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Using Needs Assessment as a Learning Tool in the Product Development Process: A Case Study of a Quick Service Restaurant

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Abstract

Purpose – The purpose of this case study was three-fold. First, to examine whether a needs assessment can work in the context of an organization's new product development process to identify the gap between what "is" occurring and what "should" be occurring. Second, to investigate how a well-known stakeholder classification system can be adopted in a practitioner setting. Third, to identify why the new product development process derailed in a quick service restaurant chain.

Design/methodology/approach - A Fortune 200 quick service restaurant chain provided the setting for a case study on the new product development (NPD) process. Data were gathered from multiple stakeholder groups using interviews and a survey questionnaire.

Findings – Findings support the adaptability of needs assessment as a learning tool to help organizations identify and address performance gaps. A second finding was the applicability of the Mitchell et al. (1997) classification system to identify and prioritize groups of stakeholders. Finally, this study revealed that the specific activities involved in the new product development process were not codified, and that the restaurant chains cross-functional team was not adhering to the process due to a lack of training.

Research limitations/implications – The specific setting may limit the generalizability of findings. Future research could determine the applicability in other settings.

Practical implications - This study provides useful insights for applying needs assessments in conjunction with a stakeholder analysis when problems arise in the product development process.

Originality/value – The study contributes to understanding around product development learning tools and provides impetus for the adoption of needs assessments and stakeholder analysis when deficiencies in the process occur.

Keywords: New Product Development, Organizational Development, Stakeholder Analysis; Franchising, Product Development, Workplace Learning

Paper type: Case Study

Introduction

Today's marketplace can be seen as a battleground as businesses continually fight for a share of the market in an increasingly competitive environment. A key weapon in the battle for

growing market share is the introduction of new products designed to accelerate consumers purchasing behavior. Having a strong arsenal of new products can bolster a company's competitive advantage and improve the odds for long-term success in the market (Sawney et al., 2006). In the quick service restaurant sector, the ultimate objective is profitable sales growth within existing stores, usually generated by new products that can be executed with minimal disruption to store-level operations (Yohn, 2012).

Due to the unpredictable and ambiguous nature of new product development (NPD), organizations struggle to find mechanisms that help channel innovation in a manner that meets customer needs (Agouridas et al., 2007; Bonaccorsi and Lipparini, 1994; McDonough and Leifer, 1986; Sarin and McDermott, 2003). A high percentage of research and development (R&D) projects never result in an actual commercialized product (Schilling and Hill, 1998), while failure rates after launch are in the 40% range (Castellion and Markham, 2012), with innovation-driven industries experiencing failure rates at the 80% watermark (Urbig et al., 2013).

Given the risky nature of new product development, a good deal of the literature has focused on how to optimize the process associated with new product development (Nystrom and Poon-asawasombat, 2003; Cooper, 1999; Lynn et al., 1999; Cooper and Kleinschmidt, 1995; McDonough and Leifer, 1986). New product development in an organization typically involves cross-functional teams, comprised of individuals from different functional departments, who work together to create new products or add new elements to existing products (Ernst, Hoyer, and Rubsaamen, 2010; Ulrich and Eppinger, 1995). While some research has explored how NPD teams learn (Lynn et al., 1999; Meyers and Wilemon, 1989; McKee, 1992; Sarin and McDermott, 2003), none of these studies have investigated a *needs assessment* as a learning tool that can be adopted to identify the root cause of issues that derail the process. Therefore, there is a need for exploratory research to determine if this process can be effective in the context of new product development. This case study has three aim: First, to examine whether a needs assessment can work within the context of new product development as a learning tool which identifies the gap between what "is" occurring within the NPD process and what "should" be occurring. Second, to investigate how a well-known stakeholder classification system from the literature can be adopted in a practitioner setting. Third, to identify the root cause for why a quick service restaurant's new product development process faltered in one of the brand's restaurant chains.

This paper begins with an overview of new product development literature. The needs assessment process is then reviewed in terms of an organization's new product development process. Next, stakeholder theory is introduced and application of a specific stakeholder classification system is outlined. We follow with our methods section, then results, discussion and finally, our conclusions.

