

Paper to be presented at the DRUID Academy Conference 2016 in Bordeaux, France on January 13-15, 2016

The Bright Side of Conflicts – Organizational Renewal Through New Product Development at Bang & Olufsen

Giacomo Cattaneo Aarhus University Department of Management gcattaneo@mgmt.au.dk

Abstract

Through an inductive study at Bang & Olufsen, we explore how a company achieves organizational renewal through its innovation activities. We identify the multi-level mechanisms that show how conflicts in new product development become the necessary trigger for organization-wide routine renewal, thus contrasting with the assumption that conflicts are detrimental to the renewal process. We contribute to theory by showing how the characteristics of the NPD process enhance the variation-selection-retention process through the necessary alertness, sense of urgency and internal legitimization for a purposeful alteration of the ostensive aspects of organizational routines. Moreover, we inform practitioners on how their agency can influence the mechanisms to resolve conflicts and induce organizational renewal.

"The Bright Side Of Conflict – Organizational Renewal Through New Product Development At Bang & Olufsen"

GIACOMO CATTANEO, AARHUS UNIVERSITY AND ETH ZURICH

- WORKING PAPER -

DECEMBER 2015

1 Introduction

"Audio's been a catalyst that is renewing the company (...) It's really shown us how unfit we are. (...) It's been a mirror where no fancy industrial design can hide behind" – Audio's NPD Creative Lead

Changing dynamics in the environment continuously push companies to revaluate their position in the industry, and to reassess their competitive advantage. The survival of companies involved in such dynamics is put into question, and might indeed turn out for the worst – consider companies like Polaroid (Tripsas and Gavetti 2000) or more recently Nokia (Vuori and Huy 2015). The concept of "renewal" has been pointed out as unique type of organizational change that holds the promise of restoring strength and vigor if decayed elements are replaced following times of creative destruction (Agarwal and Helfat 2009). Renewal can be defined as the "incremental process through which an organization continuously adapts to the environment and explores opportunities to invoke change in its activity choices and outputs" (Albert, Kreutzer et al. 2015, p.4). A body of research in renewal has developed following the seminal work of Burgelman (1983), (Burgelman 1983, Burgelman 1991, Burgelman 1994) in which the drivers of change are found within the organization's boundaries. A stream of research has focused on strategic aspects of renewal (what the company does) and the resources employed to achieve a different product-market positioning (Danneels 2002, Danneels 2011). A complementary one is concerned with the *organizational* aspects of renewal (how the company does it), focusing on the routines - actions and decisions about such resources - that lead to a different strategic positioning (Salvato 2009). Despite recognizing the important role of renewal for a company's survival, the how and when of its dynamics are still poorly understood, leading to calls to understand its micro-processes (Crossan, Maurer et al. 2015, Felin, Foss et al. 2015) and its inherent complexities across different actors (Glaser, Fourné et al. 2015). As Floyd and Lane (2000) showed, the process of renewal generates vertical and horizontal tensions across individuals. Including agency and subjectivity implies including their interpretations and power relationships (Feldman and Pentland 2003). Among the micro-processes of organizational renewal, one in particular seems to be key, yet has not been explicitly explored: the role of conflicts in the

process of renewal. In the literature, conflicts are defined as "an interactive process manifested in incompatibility, disagreement or dissonance within or between social entities" (Rahim 1992), and two are the common opinions. The first, belonging to the innovation literature, shows how functional conflicts based on dialectic interactions at the cognitive level - as opposed to affective ones – have a positive effect on innovation and creativity (Amason 1996, De Dreu 2006, Glaser, Fourné et al. 2015). The second view them as detrimental for change, thus actions and procedures should be implemented that avoid its emergence through the pursue a conflict-poor environment (Floyd and Lane 2000). Similarly, the evolutionary theory of change understands routines as "truces", repetitive and mindless activities aiming at reducing conflicts (Nelson and Winter 1982, Zbaracki and Bergen 2010) emerging from the "warfare" of procedural complexities (Feldman and Pentland 2003).

What is clear is that conflicts in an organization are unavoidable, especially in situations of change and increased uncertainty, where different roles, interpretations of routines and goals will clash. Literature on routines change has pointed to mechanisms that support conflict resolution, as with individuals able to develop ostensive patterns that reflect both targeted consistency (supporting stability) and flexibility (supporting change) (Turner and Rindova 2012), negotiations through plausible, acceptable and coherent interpretations of past, present and future experiences (Kaplan and Orlikowski 2013) and trial-and-error (Rerup and Feldman 2011). Few studies have on the other hand considered how conflicts can be beneficial for change, with the exception of Zbaracki and Bergen (2010), despite without further considerations for the renewal of an organization.

These considerations point us to question the role of conflicts for change, and investigate if they should be considered as vehicles or obstacles to the renewal processes. We set out to uncover these mechanisms as emerging from the new product development (NPD) process, which because of high uncertainties and multiple interpretations of cross-functional actors, is a hotbed for organizational tensions. Scholars have pointed out how renewal can be achieved through innovation by linking technologies to market opportunities (Dougherty 1992) and developing dynamic capabilities (Danneels 2002, Rothaermel and Hess 2007, Salvato 2009), making this process a fragile environment embodying both the drivers for struggle and change. We however lack a proper understanding *how* conflicts in NPD can contribute to the organizational renewal beyond the single events of conflict that Zbaracki and Bergen (2010) have observed.

2 Methods

We entered the Danish company Bang & Olufsen (B&O), a high-end consumer electronics producer, with an inductive single case design (Siggelkow 2007) to investigate the relationship between strategy and innovation in situations of industry convergence.

We approached the case with an open mind, yet slightly biased by the idea that B&O struggled with regard to its absorptive capacity (Cohen and Levinthal 1990, Zahra and George 2002). In an early interview with the Tonmeister we asked about the internalization of external knowledge. His answer "whether it's coming from external or internal is irrelevant" rapidly shifted our attention to the interactions between groups in NPD that would exchange such knowledge. As a blank piece of paper, we set out to investigate what the key dynamics were. The access to the company's project portfolio and the countless conversations showed us how the company was betting its future on three specific projects in these last 3 years. We moved to an embedded case study (Yin 1984, Eisenhardt 1989) focused on such NPD projects. Getting more specific insights on these projects better positioned us in making sense of how the role of conflicts – initially interpreted as obstacles – could be understood in terms of their potential for renewal.

