# Master's Thesis

## When Rational Analysis Doesn't Apply – Finding a path to continuous improvement in the uncertainty of hits-driven business

Gord Dimitrieff

BERLIN SCHOOL OF CREATIVE LEADERSHIP

# Master's Thesis

## When Rational Analysis Doesn't Apply – Finding a path to continuous improvement in the uncertainty of hits-driven business

Gord Dimitrieff

Master of Business Administration
Creative Leadership
Class of 2014-2016

1. Supervising Tutor: Prof. Dr. Shamus Khan

2. Supervising Tutor: Prof. Dr. David Slocum

Editing Time:

BERLIN SCHOOL OF CREATIVE LEADERSHIP

**Statement of Authorship:**

This dissertation is the result of my own work. Material from the published or unpublished work of others, which is referred to in the dissertation, is credited to the author in the text.

Berlin, Gord Dimitrieff

# Table of Contents

# List of Illustrations

# List of Tables

# Abbreviations

| | |
|---|---|
| A&R | Artists and Repertoire |
| AE6 | U.S. Army Experiment 6 |
| AIM | Association for Independent Music |
| ARI | U.S. Army Research Institute |
| CIMA | Canadian Independent Music Association |
| IMPALA | Independent Music Companies Association |
| SLAM | Strategic Learning Assessment Map |
| SME | Sony Music Entertainment |
| TLAC | U.S. Army's Think Like a Commander training program |
| TRADOC | U.S. Army Training and Doctrine Command |
| UMG | Universal Music Group |
| WIN | Worldwide Independent Network |
| WMG | Warner Music Group |

# 1. Introduction

As the world comes to grips with the contemporary reality of what former Bank of England governor Mervyn King, in his book *The End of Alchemy*, has termed 'radical uncertainty,' pivoting, agility and actionable metrics have become the mantras of mainstream business theory. This thinking implies that operational effectiveness and other business outcomes could be improved, if leaders would apply more of the scientific method to their decision-making. This school of thought has its roots in the 'Quality Movement,' first popularized by the work of Walter Shewhart and William Edwards Deming during the post-war reconstruction of Japan, and more recently in the 'Six Sigma,' 'Lean,' and 'Agile' movements of production management. In all of these examples, the common mindset is one of scientifically tested hypotheses and evidence-based decision-making for the purpose of improving production and business performance.

There is no denying that these rigorous approaches to testing and evaluating various alternatives have guided many successful enterprises over the past decades, enabling leaders to reduce errors and achieve continuous improvement in their production and management processes; however, their basis in the scientific method presupposes a cause-and-effect relationship between the desired outcomes of improved business performance and the means of achieving them. These methods are firmly grounded in the realm of predictability; however 'radical uncertainty' is anything but.

Cultural industries have historically struggled with predictability, or rather a decisive lack thereof. The challenges of marrying the often-contradictory ideals of art and commerce are many, as witnessed by the growing number of graduate-level university programs in arts administration; however, the dilemma of how decision-making can be improved in situations where a rational analysis of predictable, or even historic, outcomes is simply impossible is of great concern for all leaders. By examining these questions of unpredictability through the lens of 'hits-driven' cultural industries, this study aims to find a path to continuous improvement when the basic techniques of rational analysis no longer apply.

It is well established in both popular and academic literature that businesses in the cultural industries operate with higher levels of risk than those in other industries (see Finn, McFadyen & Hoskins 1994; Bilton 1999; Banks et al. 2000; Watts & Hasker 2006; Elberse 2013). In particular, businesses operating in, what Bernard Miège labels, the 'publishing logic' of cultural production[1] run with the inherent risks associated with offsetting inevitable failures with enough hits to sustain themselves. The book, music and film industries all fall into this category of 'hits-driven' business, which are characterized by major upfront capital investments, in the uncertain hope of future profits. Despite its inherent challenges, this business model is viable because successful products continue to generate revenues even after the capital investments in producing and marketing them have been fully depreciated. Although digital distribution has reduced some of the costs involved with circulating these cultural products to potential audiences, David Hesmondhalgh and Sarah Baker stress that the risks remain high due to

> the need to make audiences aware of the existence of products, and the particular pleasures they might offer (see Hesmondhalgh, 2002). And, when it comes to marketing and publicity, there is evidence in the music industry, as in the film industry, of increasing costs. This does not contradict the idea that niche markets have become more important in the cultural industries. The problem is to produce a hit within the particular niche market. A crossover hit that makes the music charts, for example, and that reaches audiences primarily drawn to other genres, can certainly bring short-term economic rewards. But a more reasonable goal is to have a hit in, say, the alternative rock or world music or jazz or ballad market.[2]

Chris Bilton summarizes these twin risks of large upfront investment coupled with uncertain market demand, writing that "since it is difficult for producers to predict the response of consumers and hence the 'real' value of the product, the production of [cultural] goods becomes a kind of gamble, investing in the present in order to recoup uncertain future rewards."[3] Although the traditional response to demands for high-quality, strategic decision-making has been rational analysis, the uncertainty around investment by cultural producers, prior to any meaningful market feedback, limits the amount of rational analysis that can be applied to making decisions about which projects to select for production, and perhaps

more importantly, how money should be invested in marketing and publicity for an optimal return. Without many analytical approaches available for making these decisions, marketers in hits-driven cultural industries rely to a very high degree on their intuitive judgment out of necessity. Addressing how uncertainty and availability (or lack) of information impact business decision-making, Eugene Sadler-Smith and Erella Shefy state:

> Where decisions do have to be taken speedily and with cognitive economy in the face of an overwhelming mass of information or tight deadlines, executives may have no choice by to rely upon intelligent intuitive judgements rather than on non-existent or not-yet-invented routines.
>
> When deliberative rational thought is not achievable or desirable (for examples, where unambiguous or sufficient 'hard' data is not immediately at hand, might never be available at all, or where creative solutions to problems are needed), one way of managing and coping with uncertainty and complexity and of 'thinking outside of the box' is by relying upon intuition. As an outcome of an unconscious process in which there is little or no apparent intrusion of deliberative rational thought, intuitions can be considered 'soft data' that may be treated as testable hypotheses ("Do the facts and figures back up my intuition?") or used to check out a rationally derived choice ("How do I feel about the decision I've made?"). In this respect, a carefully crafted intuitive knowledge, understanding and skill may endow executives with the capacity for insight, speed of response, and the capability to solve problems and make decisions in more satisfying and creative ways. [4]

With respect to marketing decisions in particular, Anthony Patterson, Lee Quinn and Steve Baron conducted a study of twelve key marketing managers in the UK apparel-retail industry and found:

> that marketing managers often do not have the 'full picture' prior to making important decisions. While it is absolutely true that some information gathering does take place in terms of analysing the possibilities of actions, there is nearly always uncertainty and ambiguity as to what the best course of actions actually is.[5]

Though uncertainty and ambiguity are central features of the marketing discipline, mainstream marketing textbooks continue to prescribe a limited range of rational analysis and technical tools for decision-making (Patterson, Quinn and Baron 2012; Ardley and Taylor 2015). As a way of mitigating this type of uncertainty, authors of popular business books, such as Jim Collins and Morten T. Hansen (*Great By Choice*, 2011), Eric Ries (*Lean Startup*, 2011), Ryan Holiday (*Growth Hacker Marketing*, 2013) and Paul Roetzer (*The Marketing Performance Blueprint*, 2014) have gone further in recent years, by advocating the concept of an experimental, 'test and learn' approach to marketing, in which progress is made by iterating and refining small actions. Duncan J. Watts and Steve Hasker have proposed a variation of this 'test and learn' approach for marketers in the cultural industries, based on a study of social-influence on the music listening patterns of teenagers. From this study, they found that:

> the success of a particular entertainment product cannot be explained by any measure of intrinsic quality or even by 'appeal'– the fit between the product's attributes and consumers' preferences. Rather, when people are influenced by what others think or do or buy, their individual choices interact in complicated and inherently unpredictable ways. In other words, experts fail to predict hits not because they are uninformed or incompetent but because hits are driven by complex networks of social influences that render accurate prediction of specific outcomes impossible.[6]

Watts and Hasker argue that cultural producers "should de-emphasize designing, making, and selling would-be hits and focus instead on creating portfolios of products that can be marketed using real-time measurement of and rapid response to consumer feedback."[7] To accomplish this, they offer five specific recommendations:

1. Increase the number of bets, and decrease their size.
2. Focus on detection, measurement, and feedback.
3. Follow through with flexible marketing budgets.
4. Exploit naturally emerging social influence.
5. Build flexibility into supply chains and contracts.[8]

While their conclusions about the unpredictability of hits definitely underscore the risky nature of cultural industries, they should not automatically lead one to conclude that a 'test and learn' approach spread out over a larger portfolio of smaller bets would reduce these risks. For one thing, Watts and Hasker ignore the structural realities of hits-driven cultural industries. In her book *Blockbusters*, Anita Elberse provides an analysis of revenues and costs in the film and book publishing industries that demonstrates "the idea of smaller bets being 'safer' is a myth."[9] Using the film industry as an example, Elberse stresses "what is critical to understand is that a studio would be taking a *greater* risk if it put more emphasis on movies with lower production budgets—if, effectively, it made a larger number of smaller bets. It may sound counterintuitive, but for a studio like Warner Bros. those smaller bets could, in a typical year, actually lose the studio more money than they bring in."[10]

Although the work of Bilton, Elberse, Hesmondhalgh, and others touches on the topic of marketing, there has been very little scholarly research into marketing management as it pertains specifically to hits-driven cultural industries. What is clear from the literature is that the degrees of uncertainty and ambiguity are even higher in this sector than in more traditional businesses. Product life cycles in cultural industries are relatively short, and new product development typically requires substantial investments in production and marketing, long before there is any information about the market demand for a project. Because these marketing expenses are necessarily committed prior to a new product's release, an iterative, experimental approach is ill suited to marketing in the cultural industries. Further evidence of this view is presented by Kate Cox, who found in her 2015 quantitative survey of UK businesses that, despite marketing's high level of influence in the cultural industries, "no 'arts or entertainment' marketers adopt an experimental approach to decision making."[11] In the sole article I was able to locate specifically about marketing management in cultural industries, Adam Finn, Stuart McFadyen and Colin Hoskins found that the marketing of arts and entertainment products is further complicated by the highly networked structure of the cultural industries themselves:

> The marketing of cultural products is complicated by the fact that no single cultural industry organization, company, or agency controls as much of the marketing mix as is normal in other industries. Popular cultural

> products are usually the collective product of project teams of specialists, who together form a cultural production system, consisting of a creative subsystem, responsible for generating the new product idea, a managerial subsystem responsible for selecting, making, and distributing the new product, and a communications subsystem responsible for giving meaning to the new product (Soloman, 1988). For example, Soloman (1992, chap. 17) identified 12 specialist roles in the music industry, including songwriters, performers, A&R (artist and repertoire) executives, music reviewers, radio program directors, and record store managers, who all can influence what reaches consumers. Thus, it is useful to view companies in the cultural industries as examples of a "marketing coalition company" (Achrol, 1991), a coalition of strategic alliances between functionally specialized firms.
>
> Once this characteristic is recognized, it becomes clear that the marketing of cultural products is different because it requires a co-ordinated program of activities designed to create an environment which is conducive to the acceptance of the new cultural product as well as the marketing of the product itself. Wind & Mahajan (1987) refer to this multichannel marketing process as one of marketing hype, in contrast with a conventional marketing introductory effort which is predominantly targeted at the consumer.[12]

Although this highly networked structure complicates how marketing decisions are made, it contributes significantly to the context in which the decision-makers operate. In their study of uncertainty and resilience within the music industry, P.H. Longstaff and Joseph Steinhardt analyzed sales data over the period of 2003-2009 and found that while the level of uncertainty within the industry has grown during that time, the overall industry remains highly resilient to that increased uncertainty. Furthermore, they argue that the 'loose couplings' of the highly networked structure identified above are a major contributor to the music industry's resilience to uncertainty:

> Work being done on networks, as that on other complex systems, indicates that the strength of the ties between things is critical for understanding (if not always for predicting) the operation of networked systems.

> There is good evidence that weak ties (or loose couplings) are often more important than strong ones when dealing with a new opportunity or problem.
>
> …the long-term stability of a system (or firm) may actually increase if it has many weak ties—even if this means the system (or firm) is less efficient in the short term... Accordingly, a record company with weak ties to many service providers, producers, and artists would thus be able to adapt quickly to new opportunities or dangers.[13]

Clearly, decision-making intelligence requires a mix of both intuition and rationality, and yet with such high levels of complexity, uncertainty and upfront commercial risk, it is easy to understand that marketing managers operating in the cultural industries are required to make decisions to a large extent on the basis of intuition and 'gut feel.' Although acute in the cultural industries, the dilemmas presented above affect marketers and other decision makers across many industries now facing uncertainty. Indeed, as many scholars have noted, the pace of technological and societal change have made uncertainty a fact life in modern business. This thesis aims to investigate how marketing practitioners and other leaders might improve their intuitive decision-making, and to identify a path to continuous improvement under conditions of high uncertainty. An empirical investigation of decision-making under uncertainty and the role of organizational learning in hits-driven cultural industries would contribute significantly to the leadership of marketing practitioners, and advance the scholarly understanding of how these theories manifest in practice. To develop an understanding of the processes involved, we need to consider the relationship between intuition and expertise, the learning structures involved in developing intuitive judgment, and how successful decisions are made under uncertainty.

# 2. Literature review and theoretical context

## 2.1 Understanding intuition

Most scholars investigating the role of intuition in decision-making define intuition as a subset of the dual-process model of decision-making, famously described by Daniel Kahneman in his book *Thinking, Fast and Slow* as 'System 1' (automatic, emotional, fast) and 'System 2' (effortful, cognitive, slow) (see Sadler-Smith and Shefy 2004; Dane and Pratt 2007; Wierenga 2012; Binet & Field 2013). Common to all views of intuition are its non-conscious, associative and affective characteristics. Intuition is thought to be non-conscious, because although the outcomes of intuitive thinking are clearly accessible to conscious thinking, their origins are not. Our non-conscious ability to recognize and make holistic associations and categorical connections between patterns stored in long-term memory is central to the concept of intuition, while our tendency to discuss intuition in terms of 'gut feelings' or similar metaphors point to its affective nature. For example, Marta Sinclair and Neal M. Ashkanasy define intuition as "a non-sequential information processing mode, which comprise both cognitive and affective elements and results in direct knowing without any use of conscious reasoning."[14] For Erik Dane and Michael G. Pratt, "intuition is a non-conscious process involving holistic associations that are produced rapidly, which result in affectively charged judgments."[15] Although Kahneman does not explicitly define intuition or intuitive judgment in *Thinking, Fast and Slow*, he references his early work with Amos Tversky on heuristics and biases, noting that:

> Amos and I did not address accurate intuitions beyond the casual statement that judgment heuristics "are quite useful, but sometimes lead to severe and systematic errors." We focused on biases, both because we found them interesting in their own right and because they provided evidence for the heuristics of judgment. We did not ask ourselves whether all intuitive judgments under uncertainty are produced by the heuristics we studied; it is now clear that they are not. In particular, the accurate intuitions of experts are better explained by the effects of prolonged practice than by heuristics. We can now draw a richer and more balanced picture,

> in which skill and heuristics are alternative sources of intuitive judgments and choices.[16]

In this paragraph, Kahneman hints at the two primary lines of research on the topic of intuitive decision-making, namely heuristic schemas and expert schemas. While heuristics are often used to make quick decisions in uncertain situations, much of Kahneman's and Tversky's research revealed that they are also likely to lead to severe errors in judgment. Expert schemas of intuition, in contrast, are rooted in the idea that years of practice in a particular domain will lead to a type of expertise that enables one to recognize relevant patterns in a matter of seconds. This view holds that experts have developed complex mental maps that they draw upon to intuitively render effective decisions. Herbert A. Simon and William G. Chase's 1973 article entitled "Skill in Chess" provides one of the earliest studies into the memory storage patterns of experts. In their article, they describe the manner in which experts commit patterns to memory as 'chunking.' Michael J. Prietula and Herbert A. Simon later expanded this concept of expert chunking to industry:

> Experts appear to absorb and evaluate large quantities of information quickly. In fact, the veteran does not scan the environment and process information any faster than an inexperienced foreman; rather, he (or she) has learned to grasp the meaning of certain patterns of operations and activity on the plant floor. In a sense, the foreman does not need to think about this information; he simply reacts to it.[17]

Prietula and Herbert further describe the amount of time it takes to develop this level of expertise, with an idea later made famous by Malcolm Gladwell in his 2008 book *Outliers*:

> Needless to say, amassing this rich store of chunks takes time and effort-more than 10,000 hours of chess. Research shows consistently that in the most rigorous vocations, like medicine, around ten years of serious effort are necessary before a person can approach levels of performance regarded as expert.[18]

In his research on analytic and intuitive thought, Robin M. Hogarth labels the two modes of the dual-process model of decision-making 'tacit' and 'deliberate.' *Tacit* is automatic, effortless, fast and reactive — analogous to Kahneman's 'System 1' — while *deliberate* is deliberative, requires effort, can be controlled and guided, is rule governed and precise — analogous to 'System 2.' Hogarth summarizes the role that feedback and tacit learning play in the development of expert intuition:

> In Hogarth (2001), I develop the notion that tacit learning can take place in environments that can be described as *kind* or *wicked*. Kind and wicked environments are distinguished by the degree to which people receive accurate feedback on their judgments and actions. In kind environments, people receive timely and veridical feedback; in wicked environments, they do not. This distinction follows the analysis of learning situations originally developed by Einhorn and Hogarth (1978) which showed that, even in fairly simple tasks, the feedback people receive on their judgments can be distorted by many factors including the very actions that they themselves take. For example, the fact that you take a particular action can prevent you from learning about possible outcomes associated with the actions you did not take.
>
> …You cannot learn from feedback you do not receive and…some feedback may simply act to increase confidence in erroneous beliefs.[19]

In their extensive review of the large and disparate body of research on the role of both heuristic and expert intuition in decision-making, Erik Dane and Michael G. Pratt synthesize the findings of many scholars into the following theoretical propositions:

1. Individuals who can bring complex, domain-relevant schemas to bear on a problem are more likely to make effective intuitive decisions than those who employ heuristics and simpler, domain-independent schemas.
2. Explicit learning will positively influence the effectiveness of intuitive decision making through the formation of complex, domain-relevant schemas.
3. The relationship between explicit learning and the formation of complex, domain-relevant schemas will be strengthened when individuals:
    a) engage in focused, repetitive practice over long periods of time; and

   b) perform in the presence of 'kind' learning structures (rapid and accurate feedback and exacting consequences).
4. Implicit learning will positively influence the effectiveness of intuitive decision making through the formation of complex, domain-relevant schemas.
5. The relationship between implicit learning and the formation of complex, domain-relevant schemas will be enhanced when individuals focus attention on the stimulus environment.
6. As the problem structure associated with a task becomes more judgmental, the effectiveness of intuitive decision-making will increase.
7. The relationship between environmental uncertainty and the effectiveness of intuition is mediated by judgmental task characteristics.
8. The relationship between complex, domain-relevant schemas and the effectiveness of intuitive decision making is moderated by task characteristics such that as tasks become more judgmental, the strength of the relationship will increase.

