

Turning intuition into managerial simple rules

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In: Jay Liebowitz, Developing the Intuitive Executive: Using Analytics and Intuition for Success, Taylor & Francis

Abstract

Despite intuition being a valuable tool for managerial decision-making, few efforts are made by managers and for managers to help acknowledging and developing their intuition. This chapter proposes simple rules heuristics as natural and appropriate means to encode, use, test, refine, store, and share knowledge that arose intuitively. One way to purposefully develop the intuitive executive is to observe and unpack how managerial intuition works in a natural environment and then to both catalyze and replicate the process. Therefore, based on our understanding of the natural process which turns intuition into a simple rule, we end this chapter by proposing two methods, one aimed at individuals and based on dialogue and one designed for teams' lessons-learned meetings, in which managers and teams can purposefully capture intuitions that would not surface otherwise and also increase their intuitive awareness.

Introduction

Despite its ambivalent image in organizations, intuition is (secretly or openly) used by most managers to decide on a vast spectrum of situations. Management scholars have, consequently, focused their studies on managerial intuition (Simon, 1987) and found it to be a valuable decision-making tool (Sinclair and Ashkanasy, 2005; Patterson et al., 2012). However, only few evidence-

based methods aim to sharpen managers' intuition and to turn it into a purposefully trained and purposefully applied decision aid. Among existing approaches are recognizing and turning the wicked environments in which we educate our intuition into kind ones (Hogarth, 2001), continuously testing and self-benchmarking intuitive judgements (Sadler-Smith and Shefy, 2004), mixing, in teams, intuitive with analytical members (Hodgkinson et al., 2009), and developing intuitive awareness as part of business school curricula (Sadler-Smith and Shefy, 2007). Yet, the repertoire of approaches is limited.

This chapter aims to address this limitation and proposes simple rules heuristics as natural vehicles to encode, use, test, refine, store, and share managerial knowledge that arose intuitively. Simple rules can be defined as the sub-type of managerial heuristics which are learned, specific, and purposeful (Bingham and Eisenhardt, 2014), as opposed to the innate, universal, and unintentional heuristics such as anchoring or availability (Tversky and Kahneman, 1974). They are often expressed as catchphrases such as *'every internal team should be small enough that it can be fed with two pizzas'* (Hern, 2018) and are observed to benefit decision-making (Bingham and Eisenhardt, 2014), strategizing (Bingham et al., 2007), and organizing (Eriksson and Kadefors, 2017).

Based on the exploration of the natural process which turns intuition into a simple rule, we end this chapter by proposing two methods in which managers and teams can purposefully train their intuition. The first method helps individual managers acknowledge and clarify their past intuitive judgements and articulate them into simple rules. The second method helps teams make sense of negative aspects of their projects and encode the insights into simple rules. Together, these methods help turning intuition and insight into explicit and shareable knowledge and, also, increase the intuitive awareness of managers and teams.

In developing our approach we draw on extant concepts and frameworks from the literatures on managerial heuristics (Bingham and Eisenhardt, 2014; Gigerenzer and Gaissmeier, 2011), managerial intuition (Dane and Pratt, 2007; Sadler-Smith and Shefy, 2007), insight (Dane, 2020; Luo and Niki, 2003), organizational learning (Crossan et al., 1999, 2011), sensemaking (Weick et al., 2005), and dual processing (Basel and Brühl, 2013; Evans and Stanovich, 2013), and on qualitative data collected in four waves from two samples totaling 63 top and senior managers, data which also served as sources for our previous studies (Atanasiu et al., 2022; Atanasiu et al., 2023 – under review).

With this chapter we make several contributions. We build on extant research which tackles the relationship between intuition and managerial heuristics (Basel and Brühl, 2013; Sadler-Smith, 2019) by outlining the role of intuition in the creation of these managerial tools and we offer practitioners methods which use this understanding to purposefully replicate the process. We begin this chapter by defining what simple rules heuristics are. We then describe how managers naturally capture, test, store, and share their intuitions by turning them into simple rules. We conclude this chapter with discussing how managerial intuition can be trained to purposefully produce simple rules.