Literature Review

Targeting Success in the New Product Development Process

Research on new product development has taken multiple paths. Studies have found that the mere existence of a new product development process correlates with higher success rates on project outcomes (Cooper, 1999; Crawford, 1984). The process is compared to a "roadmap" or "blueprint," designed to help organizations identify the activities that must occur around the conceptualization, commercialization and launch of new products (Cooper, 1999). Different new product development processes are adopted by different industries. Among the various processes

used in new product development, the *stage-gate process* has been widely adopted by multiple industry sectors (Loch, 2000; Cooper and Kleinschmidt, 1995). The activities associated with typical stage-gate processes, include (1) idea generation, (2) screening and evaluation, (3) development, (4) testing, and (5) launch (Cooper, 1999; Lynn et al., 1999; Schilling and Hill, 1998).

Beyond the literature that focuses on the new product development process itself, studies on innovation and new product development have also investigated how an organization's strategy toward innovation can impact success or failure rates for new products (Kocher et al., 2011; Schilling and Hill, 1998). Still other research has focused on whether organizational culture (McDonough and Leifer, 1986), collaboration efforts (Holger et al., 2010; Bonaccorsi and Lipparini, 1994); or the use of cross-functional teams (Olson et al., 1995) impacts new product success rates. Based on the research conducted on new product development, numerous companies have either instituted or reengineered their NPD approach in an attempt to build a process that mimics "best practices" highlighted in the literature (Kahn et al., 2012; Cooper and Kleinschmidt, 1995). Our study builds on prior research by exploring whether a specific tool, a needs assessment, can serve as an appropriate intervention when there is a gap in NPD performance.

The Need for Needs Assessment in New Product Development

The need for employees, as well as other stakeholders, to understand and embrace the systems and processes an organization uses to create new products is important if a company focuses on innovation as a strategic priority (Cooper, 1998). Because of the number of stages involved in new product development, as well as different orientations that cross functional-teams have with respect to collaboration, there are multiple opportunities for the stage-gate process to derail. Employees involved in new product development that lack understanding or commitment to the innovation process may intentionally, or inadvertently create bottlenecks, which can reduce the speed that products are brought to market. In addition, if the new product development pipeline stalls or products fail, those employees involved in the process may be perceived as ineffective and their own sense of accomplishment undermined.

Discovering the issues and creating solutions to correct misalignment is an organization development (OD) opportunity. One practice used in OD to identify the root cause of problems is the "needs assessment" technique. A needs assessment is a learning tool used by OD professionals to help understand where discrepancy exists, the causes that are surrounding the issue, and the solutions for future action (Robinson and Robinson, 2008; Gupta et al., 2007; Witkin and Altschuld, 1995). Witkin and Altschuld (1995) provide a three phase model, which includes: (a) *pre-assessment*, whereby the assessor and client determine what is known and design the assessment in the context of the political environment; (b) *assessment*, during which data is collected and interpreted; and (c) *post-assessment*, when priorities are established, solutions evaluated, and results communicated.

Our approach to the case study of a quick service restaurant chains' new product development process embraces the Witkin and Altschuld (1995) needs assessment technique. Because a successful needs assessment relies on participation from a broad-based group of stakeholders, we offer an examination of stakeholder literature to understand how to identify stakeholders who may need to be part of a needs assessment study.

Stakeholder Identification

The term “stakeholder” took root in 1984 with Freeman’s seminal work, *Strategic Management: A Stakeholder Approach*. Originally, Freeman identified two types of stakeholders: primary stakeholders, who have an authorized, contractual relationship with the firm, and secondary stakeholders, who represent any group that is not included in the primary stakeholder list (Freeman, 1984). Over the last quarter century, Freeman’s simple classification scheme has been expanded by theorists who have attempted to provide greater precision of categorization, as well as to offer theories about how to manage the different levels of stakeholder groups.