(Dane and Pratt 2007)

To summarize the findings of Dane and Pratt, expert intuition is developed with prolonged practice, and requires repetition and both implicit and explicit learning from feedback. Dane and Pratt further propose that intuition is well suited for ill structured problems that require judgment, but not for 'intellective' problems (those with clear definitions, rules, operations and relationships), which are more suited to rational analysis. Among the implications of these findings is that organizational structures and processes might be optimized to encourage the development and improvement of managerial intuition.

## 2.2. Intuition as a learnable skill

The question of how leaders might be able to develop the intuitive judgment skills of those within their organizations beyond the vague ideas of adding 'more experience' and 'more feedback,' has, perhaps not surprisingly, been the subject of much recent military thinking. In 1999, General John Nelson Abrams, then commander of the U.S. Army Training and Doctrine Command (TRADOC) challenged a group of behavioural scientists from the Army Research Institute (ARI) and the Army Research Laboratory (ARL) who were participating in TRADOC's Army Experiment 6 (AE6) program to "find a method to train commanders and staff offic-

ers *how to think* rather than *what to think* and thereby increase their ability to think adaptively."[20] The term 'adaptive thinking' as used by TRADOC was defined as "the cognitive behaviour of an officer who is confronted by unanticipated circumstances during the execution of a planned military operation,"[21] although the AE6 research team approached the challenge by adopting a definition that more closely resembles Prietula and Herbert's concept of domain-specific expertise:

> In this research effort we thought it more promising to adopt a definition of adaptive thinking that was probably narrower than is often intended by the term, a definition that was very specific for the domain of tactical decision-making. We (Ross & Lussier, 1999) made the assumption that the ability to think adaptively is something that grows out of quality experiences within a domain and does not necessarily transfer readily to other domains.[22]

The solution reached by the AE6 team was to treat thinking as a trainable behaviour, with measurable criteria, in a manner similar to how one would train skills such as marksmanship or gunnery. The researchers found a precedent in practice for this idea, seeing a parallel between their challenge and the training methods used in the former Soviet Union to train chess grandmasters.[23] As Scott B. Shadrick and James W. Lussier recount:

> With the breakup of the USSR, Soviet chess academies became publishing houses. The release of such books as Mark Dvoretsky's *Secrets of Chess Training* and *Positional Play* (1997) surprised the chess world. It seemed that the Soviets did have methods they had not revealed…
>
> [The AE6 research team] analyzed the Soviet training manuals to understand their methods. The difference between the Soviet methods and traditional chess instruction is, in a sense, the difference between training and education…the Soviets described principles of expert play that reflected the thought patterns of grandmasters. While many of these expert principles were familiar to the rest of the world, the Soviet trainers went one critical step further…The Soviet chess trainers in essence treated the thinking that the player does during a game as a behaviour - something a player does with chess knowledge as opposed to the knowledge itself -

> and then developed exercises to train that thinking performance to conform to that of an expert.[24]

The AE6 research team developed this idea into what they termed the *Adaptive Thinking Training Methodology*, and ultimately the U.S. Army's *Think Like a Commander* (TLAC) training program. At the core of this program is "an explicit set of expert tactical thinking behaviours," [25] which form a model of 'correct form' or 'expert form,' against which participants practice with repetitive exercises. Shadrick and Lussier describe the logic of the program this way:

> Repetitive performance causes thinking processes to become automatic so that they can be performed quickly and accurately with less mental effort. As more elements become automatic, complex models can be developed without a proportionate increase in mental effort. This enables experts to use their knowledge flexibly and creatively in complex situations. The associated rise in automaticity and cognitive flexibility is characteristic of expert performance.[26]

In their assessment of the program, Shadrick and Lussier found that "the data analysis suggests that the application of TLAC training can accelerate tactical leader development in U.S. Army Captains. Participants were able to increase the percentage of critical information considered even though they were subject to increasing time constraints."[27] To put this in terms of the dual-process model of decision-making, the TLAC program has demonstrated that domain-specific thinking behaviours can be transferred from the deliberate system to the tacit system at an accelerated pace through repetitive practice. This is significant for the topic of improving intuitive decision-making, as it shows how modeling 'correct form' or 'expert form' can be used to teach or train the 'chunking' of complex, domain-relevant schemas.

For leaders, the obvious question that follows is how an organization can best identify the relevant domain-specific thinking behaviours that would lead to improving expert intuition among team members. Many scholars have examined this relationship between organizational objectives and individual intuition under the broad category of *organizational learning* (see March & Olsen 1975; Daft & Weick 1984; Senge 1990; Huber 1991; March 1991; Galar & van der Heijden

1992; Tobin 1993; Watkins & Marsick 1993; Nonaka & Takeuchi 1995; Moorman & Miner 1997). Although these works have much in common, they all deal with different domains and different phenomena. In their review of the literature on organizational learning, Mary M. Crossan, Henry W. Lane and Roderick E. White propose a framework that uses the concept of strategic renewal as a common element to synthesize much of this previous work. Crossan, Lane and White contend that "organizational learning involves a tension between assimilating new learning (exploration) and using what has been learned (exploitation)."[28] Strategic renewal is thus the balancing of this tension between exploration and exploitation:

> this tension is seen in the feed-forward and feedback processes of learning across the individual, group, and organization levels. Feed forward relates to exploration. It is the transference of learning from individuals and groups through to the learning that becomes embedded—or institutionalized—in the form of systems, structures, strategies, and procedures (Hedberg, 1981; Shrivastava, 1983). Feedback relates to exploitation and to the way in which institutionalized learning affects individuals and groups.[29]

These feedback and feed-forward processes are linked together at each level from individual to institution by way of intuiting, interpreting, integrating and institutionalizing, what Crossan, Lane and White term the '4-I' framework. *Intuiting* is the individual act of non-conscious pattern recognition rooted in personal experience. "*Interpreting* is the explaining, through words and/or actions, of an insight or idea to one's self and to others… *Integrating* is the process of developing shared understanding among individuals and taking coordinated action through mutual adjustment… *Institutionalizing* is the process of ensuring that routinized actions occur…[it] is the process of embedding learning that has occurred by individuals and groups into the organization, and it includes systems, structures, procedures, and strategy."[30]

Crossan, Lane and White identify two sets of challenges in balancing this tension between feedback and feed-forward processes. First, there is always a risk that the institutionalizing-intuiting feedback process (i.e. transferring what has already been learned to the individual) will impede the organization's ability to assimilate

new learning from individuals, precisely because it has been institutionalized, and institutionalized practices are often very difficult to change. "Institutionalization can easily drive out intuition."[31] Nonetheless, institutionalizing learning is necessary to realize the benefits of intuition at an organizational level. Given the U.S. Army's focus on adaptability for volatile circumstances, one might presume this is why the TLAC program is explicitly aimed at teaching 'how to think,' as opposed to 'what to think.'

The second set of challenges identified by Crossan, Lane and White are related to the feed-forward processes:

> Moving from interpreting to integrating (feed-forward) requires a shift from individual learning to learning among individuals or groups. It entails taking personally constructed cognitive maps and integrating them in a way that develops a shared understanding among the group members…since many aspects of cognitive maps are tacit, communicating them requires a process of surfacing and articulating ideas and concepts. This process makes tacit knowledge explicit (Polanyi 1967)… [However], making something explicit does not necessarily mean the understanding is shared… We tend to "see/hear what we believe" rather than "believe what we see." The real test of shared understanding is coherent action. Yet, for novel ideas, shared understanding may not evolve unless shared action or experimentation is attempted. The learning perspective suggests that leading with action, rather than bluntly focusing on cognition, may provide a different migration path to shared understanding. As in experiential learning (Crossan et al. 1995), action provides the opportunity to share a common experience, which may aid in the development of shared understanding.[32]

Although the Crossan, Lane and White framework does not offer any practical guidance on how to overcome the challenges inherent to the feedback and feed-forward processes (what they describe as the "tension between exploitation and exploration"), it does create a model of understanding how individual intuition can become shared learning which is articulated at the organizational level. Exploitation and exploration should not be seen as pulling in opposite directions; rather, the tension between the two creates a sustainable cycle of strategic renewal.

Intuition that becomes the foundation of shared learning within an organization can thus become the 'expert form' model of domain-relevant thinking used in the feedback process. From this understanding, we might hypothesize that organizations that have mechanisms to make the tacit domain-relevant knowledge of individuals explicit in a way that creates a shared understanding of that knowledge among team members will exhibit a higher aggregate quality of intuitive judgment. Further, by viewing this in the context of the U.S. Army's adaptive thinking experiments, we might also hypothesize that organizations that are successfully able to identify certain domain-specific thinking behaviours as the tacit knowledge to make explicit with such mechanisms will exhibit more flexibility and creativity in the application of their intuitive judgments.

## 2.3. Successful decision-making under uncertainty

As discussed in the introductory section of this thesis, marketing textbooks by and large continue to follow the prescriptive logic of rational analysis, with virtually no regard to managerial expertise or intuitive judgment. While there is a small yet growing body of scholarship into the role of intuition and expertise in marketing, research on the role of organizational learning in marketing has primarily been in the area of developing market-orientation (see Hurley & Hult 1998; Sinkula, Baker & Noordewier 2001; Perry 2014), as opposed to improving intuition or expertise, and there has been very little research into how marketing decisions should be made under conditions of uncertainty.

The contemporary understanding of uncertainty stems from the work of economist Frank H. Knight, who in 1921 distinguished uncertainty from risk in his foundational book *Risk, Uncertainty, and Profit*:

> Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated.... The essential fact is that 'risk' means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character; and there are far-reaching and crucial differences in the bearings of the phenomena depending on which of the two is really present and operating.... It will appear that a measurable uncertainty, or 'risk'

> proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all.[33]

Knight classified probabilities into known, unknown and unknowable distributions, which he termed "*a priori* probability, statistical probability, and estimates."[34] While analytical techniques are capable of quantifying the risk associated with the known and the unknown, they are incapable of quantifying risk associated with the unknowable. This is because the unknowable cannot be quantified, and is thus truly uncertain.

Following the logic of Dane and Pratt, intuition and domain-expertise are perhaps better suited for dealing with problems of true uncertainty. While organizational learning theory helps us to understand how intuitive judgment might be improved, we need to look elsewhere to find how marketers might develop the domain-specific expertise required to deal with extreme uncertainty. In this regard, the literature on domain expertise and marketing has recently begun to converge around the concept of *effectuation*.

Introduced to the field by Saras D. Sarasvathy in 2001, she defines effectuation in contrast to causation: "Causation processes take a particular effect as given and focus on selecting between means to create that effect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means."[35] In philosophical terms, the differences between causation processes and effectuation processes can be understood in terms of the analytic-synthetic distinction. As Gottfried Wilhelm von Leibniz summarized it, "synthesis is achieved when we begin from principles and run through truths in good order... Analysis goes back to the principles."[36] From this perspective, effectuation operates as a synthetic process, while causation is analytic. As described by Read, Dew, Sarasvathy, Song and Wiltbank:

> Effectuation inverts the fundamental principles, solution process, and overall logic of predictive rationality. Predictive rationality rests on a logic of foresight—that is, to the extent that people can predict the future, they can control it. Effectuation rests on a logic of nonpredictive control—that is, to the extent that people can control the future, they do not need to predict it. Predictive rationality takes the environment as largely outside

> the control of the decision maker, who therefore attempts to predict and adapt to changes in it. In an effectual view, the environment is endogenous to the actions of effectuators, who therefore attempt to co-create it through commitments with a network of partner, investor, and customer stakeholders.[37]

The nonpredictive logic of effectuation has made it a point of recent scholarly inquiry into entrepreneurship, primarily due to the strong links between entrepreneurship and the uncertainty of future outcomes (see Sarasvathy 2001; Zahra, Sapienza & Davidsson 2006; Chandlera, DeTienne, McKelviec & Mumford 2009; Perry, Chandler & Markova 2011; Fisher 2012). Successful entrepreneurs, the thinking goes, have developed domain-specific expertise in navigating situations in which past events are not helpful to predicting future outcomes. In other words, experienced entrepreneurs have developed expert intuition for creating favourable outcomes in situations of high uncertainty. Sarasvathy argues that such entrepreneurial expertise is rooted in the application of an effectual logic with the following four principles:

1. *Affordable loss rather than expected returns:* effectuators focus on maximizing options rather than returns, and base investment decisions on how much they can afford to lose, rather than how much they can expect to gain.
2. *Strategic alliances rather than competitive analyses:* effectuators form partnerships and get pre-commitments from stakeholders to reduce uncertainty and create barriers to entry for potential competitors, rather than focus on strategic analysis.
3. *Exploitation of contingencies rather than exploitation of pre-existing knowledge:* rather than plan for and reduce the unexpected, effectuators exploit contingencies that arise unexpectedly over time.
4. *Controlling an unpredictable future rather than predicting an uncertain one:* effectuators focus on aspects of the future they can control, and avoid making predictions.

(Sarasvathy 2001)

This practical basis for decision-making under uncertainty is supported by the findings of Jennifer K. Phillips, Gary Klein, and Winston R. Sieck who write:

> An important attribute of expert decision makers is that they seek a course of action that is workable, but not necessarily the best or optimal decision…In naturalistic settings the time pressures often dictate that the situation be resolved as quickly as possible. Therefore it is not important for a course of action to be the best one; it only needs to be effective.[38]

Although effectuation provides a point of connection between entrepreneurship and marketing, this should not be confused with 'entrepreneurial marketing,' which has become a field of scholarly inquiry in its own right. Effectuation provides a logic for understanding how entrepreneurial practitioners use their expertise to make decisions under uncertainty, whereas scholarship into entrepreneurial marketing is predominantly defined by the integration of generic marketing and entrepreneurship.[39] In their study of how entrepreneurial expertise manifests itself in marketing management, Read, Dew, Sarasvathy, Song and Wiltbank compared the decision-making processes of 27 marketers high in entrepreneurial expertise with a group of 37 managers who were not. Their findings suggest that marketers who are high in entrepreneurial expertise "are significantly more likely to use heuristics based on an effectual logic in making marketing decisions under uncertainty. In contrast, managers with little entrepreneurial experience tend to rely on predictive approaches prescribed in marketing textbooks."[40] Given that entrepreneurial expertise is correlated with successful outcomes under uncertainty, we might hypothesize that successful domain-specific thinking behaviours for intuitive judgment in marketing ('how to think,' as General Abrams put it) might be based in effectual logic, rather than causal logic. Focusing on cultural industries in specific, if marketing cultural products requires, as Finn, McFadyen and Hoskins suggest, "a coalition of strategic alliances between functionally specialized firms," it would seem that an effectual approach to decision-making might be particularly well suited.

## 3. Rationale and hypotheses development

During the more than forty years since Chase published his foundational *"Skill in Chess"* article, scholars have thoroughly investigated the nature of intuitive judgement. Domain-specific expertise clearly plays a vital role in decision-making where a lack of information prevents the use of analytical thought. More recently, scholars have identified marketing as a field characterized by uncertainty and ambiguity, in which practitioners routinely rely on their intuitive judgement for making successful decisions; however, mainstream marketing educators and textbooks continue to advocate a limited range of analytical and technical tools for decision-making. Scholars of the cultural industries, meanwhile, have identified the extreme uncertainty of hits-driven businesses, and the unique challenges this poses for marketing practitioners.

The U.S. Army's research into adaptive thinking, the field of organizational learning, and study of the effectual logic for decision-making under uncertainty all point in the general direction of how decision-makers might learn to improve their intuitive judgement; however, the intersection of these three distinct lines of inquiry remains significantly under-researched. As noted earlier, decision-making intelligence requires a mix of both intuition and rationality — which can also be seen through the lens of effectual and causal logic. The introduction of effectuation provides a new basis for studying decision-making in hits-driven industries, which are characterized by high levels of uncertainty. This study attempts to uncover how the most effective marketing decisions are made within hits-driven businesses by examining the levels of organizational learning and the adoption of causal and effectual logics in marketing departments. By connecting some of the dots between these research fields, its findings will help to answer the question of how leaders might improve their decision-making abilities in situations where rational analysis is not possible.