2.1 Research setting

B&O is a company that has grown successful through the continuous creation of iconic products that paired exquisite design with excellent technology. B&O's position and competences have recently been questioned because of industry convergence dynamics, in which the now blurred boundaries between hardware and software have brought to the field new technologies, companies and business models (Hacklin, Marxt et al. 2010). In 2011, the arrival of the new CEO Tue Mantoni and a new top mgmt. team as an answer to a chronic lack of growth signaled a new strategic term.

The company is strongly geared towards product creation, with three departments that interact on a daily basis throughout the process: R&D, Product mgmt. and the Creative department, in charge of design and concept development. They are located close to each other in the 90-years-old factory, yet separated by a walkway. Despite a flat hierarchical structure, the "over the fence" model has permeated the company for decades (Austin and Beyersdorfer 2007). In 2012, to resolve such division, a new innovation framework has been introduced, with a "NPD team" as its cornerstone where senior managers converge as "leads" from the technology, business and creative departments into a temporary project unit and are held responsible for its development. Using projects as our unit of analysis simplifies identifying the people involved in such activities rather than through our prejudgment of who could be central (Czarniawska 2004). We chose the projects that in the last strategic term were called "boulder": the biggest in terms of impact and relevance. "TV" has been the largest in terms of initial investment, "Speaker" the most advanced technologically and "Audio" the most explorative for the company. The projects greatly differ from one another, first and foremost in the way they were initiated. TV was a "natural" consequence of roadmap analysis, which pointed at how a new high-end TV was needed in the portfolio. Speaker is an explicit statement by B&O to regain technological excellence by unleashing the best acoustics capabilities and turning the

usual design-first process into a technology-first one. Audio was meant as quick release to compete with emerging competitive products and as a driver for speaker sales. Its initiation as a skunk-works and its targeting a completely new customer generation led to the most complex product B&O had yet to produce, requiring competences far from its core and expertise.

2.2 Data Collection

We followed the standards of rigor for data collection and analysis as pointed out by Gibbert and Ruigrok (2010). We relied on ethnographic techniques (Van Maanen 1988) in our approach to the company and fieldwork. The principal observer lived close to the aluminum factory in Struer, Denmark, for a total of 40 days in a flat provided by the company, and was allocated an office in the patent office within R&D. The day was spent wandering around the company from department to department, engaging in formal interviews, informally talking through the halls, and having lunch in the canteen. The feeling of "being in the field" was without any doubt achieved, as the researcher was welcomed by any employee. Daily field notes have been recorded in daily reporting templates, and analyzed throughout the process to keep track of the development. Besides formal and informal interviews, we collected secondary documents like stage-gate reports for each projects, minutes of management board's gate decisions, plus several presentations and mail exchanges. Overall, a total of 55 interviews have been conducted with 35 informants across NPD departments, spanning from operative management, senior management and including the whole top management involved with NPD as shown in Table (1).

→ Insert Table 1 here

2.2.1 Data analysis

We performed the first data analysis throughout the data collection by reviewing daily templates to identify the main dynamics related to the renewal-innovation relationship. Iteration with literature on renewal and innovation showed how the relationship was not clear enough to make sense of the observation at B&O. To begin with a pure inductive process of understanding, we created NPD projects' chronologies on an ideation-development-implementation process timeline (Garud, Tuertscher et al. 2013). The chronologies were scanned for conflicting activities or instances of renewal within the project-space, while at the same time scanning interview transcripts from people outside the 3 NPD teams for additional instances of organizational renewal. Through an iterative process, we moved forward in time and upward from activities from the conflict events and backward and downward from those of organizational renewal, triangulating between accounts and connecting events via causal links. We documented 12 cases of conflicts. Each was developed in a case study, in which the roles of the different actors, their motivations and their activities were

interpreted through triangulation across interviews, personal field notes and secondary data. From these case studies, we have coded inductively the steps of the mechanisms that we explore extensively in the next section.

3 Findings

3.1 Conflicts in new product development

NPD as a process is a complex routine, in which organizational capabilities and knowledge, key components for organizational learning, are stored (Feldman and Pentland 2003). We found how the cross-functional nature of NPD, as well as the involvement of multiple levels of authority, easily generate different interpretations of past events, present concerns and future direction. Moreover, financial struggles and the necessity to re-establish the brand for the long-term through the short-term launch of a new generation of innovative products increased the pressure on a process that by nature deals with high uncertainties. This heightened tension leads the NPD process to be a locus of change for the company, where the initial sparkle for a successful future might emerge, if it finds its way among multiple conflicting dynamics. In Table (2) we present 12 conflicts that emerged from our analysis of the 3 core projects and the succeeding actions that we tracked. We first explore the nature of the conflicts to then track the mechanisms that were triggered, generating renewal or failing to do so.

→ Insert Table 2 here

We examine the conflicts and changes in the components that make up both the causes for the conflict, as well as their resolution. With *causes* we understand a specific relationship between two parties that can be identified as the root of disagreement or incompatibility. With *resolution* we understand the means through which a situation of conflict is brought back to stability, in which all the parties have accepted one alternative – not necessarily the one diverging from the status quo. We find that both causes and resolutions can be found in three characteristics of each individual embedded in the company's structure: their authority status, their functional knowledge and their emotive responses.

3.1.1 Conflict through authority

Different roles in the organizational structure means different authority levels and group affiliations, characterized by an agenda and a mandate. As these characteristics end up overlapping with someone else's, conflict will emerge. In case #9, System engineers' agenda is to guarantee the seamless integration across different products, but their demands – without the authority of a mandate – are

taken as simple suggestions by the NPD teams' whose agenda is to ensure the swifter development of their own product. As Technology Specialist (1) explains about Speaker NPD Team:

"We were talking about, "We need to ensure that it works with the TV customers, so you have that one remote experience (...) You can see it all as one product. "No way." they said, and then forced that all the way through. Compliance and compatibility across the portfolio was totally out of scope."

At the same time, Speaker's NPD Business Lead laments the fact that even if they wanted to comply with system integration suggestions, belonging to two different project spaces prevents them to enforce anything:

"We as the Speaker team were not able to tell someone from TV you need to do this. [...] We are not in a position just to tell TV guys to do something that cost a lot of money."

In case #12 however, Audio's NPD Creative Lead and Head of Creative department try to go beyond their mandate, feeling entitled to do so as they perceive their agenda of creating the best product possible has priority over Head of R&D's agenda, achieving fast time-to-market at a low price-point. After they tried to make the procurement department accept a proposal by the ideal UK-based company over the partner established by R&D without the Head of R&D knowing, Audio's NPD Creative Lead explains how chaos ensued:

"[He] gave an ultimatum. He said that if we use [UK-company name] under the table, if we try to use our sneaky, sneaky this and that, he would pull every single resource of all sorts off the project and [Head of Creative] and [NPD Creative Lead] can bring the whole God damn thing to market themselves."