A major contribution to stakeholder typologies was offered by Mitchell et al., (1997). These scholars developed a framework that classified stakeholders based on specific situations in order for managers to predict how stakeholders in different classes might respond under different conditions. The benefit of this model is that firms can create tools ahead of time to deal effectively with various stakeholder situations, or they can use this model to categorize and prioritize stakeholder groups when issues arise.

The premise of the Mitchell et al., (1997) typology is based on the analysis of stakeholders’ possession of three attributes: power, legitimacy and urgency. These scholars view power as a critical element in the stakeholder relationship. This model maintains that stakeholders, as an entity, must be aware of and willing to exercise their power on the firm. These theorists go on to suggest that in addition to power, stakeholders must have legitimacy, which exists independently of power. Powerful stakeholders may not have legitimacy, and, conversely, legitimate stakeholders may not be powerful. The third variable that impacts how a group becomes classified is urgency. Claims that are considered urgent by the firm, or claims that are time sensitive, can elevate the importance of a stakeholder group. The presence or absence of these three attributes allows management to categorize and then prioritize stakeholders. The model offers six stakeholder groupings: *Definitive*, *Dependent*, *Discretionary*, *Dominant*, *Demanding*, *Dangerous*, and *Dormant*. Figure 1 denotes how the three attributes are used to classify each stakeholder group, with *Definitive* stakeholders considered the most salient to management since they possess all three attributes of power, legitimacy and urgency.

Mitchell et al. (1997)			
Classification	Power	Legitimacy	Urgency
Definitive	✓	✓	✓
Dominant	✓	✓	
Dependent		✓	✓
Dangerous	✓		✓
Demanding			✓
Discretionary		✓	
Dormant	✓		

Figure 1. Classification of stakeholders based on attributes of power, legitimacy and urgency.

Using the Mitchell et al., (1997) stakeholder typology, groups shift into or out of different classifications based on specific situations where power, legitimacy or urgency are gained or

lost. With respect to organizational processes, this would suggest that there would be different stakeholder classifications for the new product development process, versus other business operations. These stakeholders may include the cross-functional team members, the supervisors of the various departments, human resources, suppliers who participate in the process, as well as business partners impacted by the success or failure of new products. In any organizational analysis, however, having too many or too few stakeholder groups becomes problematic (Nystrom and Poon-asawasombat, 2003). While stakeholder examination is recommended in the execution of a needs assessment (Robinson and Robinson, 2008; Witkin and Altschuld, 1995), no literature was located that demonstrated how a specific stakeholder classification system could be adopted for a needs assessment of a new product development stage-gate process.

This exploratory study was focused on the following questions:

Q1. How can a needs assessment identify the gap between what “is” occurring within the NPD process and what “should” be occurring?

Q2. How can a stakeholder classification system from the literature be applied to an assessment of a stage-gate process?

Q3. What is the root cause for why a quick service restaurant’s product development process faltered?

The first two questions offer data on the execution and application of the needs assessment process. This information can contribute to more robust organizational learning that may result in greater efficiencies in product development or other innovation arenas. The third question focuses specifically on the case at hand, which will be detailed in the next section.

Methodology

This study uses a case study research design. Case studies are well accepted in new product development literature and have been employed when strategic alliances with suppliers are explored (Bonaccorsi and Lipparini, 1994), when impact of culture on the NPD process is the focus (McDonough and Leifer, 1986), as well as when team learning is the subject matter (Lynn et al., 1999). Miles and Huberman (1994) suggest a case may be a process that occurs over a period of time, while the site is the physical setting.

Participants and Setting

Data from this study comes from the Grillerz Restaurant chain (pseudonym). Grillerz Restaurants is one of the brands owned by Iconic Brands (pseudonym), a Fortune 200 company. Because the Grillerz Restaurant chain’s stage-gate process was experiencing a gap in performance, this process provided an ideal opportunity to test the impact of a needs assessment learning tool. Furthermore, since the parent corporation, Iconic Brands, had successfully used a stage-gate new product development process since 2003, there was some knowledge that the stage-gate process did work.