Although a basic assumption of this thesis is that marketers in the hits-driven cultural industries make decisions on the basis of intuition and 'gut feel,' identifying a path to continuous improvement in making these decisions will be dependent upon the degree to which this assumption is true. One can therefore hypothesize as follows:

> **H1**: Intuitive judgment is the basis for most marketing decision-making in cultural industries.

Given the high levels of uncertainty involved, effectuation could provide the foundation for identifying the relevant thinking behaviours necessary to achieving successful marketing outcomes. From this, we can hypothesize that marketers who have become domain-experts will employ effectual logic to a greater degree than non-experts.

> **H2**: Marketers with more experience (and therefore more expertise) will be more likely than those with less experience to use effectuation as a basis for decision-making in uncertain conditions.

One might further hypothesize that successful domain-specific thinking behaviours for intuitive judgment in marketing might be based in effectual logic, rather than causal logic. Therefore, marketers who make more use of effectual techniques will create more successful marketing outcomes under uncertainty.

> **H3**: Marketing teams with higher aggregate use of effectuation for decision-making will exhibit more successful marketing outcomes in uncertain conditions.

Effectual-logic, combined with the strategic renewal process of organizational learning could create the 'kind' learning environment needed to strengthen the intuitive judgement used to make marketing decisions under uncertainty. Crossan, Lane and White note that "organizations naturally outgrow their ability to exclusively use spontaneous interactions to interpret, integrate, and take coherent action,"[41] suggesting that smaller organizations might naturally have higher levels of organizational learning.

> **H4**: Smaller companies will be more likely to have cultures of organizational learning.

Assuming smaller firms have higher levels of organizational learning, and assuming that effectuation is a foundation of domain-expertise for making decisions un-

der uncertainty, we can hypothesize that smaller firms will also exhibit higher levels of effectual logic in their decision-making.

> **H5**: Smaller companies will be more likely to use effectuation as a basis for decision-making.

Developing mechanisms to make explicit the tacit knowledge used by marketers in their intuitive judgments among team members might lead to a higher aggregate quality of intuitive judgment in marketing decisions. In other words, if organizational learning helps less experienced team members learn from, or train against, the 'correct form' or 'expert form' of their more experienced colleagues, it should have an impact on the quality of marketing ideas generated.

> **H6**: Marketing teams that have a culture of organizational learning will be perceived to be more creative than others.

As digital techniques for measurement have come to the marketing field, there has been increased attention paid to metrics such as return on marketing investment (ROMI), and marketers now have a wealth of tools for assessing both the effectiveness and efficiency of their activities. While the literature on organizational learning generally assumes the relationship between the levels of learning within an organization and business performance, there are some examples of how researchers have more empirically investigated this link (e.g. Bontis, Crossan & Hulland 2002). Assuming that effective and efficient marketing outcomes are linked to business performance, one can hypothesize that higher levels of organizational learning might contribute to higher levels of marketing accountability.

> **H7**: Marketing teams with cultures of organizational learning will be more accountable (i.e. more likely to link their activities to financial outcomes)

Finally, to tie these various hypotheses together, marketing teams with higher levels of organizational learning are likely to exhibit higher levels of effectuation, and teams exhibiting higher levels of effectuation are likely to produce stronger marketing outcomes. The theory of effectuation holds that it represents a type of domain-expertise in dealing with uncertainty, which suggests that experienced

marketers in hits-driven industries will naturally employ effectual techniques to a large degree; however, the same will not be automatically be true of their less experienced peers. In fact, given the prescriptive analytics techniques taught in marketing education courses, it is likely that less experienced marketers will employ effectuation to a far lesser degree. Assuming this is true, there should be a noticeable difference between the application of effectual techniques by less experienced marketers in companies with different levels of organizational learning.

> **H8**: Less experienced marketers in teams that have a culture of organizational learning will be more likely to use effectuation than their peers in teams that don't have cultures of organizational learning.

This thesis explores these hypotheses by looking at them in the specific context of the recorded music industry. For the study of intuitive judgement in decision-making under uncertainty, approaching the issues through the specific lens of the music industry presents a number of advantages. First, hits are unpredictable, and, as in all hits-driven businesses, a high level of demand uncertainty is a basic characteristic of the industry; second, decision-making is complicated by the number of independent actors involved in the highly networked structure of the industry; finally, digital disruption began to affect to the music industry in the late 1990s, arguably making it the most experienced industry at dealing with the contemporary forces of uncertainty.

## 4. Overview of the Recorded Music Industry

The business of recorded music is one of developing and exploiting the copyrights in original *sound recordings*. This differs fundamentally from the role of music publishing companies, which work with the development and exploitation of copyrights in *musical compositions* and *songs*. Record labels contract with performing artists to produce original recordings, which they then market and sell to the public in the form of compact discs, vinyl phonographs, and digital downloads. Record labels also generate substantial revenues by licensing their copyrights to digital subscription services (e.g. Spotify and Apple Music), to film and television production companies for use in screen-based entertainment, and to advertising agencies for use in commercial spots. As discussed in the introduction to this thesis, record labels invest heavily in both production and marketing in the uncertain hope of recouping their investment and making a profit.

The global recorded music industry is made up of three large multinational entertainment companies (Universal Music Group or "UMG," Sony Music Entertainment or "SME" and Warner Music Group or "WMG," each of which operates a number of brands, imprints and subsidiaries around the world – the so-called 'major labels,' or 'majors') and thousands of micro, small and medium sized companies (the so-called 'independent labels,' also referred to as 'independents,' or 'indies'). While the majors can be characterized as being vertically integrated multinationals, the structure of the independent sector is substantially different. Describing the majors, Allison Wenham, CEO of the UK's Association for Independent Music (AIM) and the Worldwide Independent Network (WIN), states that

> These companies specialise in the industrialisation of music. That is not a criticism *per se*, it's a fact.
>
> Their business model is predicated on scale. Yes, they invest in music and yes, they develop talent but their raison d'etre is simple – to shift as many units to as many people as possible.[42]

In contrast to this, the European trade group Independent Music Companies Association (IMPALA) describes the independent sector as follows:

> The independents tend to focus on their core skills – investing in the production and releasing recorded music. They outsource what they do not see as core and are therefore generally not vertically integrated. Independents develop local and international networks, building symbiotic relationships with other market operators who provide vital elements in the development, production and sale of recorded music, such as online aggregators, distributors, retailers, manufacturers, designers, session artists, concert promoters, etc. Through these ecosystems independents release music territory-by-territory and break artists across borders.[43]

In 2014, which as of this writing is the latest year for which published global statistics are available, the independent companies accounted for 26.7% of global market share, whereas the three majors accounted for 73.3% of global sales.[44] With the recent global successes of Taylor Swift and Adele, both of whose recording copyrights are owned by independent labels (Big Machine and XL Recordings respectively), many observers have suggested that the market share of the independents is slowly growing relative to the majors. Allison Wenham notes that:

> The majors' global market share is often disputed. Given their tendency to include turnover from independent labels they distribute, it is at best a grey area, but between 65% and 70% would be a fair estimation.[45]

Despite their relatively small share of the market, independent labels are widely regarded to be the primary innovators of the industry, and are responsible for producing the vast majority of all new releases. For example, IMPALA estimates that 80% of new releases in Europe are by independent labels.[46] Independents are also particularly strong at developing local and regional repertoire. In Canada, the Canadian Independent Music Association (CIMA) found that independent labels were responsible for 60% of all Canadian albums sold in that country.[47]

### 4.1. The shift to on-demand streaming and increasing uncertainty

Recorded music sales peaked in 1999, with global revenues of $38.67B (all figures in this section are presented in U.S. Dollars).[48] This peak coincided with the

mainstream adoption of broadband Internet in developed countries, and the development of the Napster music file sharing service. In the subsequent years of the 'post-Napster era,' the music industry contracted more than 60%, generating just $15B in 2015.[49] It is worth noting that these figures have not been adjusted for inflation, and if discounted for inflation, would reveal an even more severe industry contraction.

During this time, music consumption began to shift from the physical formats of compact disc, cassette tape, and vinyl phonographs to digital formats: sales-based downloads, and subscription-based music access services. Table 4.1 presents the breakdown of global music consumption by format.

Table 4.1: 2015 global revenues by segment

| | |
|---|---|
| Physical | 39% |
| Digital | 45% |
| Performing Rights | 14% |
| Synchronization Rights[a] | 2% |

By the end of 2015, streaming revenues were growing by 45.2% and accounted for 43% of digital revenues globally.[50] The decline of the previous 16 years appears to have stopped, with modest revenue growth of 3.2% globally for the year 2015.[51] This shift to digital consumption has had a dramatic effect on the demand curve for individual songs, and consequently the overall level of uncertainty within the industry.

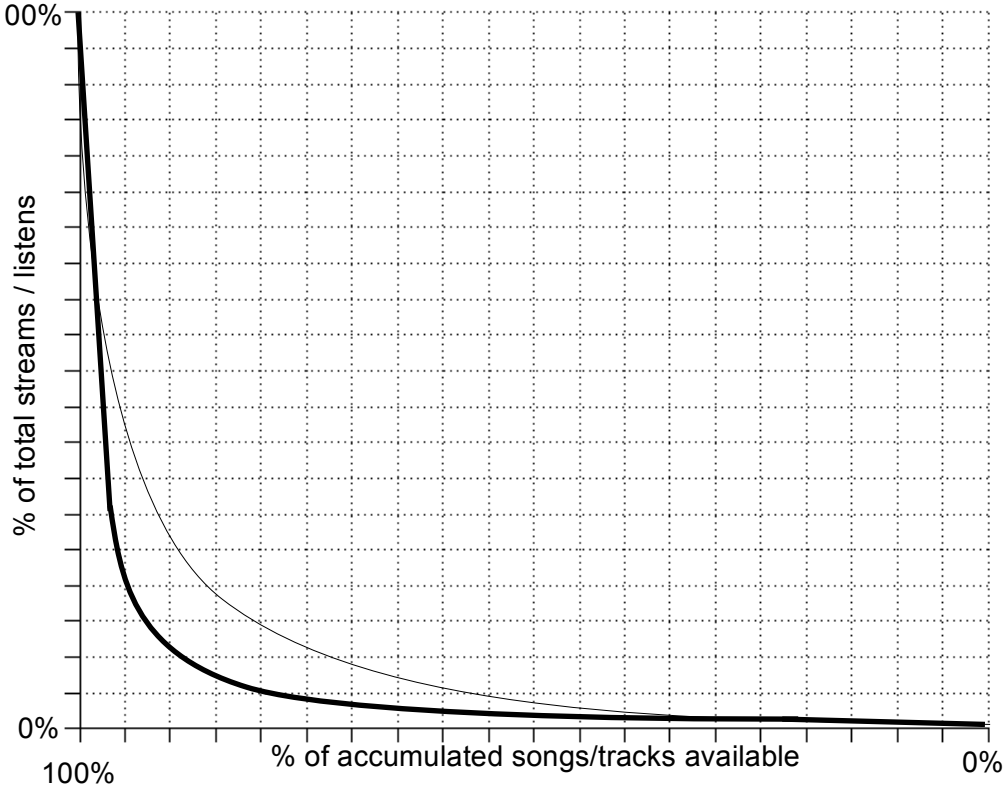
In his 2006 book, The Long Tail, Chris Anderson, editor of Wired magazine, argues that when consumers are offered infinite choice, the true shape of demand is revealed, and that it is less hit-centric than previously thought. The 'tail' end of the sales curve, he says, will become longer, fatter, and more profitable. Unfortunately, all the evidence points in a different direction.

In her study of U.S. sales data from January 2005 to April 2007, Anita Elberse found that as digital music sales increased, so did the concentration in the head

a) "Synchronization Rights" refer to the rights required to synchronize a piece of music in timed relation with an audio-video production, such as a television or film production.

of the demand curve.[52] Luis Aguiar and Joel Waldfogel provide further evidence of this trend from their study of 2014 Spotify streaming data, in which they conclude that in any given week the top 50 most streamed songs on the service account for between 7.7 and 10.8 percent of total streams of all songs.[53] Will Page, in-house economist at Spotify, commented on the trend in an interview with the Techdirt blog, stating that 80% of all the individual streams listened to on Spotify are generated by the top 5% of all available songs.[54]

Figure 4.1: Spotify's demand curve compared with a typical long-tail distribution




Although industry revenues appear to have stabilized, the number of hits per year is shrinking. Elberse reports that smaller independent companies have gained some market share at the tail end of the demand curve; however, "A more significant trend is that independent artists have actually lost share among the more popular titles to superstar artists on the major labels."[55] This can be visualized in Figure 4.1, which reproduces the demand curves as presented by Will Page in the Techdirt interview. The thin curve represents a typical long-tail distribution, in which 75% of the demand consumes the top 25% of the tracks, while the thicker curve represents true listener demand on Spotify, where the lower (or 'niche') 95% of available tracks only generate 20% of all listens.

When tasked with the job of marketing a new title, marketing practitioners at record labels are required to make choices about how to allocate a limited amount of money across various activities and territories. Their goal is always to try and move the new product as far up the demand curve, in the direction of hits, as possible, as quickly as possible, before it becomes old news and ignored by the media or forgotten by the public.

As discussed in the introduction, Finn, McFadyen and Hoskins identify that "no single cultural industry organization, company, or agency controls as much of the marketing mix as is normal in other industries."[56] In this respect, record labels take on a coordination role, engaging both internal and external network actors to ensure that marketing activities such as press releases and interviews, television and radio promotion, advertising, retail promotion, and artist touring all are all coordinated to begin as a new release comes to market. Much of the money required to secure these various network actors will be fully spent in the weeks leading up to the release date, meaning there won't be much money left if the strategy needs to be adjusted after the release date. The inability to predict a new release's first week's, or even first quarter's sales makes the decisions around budget size and allocation particularly difficult. Obviously there is a risk of financial loss if a new release performs worse than expected; however, there is another danger if a new release performs better than expected: continuing to support a new product in the market beyond what was budgeted will likely take funds away from other projects, and put additional stress on the company's overall planning. Given the extreme demand uncertainty involved, getting the 'right balance,' or even a 'reasonable balance' between these two extremes is a typical dilemma for which marketers rely to a great degree on their intuitive judgement.

Longstaff and Steinhard conclude that these challenges, coupled with the increasing concentration of sales in the 'fat' head of the tail indicate a significantly higher level of uncertainty in the music industry than in the past.[57] This study investigates how marketing practitioners in the music industry make decisions in this environment of growing uncertainty, and aims to identify a path to continuous improvement under these conditions.

# 5. Research design and methodology

To explore the hypotheses outlined above, this study examines whether correlations exist between an organization's market success, the levels of organizational learning within the organization, and the use of causal and effectual logic within the organization's marketing department. The primary research method is a quantitative survey of music industry executives that looks at the relative levels of organizational learning within their firms, and their application of both causal and effectual logics in their jobs.

## 5.1. Variables

The majority of the latent variables I have employed in this study have been previously published, and thus peer-reviewed, tested and verified. For effectuation, I have used the scale developed by Chandler et al (2011), as adapted by Johansson (2012), and for organizational learning, I have used the scale developed by Lloria & Moreno-Luzon (2014). The operationalization of both scales is described in further detail below.

*Outcome variables*

In addition to examining the relationships between effectuation and organizational learning, this study looks at what their effects might be on business outcomes. To accomplish this, the survey employs several perceptual measures of business outcomes, which are described in further detail below.

*Control variables*

As is common to many studies of organizational learning,[58] I have controlled for organization size and age, as well as industry experience. Numbers of employees, number of new releases per year, and overall marketing budget are used as measures of organization size. Sarasvathy's work views effectuation as the logic of expert entrepreneurs, so I have also controlled for variance based on whether a respondent is a founder/co-founder of their organization. While industry experience itself does not indicate expertise, it is a prerequisite for domain-specific expertise and therefore also a useful control for evaluating the use of effectuation. These control variables are discussed in more detail below.

## 5.2. Identifying the respondents

Although the research hypotheses of this study are framed in the greater context of the cultural industries, they are of relevance to marketing practitioners in any industry facing high levels of uncertainty. For the purpose of empirically testing these hypotheses, I have chosen to examine marketing practices in the recorded music industry, which is a subset of the cultural industries. As previously mentioned, looking specifically at this industry for the purpose of studying intuitive judgement in decision-making offers several advantages. In addition to the industry's high levels of uncertainty, its highly networked structure, and its history of digital disruption, the recorded music industry is diverse with literally thousands of established companies of various sizes operating around the world, providing a large pool of potential survey participants.

To identify companies for the study, I began by compiling a list of Canadian record labels working with English-language repertoire that had received funding from the Department of Canadian Heritage's *Canada Music Fund Music Entrepreneur Component* and FACTOR's *Comprehensive Music Company* programs in the previous three years. These programs have minimum requirements for annual turnover, ensuring that every company selected would be significant enough in size to generate at least CAD $100,000 per year from master recording copyrights. With the addition of the local major labels, this yielded a total Canadian population of 45 significant record companies. I augmented this list with 16 additional major label divisions, and 164 independent labels from Europe, the United States, Brazil and Japan. To identify significant independents, I looked at which firms had executives placed on the boards of trade associations and those that had won industry awards in the past three years.