What are simple rules heuristics?

Despite not being prominent in a manager's daily vocabulary, simple rules heuristics are important managerial tools which are ubiquitous in their daily activity. In this section, we introduce and illustrate this concept, which is central to our subsequent argumentation. *Simple rules heuristics* are the sub-type of managerial heuristics which are studied by the homonym research stream (Bingham and Eisenhardt, 2014). Unlike universal, unintentional, and innate heuristics, associated with biases, such as anchoring or availability (Tversky and Kahneman, 1974), simple

rules are idiosyncratic - specific to their users (Bingham and Eisenhardt, 2014), used consciously (Bingham and Eisenhardt, 2014), and learned from direct experience (Bingham and Halebian, 2012) to encode, within their proverb-like formulation (Atanasiu, 2021; Eriksson and Kadefors, 2017), tacit experience into explicit and shareable knowledge (Bingham et al., 2007). In this chapter we follow the example of the proponents of the simple-rules stream of research (e.g., Bingham and Eisenhardt, 2011) and use, interchangeably, the terms simple rules heuristics, (just) simple rules, and (just) heuristics.

Extant literature describes simple rules as important tools for deciding, strategizing, and organizing. For *deciding*, classical economics prescribes complex, analytical algorithms that use all the information available (von Neumann and Morgenstern, 1953). However, under bounded rationality (Simon, 1947), time constraints, complex business environments, and uncertainty, managers forego the use of all available information and of complex analyses and prefer to make decisions guided by simple rules heuristics: “decision-making in organizations typically involves heuristics because the conditions for rational models rarely hold in an uncertain world” (Gigerenzer and Gaissmeier, 2011, p. 474).

For instance, Harry Markowitz received the 1990 Nobel Prize in Economics for his Modern Portfolio Theory, which uses complex mathematical algorithms to allocate funds across several vehicles when investing. However, when he retired, the economist ignored his own Nobel-winning optimization method and relied instead on a heuristic: he allocated the same sum to all funds, a heuristic called 1/N (Gigerenzer, 2008). Later, his choice was empirically validated: DeMiguel et al. (2009) evaluated 14 models of diversification and found that none consistently performs better than the 1/N rule.

For *strategizing*, classical economics favors deliberate strategies (Mintzberg and Waters, 1985) and strategizing-by-thinking (Eisenhardt and Bingham, 2017), which consists of planning ahead based on carefully calculated models and scenarios. However, under conditions of volatility, uncertainty, complexity, and ambiguity, managers prefer emergent strategies (Mintzberg and Waters, 1985) and strategizing-by-doing (Eisenhardt and Bingham, 2017), guided by adaptive, simple rules heuristics, which are ‘the essence of strategy, especially in unpredictable markets where opportunities are often numerous, fast-moving, and uncertain’ (Bingham and Eisenhardt, 2014, p. 1698).

As an illustration, Jack Welch, whom Fortune magazine named “The Manager of the Century” in 1999, began his mandate as the CEO of General Electric by reorganizing the conglomerate towards consolidation and aggressive simplification. When choosing which business directions to pursue and which to divest from, Welch did not use the available financial and market data to calculate expected values and build scenarios; instead, he relied on a simple rule: ‘only keep businesses that are (or can be) number one or number two in their industries.’

For *organizing*, rigid systems and formal procedures have increasingly given way to adaptive and learning organizations (Senge, 1994). However, what do organizations learn? When they learn, managers and organizations learn simple rules heuristics (Bingham and Eisenhardt, 2011; Bingham and Haleblian, 2012) that encode tacit experience into explicit (Bingham et al., 2007), well-articulated catchphrases (Eriksson and Kadefors, 2017), which guide alignment (Sull and Eisenhardt, 2012), coordination (Bingham and Eisenhardt, 2014), communication (Eriksson and Kadefors, 2017), and monitoring (Pieper et al., 2015).

For example, to design the internal structure of the organization, Amazon uses a simple, proverb-like rule, the famous two-pizza rule: ‘every internal team in Amazon must be small enough so that it can be fed with two pizzas’ (Hern, 2018).