Because Grillerz franchisees had expressed concern that the stage-gate process was not working for their chain, management initially suggested that the franchisees simply needed to be educated about the stage-gate process. One of the author’s of this research, who worked for Iconic Brands, suggested the organization engage in a needs assessment to determine whether the problem was franchisee perception, or whether something else might be creating a performance gap. The lead author of this study served as the needs assessor. The scope of the needs assessment focused on:

- Understanding franchisee board member concerns with respect to new product

development.

- Analyzing team members' perceptions about the stage-gate process.
- Understanding the critical tools used by sister brands that execute the stage-gate model.
- Providing a recommendation to address any gap detected in the process.

Prior to engaging in the needs assessment, the executive responsible for the new product development process, in conjunction with the needs assessor, used Mitchell et al.'s (1997) stakeholder classification model to determine relevant stakeholder groups. The Grillerz Franchise Association Board was identified as a *Dominant* stakeholder because it possessed both a level of power and legitimacy. In situations with *Dominant* stakeholders, there is usually a formal mechanism in place that recognizes the importance of this group. Mitchell et al. (1997) suggests corporate boards of directors are examples of such groups. The Grillerz Restaurant's Franchise Association Board, however, could shift from a *Dominant* stakeholder to a *Definitive* stakeholder if the board felt its input on new products was being ignored and it opted to escalate those concerns to the parent company.

Using Mitchell et al.'s classification schemata, the client and needs assessor also determined that the internal NPD team should be classified as *Definitive* stakeholders. It was recognized that the 15 internal cross-function team members had power, legitimacy and urgency. The power of the internal team rested on their willingness to work together in order to efficiently and effectively employ the stage-gate process. Their legitimacy was evidenced by their role as team members in the process. The group also had urgency for without their understanding and advocacy the stage-gate process would continue to be sub-optimized and the franchise association boards' confidence would likely continue to deteriorate. While other stakeholder groups were identified, the franchisee board and the internal team carried the most weight.

Data Collection Instruments

A variety of methodological combinations helps illuminate inquiry questions (Patton, 2002; Creswell, 2008). The study involved three stages, *pre-assessment*; *assessment*; and *post-assessment* (Witkin and Altschuld, 1995), and used both qualitative and quantitative data collection methods.

Historical Records Review

A records review was conducted on Iconic Brands' knowledge management data repository. Since organizations typically produce massive amounts of files and reports, document searches and analysis can offer information about how processes came into being, as well as stimulate ideas for inquiry (Patton, 2002). Iconic Brands' information repository uses a social media interface to house documents, as well as conversations about specific subjects. A database search of the following words was conducted during the repository search: pipeline, stage-gate, and new products. The goal was to identify materials that delineated the stage-gate process, as well as possible data on new product track records.

Interviews

In the *pre-assessment stage*, semi-structured interviews were conducted with a range of stakeholders: one interview with the corporate employee responsible for the creation of the stage-gate process; one interview with the corporate employee accountable for Grillerz new product development; four interviews with Grillerz franchisees who served on the Franchise

Advisory Board. These individuals served as key informants and as Patton (2002) notes, were chosen based on the assumption their perspectives would provide meaningful information on the process. In the case of the interview with the executive responsible for the stage-gate process, the questions focused on what elements the process included in each stage, and perceptions on what elements were essential and which could be omitted. The interview was conducted via telephone and lasted 35 minutes. The questions for the director of Grillerz new product development focused on how the process was executed at Grillerz, what if any steps in the process were skipped and why. The interview was conducted in-person and lasted for one hour. All four of the franchisee respondents were interviewed by telephone and were initially asked: "How do you think the new product development process is working at Grillerz?" and "What parts of the process are you most familiar with?" The franchisee interviews varied in length from 30 minutes to an hour depending on how much information the respondents wanted to share.