Next, I identified 650 individuals working for these companies in marketing or senior management roles, roughly distributed one-third at independent labels and two-thirds at majors – a distribution that roughly corresponds to how global market share is distributed between the majors and independents. Although this sample is too small to confidently identify global trends, it covers virtually 100% of the sector in Canada, and should give an indication of whether trends in Canadian companies generally correspond to their international counterparts.

## 5.3. Questionnaire design and administration

The principal research method for this project is a quantitative study, which employs an online questionnaire to capture the perceptions of key decision-makers using either a five- or seven-point Likert type scale for most of its questions. The survey itself is primarily based on a combination of two previously published instruments, the first to test levels of effectuation and causation, and the second to test levels of organizational learning within a firm. The advantage of using these existing instruments is that they have been previously employed, tested and published in peer-reviewed journals, making it possible to compare the results with previous research.

Once the online questionnaire was ready, I sent an email invitation to the 650 identified respondents, explaining the purpose of my study and inviting them to participate. I followed up with three separate reminders, one per week for the next three weeks. As suggested by Johansson, in my final reminder, I included a request to non-respondents to explain why they did not want to participate in the project.[59]

Of the 650 people invited to participate in the survey, 193 started and 99 completed it, yielding a global response rate of 15.23%. Curiously, the response rate among independent companies was significantly higher than that of the majors: Of the 650 people invited to participate, 441 worked at major labels, and 209 at independents, roughly corresponding to the breakdown of global market share between the majors and independents. Of the 99 completed survey responses, 96 of them were from respondents employed by independent companies, representing a response rate among independents of 47.36%, whereas only 3 respondents working at majors completed the survey, representing a response rate among the majors of just 0.68%. The results of this study therefore can only be viewed as representative of the independent sector.

The global response rate alone is insufficient to be representative of the overall music industry; however, completed responses came from individuals employed at 42 of the 45 significant Canadian companies identified above, yielding a confidence interval of 3.95 with a confidence level of 95% when the results are taken

in a Canadian context. The completed survey responses are summarized by their country of origin and presented in Table 5.1.

Table 5.1: Overview of respondents by country

| | N | % |
|---|---|---|
| **Respondent's country** | **99** | |
| Australia | 1 | 1.0% |
| Austria | 1 | 1.0% |
| Brazil | 1 | 1.0% |
| Canada | 52 | 52.5% |
| Denmark | 3 | 3.0% |
| Finland | 1 | 1.0% |
| Germany | 13 | 13.1% |
| Japan | 1 | 1.0% |
| Poland | 1 | 1.0% |
| Sweden | 2 | 2.0% |
| United Kingdom | 8 | 8.1% |
| United States | 15 | 15.2% |

Although marketing activities are typically executed by marketing departments, the decisions around artist or album marketing can come from elsewhere in the organization. I therefore included other key decision makers in my list of those invited to participate in the survey, including those from positions in company management, artists and repertoire, and artist management. The full breakdown of respondents' functional job areas is described in Table 5.2.

Table 5.2: Overview of respondents by job function

| | N | % |
|---|---|---|
| **Job function / department** | **99** | |
| Administration | 3 | 3.0% |
| Artist Management | 16 | 16.2% |
| A&R | 6 | 6.1% |
| Company Management | 44 | 44.4% |
| Marketing | 23 | 23.2% |
| Other | 3 | 3.0% |
| Promotion/Sales | 4 | 4.0% |

## 5.4. Measuring effectuation and causation

Effectuation is a relatively new field of scholarly inquiry (see section 2.3. for an overview), and very few research instruments have been published. For the purposes of this study, I have chosen to use the instrument developed by Chandler et al. (2011), as adapted by Johansson (2012) to measure the use of both causal and effectual logic in *ongoing* innovation. This instrument is operationalized using a five-point Likert type scale, and treats effectuation as a formative index, comprised of the four sub-components of Flexibility, Affordable Loss, Experimentation and Pre-Commitments. Chandler et al. developed their instrument to measure effectuation and causation in the context of creating a new venture where the respondents were asked to reason in retrospect on their start-up experience. In her 2012 study, Johansson adjusted this to reflect the context of *ongoing innovation* in the Swedish magazine industry and asked the respondents to provide the perceived practices employed when working with innovation in general.[60] Although the Johansson's adaptation appears only as part of her published doctoral thesis, the results of her study are included in the article she published together with Alexander McKelvie entitled "Unpacking the Antecedents of effectuation and causation in a corporate context."[61] The focus of the Johansson adaptation on measuring both effectual and causal logics in an ongoing business context makes it appropriate for this study into the ongoing decision-making practices in the recording industry.

## 5.5. Measuring organizational learning culture

As discussed in section 2.2., organizational learning has been the subject of much scholarly research, and consequently many instruments have been developed over time to assess different aspects of learning within an organization. Many of these focus on examining systems of knowledge management and the corresponding levels of intellectual capital within an organization; however, for the purposes of this study, the important aspect of organizational learning is how new and existing knowledge flows from the individual level to the institutional level and back again – the feedback and feed-forward processes of identified in Crossan, Lane and White's 4-I framework. In the language of the TLAC research literature, these are the aspects of organizational learning that can identify and model 'expert form' thinking behaviours.

Crossan's own work in the field resulted in the Strategic Learning Assessment Map (SLAM) (Crossan & Hulland 1997), which Nick Bontis developed into an instrument for the purpose of evaluating what he referred to as the 'stocks and flows' of organizational knowledge.[62] Although this instrument would, on the surface, appear ideal for the purpose of evaluating the degree to which learning flows within an organization, the Bontis instrument implements a seven-point Likert type scale over a total of 70 questions. A high response rate is important for the validity of any quantitative survey, so I wanted to keep my questionnaire as short as possible without compromising on the information obtained. I concluded that the Bontis instrument contained far too many questions to include in a survey that would also need to include the Chandler/Johansson instrument, as it would be very unlikely that anyone could complete it within a fifteen-minute timeframe.

Further reading in the field of organizational learning led me to an instrument developed by M. Begoña Lloria and Maria D. Moreno-Luzon, which attempts to integrate much of the work by Bontis et al. and Crossan et al. with the work of several other scholars of organizational learning. This Lloria & Moreno-Luzon instrument implements an 18 item questionnaire to capture five dimensions of organizational learning: ontological levels of learning (from individual to group, as identified by Bontis et al 2002; Crossan et al. 1999; and Nonaka 1991), modes of knowledge conversion (Chang et al. 2012; Nonaka 1994), learning subprocesses (the 4-I framework, Crossan et al., 1999), types of learning (Levinthal & March 1993; March 1991), and feedback/feed-forward flow (Bontis et al., 2002; Crossan et al. 1999). Although Lloria & Moreno-Luzon published their results in English, they originally administered their survey instrument in Spanish. In order to improve the response rate when administered as part of an English-language questionnaire, I have adapted the wording of some items to sound more natural, without changing their meaning.

## 5.6 Outcome Variables

Beyond any correlations between measures of effectuation and organizational learning, this study is interested in their possible affect on business outcomes. In particular, the survey attempts to measure basic perceptions about company performance, marketing accountability and marketing creativity. To measure per-

ceived company performance, I have used questionnaire items developed by Bontis as part of the above-mentioned article,[63] and to measure perceptions about the level of a company's marketing accountability and marketing creativity, I have used the scales developed by Verhoef & Leeflang as part of their study of the marketing function's influence across firms.[64] Previous studies have found that subjective measures such as these can be a reasonable substitute for objective measures of performance, and that there are strong correlations between objective and subjective performance measures (Dess & Robinson 1984; Venkatraman & Ramunujam 1987; Pearce, Robbins & Robinson 1987; Dawes 1999).

## 5.7 Control Variables

*Founders/co-founders vs. non-founders*

Research into effectuation has been largely based on studies of successful entrepreneurs, who have developed domain-specific expertise in navigating conditions of high uncertainty. Although someone's role as founder or co-founder of a firm does not give any indication of their domain expertise in entrepreneurship, controlling for this is worthwhile to perceive any biases emerge in their survey results, particularly on the effectuation scales.

*Years of industry experience*

As discussed above in section 2.1, domain expertise begins to emerge after approximately ten years of work in a particular field. Although the research into effectuation has primarily centred on entrepreneurs, this study looks at whether effectuation is also a method used by marketing domain experts. Controlling for industry experience provides an indication of domain expertise.

*Age and size of firm*

These variables are of particular interest from the perspectives of both effectuation and organizational learning. Effectuation is primarily conceived a logic of individuals rather than organizations, and Sarasvathy suggests that as companies mature, their managers will increasingly elect to employ causal logic over effectual logic.[65] Similarly, the organizational learning cycle of strategic renewal represents a tension between the exploratory learning of individuals and the exploitative institutionalization of knowledge. Crossan et al. describe how organizations naturally outgrow the ability to function spontaneously, and are forced to

implement routines and procedures, which can hinder the organization's ability to renew itself.[66] The general consensus of both Crossan and Sarasvathy is that spontaneous learning and effectuation are well suited to smaller organizations, whereas larger organizations require more reliance on causal logic, along with systems, structures, and other formal mechanisms. Of interest to this study is whether effectuation and organizational learning contribute to a firm's success within the highly uncertain recorded music industry. Firm age and size will be used as control variables to explore the role these variables within this context.

## 5.8. Analysis

From the survey data, I scored each of the composite scales calculated their corresponding values for Cronbach's alpha and their corrected item-total correlations. There is significant criticism about the application of Cronbach's alpha as an accurate measure of reliability (see Schmitt 1996, Sijtsma 2009, and DeSante 2011 among many others), particularly in the case of smaller sample sizes. Although it may be of limited utility in the case of this study, I have included the alpha coefficient for each scale to facilitate comparison with the previously published results of Johansson, Chandler et al., and Lloria & Moreno-Luzon. Once I had scored each of the composite scales, I computed Pearson's correlation coefficient for each pair of scale totals and the control variables.

I used the open-source software package *R: A language and environment for statistical computing* to perform all of the statistical analysis and tests used in this study, and the Filemaker database application to produce the cross-tabulations of descriptive statistics.

# 6. Results

## 6.1. Descriptive analysis of variables and validation of scales

The key variables in this study are latent variables derived from composite measures of questionnaire items. Although the majority of these composite measures have been previously published, and thus tested, verified and peer-reviewed, it is still necessary to examine how they perform in the specific context of this study.

*Effectuation and causation*

To measure the decision-making logic of survey respondents, I use the scale originally developed by Chandler et al. (2011), as modified and operationalized by Johansson (2014). This scale divides effectuation into four latent variables, each representing one of the four principles of effectuation: *flexibility*, *affordable-loss*, *pre-commitments*, and *experimentation*. The scale measures *causation* as a single latent variable.

Compared with the findings of Johansson in her study of the Swedish magazine industry, the mean effectuation and causations scores of this study were all slightly higher (Flexibility +0.53, Pre-Commitments +0.37, Experimentation +0.14, Causation +0.30), with the notable exception of Affordable-Loss (-0.26). Each variable with the exception of Pre-Commitments has acceptable Cronbach alphas demonstrating satisfactory levels of internal reliability, consistent with those of Johansson's study: flexibility 0.71, affordable-loss 0.79, experimentation 0.72, and causation 0.78.

Curiously, the Pre-commitments variable exhibits a significantly lower alpha value (0.66 versus Johansson's 0.83). Closer examination of the Pre-commitments scale reveals that while its last two items are correlated pairwise, the total combination of sub-items does not correlate across the entire scale. These last two items look at how companies can develop and exploit alliances with others, while the remaining four items refer to how companies utilize their customer and supplier networks. Given that the music industry's structure is highly networked, with elaborate royalty and revenue sharing provisions in nearly all customer and

supplier agreements, it is possible that these four items merely reflect the structural reality of the business, and are thus inadequate to capture pre-commitments as a component of effectual logic within this particular industry. Although this scale has been previously validated, I concluded that the structural context of the music industry might negatively influence the validity of these items, and I therefore decided to remove them from the Pre-Commitments composite scale. The original values are reported in Table 6.1 along with the new values after these four items had been removed.

Table 6.1: Descriptive statistics and reliability of effectuation and causation

| Variable | Mean | S.D. | Alpha | Corrected item-total correlation |
|---|---|---|---|---|
| **Flexibility** | **4.10** | **0.58** | **0.71** | |
| We allow our products and services to evolve as opportunities emerge. | 4.11 | 0.77 | | 0.52 |
| We adapt what we do to the resources we have at hand. | 4.26 | 0.79 | | 0.43 |
| We are flexible and take advantage of opportunities as they arise. | 4.40 | 0.71 | | 0.66 |
| We avoid courses of action that restrict our flexibility and adaptability. | 3.76 | 0.89 | | 0.38 |
| **Affordable Loss** | **3.80** | **0.90** | **0.79** | |
| When investing in development projects, we do not put in more money than we are willing to lose. | 3.35 | 1.19 | | 0.55 |
| We are careful not to invest so much money that the company would be in real financial difficulty if a project would fail entirely. | 4.15 | 1.02 | | 0.60 |
| When investing in development projects, we are careful not to invest more resources than we can afford to lose. | 3.87 | 1.01 | | 0.72 |
| **Pre-commitments** | **3.70** | **0.83** | **0.72** | |
| | (3.50) | (0.59) | (0.66) | |
| We try to reduce uncertainty and spread the risks in projects by involving customers and/or other suppliers as partners in our projects. | (2.93) | (1.18) | | (0.42) |
| We try as often as possible to get customers or suppliers to pre-commit to our development processes. | (2.87) | (1.07) | | (0.32) |

| | | | | |
|---|---|---|---|---|
| Our network contacts provide us with low cost resources. | (3.62) | (0.92) | | (0.22) |
| We expand our possibilities to develop by working closely with people/organizations external to our organization. | (4.03) | (0.84) | | (0.41) |
| We focus on developing alliances with other people and organizations. | 3.90 | 0.86 | | 0.56<br>(0.50) |
| Many of our products/services build on the participation from organizations/people external to our company. | 3.57 | 1.01 | | 0.56<br>(0.44) |
| **Experimentation** | **3.20** | **0.85** | **0.72** | |
| We usually experiment with different ideas and business/revenue models. | 3.33 | 0.96 | | 0.56 |
| We usually experiment with different business models until we find one that works. | 3.11 | 0.97 | | 0.56 |
| **Causation** | **3.50** | **0.58** | **0.78** | |
| We analyze long run opportunities and focus on what we believe provides the best returns. | 3.48 | 0.91 | | 0.40 |
| We develop goals and strategies that best take advantage of the resources and capabilities we have. | 4.03 | 0.75 | | 0.47 |
| We plan, develop and write down our business strategies. | 3.72 | 1.02 | | 0.58 |
| We have routines to follow up our goals. | 3.42 | 0.81 | | 0.46 |
| We base our decisions on careful marketing research and competitor analysis. | 2.83 | 0.94 | | 0.38 |
| We have a clear and consistent vision from the start for what we want our projects to accomplish. | 3.70 | 0.93 | | 0.50 |
| Our work on business development and marketing are based on careful plans. | 3.66 | 0.82 | | 0.71 |

*Organizational learning*

To measure organizational learning, I use the instrument developed and operationalized by Lloria & Moreno-Luzon (2013). This instrument conceptualizes organizational learning as a combination of four factors: (F1) information systems, (F2) the existence of a framework for consensus, (F3) procedures for the institu-

tionalization and broadening of knowledge, and (F4) forms of management and the genesis of knowledge.

Lloria & Moreno-Luzon did not report reliability measures individually for each factor in their scale, rather they computed Cronbach's alpha for an overall composite of all four factors. Along with the scale's descriptive statistics listed in Table 6.2, I have included both the overall alpha value of .91, which indicates a high level of internal reliability, along with the corresponding alpha value for each subfactor in the scale. I have scored each of the four factors separately to help determine which elements might affect the adoption of effectuation within an organization. The standard deviations of each of the four factors shows that there is quite a bit of variance in the levels of organizational learning among the respondents, which is a good basis for this type of analysis.