Most research on simple rules heuristics is conducted at firm level. Before reaching the collective level, however, they are created and used by an individual manager (Guercini et al., 2015) and only afterwards shared to teams and organizations (Bingham et al., 2019). While exploring the under-researched process of how individual managers distill their experience into simple rules heuristics, a key discovery was the prominent role intuition plays in this process. The next sections describes our new understanding of how intuition is captured into, tested through, and shared as simple rules heuristics.

How do managers capture intuition into simple rules?

‘They simply come to you. You bump into them. They come.’

(respondent)

Intuition is the main topic of this book and surely the reader already has a complex image of the concept. For the purposes of our argument, we favor the definition Dane and Pratt (2007) synthesized from extant conceptualizations: ‘intuitions are affectively charged judgments that arise through rapid, nonconscious, and holistic associations’ (Dane and Pratt, 2007, p. 40). In this chapter, we also use the term ‘insight,’ which can be defined as ‘the reorientation of one’s thinking, including breaking of the unwarranted fixation and forming of novel (...) associations’ (Luo and Niki, 2003, p. 316). Sadler-Smith and Shefy (2007) outline important differences between insight and intuition, namely that, with intuition, the subject is certain on a certain solution or course of action, but cannot always explain why. Based on the understanding of our respondents, we use, here, insight and intuition in a partially overlapping manner, with insight being the sudden

understanding of a problem and intuition the non-conscious mental process that precedes, sparks, and sometimes refines the insight, and which guides the manager towards choosing between two different explanations and approaches.

The link between heuristics and intuition has been researched, with Basel and Brühl (2013) proposing that, “first, heuristics are spontaneously initiated by System 1 and then later adopted by System 2, as they are seen as a deliberate strategy” (Basel and Brühl, 2013, p. 751). Our research offers empirical support for this proposition, showing how managers use intuition for learning simple rules heuristics from negative situations, a mix of intuition and reflection for articulating them, and then reflection for testing, refining, and adapting these lessons. This sequence will be described as follows: the intuitive and intuitive-reflective phases (insight and articulation) are the focus of the current section - *Capturing intuition into simple rules*, while the purely reflective phase (testing, refining, adapting) is the topic of the next section – *Testing intuition through simple rules*.

Managers create simple rules heuristics by making sense of unexpected failures (Atanasiu, 2021; Atanasiu et al., 2022; Bingham and Haleblian, 2012). Normally, a sensemaking process consists in scanning for pre-existing heuristics (Schildt et al., 2020, p. 249) to explain and solve a puzzle. In the absence of such pre-existing heuristics, a manager struggles to create new ones, through a complex cognitive interplay of intuition and reflection, accompanied by a rollercoaster of feelings. The first part of the process, the insight and its articulation, is described by the managers we interviewed as rather intuitive: *‘they didn’t come to me after an internal one-hour debate in my head; they waited, smoldered inside and, at some point, took shape.’*

Insight. An unexpected failure generates dissonance between reality and a manager’s expectations. This uncomfortable tension – *‘it appeared in the last weeks, it accumulated’* - leads

to a state of readiness for insight (Dane, 2020), in which the manager has the issue top-of-mind, searches both actively and idly for an explanation and a solution, and scans the environment for clues to clarify the matter and to spark the insight: *'it's a concern, but a reactive concern, not a proactive one, in the sense that I listen audiobooks, I read stuff and things jump out and help me systemize; it's a need that draws from the environment what it helps.'*

Eventually, such a clarifier appears in the form of an analogy (as in the example below), an observed inconsistency, or a random piece of information. This clarifier helps the manager make sense of the situation by sparking a triple insight:

- what was not true – what assumption was in fact flawed and caused the failure;
- what is true instead - a new principle which, if applied, will prevent the reoccurrence of the failure and which will be captured into a conceptual simple rule heuristic; and
- what to do about it - a way to enact this new principle through an operative simple rule heuristic.