During the *assessment* phase of the study, 10 executives involved in new product development were interviewed either by telephone or email. Email was chosen for those respondents who were located in countries with different time zones. The criteria for interviewee selection was based on the executive's role in new product development and only countries known for successful new product launches (i.e., UK, Australia, India, China, Canada, South Africa, Germany, Mexico) were selected. Since this was a benchmarking exploration, questions for all respondents were the same and contextualized by stage of the new product development process. For example, in the first stage of the process respondents were asked, "What are the essential tools used during this stage," "What obstacles occur in this stage and what methods do you use to overcome these obstacles?"

Survey

Cross-functional team member perceptions regarding the Grillerz stage-gate process were measured using a multi-item instrument developed for this study. Team members' knowledge of the stage-gate process was measured by a question asking them to assess their own level of understanding of the process using a five-point Likert type scale. Team members were also asked to assess how effective Grillerz had been in executing the stage-gate process on a five point Likert scale ranging from not very effective to very effective. We also wanted to understand if team members were using the tools identified as relevant to the stage-gate process. Items measuring specific usage of tools included, for example, "*How often does Grillerz utilize sensory taste tests,*" and "*How often does Grillerz utilize consumer surveys to evaluate ideas?*" The 5-point response options ranged from 1 = never to 5 = every time. The last question was open-ended, to allow for team member suggestions on how Grillerz could improve the execution of the stage-gate process.

Data Analysis Procedure

Historical records

Only two documents were located within the knowledge repository of Iconic Brands. A content analysis was conducted to extract specific elements of the stage-gate process that would be included in the survey.

Interview data

Interviews with respondents were audio-taped, transcribed and read in-depth to identify key themes. A comparative analysis (Miles and Huberman, 1994) was conducted between the interviews with the creator of the stage-gate process and with the director of new product

development to determine how the Grillerz stage-gate process was being executed compared to the recommended model. A checklist matrix was used with the four franchisee interviews to delineate and compare their perceptions regarding the product development process (Miles and Huberman, 1995).

The analysis of the 10 benchmarking interviews were also analyzed in-depth and involved using a set of a priori codes (Miles and Huberman, 1994) developed based on the research questions, and knowledge about specific activities that are expected to occur in the stage-gate process. Once coded, the data was entered into a thematic matrix comprised of each stage. Clusters were then identified to define activities occurring in each stage, as well as potential problems the new product developers experienced in those stages.

Survey Data

The response rate for the survey was 100%. Due to the goal for team members to be assured confidentiality, there were no identifiers to track results by department. Descriptive statistics were conducted to assess the team member perceptions of the product development process. To analyze the one open-ended question on what could improve the stage-gate process, a counting process was used to discover themes.

Results

The *pre-assessment* stage is presented first and was conducted to gather preliminary data, which helped guide the needs assessment process. Next, the *assessment* phase results are detailed, revealing both a macro understanding of Iconic Brands' stage-gate process and a micro view of what was occurring within the Grillerz cross-functional new product development team. Finally, the *post-assessment* stage is detailed, whereby ideas were formulated to address the gap.

Pre-assessment Phase

An archival search on Iconic Brands' knowledge repository confirmed that no single document delineated required activities to follow in each stage of the new product development process. Only two documents detailing the stage-gate process were posted on the repository. Because Iconic Brands' document repository was still relatively new, the lack of documents detailing the stage-gate process was not unexpected.

An interview with the executive who initiated the stage-gate process for Iconic Brands shed light on the history of new product development at Iconic Brands. According to this executive, the stage-gate model had been adopted in 2003 after Iconic Brands' largest restaurant chain suffered multiple new product failures despite strong test market results. Once the formal stages of the stage-gate model were adopted, the executive indicated that chain's success rate on new products dramatically improved. When asked what "required" activities should occur during each stage of the process, the executive indicated that each Iconic restaurant chain needed to have some leeway given budgets would vary based on the chain size.

The marketing director for Grillerz Restaurants was interviewed to gain perspective for how Grillerz executed the stage-gate model. In his position for four years, the marketing director referred to Grillerz's stage-gate process as "light," because a limited budget required a number of activities in each stage to be skipped. He also pointed out that several players on the marketing and food innovation team that executed the stage-gate model were new in their positions.