Table 6.2: Descriptive statistics and reliability of organizational learning

| Variable | Mean | S.D. | Alpha | Corrected item-total correlation |
|---|---|---|---|---|
| **Overall Composite Scale** | **4.6** | **0.95** | **0.91** | |
| **Information systems (F1)** | **4.80** | **1.20** | **0.76** | |
| Our company's files and databases provide its employees with the information they need to do their jobs effectively. | 4.82 | 1.45 | | 0.58 |
| Information systems allow individuals to share information. | 5.22 | 1.31 | | 0.58 |
| The company has formal mechanisms for sharing best practices between departments. | 4.33 | 1.55 | | 0.59 |
| **Framework for consensus (F2)** | **5.00** | **0.99** | **0.74** | |
| In meetings, everyone's point of view is given due consideration. | 5.68 | 1.24 | | 0.57 |
| Work groups share knowledge and experience via dialogue. | 5.52 | 1.25 | | 0.68 |
| Work groups share a common understanding of the subjects pertinent to their roles and activities. | 5.02 | 1.20 | | 0.47 |
| Our company has a procedure for receiving proposals from its employees, collecting them and internally distrib- | 3.64 | 1.66 | | 0.37 |

| | | | | |
|---|---|---|---|---|
| uting them. | | | | |
| **Procedures for the institutionalization and broadening of knowledge (F3)** | **4.0** | **1.0** | **0.63** | |
| Our company has agreements with universities or other technological and research centres to encourage learning. | 2.32 | 1.63 | | 0.39 |
| The organization's procedures and processes are laid down in a manual, standards booklet or similar. | 3.12 | 1.93 | | 0.46 |
| Our company has established alliances and networks with other companies to encourage learning. | 4.48 | 1.66 | | 0.39 |
| The company has databases, which allow experiences and knowledge to be stored and used at a later date. | 4.71 | 1.61 | | 0.44 |
| Suggestions from the company's own employees are frequently incorporated into its processes, products or services. | 5.42 | 1.29 | | 0.26 |
| **Forms of management and the genesis of knowledge (F4)** | **4.70** | **1.20** | **0.83** | |
| The people in our company are capable of breaking from traditional perceptions in order to see things in a new, different light. | 5.31 | 1.24 | | 0.69 |
| Meetings are periodically held where all employees are informed about any new developments in the company. | 5.43 | 1.65 | | 0.58 |
| Thanks to problem solving, groups work together to create radically different solutions. | 4.73 | 1.38 | | 0.63 |
| The company periodically produces a report in which all staff are informed about the company's progress. | 3.56 | 1.91 | | 0.47 |
| Our company's HR, compensation and bonus policies encourage staff to share knowledge. | 3.99 | 1.99 | | 0.67 |
| The people in our company try to understand the way their colleagues and workmates think and act. | 5.27 | 1.26 | | 0.58 |

*Outcome variables*

As discussed in section 5.6, the outcome variables used in this study include subjective measures of business performance, marketing accountability and marketing creativity. Each of these constructs are composite measures, all of them based on five sub-items. I examined the Cronbach's alpha value for each scored total, as well as the corrected item-total correlations for all sub-items. The Cronbach's alpha coefficients are .81 (business performance), 0.70 (marketing accountability) and .81 (marketing creativity), indicating a high level of internal consistency for each of the scales. The results are presented in Table 6.3.

Table 6.3: Descriptive statistics and reliability of outcome variables

| Variable | Mean | S.D. | Alpha | Corrected item-total correlation |
|---|---|---|---|---|
| **Perceived company performance** | **3.30** | **0.64** | **0.81** | |
| Our organization is successful. | 3.67 | 0.94 | | 0.76 |
| Our group meets its performance targets. | 3.45 | 0.82 | | 0.75 |
| Individuals are generally happy working here. | 4.04 | 0.94 | | 0.55 |
| Our organization meets its clients' needs. | 3.84 | 0.84 | | 0.76 |
| Our organization's future performance is secure. | 3.29 | 0.92 | | 0.51 |
| **Marketing Accountability** | **3.20** | **0.69** | **0.70** | |
| Is effective at linking their activities to financial outcomes. | 3.38 | 0.79 | | 0.65 |
| Shows the financial outcomes of their plans. | 3.11 | 0.95 | | 0.67 |
| Has little attention for financial outcomes of their activities.* | 2.54 | 1.01 | | 0.30 |
| Is effective at linking their activities to shareholder value. | 2.80 | 1.07 | | 0.32 |
| **Marketing Creativity** | **3.30** | **0.69** | **0.81** | |
| Dull…Exciting | 3.53 | 0.82 | | 0.54 |
| Fresh…Routine* | 2.73 | 0.92 | | 0.67 |
| Novel…Predictable* | 2.90 | 0.84 | | 0.70 |
| Trendsetting…Warmed over* | 2.81 | 0.79 | | 0.59 |
| Nothing special…An industry model | 3.31 | 0.91 | | 0.46 |

* Indicates a reverse-scored item

*Control variables*

The variables of founders/co-founders versus non-founders are operationalized in this study as a dummy variable, while years of industry experience and the age and size of firms are captured in ordinal scales. At the individual level, the breakdown of founders versus non-founders was remarkably close to equal, with 47.5% of respondents identifying as founders or co-founders. More than three quarters of respondents identified as having more than 10 years of industry experience, indicating that the survey results capture a great deal of domain expertise. The individual-level control variables are described in Table 6.4.

Table 6.4: Descriptive statistics of individual level control variables

| Variable | N | % |
|---|---|---|
| **Founder of firm** | **99** | |
| Founder/co-founders | 47 | 47.5% |
| Non-founders | 52 | 52.5% |
| **Years of industry experience** | **99** | |
| 0-3 Years | 9 | 9.1% |
| 4-6 Years | 7 | 7.1% |
| 7-9 Years | 7 | 7.1% |
| 10+ Years | 76 | 76.7% |

At the organizational level, 80.9% of respondent companies were under 26 years old, and 89.0% of respondent companies had fewer than 25 employees. Both of these figures would be significantly different had more employees of major labels completed the survey, therefore any resulting correlations with these control variables can only be said to be true of the independent sector. The results of the age and size of firm are presented in Table 6.5.

Table 6.5: Descriptive statistics of organizational level control variables

| Variable | N | % | Range | Mean | S.D. |
|---|---|---|---|---|---|
| **Age of firm*** | **99** | | **1-87** | **18.62** | **14.25** |
| 0-5 years | 7 | 7.1% | | | |
| 6-10 years | 16 | 16.2% | | | |
| 11-15 years | 29 | 29.3% | | | |
| 16-20 years | 18 | 18.2% | | | |

| | | | | |
|---|---|---|---|---|
| 21-25 years | | | 10 | 10.1% |
| 26-30 years | | | 4 | 4.0% |
| 31-35 years | | | 4 | 4.0% |
| 36-40 years | | | 3 | 3.0% |
| 41-45 years | | | 2 | 2.0% |
| 46-50 years | | | 2 | 2.0% |
| 51+ years | 3 | 3.0% | | |
| **Size of firm** | **99** | | | |
| 0-6 employees | 45 | 45.5% | | |
| 7-12 employees | 25 | 25.3% | | |
| 13-24 employees | 18 | 18.2% | | |
| 25-49 employees | 4 | 4.0% | | |
| 50+ employees | 7 | 7.1% | | |

* One respondent did not indicate the age of their company

## 6.2. Correlations

Table 6.6 displays the bivariate Pearson correlations of all the variables included in the hypotheses together with the control variables.

As expected, there are significant correlations among the decision-making variables, and among the organizational learning variables. With the exception of affordable-loss and pre-commitments, all the sub-components of effectuation are correlated with each other, which mirrors the findings of Johansson in her study of the Swedish magazine industry.[67] All four of the organizational learning factors are strongly correlated, which is also as expected given that Lloria & Moreno-Luzon used an exploratory factor analysis to identify these underlying latent variables in their scale.

Turning to the outcome variables, significant correlations emerge between *marketing creativity* and all four factors of organizational learning. *Marketing creativity* is also strongly correlated with both the effectual sub-component of *experimentation* and the use *causal logic*. Marketing accountability correlates strongly with *causation* and with all of the organizational learning factors, except for (F1) *information systems*.

Table 6.6: Correlation Matrix

| | C1 | C2 | C3 | C4 | PRF | MA | MC | CA | FLX | AF | PC | EXP | F1 | F2 | F3 | F4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1. Founder | 1.00 | | | | | | | | | | | | | | | |
| C2. Experience | ***0.31*** | 1.00 | | | | | | | | | | | | | | |
| C3. Firm Age | ***-0.26*** | 0.14 | 1.00 | | | | | | | | | | | | | |
| C4. Firm Size | ***-0.36*** | 0.05 | ***0.55*** | 1.00 | | | | | | | | | | | | |
| PRF | -0.09 | -0.09 | 0.12 | ***0.21*** | 1.00 | | | | | | | | | | | |
| MA | -0.06 | -0.06 | -0.02 | 0.04 | ***0.36*** | 1.00 | | | | | | | | | | |
| MC | 0.06 | 0.09 | 0.05 | 0.10 | ***0.28*** | 0.01 | 1.00 | | | | | | | | | |
| CA | -0.04 | 0.00 | -0.05 | 0.10 | ***0.42*** | ***0.25*** | ***0.45*** | 1.00 | | | | | | | | |
| FLX | 0.13 | 0.10 | -0.08 | -0.19 | ***0.34*** | 0.08 | 0.18 | ***0.32*** | 1.00 | | | | | | | |
| AF | 0.08 | 0.11 | 0.16 | -0.06 | 0.06 | -0.01 | -0.04 | 0.08 | 0.18 | 1.00 | | | | | | |
| PC | -0.02 | -0.05 | 0.09 | -0.02 | ***0.22*** | 0.02 | 0.11 | ***0.26*** | ***0.28*** | ***0.34*** | 1.00 | | | | | |
| EXP | ***0.24*** | ***0.22*** | -0.01 | -0.03 | ***0.19*** | -0.05 | ***0.29*** | 0.11 | ***0.29*** | 0.05 | 0.20 | 1.00 | | | | |
| F1 | ***0.20*** | 0.02 | -0.09 | -0.09 | 0.13 | 0.16 | ***0.34*** | ***0.36*** | ***0.22*** | -0.08 | 0.14 | 0.23 | 1.00 | | | |
| F2 | ***0.22*** | 0.01 | -0.15 | -0.10 | ***0.28*** | ***0.27*** | ***0.35*** | ***0.40*** | ***0.27*** | 0.10 | -0.01 | 0.19 | ***0.63*** | 1.00 | | |
| F3 | 0.02 | -0.08 | -0.06 | 0.07 | 0.23 | ***0.21*** | ***0.30*** | ***0.39*** | 0.11 | 0.01 | ***0.28*** | ***0.20*** | ***0.66*** | ***0.54*** | 1.00 | |
| F4 | 0.09 | 0.08 | -0.19 | -0.05 | ***0.36*** | ***0.26*** | ***0.42*** | ***0.44*** | ***0.26*** | -0.11 | -0.02 | ***0.23*** | ***0.65*** | ***0.81*** | **0.66** | 1.00 |

Values in italics have a *p* value of < 0.05

PRF = Business Performance, MA = Marketing Accountablity, MC = Marketing Creativity,
CA = Causation, FLX = Flexibility, AF = Affordable Loss, PC = Pre-Commitments, EXP = Experimentation,
F1 = Information Systems, F2 = Framework for Consensus, F3 = Institutionalizing Knowledge, F4 = Management of Knowledge

Finally, overall *business performance* correlates strongly with the use of both causal logic and effectual logic, and with the organizational learning factors of (F2) *framework for consensus* and (F4) *management and genesis of knowledge*.

Between the elements of effectuation and organizational learning, strong correlations emerge between *flexibility* and all elements of organizational learning, except for (F3) *institutionalizing and broadening knowledge*. Although not correlated to flexibility, (F3) is strongly correlated to both the use of pre-commitments and experimentation.

Some interesting non-hypothesized correlations also emerge between the control variables themselves. Firm age and firm size are both negatively correlated to whether or not the respondent was a founder of the firm, which seems logical since respondents are more likely to be non-founders in larger companies. Likewise, there is a strong correlation between firm age and firm size, which also seems logical as the older a firm becomes, the more growth it has likely experienced.

Significantly, there are no meaningful correlations between the control variables of firm age or size and any of the decision-making variables, or any of the organizational learning factors. This is surprising, and contrary to the suggestions of both Sarasvathy and Crossan, who have predicted that smaller organizations are more suited to effectual logic and spontaneous learning respectively. While it is possible that none of the firms operating in the music industry are large enough to notice these effects, it is also possible that all firms continue to employ effectual logic because firms of all sizes are forced to address the industry's inherent uncertainty – size does not mitigate it. On the other hand, the outcome variable of business performance does correlate strongly with the size of a firm, which seems entirely logical because a business grows as it becomes successful.

## 6.3. Testing the hypotheses

**H1**: Intuitive judgment is the basis for most marketing decision-making in cultural industries.

Somewhat contradictory, strong correlations exist between business performance and both causal logic and all elements of effectual logic except for affordable-loss. This indicates that successful companies are employing a mix of both causal and effectual logics, and would seem to disprove the hypothesis that intuitive judgement is the basis for most marketing decisions in cultural industries. This finding is, however, consistent with the suggestions of Sarasvathy (2001), Chandler et al. (2011) and Perry et al. (2012) that effectual and causal principles necessarily coexist. This finding is further supported by looking at marketing creativity, which is positively correlated with both causation and experimentation – indicating that the most creative marketers use a mix of both causal and effectual approaches.

**H2**: Marketers with more experience (and therefore more expertise) will be more likely than those with less experience to use effectuation as a basis for decision-making in uncertain conditions.

This hypothesis is partially supported by the correlations between industry experience and use of causal and effectual logics, although the strongest correlation is between industry experience and experimentation in particular. Approaching this hypothesis from the opposite direction, it is worth noting that there is no correlation whatsoever between industry experience and the use of causal logic, indicating that while more experienced marketers are likely to employ effectual techniques, they are no more likely than entry level marketers to employ or causal or analytical techniques. In contrast to causation, which is employed by both experts and novices, it appears that effectuation is indeed a skill or behaviour of experts.

**H3**: Marketing teams with higher aggregate use of effectuation for decision-making will exhibit more successful marketing outcomes in uncertain conditions.

This hypothesis is clearly supported by the strong correlations between business performance and most of the effectual variables. The notable exception is the lack of any significant correlation between the principle of affordable-loss and business performance. Furthermore, this study did not find significant correlations between affordable-loss and any of the control variables, nor the business outcome variables. This is remarkably different from the findings of Johansson

(2012), and of Chandler et al (2007), and could indicate that the principle of affordable-loss as operationalized in this study is not well suited to capturing the principle as it applies in the music industry.

**H4**: Smaller companies will be more likely to have cultures of organizational learning.

Although much of the organizational learning theory suggests that firms will find it difficult to maintain levels of organizational learning as they grow, this study found no evidence that smaller organizations are more likely to have cultures of organizational learning. As Table 6.7 shows, most of the organizational learning factors remain relatively stable as firm size increases. The only exception to this is F3 (institutionalizing knowledge), which does increase slightly as firm size increases. The result is that large firms in the music industry are just as likely as small firms to have strong cultures of organizational learning.

Table 6.7: Cross-tabulation of organizational learning factors by size of firm

| | **F1** | | **F2** | | **F3** | | **F4** | |
|---|---|---|---|---|---|---|---|---|
| **Size of Firm** | mean | s.d. | mean | s.d. | mean | s.d. | mean | s.d. |
| 0-6 employees | 4.99 | 1.08 | 5.16 | 0.90 | 4.00 | 1.03 | 4.77 | 1.21 |
| 7-12 employees | 4.76 | 1.12 | 4.92 | 0.89 | 3.97 | 1.04 | 4.73 | 1.04 |
| 13-24 employees | 4.35 | 1.43 | 4.54 | 1.25 | 3.90 | 1.13 | 4.62 | 1.33 |
| 25-49 employees | 5.00 | 1.52 | 5.06 | 1.23 | 4.60 | 0.54 | 4.71 | 1.27 |
| 50+ employees | 4.67 | 1.15 | 4.86 | 0.93 | 4.20 | 1.26 | 4.57 | 0.98 |

**H5**: Smaller companies will be more likely to use effectuation as a basis for decision-making.

Sarasvathy suggests that as firms grow, their managers will increasingly turn to causal logic out of necessity.[68] The music industry is an interesting context in which to examine this idea, as the uncertainty associated with successfully producing and marketing hits never diminishes. Indeed, as the Pearson correlations of Table 6.6 demonstrate, there is no obvious correlation between the size of a firm and any of the sub-components of effectuation.

Table 6.8 presents the mean scores and standard deviations for each of the effectuation sub-components, summarized by the size of a firm. This cross-tabulation confirms that the affordable-loss and experimentation components of effectuation are more or less the same for all sizes of firms; however, smaller firms exhibit more flexibility than the larger ones, while larger firms exhibit higher levels of pre-commitments. The relationship between flexibility and size of firm seems consistent with Sarasvathy's above prediction; however, the relationship between pre-commitments and size of firm found in this study seems contrary to the established theory of effectuation. I hypothesize that since the levels of uncertainty remain the same for music companies of all sizes, the largest companies are using their size to negotiate stronger pre-commitments from their network partners. Thus, there might be an additional relationship between the size of a firm, and it's effectual negotiating power. This would be an interesting direction for future research on the use of effectuation among established firms in business development under uncertainty.

Table 6.8: Cross-tabulation of effectuation measures by size of firm

| | **Flexibility** | | **Affordable-Loss** | | **Pre-Commitments** | | **Experimentation** | |
|---|---|---|---|---|---|---|---|---|
| **Size of Firm** | mean | s.d. | mean | s.d. | mean | s.d. | mean | s.d. |
| 0-6 employees | 4.20 | 0.49 | 3.86 | 0.87 | 3.76 | 0.90 | 3.28 | 0.74 |
| 7-12 employees | 4.10 | 0.65 | 3.80 | 0.91 | 3.60 | 0.80 | 3.30 | 0.90 |
| 13-24 employees | 4.22 | 0.65 | 3.67 | 0.99 | 3.69 | 0.81 | 2.92 | 1.07 |
| 25-49 employees | 3.81 | 0.31 | 3.67 | 0.54 | 4.00 | 0.82 | 3.50 | 0.58 |
| 50+ employees | 3.79 | 0.65 | 3.71 | 1.11 | 4.00 | 0.58 | 3.21 | 0.91 |

**H6**: Marketing teams that have a culture of organizational learning will be perceived to be more creative than others.

As can be seen in Table 6.6, there are strong correlations between marketing creativity, causation, and the effectual principle of experimentation. By grouping the data by mean organizational learning score in Table 6.9, one can see that as the overall level of organizational learning increases, so does marketing creativity. Although the standard deviation of marketing creativity scores is greater at the lowest level of the table, it remains relatively consistent throughout.