Vignette. Two entrepreneurs who structure their organization into autonomous teams were puzzled by an unexpected failure: counterintuitively, the more successful a team, the more its internal dynamics altered. The dissonance between this observation and their previous assumption (that success must harmonize a team's internal dynamics) initiated a state of readiness for insight, characterized by discomfort and the constant search for the root cause. One of them describes that the insight came during a conversation with his partner, sparked by an analogy which acted as clarifier: *'mastermind teams must be small to function well, and we realized that business teams must have the same size, as they function similarly; we recognized the parallel with mastermind teams and we said, this is it!'* The triple insight was about a) what was not true – success does not automatically lead

to a team functioning well, b) what is true instead – success sometimes leads to an increase in team size, which alters its internal dynamics, principle which they captured in the conceptual simple rule heuristic *‘when small teams grow, their dynamics change,’* and c) what to do about it – enacting this new principle through an operative simple rule heuristic, *‘when a team reaches ten members, it must split.’*

The immediate context for insight varied for our respondents. To some managers, the insight happened when alone: *‘everything happened in my head, I never found conversations very helpful for this,’* at various moments of the day: *‘in the morning, as things that I probably pondered while asleep crystalize when I open my eyes’* or *‘during running, which is active meditation.’* To others, the insight happened during one-to-one conversations *‘with people I resonate with.’* Yet others have the insight during meetings, but our respondents stress that *‘the collective realization still came from an individual insight.’* The personal (or life) contexts shared similarities among our interviewees, as such intuitive realizations mostly happened during a moment of transition - change of jobs, moving cities, becoming a parent, doing an MBA, or even during a perceived identity crisis.

Articulating. Despite their strategic importance, simple rules heuristics are sometimes used tacitly, without ever being verbalized: *‘for five years, we acted on it without discussing it; it was not written or acknowledged in any way’* and articulation may happen long after the initial insight: *‘there certainly is a period between realizing such a principle and verbalizing it.’* Tsoukas and Vladimirou (2001) define articulation as “the dynamic process of turning an unreflective practice into a reflective one” (Tsoukas and Vladimirou, 2001, as cited in Hazlett et al., 2005, p. 32), while Weick et al. (2005, p. 413) have defined articulation as the process ‘by which tacit knowledge is made more explicit or usable.’ In the classic 4I model of organizational learning,

Crossan et al. (2011) describe that learning begins at individual level with *intuiting*, which leads to new understandings that are pre-verbal - matching our insight phase, and continues with *interpreting*, which stabilizes these insights through words – articulation (Crossan et al., 2011). These perspectives may lead us to consider articulation a predominantly reflective practice.

Our respondents confirm the reflective aspect of articulating insights: *'articulating helps me personally in clarifying the issue.'* However, our data show that, for articulation, managers also appeal to intuition. In a handful of instances, our interviewing was what caused the respondent to first articulate a simple rule: *'its verbalization came to me ten minutes ago, during this conversation, I never thought of it before in this form.'* As one manager admitted, somehow poetically: *'I knew it, but I didn't know I knew it.'* In these instances, we had the opportunity to further inquire on this process and we found that articulation does not only put pre-existing ideas into words, but also clarifies, through a second wave of insight, these ideas: *'this interview is like therapy, it helps me analyze, make sense of, and verbalize ideas that are still taking shape in my head.'* In another instance when articulation happened during the interview, the manager showed genuine surprise by how she just formulated her simple rule, further supporting the pre-conscious, intuitive aspect of articulating: *'I was surprised I formulated it so decisive: this means that I have reached that belief without being aware of it.'* Often, this second insight which leads to articulation inspires the manager to effortlessly formulate the simple rule in a proverb-like form - such as *'the cool factor does not pay the salaries.'* Therefore, although most theoretical frameworks consider articulation a purely reflective process which renders intuition explicit, our data suggest that articulation in fact lays on the border between intuition and reflection, drawing from both types of processing.