Semi-structured interviews were also conducted with four of the six Grillerz Restaurant franchisees that served on the board. The goal was to ascertain perceptions of the stage-gate

process and to drill down to uncover specific areas of concern. While the level of support for the process varied, it became clear that the process was not clearly understood by the franchisees and was given little credit in providing adequate measures of validation. One franchisee stated, “I don’t know what the letters they use in the model stand for and I try and ignore it,” while another commented, “I’m not sure there is a process.” In each of the interviews, it became clear that there was a mixed understanding not only about the stages, but what is expected to occur in each stage.

Learning from the *pre-assessment* led to the conclusion that the stage-gate process might or might not be adhering to the appropriate activities in each stage to validate new product ideas. Furthermore, the process had a poor perception among the franchisees on the board. Discussions with the client suggested we continue with the needs assessment in order to understand what were the most effective tools used by other Iconic Brands, and how often the Grillerz Restaurant internal cross-functional team was currently executing the stage-gate model.

Assessment Phase

A total of 10 telephone interviews were conducted with executives in the Iconic system that were involved in the new product pipeline process. Specific ideas emerged for each stage and those themes are outlined in Table 1.

Table 1

Benchmarking Interview Findings: Ideas for New Product Pipeline Process

STAGE	THEMES
DEFINE	
- Key Need	A Clear Business Strategy
- Key Ideas	Universally people suggested a clear business strategy was critical. Tools suggested: Ethnographies; Segmentation Studies; Brand Trackers; Problem Detection Studies; Need State Analyses
- Key Concerns	This step is often skipped.
EXPLORE	
- Key Need	More Cross Functional Participation
- Key Ideas	Bring more cross-functional people into the explore process. Tools: Innovation Briefs; Ideation Sessions; Partnerships w/ key suppliers; concept screeners; data repository; Product Paks Website
- Key Concerns	Problem is over-confidence. <i>"Assuming you have all the answers, you have to get know-how beyond your own."</i>
DEVELOP	
- Key Need	Collaboration was cited most frequently with suggestions such as: <i>"Chefs and suppliers working together" or "a pipeline council that helps identify what moves forward."</i>
- Key Ideas	Tools: Supplier/Develop Briefs; Mind mapping; Qualitative Groups with prototypes; Regional Guidance Tests
- Key Concerns	Lack of clarity and poor communication.

VALIDATE

- **Key Need** Employ Market Tests When Possible
- **Key Ideas** Market tests necessary if budget allows.
Tools: Operations Tests; In-Store Testing; Concept Product Tests; Advertised Test Markets or Test Markets with POP ; Buyer Reaction Studies
- **Key Concerns** Seek correlations to improve predictability.

IMPLEMENT

- **Key Need** Strong Training Programs
- **Key Ideas** Tools: Training Calls; Training Sessions; Review Stage for Marketing Materials
- **Key Concerns** Lack of time: "*Not enough time to ensure flawless execution.*"

MEASURE

- **Key Need** Use Both Sales & Marketing Yardsticks
 - **Key Ideas** Tools: Advertising Awareness Trackers; Buyer Reaction Studies; Franchisee Feedback / Team Member Feedback
 - **Key Concerns** Ensuring buy-in upfront on the criteria for success.
-

The Grillerz Restaurant cross functional new product team consisted of 15 team members whose roles spanned marketing, finance, operations, food commercialization, training, and quality assurance. The survey was designed to identify if team members believed the stage gate process was being followed, was being executed effectively, and whether there was understanding of the process. Only three team members thought Grillerz was following the stage-gate process very often. There was also a sense the process wasn't being executed effectively; about 75% of the team members ranked the execution of the process as "not very effective." With respect to their own knowledge of the process, about 50% of the team members indicated they were only somewhat knowledgeable. In addition, most team members thought the franchisees were even less knowledgeable about the process than they were. Furthermore, only about half of the team members indicated they had been trained on the stage-gate model.