Table 6.9: Cross-tabulation effectuation and marketing creativity grouped by organizational learning scores

| Grouped organizational learning score | Effectuation mean | Effectuation s.d. | Marketing Creativitity mean | Marketing Creativitity s.d. |
|---|---|---|---|---|
| 6.01-7.00 | 4.01 | 0.76 | 4.03 | 0.66 |
| 5.01-6.00 | 3.71 | 0.45 | 3.41 | 0.55 |
| 4.01-5.00 | 3.66 | 0.37 | 3.26 | 0.65 |
| 3.01-4.00 | 3.53 | 0.52 | 3.01 | 0.57 |
| 2.01-3.00 | 3.38 | 0.62 | 2.70 | 0.58 |

**H7**: Marketing teams with cultures of organizational learning will be more accountable (i.e. more likely to link their activities to financial outcomes)

As presented in Table 6.6, there are no correlations between effectuation and marketing accountability; however, the Pearson coefficients do indicate that there is a correlation between causation and marketing accountability. By grouping the data by organizational learning score, as shown in Table 6.10, one can see that causation increases along with the level of organizational learning; however, the slight increase in marketing accountability appears to be marginal, and the standard deviations indicate that there is a tremendous amount of overlap between the different levels. From this examination of the survey data, I conclude that while some organizations might be better at demonstrating a link between marketing activities and financial outcomes, the correlation between organizational learning and marketing accountability is not very significant – despite the clear relationship between causal logic and organizational learning. Thus, marketing teams with cultures of organizational learning will not be significantly more accountable than those with lower levels of organizational learning.

Table 6.10: Cross-tabulation causation and marketing accountability grouped by organizational learning scores

| Grouped organizational learning score | Causation mean | Causation s.d. | Marketing Accountability mean | Marketing Accountability s.d. |
|---|---|---|---|---|
| 6.01-7.00 | 4.26 | 0.46 | 3.04 | 0.43 |
| 5.01-6.00 | 3.61 | 0.58 | 3.08 | 0.64 |

| | | | | |
|---|---|---|---|---|
| 4.01-5.00 | 3.59 | 0.48 | 2.95 | 0.46 |
| 3.01-4.00 | 3.26 | 0.55 | 2.82 | 0.57 |
| 2.01-3.00 | 3.00 | 0.71 | 2.69 | 0.66 |

**H8**: Less experienced marketers in teams that have a culture of organizational learning will be more likely to use effectuation than their peers in teams that don't have cultures of organizational learning.

The sample size among respondents with less than ten years of industry experience is not large enough to examine the bivariate Pearson correlations between the effectuation and organizational learning scores; however, one can get a sense of the trend by looking at the individual responses. In Table 6.11, I have summarized the four components of each effectuation and organizational learning for each respondent with less than ten years of experience with composite mean scores. With the exception of one outlier in the category of 0-3 years experience, which I have removed from the analysis, the combined effectuation score clearly rises with the combined score for organizational learning.

Table 6.11: Levels of organizational learning and effectuation by experience

| 0-3 years experience | | 4-6 years experience | | 7-9 years experience | |
|---|---|---|---|---|---|
| Learning | Effectuation | Learning | Effectuation | Learning | Effectuation |
| 2.37 | 2.90 | 2.20 | 4.17 | 2.60 | 2.85 |
| 3.53 | 2.75 | 4.03 | 3.92 | 4.10 | 3.88 |
| 4.39 | 3.77 | 4.05 | 3.38 | 4.54 | 3.27 |
| 4.68 | 3.58 | 4.55 | 4.23 | 5.26 | 3.77 |
| 4.79 | 2.67 | 4.88 | 3.23 | 5.32 | 2.25 |
| 5.23 | 3.92 | 5.26 | 3.54 | 5.48 | 3.79 |
| 5.27 | 3.90 | 6.37 | 3.90 | 5.77 | 3.08 |
| 5.70 | 4.21 | — | — | — | — |
| 5.71 | removed | — | — | — | — |

This suggests that less experienced marketers will be more likely to adopt more effectual logic if they are surrounded by a culture of organizational learning, and supports the hypothesis that effectuation is a 'thinking behaviour' that can be trained.

# 7. Discussing the findings

Given the levels of uncertainty present in hits-driven cultural businesses, marketing practitioners rely on their intuitive judgement in lieu of having 'the full picture.' This study examines how marketing decisions are made in the music business to help answer the question of how leaders might improve their decision-making abilities in situations where rational analysis is not possible.

The findings support hypothesis H3, the idea that higher levels of the effectual principle of experimentation, result in better outcomes when measured in terms of marketing creativity and business performance. This supports Sarasvathy's idea that non-predictive control is a major factor in successfully navigating conditions of uncertainty, and suggests that the principles of effectuation are successfully employed in fields beyond entrepreneurship or new product development.

Furthermore, the findings support the idea that music industry experience and its related domain-specific expertise are predictors of decision-making logic used in marketing. Use of experimentation in particular increases with industry experience. Although not consistent with the findings of Johansson, who surprisingly found no such link between industry experience and effectuation,[69] this finding is congruent with the findings of Chandler et al., which indicate that experimentation is the only sub-component of effectuation that is significantly correlated with uncertainty.[70] In general, these findings are also consistent with those of Reed et al. who found that expert entrepreneurs approached marketing decisions using effectual techniques not employed by their manager peers.[71]

Although not correlated to industry experience, the results suggest that the effectual principles of flexibility and affordable-loss are negatively correlated with a firm's size. While not obviously consistent with Sarasvathy's theories, this finding is similar to her prediction that managers will turn away from effectuation as their firms mature.[72] On the other hand, the results also show that pre-commitments are employed to a higher degree by larger firms than smaller ones. These findings suggest that in the context of established or mature companies, flexibility and affordable-loss are effectual principles best employed by small firms, while pre-commitments are more successfully employed by larger ones.

Surprisingly, the results found that the effectual principle of affordable-loss is not correlated to any outcome variable, nor organizational learning variable. With the increasing concentration of hits in the highest percentiles of the demand curve, it is hard to imagine that music companies would not be acutely aware of their thresholds for affordable-loss on a daily basis. As briefly discussed in section 6.3, this is substantially different from what was expected, and I have speculated that the principle of affordable-loss as operationalized in this study is not well suited to capturing the principle as it applies in the music industry.

These findings yield some insight into how domain experts employ effectual logic to make marketing decisions under uncertainty at music companies of all sizes; however, of particular interest to this study is how organizational learning affects the use of effectuation among less experienced staff, and how that correlates to overall business performance.

Contrary to hypothesis H4, the findings suggest that there is no significant correlation between levels of organizational learning and the size of a firm. This is somewhat counterintuitive, given that the literature suggests learning becomes less spontaneous as a firm grows;[73] however even the largest firms in the music industry are relatively small when compared to those in sectors such as fast-moving consumer goods or financial services, suggesting that no firm surveyed was large enough to observe this effect. Rather, the survey results indicate that larger firms in the music industry are just as likely as the smallest firms to have high levels of organizational learning.

Nonetheless, the survey results show a healthy spread among levels of organizational learning within the sample. Furthermore, these results indicate that higher levels of organizational learning can predict the adoption of effectual logic by less experienced respondents. This directly supports hypothesis H8, and is consistent with Hogarth's theories on the role of feedback in developing domain expertise and intuitive judgement.[74] Furthermore, put in terms of the U.S. Army's work on adaptive thinking, this result suggests that the effectual principles can be thought of as a trainable 'thinking behaviours.'

Despite the apparent correlation between organizational learning and marketing accountability, a deeper examination of the findings reveals that marketing teams with higher levels of organizational learning are no more likely to link their activities with financial results than those with lesser levels of organizational learning. Marketing accountability is closely correlated with causal logic, which in turn is also closely correlated to organizational learning; however, despite these correlations, the survey results do not support hypothesis H7.

In contrast to the findings about marketing accountability, the results indicate that marketing teams with higher levels of organizational learning exhibit higher levels of creativity. Although there is no link between organizational learning and marketing accountability, this finding directly supports hypothesis H6, and connects this line of thinking about organizational learning with hypothesis H3. In other words, marketing teams with higher levels of organizational learning exhibit higher levels of of experimentation, and teams exhibiting higher levels of experimentation are perceived as producing more creative marketing ideas and materials.

Taken together, these findings support the theory that effectual-logic, combined with the strategic renewal process of organizational learning could create, in Hogarth's terminology, the 'kind' learning environment needed to strengthen the intuitive judgement used to make marketing decisions under uncertainty. The results support the idea that by developing mechanisms to make explicit the tacit knowledge used by marketers in their intuitive judgments among team members, firms might lead their less experienced staff to a higher quality of intuitive judgment in making marketing decisions. This suggests that the application of effectual logic in certain cases might represent a modeling of 'correct form' or 'expert form.'

## 7.1. Contributions to the literature

This thesis contributes to the literature base in several ways. First, by introducing a quantitative study of marketing practitioners within the music industry, it adds to the cultural industries discourse around the issues of uncertainty and decision-making. While there has been a lot of research that indicates hits are becoming increasingly concentrated in the very first percentiles of the demand curve, and the remainder of the curve is flattening (Elberse 2008; Will Page, quoted in Mas-

nick 2010; Longstaff & Steinhardt 2011), and some research into why hits-driven companies pursue big-bet production and marketing strategies (Elberse 2014), this study examines how business performance can be improved when marketing decisions need to be made under these uncertain conditions, beyond the limits of rational analysis.

Second, this study reframes the role of organizational learning in the marketing context from being a tool for market-orientation to being a method of propagating successful domain-specific expertise or "thinking behaviours" within marketing teams. Despite the prescriptive analytical techniques used in marketing text-books, the marketing discipline is largely one of intuitive judgement (Patterson, Quinn & Baron 2012; Ardley & Taylor 2015). By approaching organizational learning as a tool for modeling 'expert form' and developing domain-specific expertise, this thesis addresses the question of how managers might be able to improve the intuitive judgement of their teams.

Third, this study confirms the understanding of effectuation as a method of decision-making under uncertainty by expanding the concept from that of entrepreneurship and new product development to that of marketing in hits-driven businesses. Effectuation is in a nascent-to-intermediate stage of research,[75] and while the findings of this study demonstrate that many aspects of the effectuation model can help understand decision-making under uncertainty in established companies, others aspects may still need refinement. The continuously uncertain operating environment of hits-driven businesses provides a particularly meaningful context in which to examine the role of effectuation in maturing organizations.

Finally, by combining these last two ideas, intuitive judgement and decision-making under uncertainty, this study adds to the body of knowledge about how organizations dealing with high uncertainty can improve their collective skill of intuitive judgement. This thesis extends the theories developed by U.S. Army's TLAC program by finding that a similar style of training or knowledge transfer can occur around 'adaptive thinking' or intuitive judgement within a completely different industry that also faces degrees of uncertainty. Although the stakes in other industries are lower, the puzzle of improving intuitive judgement is relevant to

leadership theory beyond military circles, as it is a subject of considerable importance to any leader in an uncertain environment.

## 7.2. Limitations of this study

This study brings some quantitative analysis to an area of inquiry within the cultural industries where the vast majority of research has employed qualitative techniques, far more limited in scope of respondents. With nearly half the respondents originating from outside of Canada, it also attempts to get a global picture of how practitioners in the music industry are dealing with uncertainty.

As with all studies based on self-reported questionnaires, this research suffers from a number of inherent limitations. In particular, this study suffers from a potential selection bias due to non-responses. Although the overall response rate from independent companies is in excess of 47%, the response rate for any record labels owned by the three multinationals (SME, UMG and WMG) is so low as to be immaterial. This research is therefore only truly representative of independent record companies.

Although the response rate from independent companies was significant, the overall sample size was quite small, and in some cases too small to conduct a thorough analysis. It is worth contemplating that had employees of the multinationals participated in proportion with their market share, the overall sample size would have been three times larger. Employees of both independent and major companies indicated in many cases that they were unable to participate in the survey due to its timing in the second calendar quarter. In hindsight, the first calendar quarter would have been a better time of year to administer such a survey, as the immediate post-holiday season is a traditionally slow time of year in the music industry. This likely would have increased the overall number of respondents.

Several post-survey email exchanges with respondents suggest that the language of the survey itself may have created demand characteristics among respondents. Although the survey was introduced as being on the topic of decision-making, these post-survey emails suggest that several respondents believed the topic to be about the adoption of structured procedures at their companies.

This suggests that some respondents may have adjusted their responses based on their perception of the study's purpose; however, it is impossible to know how this may or may not have altered the study's outcome.

## 7.3. Directions for future research

This study looks at the roles of organizational learning and effectuation in improving an organization's ability to make decisions under uncertainty; however, it is clear that the music industry is structured around networks of both tight and loose connections. While these tight and loose couplings have created an industry that is highly resilient to uncertainty, it also presents a conundrum for improving decision-making throughout entire networks within the industry. Given that leveraging network connections is so integral to the logic and practice of effectuators, an important area for future research is to uncover how learning is facilitated across such networks, and whether network learning has an impact on the quality of decisions made within such a network. As presented above in Table 6.8, larger companies score higher on the pre-commitments measure of effectuation. Longstaff and Steinhard have argued that the long-term stability of a firm might increase if it has many weak ties;[76] however, this particular correlation does not necessarily equate with causation. Since the levels of uncertainty remain the high for music companies of all sizes, it would be worth investigating how size might be related to a firm's effectual negotiating power in the realm of getting pre-commitments and leveraging network strengths. Conversely, what would the implications of this be for smaller firms?

Reed et al. note that effectual logic is coherent with service-dominant logic and other co-creational theories of marketing.[77] International co-writing and artistic collaboration are daily practices of the contemporary music industry. Future research might begin to tackle this question of negotiating power for smaller firms by comparing how loosely coupled networks of stakeholders co-author meaning, or other forms of value co-creation within an effectual marketing context.

The high non-response rate from those working at major labels also points to an area for future research. Independent labels' propensity to work closely with external network participants in other countries may have contributed to their relative willingness to participate in this study, thus contributing to a form of selection

bias. The major labels, in contrast operate within their own tightly coupled multinational networks, and might have little business incentive to participate in external networks at the record company level. Such multinational networks have been investigated at length for their potential as sources of intra-organizational learning (see Ghoshal & Bartlett 1990; Birkinshaw & Hood 1998; Rugman & Verbeke 2001), but research into effectuation has concentrated primarily on entrepreneurial and start-up ventures. A comparison of how those working in major labels versus those working in independent labels deal with uncertainty would contribute significantly to the topics of effectuation and decision-making under uncertainty. Furthermore, as the music industry contracts, many people who started at major labels have moved to independents, which raises the question of whether the domain-expertise developed inside the multinational networks of the majors transfers easily, or is even particularly well suited to the loosely coupled external networks of the independents.

# 8. Conclusions and implications

This project began with idea of studying how an independent record label could improve its decision-making when it came to allocating marketing funds. As a hits-driven cultural industry, the music business is somewhat unique. The reliance on hits, and the uncertainty around producing them creates an unpredictable environment that is shared by all firms in the sector; however, uncertainty is not unique to the music industry, or even the cultural industries. Recognizing that the most experienced marketers in all fields rely to a high degree on their own intuitive judgement and 'gut feelings' to guide their choices, this thesis seeks answers to the question of how leaders can improve their decision-making in situations where a rational analysis of predictable, or even historic, outcomes is simply unhelpful.

The original research presented in this study draws on similar work from the fields of entrepreneurship and organizational learning, and makes a connection between them inspired by the U.S. Army's research on the training of 'adaptive thinking.' Its key finding is evidence supporting the theory that the adoption of non-predictive effectual logic is enhanced in environments of organizational learning, strengthening the intuitive judgement required to make marketing decisions under uncertainty.

Traditional rationality is rooted in the predictive relationship between cause and effect, where the emphasis is in pursuing anticipated future outcomes, even if it requires resources beyond the immediate control of the decision-maker. While this is well suited for problems with clear definitions, rules, operations and relationships, this type of analysis is not particularly helpful when future outcomes are truly uncertain. Effectual logic, in contrast, is rooted in the decision-maker's immediate control, and is predicated on leveraging elements within that control together with stakeholders to co-create the future.

Clearly, reality presents a mix of both 'intellective' and ill-structured problems—the known, the unknown and the unknowable—each of which requires a different approach. Although the findings of this study reflect this in the mix of causation and effectuation levels that respondents demonstrated, they also point to differ-

ent levels of individual and organizational awareness around these two types of problem-solving logics. For leaders aiming to improve their organization's ability to deal with uncertainty, this presents three significant challenges. First, leaders need to be able to identify 'correct form' thinking behaviours and encourage them. Second, leaders need to facilitate the flows of both individual and institutional level knowledge within the organization. Finally, leaders need to be prepared to make plans that are not entirely linear.

Although 'correct' or 'expert' thinking will be different in every situation, effectuation provides a way of understanding the 'invisible' logic of expertise in dealing with uncertainty. To identify the types of thinking behaviours most likely to be successful in uncertain situations, leaders should develop an awareness of what effectuation looks like in practice. One of the biggest differences between effectual logic and causal logic is that effectuation begins with a focus on the available means, rather than a focus on the end goal. The non-predictive aspect of effectuation means focusing on activities that are within control, rather than forecasting future events. Leaders trying to identify this type of behaviour can think in terms of 'what *can* be done,' as opposed to 'what *ought* to be done.'