Conflicts across hierarchical levels arise also when there is a difference in assessing the value of a certain feature or project, as with #7. Speaker is stopped as it is rising in its necessary investment while under-delivering with respect to the promises by the acoustics engineers.

3.1.2 Conflict through functional knowledge

Different knowledge bundles are associated to each individual through their background and current functional role. They will inform different interpretations of framing the problem and envisioning solutions that might be conflicting with each other. This is the classic "clash of ideas" often celebrated as supporting the creativity of innovation projects. In the case of #5 acoustics engineers are granted active participation in the development of Speaker's "brief 0", the document created by the NPD Business Lead and ratified by the Innovation Management Board for the allocation of a project number and budget. First time since decades to do so, their enthusiasm still has to fit into NPD Business Lead's framing:

I had already some ideas about [Speaker], what it should be - some of the acoustic guys had some different ideas. The ideas were not completely consolidated between us [...] so when someone said something, it was very much challenged. There was a very hectic debate in the beginning (...) about what exactly is the speaker like.

This is an example of a functional knowledge conflict on the horizontal level. When it comes to functional knowledge conflicts on the vertical level, the different supply of information to hierarchical roles causes conflicts to emerge. Case #8 is illustrative, when Speaker's NPD Technology Lead points out how Struer, B&O's headquarters in Denmark, would be the ideal production location as opposed to the current plants in Czech Republic. Suppliers for many components are less than 100km away from Struer, and the project's complexity calls for frequent interactions between R&D and the production facility, making Struer the better candidate. However, his boss never doubts the company strategy that envisioned the relocation of all production activities to the Czech plant:

"I made a proposal saying okay, this is the cost in Denmark, this is the cost in CZ [...] I sent it and then they thought it was a kind of provocative e-mail to send. I was called by my boss and he said, "Why did you do it? Can we agree it was just a joke?"

3.1.3 Conflicts through emotive responses

Emotive responses cause conflicts in which two parties disagree or challenge each other on levels that escalate beyond those of authority or functional knowledge. A clear example is case #1, where the re-introduction of a skunk work project into the company's processes causes the emotional rejection of a larger group. They mistrust a concept they believed has been developed outside the company's regular process because of lack of trust in the company's capabilities, as "they even changed the locks for some rooms in Lyngby because it should be kept very secret" as Audio's NPD Technology Lead remembers. The company comes to be aware of the product partly because Technology Specialist (1) is asked by the NPD team to support the project with his knowledge of product architecture. As one of the most qualified and connected person in the company, he prioritizes involving people with B&O. This lead quickly to have a product meant by NPD Creative Lead to be almost completely outsourced to become close to what a normal internal NPD set-up would be. Audio's NPD Technology Lead remembers some of strongest reactions:

"One very strong guy in the hardware's team, he was very negative. He came to me several times saying he wanted to get off this crazy project, he cannot back it up. For that guy, I have even received complaints from creative managers that he has been insulting them - it's just a lot of personal distrust and lack of motivation basically. Even if it's good B&O guys who have been willing to fight for B&O, this was just too much."

3.2 Mechanisms of organizational renewal

In this section we track how the conflicts so far described can become the trigger for subsequent actions. Mainly, besides the cases in which a conflict remains unresolved, we find two types of possible consequences: a change at the project level, and a change at the organizational level. With change we understand a purposeful decision or action that is implemented to improve the current setup and that diverge enough from the "business-as-usual" to be recognized as different. Change at the

project level occurs through decisions that influence only the NPD project space and its process. Change at the organizational level is however decisions that more broadly influence future projects. Such changes influence the ostensive aspects of the routines, as well as the organizational structure and its members so that routines will be performed differently for better outcomes.

Our mechanisms of renewal have three components: the conflict and its outcome, the project-level and the organization-level change. We find that project-level change does not necessarily needs or lead to organizational-change, or on the other hand preclude it. In the following we present when changes occur, and when it does not. Project-level change is tightly linked to the outcome of the conflict and its resolution in the form of rejection or acceptance of the alternative courses of action emerging from frictions in authority, functional knowledge or emotive responses. On the other hand, organization-level change is linked to the outcomes of both the original conflict and project-level change. We find that if project-level change is more of a reactive activity to a present conflict, organization-level change is rather a proactive one that reflects on the causes and outcome of the conflict and project-level change.

3.2.1 Project-level change

Why and how project-level change does not occur

We find reasons related to all three original causes – authority, functional knowledge and emotive responses – that presented situations in which project-level change does not occur. In terms of authority for example, change can require altering one's agenda and it is hard to accomplish, or to escalate the conflict to an authority level above the parties. In the case of #12, Audio's NPD Creative Lead speaks about the "missed opportunity" when the Head of R&D threatened to withdraw the whole R&D resources from the project, so they gave in:

"Retrospectively, that [let Head of R&D withdraw his resources] might have been a good decision (...) We said "oh, okay" because [Head of Creative] and I thought that we have no business building up an R&D organization. (...) That would have given [the CEO] the ability to say, "I'm doing an organizational change project right now, and I'm forcing you to do X". Or he might have said "well, okay, in that case, we're going to build our R&D organization somewhere else". But we didn't give him that opportunity because we were chickens. (...) We ended up having a half-arsed messy, messy crazy set-up we never wanted."

Considering conflicts of functional knowledge, the withholding or masking of information would prevent an honest – "really" functional – clash of knowledge that is more easily resolved. As case #3 shows, this caused the decision-makers to never have the complete information necessary to assess the objective status of the project, and so grant resources and time extensions accordingly. Similarly, emotive responses causing conflicts are difficultly resolved through immediate decision-making at the project-level.

Why and how project-level change does occur

Two dynamics of project-level change emerged: the first in which the conflict was not resolved optimally and a quick turnaround enables a different course; in the second, the outcome of the conflict is the change itself, i.e. the decision that accounts for the conflict resolution corresponds to a change in the routines or resources at the project level.