To highlight these issues, Table 2 shows the summary of response means by topic. If the mean is closer to one, it indicates the respondent either considers the frequency of use low, or level of effectiveness low. The mean of 2.53 for frequency that the stage-gate process is followed reflects team members' perception that the process is only followed rarely (2) to sometimes (3). The only tool in the process given fairly strong scores for frequency of use was the operations testing, with a mean of 3.80. The assessment that Grillerz is effectively executing the stage-gate process is low, with a mean of 2.33.

Table 2

Summary of response means

Perceptions of Team Members	Mean
Frequency that stage-gate process is followed	2.53
Frequency stage-gate tools below are used:	
1) Consumer surveys	2.86
2) Consumer focus groups	3.29
3) Consumer taste tests	3.07
4) Operations tests	3.8
Effectiveness in executing the process	2.33
Personal understanding of the process	3.13
Franchisees understanding of the process	1.67

Using an inductive approach to analyzing the open-ended question on what could improve the stage-gate process, the following themes emerged:

- Training of team members.
- Following key activities in the validation stage.
- Focusing on commercialization earlier in the process to reduce the timeline.
- Using a check-off sheet that updates the team on what steps were being used for each product.

Post-Assessment Phase

The lack of franchisee confidence in the Grillerz Restaurant stage-gate process was springing from a deep-rooted issue that we uncovered with the team member survey. How could the franchise board be expected to have confidence in the stage-gate process when the internal team was ambiguous about the process and clearly not convinced they were correctly executing the process? The interviews with other brands in Iconic also suggested that Grillerz Restaurants was using a limited pool of tools available in each stage of the process.

Discussion

This study aimed to assess the usefulness of a needs assessment process to elicit the issue of the gap occurring in the new product development process of a restaurant chain. Many organizations struggle to create and manage the new product pipeline process (Hoyer et al., 2010) and for many industries new products can be one of the key factors driving firm success (Schilling and Hill, 1998). A case study of Rolls Royce product development process demonstrated the importance of a system approach for teams involved in new product development (Agouridas et al., 2008). Our paper extends research on new product development by addressing how an organization can investigate a systemic breakdown in the new product development process using a needs assessment approach. Using a case study the results presented here indicate that a needs assessment process brings a level of rigor to the investigation of where the gap occurs in a process and can help identify the less obvious reasons for breakdowns. This finding was evidenced by the fact that the initial Grillerz management recommendation was to “educate the franchisees,” assuming that the poor results for new product success at Grillerz was due to franchisees not understanding the process. While the study

revealed that the franchisees did not clearly understand the new product process operating at Grillerz, the findings revealed deeper issues that needed to be addressed prior to any educational efforts directed towards the franchisees.

Communicate and Educate the Cross Functional Team

The results of a survey of the corporate cross functional team accountable for new product development revealed that members of this team did not believe the process was being executed and only half of the team had been trained in the stage-gate model. The potential for problems can escalate when team members work across multiple functions, as is often the case with new product development teams (Ernst et al., 2010). The perceptions that the process was not being followed in the case of Grillerz, was evidenced by the low scores the internal team members assigned to the various functions performing specific new product development tasks.

The director of marketing, director of human resources and the needs assessor recommended three immediate action steps, which included: providing research information to the team regularly; training the cross functional team members; and creating a “check-off sheet” that details what validation steps had or would occur for each product. Having a training path for individuals who are hired or shift into the NPD role could eliminate some of systemic issues that Grillerz uncovered.

Best Practices

For the purposes of identifying best and poor practices, 10 interviews with successful new product managers from Iconic Brands were amassed. The results support the practices described by Cooper’s (1999) stage-gate model. While certain best practices were readily recognizable, the poor practices warrant mentioning. The interviewees noted that there is the tendency to become overconfident and skip steps in the process that provide needed metrics. Therefore, what happens is “common practices” take over as time pressures mount. In the case of Grillerz Restaurants, the new product development team had begun to skip steps and the lines became blurred as to what the stage-gate model even included. The impediments to Grillerz NPD process lends support to those found by Kahn et al., (2012) in their study of NPD practitioners in three countries (2012), suggesting there is some consensus of what constitutes “poor practice” in the NPD process.