How can this initial, intuitive phase, fail? And how can a manager prevent this? Our respondents mentioned that, surely, they missed turning some other past failures into valuable insights because, often, *'we are caught in buzz work and don't pay attention to higher order themes'* and *'you need some detachment from operational tasks.'* Although intuitive, the birth of a simple rule heuristic requires the manager to focus her attention and time on the failure and to entertain the resulting tension and dissonance. Some of our respondents have created personal systems to facilitate coming up with such valuable insights: *'I meditate, sometimes daily, on where I go wrong,'* or *'I take breaks from current tasks and I self-reflect,'* or even *'every other day I sit and think about managing this company.'* Yet others have scaled this intention as a system to the entire company: *'aha moments may come in the shower, during a crisis, while running, but we also try to create here a deliberated culture, which we try to purposefully influence; so, we encourage thinking and self-reflection.'* In this quote, thinking and self-reflection are not the epitomes of rational analysis, but more likely they describe the state Dane (2020) describes as *'readiness for insight.'*

Other managers, after understanding that conversations with people holding different perspectives are their appropriate context for having and articulating such insights, have started to purposefully encourage similar moments: *'I spend 50% of my time outside of the company, talking to people outside the company; it's an active goal,'* or *'I entered circles outside the business world where discussions did not start with "we need to decide whether we give bonuses this Christmas," but with "how does everyone feel, why are you here, what are the expectations from this context, from this group?"'*

How do managers use simple rules to test their intuition?

'Intuition comes first, and it relies on nothing, you just know; then, if you want to check your intuition, you take the numbers and analyze them, and that's how the magic gets certified.'

(respondent)

After the more intuitive phase of the process, simple rules heuristics go through a predominantly reflective phase, when they are tested (and, if confirmed, reinforced), refined, and adapted. One of our respondents mentioned that this second, reflective phase, came with a sense of urgency: *'coming up with the intuitive rule is like the sky clearing, but then you can't wait to test it and validate it.'* The manager tests the new simple rule heuristic in successive feedback loops, in various situations; if confirmed, the rule is reinforced: *'it worked repeatedly and that has made it stronger.'* Then, the manager analyzes these results and purposefully reshapes the simple rule, in accordance with the principles of ecological rationality (Gigerenzer and Brighton, 2009; Gigerenzer and Gaissmaier, 2011), making it better fit for the specific context and better adapted and generalized for larger contexts: *'it's in perpetual testing, and on this new job we perfected it, it's already version 3.0 now.'*

This sequence - intuition followed by reflection, which yields from our data, supports the default-interventionist hypothesis (Basel and Brühl, 2013; Evans and Stanovich, 2013), which states that we rely on Type 1 processing – rapid and autonomous – as the default response for a situation and then, if required, we intervene with Type 2 processing – slow and purposeful – to validate or adjust the default response. One of our respondents perfectly described the role of reflection to certify the magic of intuition: *'intuition comes first, and it relies on nothing, you just know; then, if you want to check your intuition, you take the numbers and analyze them, and that's how the magic gets certified.'* These reflective processes overlap with the *integrating* phase of the

4I model of organizational learning (Crossan et al., 1999) and with the *enactment, selection, and retention* phases of the sensemaking model proposed by Weick et al. (2005).

However, we found that reflection is required not only for testing and refining the insight, but also for having the insight in the first place. More precisely, our respondents describe that, in order to generate an insight, they purposefully put themselves in a position of assumed responsibility for the initial failure: *'for principles to arise, a manager must look at pain points reflectively, not defensively. Because, if you look defensively, you will not look for real answers, but for answers that keep you in your comfort zone, like "the world is mean", "it cannot be done differently", "I've tried and it doesn't work", this kind.'* This empirical observation concurs with the conclusion of Bingham and Haleblian (2012), who found internal attribution (assuming responsibility for the failure) to be the necessary condition to learn simple rules heuristics from failures. The role of reflection is, therefore, not only to check and refine the intuition, but also to purposefully induce a mindset that favors looking at the situation with an internal locus of control.

How can this second, more reflective phase, fail? And how can a manager prevent this? Making sense of failures cannot take place without enacting the intuitive lesson you have learned (Weick et al., 2005). Some of our respondents remembered a time when they discounted their intuition and refrained to act on it, mainly because of social pressure: *'I fought it hard, saying to myself to stop this nonsense of listening to how I feel about things.'* Only later, when similar failures happened repeatedly, they purposefully built the courage to trust their intuition and act on it.