With respect to the first dynamic, case #9 is illustrative. The conflict outcome is a deadlock between system engineers and the NPD Teams of Speaker and TV, who did not have the mandates to influence each other. The only person with a higher mandate aware of the issue – the Head of R&D – decides momentarily not to act on it so to avoid increasing complexities in the two products. This makes the deadlock with no system integration the resolution of the conflict. However, two events lead to a change: first, both NPD Teams and top mgmt. realize that their first envisioned target customer – the audiophile community – was not the customer that will buy Speaker. Rather, Speaker would attract customers looking for the best speaker in the lifestyle category, fitting in their living rooms rather than dedicated soundproofed ones. This implication, since long advocated by the system engineers, makes the system integration much more relevant, so that top mgmt. re-assesses the previous decision under different assumptions. At the same time, system engineers find with the new COO a new champion for the change, who can overstep the previous Head of R&D's decision. Speaker's NPD Technology Lead remembers:

"When it has been said a lot of times and even to Stefan, the newcomer, then he say "Okay, I need to put the project and system engineering and UX management in the same room, then I want to look around at everybody, and they shall say "We are aligned." He put us all in and then, we had the decision on this."

Shifts in decision-power, supported by additional information unlocked the situation. At such times, the groups invested in the change need to hold their ground and show readiness in taking up responsibility, as with the system engineers in #9.

We find two instances for the outcome of the conflict to be the change. The first is that the two contrasting perspectives are integrated into one, as both parties acknowledge its synergistic value. An example is case #5 with acoustics engineers and Speaker's NPD Head of Business in creating brief 0. Still, it is necessary for Speaker's NPD Business Lead to recognize that integrating acoustics engineers' perspective is beneficial to his agenda. A different example is case #8 where the conflict emerges as Speaker's NPD Technology Lead proposes to move the production of Speaker back to Denmark from CZ. At first considered a "joke", NPD Technology Lead make his case by showing how the numbers highlight his proposed solution as the most valid. Speaker sources the majority of its external components within a 100km radius from Struer, B&O's headquarters, and the 65kg aluminum cast would anyways be produced in Struer's facilities. Moreover, the vicinity to NPD Team allowed for quick and frequent interactions with the production line.

3.2.2 Organizational-level change

There are two possible states at which organization-level change can happen or not: the first, project-level change has happened, the second, it did not, and we are left with an unresolved conflict and a set-up close to the original status quo. We will first present the cases in which organizational change *did not* happen, irrespectively of project-change, to then move on to the case where organizational renewal occurred.

Why and how organizational-level change does not occur

Project-change occurred, but it did not develop into organization-change. One of the reasons is that the resolution of the conflict *ought* to stay project-specific, as that is its inherent value. Think about case #6, in which the NPD Creative Lead was finally able to break free from a long-standing collaboration with David Lewis design house to explore new design venues and would like to maintain such flexibility. Another case is when change is project-specific, and does not provide any apparent benefit for additional projects. In this situation we find e.g. case #5, in which the acoustics engineers were given stronger negotiation power and influence in the creation of "brief 0", or case #8 in which the production location has been moved from Czech Republic to Denmark. Both cases emerged because of the unique uncertainties of Speaker's development process and technology, and will not emerge again unless the company engages in a similar project.

The second dynamic is where organization-change does not occur after also project-level change did not. As mentioned above, resolving contrasting emotive responses is hard, even more so at the organizational level. Overall, organizational-level change does not occur because of the lack of reflective activity by top mgmt. to identify the causes of the conflict – mainly attributed to authority or functional knowledge - as something to be avoided in the future, or somebody invested enough in bringing it to the attention of a decision-makers.

Why and how organizational-level change does occur

In the first scenario, project-level change proves to be a beneficial solution and so it is elevated into organization-level change, in the second project-level change did not occur, and the resulting negative performance puts into question if change at the organizational-level should occur.

We first consider the case in which organization-level change follows project-level change, which means a new course of action was already undertaken with the respect to the business-as-usual scenario. Either as the integration of two perspectives or the superior value of one, such choice showed to beneficially resolve a conflict by altering routines and resources within the project space. This favorable situation either catches a top manager attention, or it is brought up to his attention by somebody directly involved, who believes the original causes are still lingering and should be

tackled to prevent similar conflicts to emerge. The better scenario is when both parties have something to gain, in case #9: system engineers want to prevent the deadlock situation when they tried to improve the system integration of TV and Speaker, while the new COO wants to ensure a system offering for the brand, as his personal experiences showed him the value of such practice. The solution is to raise the group of system engineers directly reporting to him, rather than the Head of R&D, with a new Head of System Architecture to complement their knowledge of B&O's systems. At the same time, such broader mandate should be complemented by higher responsibilities, as the COO explains:

"If you break the system, it can create a lot of problems and that we have seen here in many, many cases. (...) I don't want what I call the "muppet show", where you have the people sitting on the balcony and just pointing to what is right and wrong. Therefore we introduce the System Lead in the NPD team also because they need to take the responsibility. You sit on the balcony and decide the overall strategy for the company but you make sure it's also implemented in the project.

In this case, organization-level change happens on two levels: the first aims at changing the existing routines and resources, while the second creates them anew. The organizational structure is changed to increase authority of a group up to now with an insufficient mandate. By creating the position of System Lead in each forthcoming NPD Team, additional resources are added to the NPD process to prevent falling in similar conflicting situations across projects, as in #9. Moreover, by creating the position of Head of System Architecture, the COO tried to complement the B&O's specific functional knowledge of the System Engineers and increase their legitimacy.

When project-level change does not occur however, different dynamics can lead nonetheless to organizational-level change. Assume the performance of the project, run with the business-as-usual set-up of resources and routines after the conflict was not resolved, proves to be negative. Assume additionally the awareness of the decision-maker, for the failed resolution of the original conflict is understood as a missed opportunity – this triggers a process of reflection. An underperforming project is often a more explicit signal for attention to top managers than a well-performing one. The decision-maker has the chance to revaluate decisions and structural complexities that have contributed to cause the conflict. Audio's NPD Creative Lead states now, looking back at the project:

"Audio's been a catalyst that is renewing the company, it has served that purpose. It's really shown us how unfit we are. It's exposed us for being not as good as we say we are. It's made us face truths. It's made us face organizational issues. (...) It's been a mirror where no fancy industrial design can hide behind, you know, no rising the price up can hide behind. It's been a mirror and we are coming out as a better company for it, if we come out."

Case #12 is illustrative for its organizational change in terms of authority and functional knowledge, beyond troublesome emotive responses. The Head of Product Management looks back at how the conflict emerged because of an doubtful agenda by top mgmt. driven by cost-curbing activities in specific areas of development, this case software development:

"Audio became in many way, the hostage of that way of changing the organization. I see also now, today, that actually some of the things that we did back then really impacted Audio, and it is now being shifted back to a different model. Now there is [new COO] and [Head of System Architecture] coming in."