The creation of a task force was recommended to formalize the Grillerz stage-gate process. The mission of this new task force would be to align on what tools would be used and when these tools would be employed. The task force would include a franchisee from the association board. Having a codified stage-gate process would mean less waste of internal resources. Finally, it would foster confidence internally between the Grillerz Team, which should, in turn, provide more confidence to the franchisees as their role was clarified. Ideally, the entire group would be working in sync and multiple stakeholders engaged.

Limitations

There are limitations to this study that should be recognized and taken into account when evaluating and considering the findings. First, this study was based on one firm and may not be generalizable to other organizations. However, readers can consider the contextual factors presented in this case study in evaluating the transferability of the findings to settings for which they are familiar (Stake, 1995). Second, though our study used multiple methods to investigate the issue, there were limitations in the approaches to triangulation (Yin, 2003). While the

internal team members completed a survey, there was no corresponding interviews or focus group with the team to investigate further. Additionally, due to the number of participants, the survey was designed for gathering basic perceptions and used basic descriptive statistics instead of considering inferential relationships. The qualitative data, based on interviews with franchisees, the executive responsible for the stage-gate model, the marketing director at Grillerz, and the other executives at Iconic Brands involved in new product development also must be used with caution since only one of the researchers conducted the interviews, thereby not providing for investigator triangulation (Yin, 2003).

Conclusions and Implications for Practice and Research

Implications of the findings in this case study are straightforward. First, the use of a needs assessment tool can be used in the context of new product development to identify gaps in the process. While the needs assessment technique has been demonstrated as effective for determining the need for training expatriates about host cultures (Selmer, 2000) this technique has not been proffered in the new product development process. With an estimated 60% of organizations using a *stage-gate process* (Cooper, 1999) it is highly likely that these processes experience performance deficiencies at different times. The needs assessment technique outlined in this paper offers practitioners a framework for identifying the gap between what “is” and what “should be.”

Our second finding is equally important because it demonstrates how an assessment of power, urgency and legitimacy (Mitchell et al., 1997), can be adopted at the onset of an organizational analysis to help delineate different groups of stakeholders. By taking time to analyze the level of power, legitimacy and urgency each stakeholder group possesses, new product development managers can identify what group to address first. In the Grillerz case understanding the perceptions of the *definitive* stakeholder group (the new product cross-functional team) who had power, legitimacy and urgency, was even more important than tackling the franchise advisory group -- the group who initially had the complaints about the new product process. Attempting to influence the perception of the franchisee board, before addressing the root cause of the issue, would have most likely caused more damage to the reputation of the stage-gate process used by Iconic Brands.

Finally, our third finding illuminated the root cause of Grillerz’s Restaurant new product development process derailment. The Grillerz cross-functional new product development team members lacked clear understanding and alignment around the stage-gate process. Given the results of the assessment it was clear that the internal team was not equipped to make informed decisions because many team members were not trained on the process. Furthermore, the process required some institutional codification to ensure specific activities were not skipped during key stages. The initial thought that franchisees’ lack of knowledge about the new product process was causing dissatisfaction was only a symptom of the problem, and not the actual gap that needed to be addressed.

While this study does not suggest needs assessment is a panacea to improve the new product development process, the work can stimulate discussion for how needs assessments can be used in a variety of contexts. Future studies could provide additional case examples for practitioners to embrace. Additionally, since the NPD process suggests that product innovation is a learnable activity other studies could quantitatively assess what types of learning skills are needed in different organizational contexts. Furthermore, as more organizations embrace external

constituents in the NPD process, future studies could quantitatively assess the impact of involving different stakeholders in the NPD process.

Despite the specificity of the nature of this case study, this research reinforces that OD professionals and cross-functional leaders need to step back and search for the root cause of issues before determining solutions. Needs assessment is a practical learning tool that can be used to identify, analyze and establish criteria to solve underlying problems that arise with programs, practices or policies. Using needs assessment as a learning tool we can help improve organizational systems, as well as help individuals be more successful in their positions.

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