in general).

Comment R2-16:

LAST, your discussion is a bit of a "dud" or anticlimactic. It should not be. It feels like you ran out of steam and are checking off a laundry list. It does not have to be super long.

Response R2-16:

We have thoroughly revised and rewritten the discussion section. The rewritten version:

- does not reiterate or repeat events of the empirical case for several pages
- only provides a 1.5 page summary of the empirical findings first, focusing on answering

the research question (How might the strategic choices of a corporation unexpectedly emerge from chance?)

- after the summary of the findings, identifies the main theoretical contributions of the research to four literatures in strategy and management
- ends with a discussion of the managerial implications, limitations of the study and further research avenues.

In closing, we hope that the restructuring and rewriting of the manuscript and all its main sections (including the empirical analyses), make you more confident of the value of our paper to *AMD* readers. We also hope that it has passed your three litmus tests. We are truly grateful for your invaluable advice and suggestions throughout the review process on how to keep improving our paper!