COO's "model shift" aims at strengthening the in-house software development, moving toward more agile routines and away from the specifics-heavy ones inherited as a hardware company. He appoints Head of System Architecture as a way to kill two birds with one stone: his expertise in system engineering supports the change in case #9, his software development skills case #12. This organization-level change brings about the definition of a new group of people embodying a new set of functional knowledge, as well as raises their authority level by reporting directly to the COO.

3.2.3 Two typologies of organizational renewal mechanisms

If we combine the three elements discussed above – conflict, project-level and organization-level change – we get four processes as shown in Figure (1) as potential outcomes from conflicts in NPD, two of which represent organizational renewal:

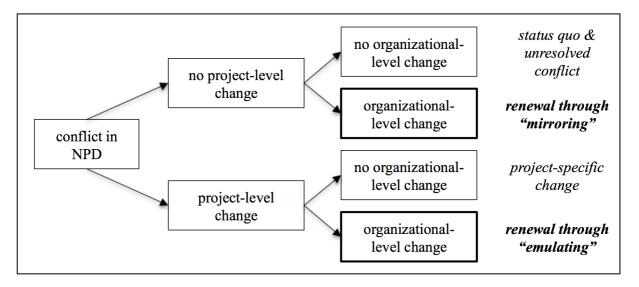


Figure 1 - Four mechanisms of conflict resolution

As we have explored above, which process will occur depends on the actions of the parties involved in the conflict and those that have authority over them. Drawing on our sample of 12 cases, we thus describe the four mechanisms as it follows:

Status quo & Unresolved conflict

The case of status quo is when neither project-level nor organizational-level change occurs. Examples of such are cases #1 - #4. In these instances, the conflict could not be resolved in favor of an alternative course of action at the project-level for reasons related to the authority structure, functional knowledge of the parties involved and their emotive responses. In terms of authority, the

reasons are the difficulty in changing any involved party's agenda, as well making somebody of higher authority invested in the resolution of such conflict. Considering the functional knowledge, the withholding and masking of information can cause to never be fully aware of the conflict itself and its underlying causes, leading to short-term fixes rather than a stable resolution. Emotive responses add an additional layer of complexity, as they can more difficultly be resolved through an operative decision. The lack of project-level change can still lead to an organizational-level change as in the case of "renewal through mirroring", but is missed by the lack of either a party involved in the original conflict bringing their concerns to the attention of a top manager, or of a top manager reflecting on the risk that such a conflict might emerge again to the damage of the company.

Project-specific change

If the conflicting perspectives are integrated into a synergistic one, or the proposed alternative is shown to be more valid than the current one, change at the project-level will occur. We found cases #5, #6 and #8 to follow this pattern. Such direct project-change if often the result of the recognition of each other's functional knowledge and aligned agendas, with lower degrees of negative emotive responses. If on the other hand the conflict is resolved in favor of the current status, operations will continue with the status quo, unless the performance of the current status is unsatisfactory. In this case, a timely intervention by a decision-maker can still turn the project around by revisiting the previous conflict in favor of the alternative solution, as in the case of #7 in which the authority over a decision was passed to somebody else. This alternative course of action turns out to be nevertheless specific for this project, as it either ought to be so, or extending this decision does not seem to benefit any additional projects.

Renewal through "mirroring"

We call organizational renewal through reflecting activity on the negative outcome of a missed opportunity "mirroring", a term that emerged from our interviews. Mirroring implies a series of choices at the project-level, which are understood as underperforming after the expected project's goals are not met. The negative performance becomes the trigger of reflective activities, from either people who had been involved in the conflict who will bring the issue to decision-makers, or from top mgmt. who has become aware of the situation and can recognize the need for action. By assessing what caused the conflict to emerge and the benefit of resolving it in the long term, decision-makers have the chance to modify organizational structure and processes, so that routines and human resources performing such routines will not lead to similar underperforming projects. The change occurs by complementing existing or creating new functional knowledge and altering the authority status of people invested with such knowledge. This way, the parties that were first

involved in the conflict are given increased legitimacy and authority to prevent falling in the same problem. Examples of such mechanisms are cases #10 through #12.

Renewal through "emulating"

When project-change proves to be beneficial not only for the project, but potentially as well for forthcoming ones, the resolution of the conflict at the project-level might inform an organization-level change. The generalizable elements of project-change will be emulated at the organizational-level. To achieve such result, similarly to renewal through mirroring, either people involved in the conflict resolution will bring such best-practice to the attention of top mgmt., or top mgmt. had become aware through participating in the project-level resolution. The authority that spans across projects is what is needed to alter the organizational structure and processes so to achieve renewal in the routines and the underlying human resources, as we have seen in case #9. In this case, it is more likely that the change implemented puts emphasis on the existing sets of routines and resources, as they have proven to be successful in tackling the issue at the project-level, and now need to be extended to the whole company. However, new functional knowledge and increased authority should be added as a complement to grant the legitimacy of such routines and avoid falling in the same conflict.

3.3 Discussion

Going beyond the conflict

For organizational renewal to occur, actors need to engage in routines, as the performative aspects provides the variation, which is selectively retained in the ostensive aspects (Feldman and Pentland 2003). We have confirmed that such variation can be introduced or induced through the agency of mgmt., as they can select variation produced by others. Change occurs when part of the routine is performed differently and recognized by somebody of power that legitimize it as appropriate – turning exceptions into rules (Feldman and Pentland 2003). The work of Burgelman (1983) tracks similar dynamics, in which a variety of initiatives is explored, entrepreneurially championed and eventually selected by a formal power, also called "competence definition" by Floyd and Lane (2000). The case of Salvato (2009) is similar, and variation is generated by what he calls "successful experiments". This process is close to what we identified as the "emulation" mechanism. The mechanism of "mirroring" is however more difficult to relate to any other work reviewed so far. We show how conflicts in NPD work as enhanced processes of variation, selection and retention. The uncertainty linked with the exploration of new products and the external pressure to provide a new ground for the future of the company trigger a high degree of variations in interpretations about how such uncertainty should be tackled, eventually colliding. Moreover, being subject to market timelines