Organizational learning is more than a commitment to training and development; in the terms of Crossan et al., it is a framework for strategic renewal. Leaders aiming to improve their organization's ability to deal with uncertainty need to support individuals who develop effectual techniques by creating a vehicle for these new techniques to be shared within the organization, and possibly with network partners external to the organization. Although formal mechanisms can certainly help with this, a major part of the leadership challenge is facilitating the feed-forward process from individual to group level, by encouraging unbiased, open and transparent communications between team members. The leader's role here is to help team members integrate the personally constructed cognitive maps of others into a shared understanding.

Although effectuation is based in non-predictive logic, this does not mean that it is a form of trial-and-error, or a variation on an 'agile,' test-and-learn approach to decision-making. At its core, effectual logic begins with available means, and leverages contingencies. While a causal approach to planning beings with the end in mind, and works backwards from there to limit contingency risks, an effec-

tual approach to planning starts with an assessment of available means, and works forward from there to co-create the future with network stakeholders. Leaders need to accept that the future is ultimately unpredictable, and although there may be a general shared direction between stakeholders, the end result may look substantially different from what they've envisioned at the start.

From this perspective, an effectual approach to planning is more like how one imagines the early sea explorers prepared expeditions into the unknown: they would have planned for potential risks they could foresee, but they didn't know exactly where they were going to find themselves, nor exactly how they would get there. An effectual point of view perceives the unexpected as something to be leveraged into further means, for further exploration. Leaders not only need to be comfortable with not knowing the exact destination of their plans, but they also need to help their team members develop a shared understanding of purpose that doesn't necessarily include a specific destination. Finally, leaders can encourage their team members to think in effectual terms in situations where outcomes are unknowable – asking 'what *can* be done,' as opposed to 'what *ought* to be done. The findings of this study suggest that leaders who can meet these challenges will be on their way to improving their organizations' use of intuitive judgement in situations of uncertainty.

As many have observed, disruptive innovation and the rapidly changing competitive landscape across all industries have rendered traditional strategic planning models inadequate. Traditional business education teaches that decision-making can be improved by using rational analysis to estimate the probability of various outcomes given a particular choice, and then basing decisions on choosing the appropriate option to produce the best most likely outcome. When operating under uncertainty, the probability of any particular outcome is impossible to estimate meaning that rational analysis is ill suited to improving decision-making. Pivoting and agility are the mantras of start-up culture, and in an age of radical uncertainty these ideas have begun to spread to established business as a way of dealing with all the unpredictability. Formulating a clear long-term picture is impossible when the future is highly uncertain; however, the application of effectual logic provides an alternative to blindly chasing revenue and other business objectives with trial and error tactics. By fostering a culture of organizational learning that encourages effectuation as a basis for decision-making, creative

leaders can keep their teams focused on business outcomes and avoid constantly reacting to the volatility of uncertain conditions. Effectuation is a viable alternative to causation for improving decision-making among available choices.

## 8.1. What it means for Continuous improvement

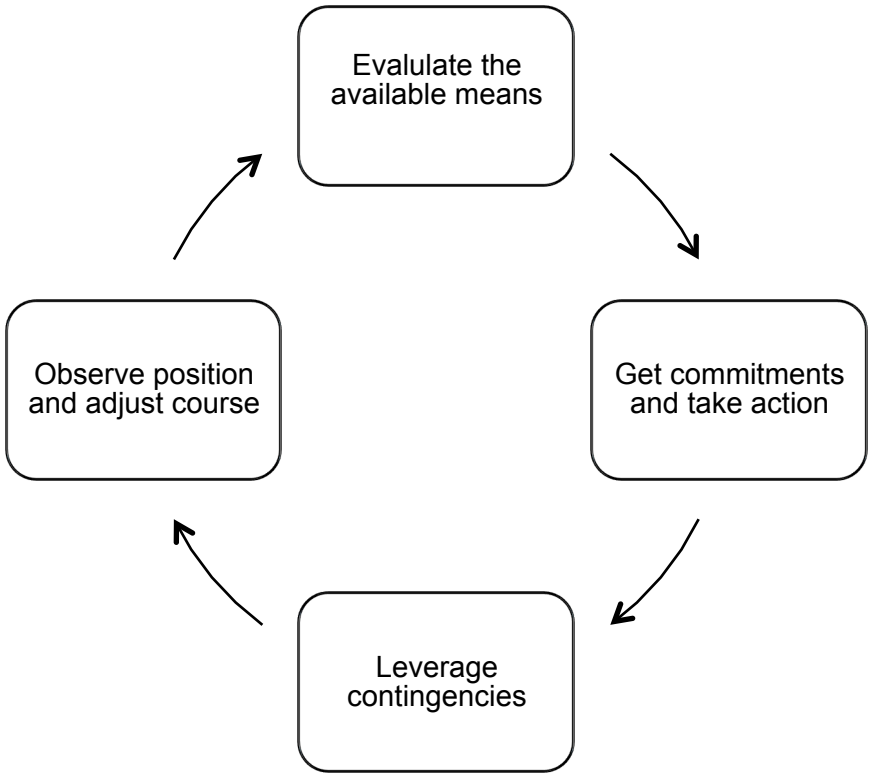
The concepts of 'continuous improvement' as popularized by the pioneering work of Walter Shewhart and William Edwards Deming during the post-war reconstruction of Japan are largely based on the application of statistical methods to variation in mass production. The well-known 'Plan-Do-Study-Act' cycle of Quality Management is in essence a learning mechanism based on the scientific method of 'hypothesis–experiment–evaluate,' in which business processes are refined with each iteration of the cycle to further eliminate the potential for error. This is strikingly similar to the 'test and learn' methods advocated in the popular business press by Jim Collins and Morten T. Hansen (*Great By Choice*, 2011), Eric Ries (*Lean Startup*, 2011), Ryan Holiday (*Growth Hacker Marketing*, 2013) and Paul Roetzer (*The Marketing Performance Blueprint*, 2014); however, for the reasons discussed throughout this thesis, this approach is not well suited to situations with uncertain, or unknowable, outcomes.

While specific outcomes are impossible to reliably predict under uncertainty, this does not mean that leaders cannot have strategic goals. For example, in the music industry it is impossible to predict the likelihood of a hit song. What worked once, for a particular artist or songwriter will not necessarily work again under similar circumstances; however, this does not change the fact that a record label's goal is to move that song as far up the demand curve, in the direction of hits, as possible.

Given that future outcomes under uncertainty are fundamentally unknowable, any systematic attempt at improving decision-making in uncertain conditions will need to take a synthetic rather than analytic approach. Rather than focus on the improvement of specific, unpredictable outcomes, the focus needs to be on improving the quality of available outcome options. Although techniques such as real options valuation have contributed significantly to improving decision-makers' ability to analyze potential costs and gains arising from flexibility, they are still largely dependent on estimating the probability distribution for risk consideration.

In situations of true uncertainty, taking the perspective that the ability to predict outcomes will enable control is illusionary at best. Taking an effectual approach, in contrast, stems from the perspective that control of the immediate environment is possible, even if the future is unknown. For the purpose of continuous improvement, the focus needs to be on generating further possibilities for control, rather than eliminating errors. Reversing the logic of the 'Plan-Do-Study-Act' cycle, I suggest an alternative cycle based on the non-predictive control of effectuation:

Figure 8.1: A suggested cycle for continuous improvement in uncertain conditions




1. *Evaluate the available means:* the cycle begins by taking an inventory of all available resources, including external people or firms who may be willing to partner. From these available means, select the ones that lead in the desired direction based on their immediate effect. For example, in the case of a new music release, is there action immediately available that would increase fan or listener engagement?

2. *Get commitments and take action:* form partnerships and get pre-commitments from stakeholders to reduce uncertainty. Take action using the

resources available *right now* that will lead in the generally desired direction. To continue the above example, lobbying radio stations for airplay might not actually result in any airplay at all; however, if a larger artist has offered a support slot on their tour, it creates an opportunity to engage new fans.

3. *Leverage contingencies:* look for new resources, new stakeholders, or other new opportunities that are created in the course of unexpected events. These new opportunities become part of the available means in the next iteration of the cycle.

4. *Observe position and adjust the course:* while effectuation enables control in situations of uncertainty, it is important to remember the non-predictive element of this control. Effectual techniques will most likely *not* deliver desired outcomes in as few steps as possible. To draw once more on the analogy of early seafaring explorers, charting a precise course is impossible when the destination's exact location is unknown.

This 'Evaluate–Commit–Leverage–Observe & Adjust' cycle reverses the logic of the Shewhart/Deming cycle, putting the focus on surfacing means and options, rather than detecting and preventing errors. With each iteration of this cycle, decision-makers will have uncovered more available resources, and by getting commitments or taking action, have moved one step further in their desired direction. This focus on available means treats decision-making and planning as pragmatic activities based in the here-and-now that are capable of transforming or creating the future.

To be clear, effectual logic is not an alternative to causal logic, rather it is complementary. Effectuation is particularly useful in situations of uncertainty, where causal rationality is unhelpful. Together with the traditional planning techniques of rational analysis, and the more adaptive techniques of 'test and learn' or 'agile' approaches to decision-making, these effectual techniques represent a third paradigm of decision-making.

What follows is a short guide that leaders and other decision-makers can consult when making plans in conditions of high uncertainty.

## 8.2. A guide to making plans in conditions of high uncertainty

1. First, you need to determine if you are dealing with risk, or if the situation is truly uncertain.

   'Risk' is measurable and comes in two varieties: *known* and *unknown*; however, if you combine enough unknown risk together, you will eventually discover its probability. For example, you cannot know if *your* house will burn down in a fire; however, by combining all the houses in a given area, one can determine the individual probability of losing a single house to fire by dividing the number of fire losses each year by the total number of houses. This is how insurance companies share risk among policyholders.

   True uncertainty, on the other hand, is *unknowable* and cannot be quantified. In other words, we don't know what we don't know, and there is no way for us to figure it out.

2. Next, if you are dealing with *risk*, you can apply any number of analytical techniques to determine the best course of action, such as NPV or real options valuation in an investment scenario, or a SWOT or Five-Forces analysis in a strategic planning scenario.

   However, if you are dealing with *uncertainty*, no analytical technique is going to yield a reliable answer because there is no clear relationship between cause and effect. You need to approach uncertainty from the opposite direction.

   When dealing with uncertainty, do not try to work backwards from a desired goal; instead, think in terms of available means:
   - What can you use that you already have?
   - What do you know that can help you?
   - Whom can you partner with?
   - How can you exploit the unexpected?

3. Focus on the things that are truly within your control. Taking action on things that are within your immediate control are more likely to lead to favourable

outcomes than trying to influence things that are not within your immediate control. Pragmatic action is key when dealing with uncertainty – in these cases, the 'ideal' should be viewed as the enemy of 'good enough.'

- Forget about the 'future,' and focus on what can be done in the present. The 'future' is an abstraction that only exists as an idea. Reality is what you continuously create every day.

4. Pre-commitments help to reduce uncertainty. Think of how your customers, suppliers and other partners can help to pre-sell your goods or services to reduce demand uncertainty. Can working collaboratively with a particular partner help to reduce costs, or help stretch your money further? Working with partners to co-create the future extends what is under your immediate control, adding to the pragmatic options that are available to you.

   - Forget about the goods or services you sell, and focus on your relationships. Strengthening your relationships with suppliers, clients, customers, and prospects to co-create new value will improve the options immediately available to you.

5. Don't think in terms of preventing worst-case scenarios, rather view contingencies as opportunities to find new means or new partners. Traditional planning puts a lot of energy into reducing risks. Since we can't anticipate every eventuality under uncertainty, it is more productive to view 'bad news' cases as clues that can yield insight into new markets, means or partners. In this regard, contingencies are learning opportunities that will further add to the pragmatic options that are immediately available to you.

   - Forget about 'events' and focus on your responses. While we can't control things that happen to us, we can control our creative responses to unexpected events.

6. Breathe and relax! To the extent that you can control the present, you do not need to predict the future.

## 9. Notes

1. Miège, Bernard. The Capitalisation of Cultural Production, 145-148.
2. Hasmondhalgh & Baker. "Creative Work in the Cultural Industries," 3.
3. Bilton, Chris. "The New Adhocracy," 8.
4. Sadler-Smith, Eugene & Shefy, Erella. "The intuitive executive," 78.
5. Patterson, Anthony, Quinn, Lee & Baron, Steve. "The power of intuitive thinking," 38.
6. Watts, Duncan J. & Hasker, Steve. "Marketing in an Unpredictable World," 26.
7. Ibid.
8. Ibid.
9. Elberse, Anita. Blockbusters, 42.
10. Ibid, 27.
11. Cox, Kate. "A testable hypothesis is better than a good idea," 59.
12. Finn, McFadyen & Hoskins. "Marketing, Management, and Competitive Strategy in the Cultural Industries."
13. Longstaff & Steinhardt. "Listening to Uncertainty in the Music Business," 23.
14. Sinclair, Marta & Ashkanasy, Neal M. "Intuition," 357.
15. Dane & Pratt. "Exploring Intuition and its Role in Managerial Decision Making," 36.
16. Kahneman, Daniel. Thinking, Fast and Slow, 10-11.
17. Prietula, Michael J. & Simon, Herbert A. "The Experts in Your Midst," 121.
18. Ibid.
19. Hogarth, Robin M. "Deciding analytically or trusting your intuition," 19-20.
20. Lussier, James W., Ross, Karol G. & Mayes, Bob. "Coaching Techniques for Adaptive Thinking," 2.
21. Ibid, 1.
22. Shadrick, Scott B. & Lussier, James W. "Adaptive Thinking Training For Tactical Leaders," 2.

23. Shadrick, Scott B. & Lussier, James W. "Assessment of the Think Like a Commander Training Program," 2.
24. Ibid, 5.
25. Ibid.
26. Ibid, p.1.
27. Ibid, p.14.
28. Crossan et al. "An Organizational Learning Framework," 523.
29. Ibid, 524.
30. Ibid, 525.
31. Ibid, 533.
32. Ibid, 532-533.
33. Knight, Frank. Risk, Uncertainty, and Profit, 19-20.
34. Ibid, 224-225.
35. Sarasvathy, Saras D. "Causation and Effectuation," 245.
36. Liebniz, "De synthesi et analysi," in Philosophical papers and letters, 232.
37. Read, Stuart, et al. "Marketing Under Uncertainty," 2.
38. Phillips, Klein & Sieck. "Expertise in Judgment and Decision Making," 305.
39. Maritz, Frederick & Valos,. "Entrepreneurial marketing," 76.
40. Read, Stuart, et al. "Marketing Under Uncertainty," 13.
41. Crossan et al. "An Organizational Learning Framework," 529.
42. Wenham, "Independent music is a growing force in the global market."
43. IMPALA, "Features of Independents."
44. Ovum, Music & Copyright. "Recorded music market share gains for WMG in 2014, Sony/ATV is the publishing leader."
45. Wenham, "Independent music is a growing force in the global market."
46. IMPALA, "European Music In Numbers."
47. CIMA, "How Independent is the Canadian Music Market?"
48. IFPI, "2000 Recording Industry World Sales," 7.
49. IFPI, "Global Music Report," 9.
50. Ibid, 17.

51. Ibid., 4.
52. Elberse, Anita. "Should You Invest in the Long Tail?" 92.
53. Aguiar, Luis, and Waldfogel, Joel. „Streaming Reaches Flood Stage," 14.
54. Masnick, Mike. "Interview With Will Page."
55. Elberse, Anita. "Should You Invest in the Long Tail?" 92.
56. Finn, McFadyen & Hoskins. "Marketing, Management, and Competitive Strategy in the Cultural Industries."
57. Longstaff & Steinhardt. "Listening to Uncertainty in the Music Business,"19.
58. Bontis, Nick. "Managing an Organizational Learning System by Aligning Stocks and Flows of Knowledge," 69.
59. Johansson, Anette, "Ways forward," 114.
60. Johansson, Anette, "Ways forward," 118-119.
61. Johansson, Anette and McKelvie, Alexander. "Unpacking the Antecedents of effectuation and causation in a corporate context," 15.
62. Bontis, Nick. "Managing an Organizational Learning System by Aligning Stocks and Flows of Knowledge," 112-115.
63. Ibid., 115.
64. Verhoef & Leeflang. "Understanding the Marketing Department's Influence Within the Firm," 31.
65. Sarasvathy, Saras D. Effectuation, 132.
66. Crossan et al. "An Organizational Learning Framework," 531.
67. Johansson, Anette. "Ways forward," 142.
68. Sarasvathy, Saras D. Effectuation, 132.
69. Johansson, "Ways forward," 161.
70. Chandler et al., "Causation and Effectuation," 9.
71. Reed et al., "Marketing Under Uncertainty," 15.
72. Sarasvathy, Saras D. Effectuation, 132.
73. Crossan et al. "An Organizational Learning Framework," 529.
74. Hogarth, Robin M. "Deciding analytically or trusting your intuition," 19-20.
75. Perry, Chandler and Markova. "Entrepreneurial Effectuation," 839.
76. Longstaff & Steinhardt. "Listening to Uncertainty in the Music Business," 23.
77. Read, et al. "Marketing Under Uncertainty," 2.

# 10. Bibliography

Achrol, R. S. "Evolution of the marketing organization: New forms for turbulent environments." Journal of Marketing 55 (October 1991): 77-93.