The opposite situation can also happen, when a manager trusts so deeply her intuition and the resulting simple rule heuristic that she will never doubt, test, or discard it, if necessary. Most managers we interviewed maintain that *'if I see it doesn't work anymore, I will discard it,'* but we also encountered the occasional manager who admitted that, even after the simple rule would not

function anymore, *'giving it up would mean giving up a part of me, of who I am, and that is complicated.'* The potential stickiness of a simple rule is an issue recognized by extant literature: *'not only the question of how heuristic strategies are initially selected, but particularly how they are switched after they have become maladapted largely remains a central but not yet sufficiently answered question'* (Artinger et al., 2015, p. 45). One potential explanation of this stickiness is the feelings which accompany the moment of insight. Clever experiments designed by Laukkonen et al. (2020, 2022) have shown that the feeling of awe associated with aha moments will make the insight appear more valid and be remembered longer, even if the aha moment is induced artificially, by solving an anagram. A potential solution for avoiding the stickiness trap is to continuously check the results of our simple rules heuristics, especially when the conditions have changed and ecological fitness (Luan et al., 2019) no longer holds. One interviewee pinpointed this attitude: *'this is something that preoccupies me – being flexible, not making up your mind for life; I wouldn't doubt it constantly, but I would pay attention if, at some point, it doesn't function anymore, and then I will be OK to change it.'*

How do managers use simple rules to share their intuition?

'Instead of a leadership course, I could give you a single sheet of paper with such principles.' (respondent)

Simple rules heuristics, born from intuition and shaped through reflection, are often used exclusively by the individual manager (Guercini et al., 2015). However, when appropriate, they are shared to peers, teams, organization: *'heuristics move from individual-level rules of thumb (...) to firm-level understandings'* (Bingham et al., 2019, p. 121), and even to the entire industry, as described by Kazakova and Geiger (2015) and Monaghan and Tippmann (2018). According to

our data, the process of sharing their simple rules begins timidly: *'I use it for myself, but I also shared it recently to my team,'* and it can later become well-systemized: *'with time, I used it not only for myself, but I transmitted it, imposed it, required it from my team, and then asked them to implement it in their teams.'* This phase overlaps with the *institutionalizing* phase of the 4I model of organizational learning (Crossan et al., 2011) and with the *organizing through communication* phase of the sensemaking model proposed by Weick et al. (2005).

Extant literature describes that heuristics can be shared either informally (Barberà-Mariné et al., 2019; Bingham et al., 2019; Guercini et al., 2015) or through formal communication, such as regular meetings (Bingham and Haleblian, 2012). Our data support these conclusions, with managers reporting that they share their simple rules formally, during *'our first or second meeting'* or in *'weekly one-to-ones,'* informally, through *'open discussions,'* or even tacitly, through enacting them together: *'I didn't always tell, but they all know it, we reached a common way of doing things,'* or through co-creating these simple rules: *'because we experienced these together, everyone knows them, it's a common experience that we solidified together.'*

Our data show that, as some managers use their simple rules before being articulated, it is their first need to share a rule that which initiates articulation: *'I learned it while being a CEO, but I articulated it during my subsequent practice as a consultant, because consultancy requires you to formalize these rules somehow.'* The need to be easily shared, understood, memorized, and applied also shapes the formulation of the simple rule (Atanasiu, 2021; Atanasiu et al., 2022; Bingham and Eisenhardt, 2014; Katsikopoulos, 2016; Eriksson and Kadefors, 2017). To these aims, managers formulate their simple rules heuristics like proverbs, with proverbial markers (Mieder, 2014) such as shortness – *'If there are 3 'ifs', don't do it!'* (Atanasiu, 2017) , humor – Amazon's *'Every internal team should be small enough that it can be fed with two pizzas'* (Hern,

2018), symmetry and contrast – *‘Buy on the rumour, sell on the fact’* (Shapin, 2001), rhyme – *‘Sell in May and go away’* (Bouman and Jacobsen, 2002), and repetition – Cisco’s *‘Companies to be acquired must have no more than 75 employees, 75% of whom are engineers’* (Eisenhardt and Sull, 2001).