will bring time pressure across different groups in the company to present their case on how to best get there, enhancing the tensions. A prompt resolution of conflicts between alternatives – a selection process - is imperative to maintain momentum, irrespectively of where the choice falls. The retention of such choice will have an immediate feedback from market-launch, prompting a proactive reflection – close to a "local, ad-hoc and mindful intervention" in Salvato (2009) terms, a "coherent, plausible and acceptable negotiation among temporal accounts of past, present and future" in Kaplan and Orlikowski (2013) - that has the potential to generate routine renewal. In the case of renewal through mirroring, an even more intense process of proactive reflection occurs. The reflective activity aims at uncovering the causes of the conflict and its outcome more explicitly than in the "emulation" case, where a best-practice is already available at the project level. These results prompt us to re-interpret the general dynamics of conflict, often considered detrimental if not for a moderate functional conflict limited to innovation activities (De Dreu 2006, Glaser, Fourné et al. 2015). We indeed find the cases of beneficial functional conflict as in case in case #5 between the acoustics engineers and NPD Business Lead, dialectically interacting to create a greater product brief. Also, we found how conflicts caused by emotive responses were more difficult to overcome initially (Amason 1996). By extending our inquiry and analysis beyond the single conflicting event to the activities that it triggered, we found how despite not being beneficial as standalone events, they can become the necessary trigger for organizational renewal. Kaplan and Orlikowski (2013) have pointed at how breakdowns – caused by conflicting interpretations due to uncertainties related to business, market and environment - can on one hand impede progress, but at the same time trigger the different creative interpretations necessary for change. Our results are aligned with their study, and contribute by exploring the causes of such breakdowns and the multilevel mechanisms in which what they identify as temporal work – convincing people through acceptable, plausible and coherent accounts of past, present and future experiences - is used to achieve organizational renewal. The study of (Zbaracki and Bergen 2010) proposes similar arguments, in which a major price adjustment resulted from highly conflicting dynamics. However, as they point out, "[t]o look at the organization before and after, nothing would seem different" (p.967), if not for the learning and adaptation that this case provided. What they refer as change is close to some cases of project-level changes in our results, in which the resolution of the conflict is the change itself. Despite threatening the stability of the routine, it did not eventually renew it – a sign that the argument of the conflict was the content of the decision, rather then how the decision was taken. An example of such conflict is case #9, in which despite not resolving the underlying issue, Head of R&D returned to a status of truce by stating that system integration between Speaker and TV would not happen. The organizational renewal process that followed after COO implemented the project change is not envisioned in their model. We show in contrast how B&O indeed renewed itself into a different company where new people were hired to complement the functional knowledge of a group of people raised in its

authority (case #9), or the whole routine to develop software implied closing a department to creating a new one with a different approach (case #12).

Mechanisms of routine change

We identified two types of change, the first at the project-level and the second at the organizational-level. As stated by (Rerup and Feldman 2011) organization actors are like "firefighters" as they'll deal first with emerging issues in routines rather then asking wider questions dealing with organizational schemata. Indeed, project-change is the first step in our mechanisms, as no conflict in any NPD project directly demanded attention at the organizational-level. Rather, the process will involve actors that are either directly connected with the NPD project or the routine which is affected by a conflicting situation. Actions will be reactive in the sense that the aim is the resolution of the conflict, "fixing the problem". Change at the organizational level is however aimed at both solving the issue at the project level if still possible, but especially at "preventing the problem". This type of activity is of more proactive nature than that at the project-level, and implies organizational actors to raise their attention and reflecting on the original causes of the conflict.

While the changes in resources can be resolved within the established routine with little adjustments as in Danneels (2002), changes in the routine components implies the redesign of its ostensive aspects, achieving so a "routine renewal". Routine renewal encompasses changing the activities necessary to complete what is still understood as the same routine with the purpose of long-term benefit, together with who performs such altered routines. As opposed to Zbaracki and Bergen (2010), in which we did not perceive such type of renewal, we find alignment with the work on Alessi by Salvato (2009), where he shows how the recombination of successful past activities experiments in NPD - leads to new forms of organizational routines. Our conflict-induced routine renewal however does not preclude entirely new routine components and the integration of new organizational actors as prevention to the conflict's emergence in the first place. The cases in which routine renewal diverged the most are those in which the old organizational schemata was challenged by new courses of actions and a new schemata emerged. Examples are #9 and #12, where the changes represent a step towards an organization driven by system and software thinking as opposed to a product-portfolio and hardware one. Schemata are thus changed through the bottom-up enactment of routines that challenged them in the first place (Rerup and Feldman 2011).

3.4 Conclusion

Through our study we show how the common assumption of the detrimental effects of conflict in the renewal process of a company might be misplaced (Vuori and Huy 2015). The dynamics of conflicts in the NPD process are not necessarily beneficial per se, rather as the trigger of subsequent

mechanisms that have the potential to renew the company at the organizational-level. Through the enactment of routines, organizational actors clash because of different authority statuses, bundles of functional knowledge and emotive responses. The characteristics of the NPD process in a company pressured to change enhance the variation-selection-retention process, so that conflicting dynamics become generative power of alternative courses of actions to renew the organizational routines.

3.5 References

- Agarwal, R. and C. E. Helfat (2009). "Strategic Renewal of Organizations." Organization Science 20(2): 281-293.
- Albert, D., M. Kreutzer and C. Lechner (2015). "Resolving the paradox of interdependency and strategic renewal in activity systems."