Aguiar, Luis, and Waldfogel, Joel. "Streaming Reaches Flood Stage: Does Spotify Stimulate or Depress Music Sales?" Institute for Prospective Technological Studies, Digital Economy Working Paper 2015, European Commission JRC, accessed 2016-06-23, https://ec.europa.eu/jrc/sites/default/files/JRC96951.pdf

Anderson, Chris. *The Long Tail: Why the Future of Business is Selling Less of More*. New York: Hyperion, 2006.

Ardley, Barry, and Nick Taylor. "Unarticulated Expertise: Tacit Knowledge Production and the Marketing Manager." In ICCMI London 2015: 3rd International Conference on Contemporary Marketing Issues, 2015 (London: Kingston University, 2015): 27-33.

Banks, M., A. Lovatt, J. O'Connor, and C. Raffo. "Risk and Trust in the Cultural Industries." Geoforum 31, no. 4 (2000): 453-464.

Bilton, Chris. "Management in the Cultural Industries." In *The Routledge Companion to the Cultural Industries*, ed. Kate Oakley and Justin O'Connor, 283-295. Abdingdom, Oxon: Routledge, 2015.

Bilton, Chris. "Risky Business: The Independent Production Sector in Britain's Creative Industries." International Journal of Cultural Policy 6, no. 1 (1999): 17-39.

Bilton, Chris. "The New Adhocracy: strategy, risk and the small creative firm." Edited by Oliver Bennett. Research Papers (Centre for Cultural Policy Studies, University of Warwick, 1999): 1-31. Accessed 2015-10-12, http://www2.warwick.ac.uk/fac/arts/theatre_s/cp/research/publications/centrepubs/

Binet, Les, and Peter Field. The Long and the Short of It: Balancing Short and Long-Term Marketing Strategies. London: IPA, 2013.

Birkinshaw, J. and Hood, N. "Multinational subsidiary evolution: capability and charter change in foreign-owned subsidiary companies." Academy of Management Review 23, no. 4 (1998): 773-795.

Bontis, Nick. "Managing an Organizational Learning System by Aligning Stocks and Flows of Knowledge: An Empirical Examination of Intellectual Capital, Knowledge Management, and Business Performance" (doctoral thesis, Richard Ivey School of Business, 1999).

Bontis, N., Crossan, M., & Hulland J. "Managing an organizational learning system by aligning stocks and flows." Journal of Management Studies 39, no. 4 (2002): 437-469.

Chandlera, Gaylen N., DeTienne, Dawn R., McKelviec, Alexander, Mumford, Troy V. "Causation and effectuation processes: A validation study." Journal of Business Venturing 26, no. 3 (May 2011): 375–390.

Chang, C.-M., Hsu, M. H., & Yes, C. "Factors affecting knowledge management success. The Fit perspective." Journal of Knowledge Management 16, no. 6 (2012): 847-861.

Cox, Kate. "A testable hypothesis is better than a good idea: Is adopting an experimental approach to marketing, the best way to increase the waning influence of the marketing function across business?" (masters thesis, Berlin School of Creative Leadership, 2015).

CIMA. "How Independent is the Canadian Music Market?" accessed 2016-04-24, http://cimamusic.ca/how-independent-is-the-canadian-music-market/

Crossan, Mary & Bontis, Nick. (1998). "The strategic management of organization learning", Presentation at the Academy of Management 1998, San Diego, CA

Crossan, Mary & Hulland, John. (1997). "Measuring Organizational Learning", Presentation at the Academy of Management 1997, Boston, MA.

Crossan, M., Lane, H., White, R. E., Djurieldt, L. "Organizational learning: Dimensions for a theory." International Journal of Organizational Analysis 3 (1995): 337-360.

Crossan, M., Lane H., & White, R. E. "An Organizational Learning Framework: From Intuition to Institution." Academy of Management Review 24, no. 3 (1999): 522-537.

Daft, R, L., & Weick, K, E. "Toward a model of organizations as interpretation systems." Academy of Management Review 9 (1984): 284-295.

Dane, Erik, and Michael G. Pratt. "Exploring Intuition and its Role in Managerial Decision Making." Academy of Management Review 32, no. 1 (2007): 33-54.

Dawes, John. "The Relationship between Subjective and Objective Company Performance Measures in Market Orientation Research: Further Empirical Evidence." Marketing Bulletin 10, Research Note 3 (1999): 65-75.

DeSante, Christopher D. "Revisiting Reliability: The Misuse of Cronbach's Alpha in Political Science," in APSA 2011 Annual Meeting Paper, accessed 2016-06-12, http://ssrn.com/abstract=1903233

Dess, G. and R. Robinson. "Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit." Strategic Management Journal 5 (1984): 265-273.

Einhorn, H. J., and Hogarth, R. M. "Confidence in judgment: Persistence of the illusion of validity." Psychological Review 85 (1978): 395-416.

Elberse, Anita. *Blockbusters: hit-making, risk-taking, and the big business of entertainment*. New York: Henry Holt & Co, 2013.

Elberse, Anita. "Should You Invest in the Long Tail?" Harvard Business Review (July–August 2008): 88-96.

Finn, Adam, McFadyen, Stuart, and Hoskins, Colin. "Marketing, Management, and Competitive Strategy in the Cultural Industries." Canadian Journal of Communication 19, no. 4 (1994), accessed 2015-10-10, http://www.cjc-online.ca/index.php/journal/article/view/831.

Fisher, Greg. "Effectuation, Causation, and Bricolage: A Behavioral Comparison of Emerging Theories in Entrepreneurship Research." Entrepreneurship Theory and Practice 36, no. 5 (Special Issue on Social Entrepreneurs' Behavior, September 2012): 1019–1051.

Galar, Graham, and van der Heijden, Kees. "The Learning Organization: How Planners Create Organizational Learning." Marketing Intelligence & Planning 10, no. 6 (1992): 5-12.

Ghoshal, S. and Bartlett, C.A. "The multinational corporation as an inter-organizational network." Academy of Management Review 15, no. 4 (1990): 603-625.

Hackley, Chris. "Silent Running: Tacit, Discursive and Psychological Aspects of management in a Top UK Advertising Agency." British Journal of Management 11 (2000): 239-254.

Hackley, Christopher E. "Tacit knowledge and the epistemology of expertise in strategic marketing management." European Journal of Marketing 33, no. 7/8 (1999): 720-735.

Hedberg. B. "How organizations learn and unlearn." In P. C. Nystrom & W. H, Starbuck (Eds.). *Handbook of organizational design*. New York: Oxiord University Press, 1981: 3-27.

Hesmondhalgh, David. *The Cultural Industries*. London: Sage, 2002.

Hesmondhalgh, David, and Sarah Baker. "Creative Work in the Cultural Industries." International Symposium "Transformations in the Cultural and Media Industries". Saint-Denis La Plaine : Observatoire des mutation des industries culturelles, 2006. 1-8.

Hogarth, R. M. *Educating Intuition*. Chicago: The University of Chicago Press, 2001.

Huber, G, P. "Organizational learning: The contributing processes and the literatures." Organization Science 2 (1991): 88-115.

Hurley, Robert F., and Hult, Thomas G. "Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination." Journal of Marketing 62 (July 1998): 42-54.

IFPI. "2000 Recording Industry World Sales," accessed 2016-06-20, http://www.ifpi.org/content/library/worldsales2000.pdf

IFPI. "Global Music Report: state of the industry overview 2016," accessed 2016-06-20, http://www.ifpi.org/downloads/GMR2016.pdf

IMPALA. "European Music In Numbers," accessed 2016-04-24, http://www.impalamusic.org/node/9

IMPALA. "Features of Independents," accessed 2016-04-24, http://www.impalamusic.org/node/13

Johansson, Anette. "Ways forward: Effectual and causal approaches to innovation in the Swedish magazine industry" (doctoral thesis, Jönköping International Business School, 2012)

Johansson, Anette and McKelvie, Alexander. "Unpacking the Antecedents of effectuation and causation in a corporate context." Frontiers of Entrepreneurship Research 32, no. 17, article 1 (2012), available at: http://digitalknowledge.babson.edu/fer/vol32/iss17/1

Kahneman, Daniel. *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux, 2011.

King, Mervyn. *The End of Alchemy: Money, Banking, and the Future of the Global Economy*. New York: W.W. Norton & Co., 2016.

Knight, Frank H. *Risk, Uncertainty, and Profit*. Boston, MA: Hart, Schaffner & Marx; Houghton Mifflin Company, 1921.

Levinthal, D. A. & March, J. G. "The myopia of learning." Strategic Management Journal 14, Special issue: organizations, decision-making and strategy (1993): 95-112.

Leibniz, G. W. (1679). "De synthesi et analysi universali seu arte inveniendi et judicandi," in *Philosophical papers and letters*, ed. and trans. L. E. Loemker (Dordrecht: Reidel, 1967), 229-234.

Lloria, M. Begoña and Moreno-Luzon, Maria D. "Organizational learning: Proposal of an integrative scale and research instrument." Journal of Business Research 67 (2014): 692–697

Longstaff, P.H. & Steinhardt, Joseph. "Listening to Uncertainty in the Music Business: Fat Tails and Resilience," Center for Information Policy Research, Harvard University (2011), accessed 2016-03-31, http://www.pirp.harvard.edu/pubs_pdf/longsta/longsta-i11-1.pdf

Lussier, James W., Ross, Karol G. & Mayes, Bob. "Coaching Techniques for Adaptive Thinking," in Interservice/Industry Training, Simulation and Education Conference 2000, accessed 2015-10-13, http://www.iitsec.org.

March, J, G., & Olsen, J. P. "Organizational learning under ambiguity." European Journal of Policy Review 3, no. 2 (1975): 147-171.

March, J. G. "Exploration and exploitation in organization learning." Organization Science 2, no. 1 (1991): 71-87.

Maritz, Alex, Frederick, Howard, and Valos, Michael. "A discursive approach to entrepreneurial marketing: Integrating academic and practice theory." Small Enterprise Research 17 (2009-2010): 74-86.

Masnick, Mike. "Interview With Will Page, Music Industry Economist," Techdirt.com (29 April 2010), accessed 2016-06-25, https://www.techdirt.com/articles/20100429/0116199232.shtml

Moorman, Christine, and Miner, Anne S. "The Impact of Organizational Memory on New Product Performance and Creativity." Journal of Marketing Research 34, no. 1 (Special Issue on Innovation and New Products, February 1997): 91-106

Miège, Bernard. *The Capitalisation of Cultural Production*. New York: International General, 1989.

Nonaka, I. "A dynamic theory of organizational knowledge creation." Organization Science 5, no 1. (1994): 14-37.

Nonaka, I., & Takeuchi, H. *The knowledge creating company.* Oxford: Oxford University Press, 1995.

Ovum, Music & Copyright. "Recorded music market share gains for WMG in 2014, Sony/ATV is the publishing leader." In Music & Copyright's Blog, accessed 2016-04-24, https://musicandcopyright.wordpress.com/2015/04/28/recorded-music-market-share-gains-for-wmg-in-2014-sonyatv-is-the-publishing-leader/

Patterson, Anthony, Quinn, Lee and Baron, Steve. "The power of intuitive thinking: a devalued heuristic of strategic marketing." Journal of Strategic Marketing 20, no. 1 (February 2012): 35-44.

Pearce, John A., II, Robbins, Keith D. and Robinson, Richard B., Jr. "The impact of grand strategy and planning formality on financial performance." Strategic Management Journal 8 (1987): 125-134.

Perry, John T., Chandler, Gaylen N., Markova, Gergana. "Entrepreneurial Effectuation: A Review and Suggestions for Future Research." Entrepreneurship Theory and Practice 36, no. 4 (July 2012): 837–861.

Perry, Monica. "Market Orientation in Small Businesses: Creative or Lacking?" The Marketing Management Journal 24, no. 1: 96-107.

Phillips, Jennifer K., Klein, Gary, and Sieck, Winston R. "Expertise in Judgment and Decision Making: A Case for Training Intuitive Decision Skills," in *Blackwell Handbook of Judgement & Decision Making*, ed. Derek J. Koehler & Nigel Harvey (Oxford: Blackwell Publishing, 2004), 297-315.

Polanyi, M. *The tacit dimension.* London: Routledge, 1967.

Prietula, Michael J., and Herbert A. Simon. "The Experts in Your Midst." Harvard Business Review, Janary-February 1989: 121.

R Core Team. *R: A language and environment for statistical computing.* Vienna, Austria: R Foundation for Statistical Computing, 2016. https://www.R-project.org/.

Read, Stuart, Nicholas, Drew, Sarasvathy, Saras D., Song, Michael & Wiltbank, Robert. "Marketing Under Uncertainty: The Logic of an Effectual Approach." Journal of Marketing 73 (May 2009): 1-18.

Read, S., Sarasvathy, S., Dew, N. and Wiltbank, R. "Response to Arend et al: Co-Creating Effectual Entrepreneurship Research." Academy of Management Review (2016), accessed 2016-06-26, http://www.effectuation.org/sites/default/files/research_papers/amr_asb_dialog_readsarasvathydewwiltbank_2016.pdf

Revelle, W. *psych: Procedures for Personality and Psychological Research*. Evanston, Illinois: Northwestern University, 2016. http://CRAN.R-project.org/package=psych Version = 1.6.4.

Ross, K.G. & Lussier, J.W. "A training solution for adaptive battlefield performance." In Interservice/Industry Training, Simulation, and Education Conference 1999, http://www.iitsec.org.

Rugman, A. and Verbeke, A. "Subsidiary-specific advantages in multinational enterprises." Strategic Management Journal 22, no. 3 (2001): 237-250.

Sadler-Smith, Eugene, and Erella Shefy. "The Intuitive Executive: Understanding and Applying 'Gut Feel' in Decision-making." Academy of Management Executive 18, no. 4 (2004): 76-91.

Sarasvathy, Saras D. "Causation and Effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency." Academy of Management Review 26, no. 2 (2001): 243-263.

Sarasvathy, Saras D. *Effectuation: Elements of Entrepreneurial Expertise.* Cheltenham, UK: Edward Elgar, 2008.

Schmitt, Neal. "Uses and abuses of coefficient alpha." Psychological Assessment 8, no. 4 (December 1996): 350-353.

Senge, P. *The fifth discipline: The art and practice of the learning* organization. New York: Doubleday/Currency, 1990.

Shadrick, Scott B. & Lussier, James W. "Adaptive Thinking Training For Tactical Leaders," RTO-MP-HFM-101, Paper 19, U.S. Army Research Institute. In Human Factors and Medical Symposium on Advanced Technologies for Military Training (NATO Research and Technology Organization: 2004).

Shadrick, Scott B. & Lussier, James W. "Assessment of the Think Like a Commander Training Program," Research Report 1824, U.S. Army Research Institute (July 2004).

Shaker A. Zahra, Harry J. Sapienza, and Per Davidsson. "Entrepreneurship and Dynamic Capabilities: A Review, Model and Research Agenda." Journal of Management Studies 43, no. 4 (June 2006): 917–955.

Shrivastava, P. "A typology of organizational learning systems." Journal of Management Studies 20, no. 1 (1983): 7-28.

Sijtsma, Klaas. "On the use, the misuse, and the very limited usefulness of Cronbach's alpha." Psychometrika 74, no. 1 (March 2009): 107-120.

Simon, Herbert A. "Theories of Decision-Making in Economics and Behavioural Science." The American Economic Review 49, no. 3 (June 1959), 253-283.

Sinclair, Marta, and Neal M. Ashkanasy. "Intuition: Myth or a Decision-making Tool?" Management Learning (September 2005): 353-370.

Sinkula, James M., Baker, William E. and Noordewier, Thomas. "A Framework for Market-Based Organizational Learning: Linking Values, Knowledge, and Behavior." Journal of the Academy of Marketing Science 25, no. 4: 305-318.

Soloman, M. R. (1988). "Building up and breaking down: The impact of cultural sorting on symbolic consumption." Research in Consumer Behavior 3 (1988): 325-351.

Soloman, M. R. *Consumer behavior: Buying, having, and being*. Boston: Allyn and Bacon, 1992.

Tobin, Daniel R. *Re-Educating the Corporate Foundations for the Learning Organization*. Essex Junction: Oliver Wright, 1993.

Venkatraman, N. and Ramanujarn, V. "Planning System Success: A Conceptualization and an Operational Model." Management Science 33, No. 6 (June 1987): 687-705.

Verhoef, Peter C., & Leeflang, Peter S. H. "Understanding the Marketing Department's Influence Within the Firm." Journal of Marketing 73 (March 2009): 14-37.

Watkins, K. E., & Marsick, W. I. *Sculpting the learning organization.* San Francisco: Jossey-Bass, 1993.

Watts, Duncan J., and Steve Hasker. "Marketing in an Unpredictable World." Harvard Business Review (September 2006): 25, 30.

Wenham, Allison. "Independent music is a growing force in the global market." In Music Business Worldwide (21 July 2015), accessed 2016-04-24, http://www.musicbusinessworldwide.com/independent-music-is-a-growing-force-in-the-global-market/

Wierenga, Berend. "Understanding Marketing Decision-making." RSM Insight, 3rd Quarter (2012): 12-14.

Wiltbank, R., Dew N., Read S., Sarasvathy S. "What to do Next? The Case for Non-predictive Strategy." Strategic Management Journal 27 (2006): 981-998.

Wind, Y., & Mahajan, V. "Marketing hype: A new perspective for new product research and introduction." Journal of Product Innovation Management 4 (March 1987): 43-49.

Zahra, S., Sapienza, H., Davidsson, P. "Entrepreneurship and dynamic capabilities: A review, model and research agenda." Journal of Management Studies 43, no. 4 (2006): 917-955.