Proverbialization is mainly done for the benefits of those to whom the simple rule is shared: *‘it helps me being concise and inspirational,’* but not exclusively. Sometimes, these features are for the personal benefit of the manager who created the simple rule: *‘being like a proverb brings clarity and helps me transform complex problems into simple ones, so that I can move on.’* Sometimes, the manager shapes her simple rule like a proverb without even noticing: *‘I didn’t realize that it sounds like a proverb, but when I said it, people started writing it down, so perhaps it struck a chord.’*

How can this phase fail? And how can managers deal with such obstacles? First of all, a manager may not be aware that her personal lessons might be of good use to others. Personal simple rules can prove valuable for peers who face similar situations: *‘I shared it with some entrepreneurs I know,’* for colleagues who are at an earlier career stage: *‘the condensed form helps passing experience forward; instead of a leadership course, I could give you a single sheet of paper with such principles,’* or for a team or an entire organization to align. One of our CEO respondents mentioned that: *‘heuristics are useful for yourself, but I mainly see benefits for the team. People in the organization inherently have less information or less correlated information. And, without some guidance, they either create their own narrative, which is hard to replace, or are confused and feel that there is no direction. So, heuristics are useful for communicating the strategy.’* However, especially when the manager still applies her intuitive rule tacitly, she might not be aware of such needs of others. During our interviews, when asked whether they have shared

their rules to others, some managers admitted that: *'I have shared it, but now I realize that I haven't shared it enough.'* To overcome this, a good method would be to create context for and encourage informal communication within teams and organizations.

When sharing, some of our respondents faced resistance: *'I tried to share this lesson with some of the managers I work with; unfortunately many of them are of the impression that a square can be hammered to fit into a cylindrical shape,'* or limited effect: *'I shared it with my team in one of our meetings, but the effect is visible almost only in those that faced something similar.'* To prevent this, we gathered from the practice of our top managers three lessons on how to share simple rules heuristics effectively:

- Select your audience. Some of these insights are applicable at a certain level of maturity and self-development: *'if someone would have come to me 10 years ago with this set of rules it wouldn't have helped me,'* so one of our interviewees admitted that he shares his insight-turned-into-simple-rule *'with as many are ready to hear; I don't share it with people that don't hear me or are not ready, because I see myself in them years back and I wouldn't listen either.'*
- Adapt to your audience. When a rule can be used by people who are on different career or maturity stages, sharing must be preceded by empathically adapting the rule to the receiver: *'I share it, yes. And I make it about them.'*
- Share your narrative. As described earlier, simple rules are distilled as intuitive lessons after a failure and many top manager realized that sharing their lessons is futile, as one must experience the triggering failure and the subsequent insight firsthand: *'saying "don't play with the axe, you will cut your fingers!" doesn't work until you cut your fingers; after you cut your first finger you realize how good was*

the advice. While some managers abandon here, because: *'even if the present me would have traveled in time 12 years ago to tell these rules to my former self, I wouldn't have taken them, because you need to experience things beforehand'* and others struggle with sharing: *'it's hard to transfer simple rules because they rely on intuition and I cannot transfer that, you need to develop your own intuition; I can only transmit what I learned, my experiencing is untransmissible,'* one of our respondents has devised a clever way to overpass the obstacle. He does not share just his insight (the new simple rule), but the whole story of his failure: *'when I share it, I also share its story, what I did wrong before; if shared without its story, the rule would be ignored, but if the story is there, they pay more attention and they remember better.'*

How can managerial intuition be trained to produce simple rules?

'If you would travel the world with this process, you could clarify a lot of things for a lot of people.'

(respondent)

The positive role of intuition in management has been well documented (Patterson et al., 2012), explained (Dane and Pratt, 2007; Simon, 1987), and even measured (Sinclair and Ashkanasy, 2005). However, in practice, intuition still struggles to gain the image of a trustworthy managerial tool and, therefore, the efforts for igniting and developing managers' intuition are rather the exception (Sadler-Smith and Shefy, 2007). So far, in this chapter we described how managers naturally have their intuitions and insights captured into, tested through, and shared as simple rules heuristics. This section aims to propose, based on our research, two methods for purposefully

igniting and developing managerial intuition. One addresses individual managers and it is based on dialogue, while the second addresses teams and it is based on formal lessons-learned meetings.