 Academy of Management Review 40(2): 210-234.
- Amason, A. C. (1996). "Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams." <u>Academy of management journal</u> **39**(1): 123-148.
- Austin, R. D. and D. Beyersdorfer (2007). "Bang & Olufsen: Design Driven Innovation." Harvard Business School Case Study 9-607-016.
- Burgelman, R. A. (1983). "A model of the interaction of strategic behavior, corporate context, and the concept of strategy." Academy of management Review 8(1): 61-70.
- Burgelman, R. A. (1983). "A Process Model of Internal Corporate Venturing in the Diversified Major Firm." <u>Administrative Science Quarterly</u> **28**(2): 223-244.
- Burgelman, R. A. (1991). "Intraorganizational Ecology of Strategy Making and Organizational Adaptation: Theory and Field Research." Organization Science 2(3): 239-262.
- Burgelman, R. A. (1994). "Fading Memories a Process Theory of Strategic Business Exit in Dynamic Environments." <u>Administrative Science</u> Quarterly **39**(1): 24-56.
- Cohen, W. M. and D. A. Levinthal (1990). "Absorptive-Capacity a New Perspective on Learning and Innovation." <u>Administrative Science Quarterly</u> **35**(1): 128-152.
- Crossan, M. M., C. C. Maurer and A. Miner (2015). Micro-Foundations of Strategic Renewal.
- Czarniawska, B. (2004). "On time, space, and action nets." Organization 11(6): 773-791.
- Danneels, E. (2002). "The dynamics of product innovation and firm competences." Strategic Management Journal 23(12): 1095-1121.
- Danneels, E. (2011). "TRYÍNG TO BECOME A DIFFERENT TYPE OF COMPANY: DYNAMIC CAPABILITY AT SMITH CORONA." Strategic Management Journal 32(1): 1-31.
- De Dreu, C. K. (2006). "When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams." Journal of Management 32(1): 83-107.
- Dougherty, D. (1992). "A Practice-Centered Model of Organizational Renewal through Product Innovation." <u>Strategic Management Journal</u> 13: 77-92
- Eisenhardt, K. M. (1989). "Building Theories from Case-Study Research." Academy of Management Review 14(4): 532-550.
- Feldman, M. S. and B. T. Pentland (2003). "Reconceptualizing organizational routines as a source of flexibility and change." <u>Administrative</u> science quarterly **48**(1): 94-118.
- Felin, T., N. J. Foss and R. E. Ployhart (2015). "The microfoundations movement in strategy and organization theory." <u>The Academy of Management Annals 9(1): 575-632</u>.
- Floyd, S. W. and P. J. Lane (2000). "Strategizing throughout the organization: Managing role conflict in strategic renewal." Academy of Management Review 25(1): 154-177.
- Garud, R., P. Tuertscher and A. H. Van De Ven (2013). "Perspectives on Innovation Processes." Academy of Management Annals 7(1): 775-
- Gibbert, M. and W. Ruigrok (2010). "The" what" and" how" of case study rigor: Three strategies based on published research." Organizational Research Methods.
- Glaser, L., S. L. Fourné and T. Elfring (2015). "Achieving strategic renewal: the multi-level influences of top and middle managers' boundary-spanning." Small Business Economics: 1-23.
- Hacklin, F., C. Marxt and F. Fahrni (2010). "An evolutionary perspective on convergence: inducing a stage model of inter-industry innovation." International Journal of Technology Management 49(1-3): 220-249.
- Kaplan, S. and W. J. Orlikowski (2013). "Temporal Work in Strategy Making." Organization Science 24(4): 965-995.
- Nelson, R. R. and S. G. Winter (1982). << An> evolutionary theory of economic change. Cambridge etc., Belknap Press of Harvard University Press.
- Rahim, M. A. (1992). Managing conflict in organizations. <u>Construction Conflict Management and Resolution</u>. P. Fenn and R. Gameson. London, E & FN Spon.
- Rerup, C. and M. S. Feldman (2011). "ROUTINES AS A SOURCE OF CHANGE IN ORGANIZATIONAL SCHEMATA: THE ROLE OF TRIAL-AND-ERROR LEARNING." Academy of Management Journal 54(3): 577-610.
- Rothaermel, F. T. and A. M. Hess (2007). "Building dynamic capabilities: Innovation driven by individual-, firm-, and network-level effects."

 Organization Science 18(6): 898-921.
- Salvato, C. (2009). "Capabilities Unveiled: The Role of Ordinary Activities in the Evolution of Product Development Processes." Organization Science 20(2): 384-409.
- Siggelkow, N. (2007). "Persuasion with case studies." Academy of Management Journal 50(1): 20-24.
- Tripsas, M. and G. Gavetti (2000). "Capabilities, cognition, and inertia: Evidence from digital imaging." Strategic Management Journal 21(10-11): 1147-1161.
- Turner, S. F. and V. Rindova (2012). "A balancing act: How organizations pursue consistency in routine functioning in the face of ongoing change." Organization Science 23(1): 24-46.
- Van Maanen, J. (1988). Tales of the field: on writing ethnography. Chicago, University of Chicago Press.
- Vuori, T. O. and Q. N. Huy (2015). "Distributed Attention and Shared Emotions in the Innovation Process: How Nokia Lost the Smartphone Battle." Administrative Science Quarterly.
- Yin, R. K. (1984). Case study research design and methods. Beverly Hills, Calif. etc., Sage.
- Zahra, S. A. and G. George (2002). "Absorptive capacity: A review, reconceptualization, and extension." Academy of Management Review 27(2): 185-203.
- Zbaracki, M. J. and M. Bergen (2010). "When truces collapse: A longitudinal study of price-adjustment routines." Organization Science 21(5): 955-972.

 Table 1 - Interview report

Managerial level	Organization	Position	Specific role for NPD project	Number of interviews
Top management	•			
		CEO		1x
		C00		2x
	R&D	Head of R&D		1x
	Product mgmt.	Head of Product mgmt.		2x
	Creative	Head of Creative		1x
			Total	7
Middle managemer		I C + M P		1
	R&D R&D	Category Manager Procurement		1x
	R&D R&D	Head of System and Cloud Architecture Head of Research		1x 2x
	R&D	Purchasing manager	-	2x 1x
	R&D R&D	Senior Project Development Manager	Tools along I and for Andia (late)	1x
	R&D	Senior Manager Design and Technology	Technology Lead for Audio (late)	
	R&D	Senior Manager Design and Technology Senior Manager Screens & Displays		1x 1x
	R&D	Senior Manager Screens & Displays Senior Manager R&D #1	Tashnalagy Land for Spanker	2x
	R&D R&D	Senior Manager R&D #1 Senior Manager R&D #2	Technology Lead for Speaker Technology Lead for TV	2x 1x
	R&D	Senior Manager R&D #2 Senior Manager System Engineering	reciniology Lead for 1 v	5x
	K&D	Semoi Manager System Engineering	Total	16
	1		Total	10
	Product mgmt.	Directors, Category Audio	Business Lead for Audio	1x
	Product mgmt.	Director, Category Speaker	Business Lead for Speaker	1x
	Product mgmt.	Global Product manager	Technology Lead for Audio (early)	2x
	Product mgmt.	Head of Program Management Office	reemieregy Beau for Fluide (early)	2x
	Product mgmt.	Senior Manager Custom Installations		1x
	,		Total	7
	Creative	Concept developer	Creative Lead for TV	1x
	Creative	Director, Global Consumer Marketing	Cicative Lead for 1 v	1x
	Creative	Senior Manager, Sound Concept	Creative Lead for Speaker	2x
	Creative	Senior Manager, UX Concept	Creative Lead for Audio	2x
	Creative	Senior Scoping Manager	Cicative Lead for Addio	4x
	Creative	Senior Manager, Brand & Consumer Insights		1x
	Ciculive	Semoi Manager, Branc & Consumer misignes	Total	11
Operative manager	nent	I	- 000	
- 1	R&D	Corporate Patent manager		1x
	R&D	Technology Specialist #1		4x
	R&D	Technology Specialist #2		1x
	R&D	Technology Specialist #3		1x
	R&D	Tonmeister		2x
			Total	9
	Product mgmt.	Senior Marketing Project Manager		1x
	Product mgmt.	Product manager	Business Lead for TV	1x
			Total	2
	Creative	PR & Event Consultant		1x
	Creative	UX Specialist		1x
		- F	Total	2
			Total of interviews	55

Table 2 - Instances of conflict in NPD, Project-level and Organization-level changes in routines and resources

	Project	Who vs. who	Conflict	Outcome	Project-level change in routines & resources	Organization-level change in routines & resources
#1	Audio	NPD Team Vs. R&D organization	NPD team involves Tech Specialist (1) for support in the product's architecture, and by so doing it is re-introduced in the company's development process and causes mistrust and lack of support as it originated outside of it	Never resolved, and the product is developed amidst an unsupportive environment, especially from R&D	-	-
#2	Audio	NPD's Tech Lead (individual)	NPD's Tech Lead, first time in this role, struggles to balance his NPD team affiliation – where he is drawn into the concept's pureness and drive by the NPD's Creative Lead, and his R&D's affiliation – where the Head of R&D opposes its development by low and reactive commitment	Never resolved, and the tension will be part of NPD's Tech Lead for the whole NPD process	-	-
#3	Audio	NPD's Team Vs. Top Mgmt.	When asking for extensions in time & budget, NPD Team often masks real issues with overconfidence, while top mgmt. is fed with partial information from within.	Never resolved, lack of awareness of underlying issues results in "technology debt", i.e. granted resources are never enough and new ones will be requested.	-	-
#4	TV	Head of Product Mgmt. and R&D Vs. R&D organization	Top mgmt. decides that UHD technology should be used instead of HD as the project had been developing so far. R&D organization is upset and feel mistreated, as previous weeks of work would become worthless	After the CEO has been contacted to report such mistreatment from the representative of employees, NPD's Tech Lead motivates people again to work on the new technology, but no routine or resource is changed in the process.	-	-
#5	Speaker	Acoustics engineers Vs. NPT Business Lead	Acoustics engineers are given more legitimacy for the tech-first speaker and debate with product manager in charge of developing the first product brief	Idea clash results in a document that integrate the perspectives of both parties	The product briefs is approved and the project starts by involving acoustics engineers in the development much earlier on as compared to the standard approach	-
#6	Speaker	NPD's Creative Lead (individual)	Having decided for a design competition for the next company's icon, the NPD's Creative Lead is forced to decide between the long- standing partner designer house and a new one	By leaving aside personal and emotive factors and focusing on the professional assessment of the design, the new design house's design is chosen	The new iconic speaker will be developed with a new designer house instead of the one that had developed most of the product icons so far	-
#7	Speaker	Top mgmt. Vs. Acoustics Engineers & NPD team	Top mgmt. believes the product development is exceeding the envisioned investment while under-delivering in the promises about technological advancements from the acoustics engineers	The product development is stopped, causing a wave of disappointment and frustration among the people involved in the NPD	The newly appointed Head of Product Management believes in the product potential and restart it by increasing the control while at the same asking to push the boundaries of technology	-

#8	Speaker	NPD's Tech Lead Vs. Head of Product Development	As Procurement decided for a "make" rather than a "buy", NPD's Tech Lead showed how producing in the old factory in Denmark would be more efficient and cheaper than in the current plant in Czech republic. His boss takes this as a "joke", as the general manufacturing relocation is part of a larger strategy.	NPD's Tech Lead is given clearance by the Head of Product Development to initiate the production in Struer's former facilities as he proved the validity of his case	Production is initiated in Struer, as most of the product pieces are sourced within 100km of Denmark's facilities and the complex technological specifics make the frequent interaction of Struer-based engineers required.	
#9	Speaker & TV	System engineers Vs. NPD Teams and Head of R&D	System engineers are concerned that the proper integration of the two products is being neglected to ensure the promised system offering, but lack the mandate to enforce any decision. NPD teams of respective products also lack the mandate for the other product, and are less concerned as they envision different customers. Head of R&D does not intend to add additional complexities to the two projects, and decides to not act on it. It's a lock-in situation.	Not resolved initially. Lock-in situation as the Head of R&D, the only one with mandate across product categories does not want to add complexities to TV, running behind schedule for launch already.	System engineers voice their concerns to the newly appointed COO, who recognizes the value of a system offering. By influencing the whole top mgmt., which envisioned a more system-oriented customer, also agreed to add proper system integration despite the additional delay and costs.	To prevent similar situation, the COO creates the position of NPD System Lead for future NPD projects so to bridge across product categories, with the people who first expressed their concerns and a newly appointed Head of System Architecture reporting directly to the COO
#10	Audio	System engineers Vs. NPD's Technical Lead	System engineers create a tool to evaluate the maturity of project's elements, developed without a proper assessment of its feasibility. NPD Team sees this as an intrusion without a mandate, but the Head of R&D forces – who listened to the concerns - forces the removal of such immature elements. Later on, the newly appointed NPD's Tech Lead refuses to do so	NPD's Tech Lead resists the pressures of the Head of R&D, (over)confident in the NPD's Team capability to fix the issue. They will however not be resolved, and will stay immature throughout most of the development.	-	To prevent similar situation, the COO creates the position of NPD System Lead for future NPD projects so to bridge concept development and product architecture, with the people who first expressed their concerns and a newly appointed Head of System Architecture reporting directly to the COO
#11	Audio	NPD's Creative Lead Vs. Classification Committee	The project is assessed by the Classification Committee with several errors, many of which are "ridiculous" in the eyes of NPD's Creative Lead, who also believes the current status of the Committee is not of the highest standard	Through various interactions, some of the errors are re-assessed, or reworked on the project's side	-	Following the creation of his own UX development group, NPD's Creative Lead suggests to the Head of the Classification Committee to replace one member soon to retire with one of his own members, plus one from the Software department, so to represent two ends of a functional dialogue
#12	Audio	NPD's Creative Lead & Head of Creative Centre Vs. Head of R&D and SW organization	NPD's Creative Lead believes a different external company in the UK can provide a higher quality and swifter software development than the long-standing partner in India, preferred by the Head of R&D and his Software organization for its size and costs. With the help of the Head of Creative Centre, they try to sneak in the UK company through procurement, but by so acting the anger the Head of R&D who threatens to withdraw all of his resources from the project.	NPD's Creative Lead and the Head of Creative Centre agree to the claims of Head of R&D that it is not their mandate to select the software development partner, and reluctantly agree to collaborate with the partners in India. The achieved quality will be sub-optimal, and the product will be released with software related flaws.	-	Recognizing the flaws of such approach and outcome, the newly appointed COO redefines how software is developed internally by closing the principal software organization, establishing a new and smaller group headed by a newly appointed person with experience in a more agile software development