Dialogue. Within the top and senior managers in our samples, very few are those who acknowledge and purposefully work on their intuition: those who have a strong intuition, but have long fought against it, only to understand that ignoring their intuition leads to negative outcomes, especially domains such as deciding about people (clients, employees); those who never had strong instincts and used to rely mostly on rational analysis, only to discover that colleagues who *'shoot from the hip'* have better results; and those rare cases who are in constant touch with their intuitive sense, who use it and cultivate it purposefully.

This leaves a majority of managers who never thought about the role intuition has in their decision-making and who were surprised to realize that a conversation of less than one hour – our interview - can make them discover that they had an intuitive sense all along: *'it makes me uncover things inside me that I do not access when I think alone, a discussion is more efficient'* and crystallize insights for systematic future use: *'once you talk about it, it stays in your mind, it becomes an axiom.'* The interview helped managers acknowledge, articulate, clarify, memorize, and prepare these insights for sharing with others. It also increased their intuitive awareness, prompting them to replicate the process. These outcomes are aggregated and illustrated in Table 1.

Table 1. Discussion helps managers capture intuitions into simple rules

Outcome	Exemplary quotes
Acknowledging tacit knowledge	<i>'if we talk for another three hours, I will acknowledge 10 more rules'</i> <i>'when you talk about them, you find that you have them'</i>

Articulating tacit knowledge	<i>'it crystalized some words and some thoughts that I had in the background'</i> <i>'helped me articulate in a concrete way things that were vague in my head'</i>
Helping the sensemaking process	<i>'helped me structure my principles, as I was implementing them without them being well structured'</i> <i>'helps me personally in clarifying the issue; because I didn't think about it until now, it didn't occur to me that there are patterns'</i>
Storing this knowledge for personal use	<i>'this discussion brings rules from hard disk to RAM, makes them easily accessible'</i> <i>'now, after being asked, I realize I have some principles, they are there, I should write them down myself'</i> <i>'this kind of discussion is good for creating a repository of lessons learned and a reminder to apply them'</i>
Sharing their knowledge	<i>'the process is useful for knowledge transfer. We accumulate things as passive knowledge, then we share different things at different times with different people. It would be better to systematically structure 4-5 things to be shared consistently'</i>
Desire to replicate the process	<i>'I will do this process with myself from now on'</i> <i>'it determines me to look actively for such insights'</i>

Inspired by these unexpected outcomes, we propose a dialogue technique based on our interview guide as a tool for purposefully replicating the process. By being subject to such an intervention, a manager can acknowledge and clarify her insights, articulate them into simple rules heuristics, write them down in a *'personal decalogue'* (as one respondent named his newly found toolbox of – not necessarily ten - simple rules heuristics), and prepare them to be shared, if appropriate. The idea came from one of our interviewees, the head of a not-for-profit organization, who said *'if you would travel the world with this process, you could clarify a lot of things for a lot of people.'* What we propose, thus, is a one-session intervention, led by a guide - someone whom the respective manager knows and trusts (e.g., an advisor, a coach, a mentor, or a senior colleague), who proposes to the subject the following thought experiment:

'Imagine you are promoted and you already found and trained your successor - someone who resembles you, but is less experienced. After all the official transfer of

knowledge and procedures, in your last day at the office you tell your successor: “Before I go, there are three rules which I learned the hard way, rules you will not find written anywhere. They are: ...”

The manager is, then, prompted to complete the phrase. Initially, they might doubt they have such rules, but, as we found from our interactions, after a short introspection everybody finds they, indeed, have something to say. One method for unblocking the thought process is for the guide to offer an example of one their insights which turned into a simple rule heuristic, illustrated with the story of the trigger situation, the clarifying event, and the sensemaking process. Then, each time the subject of the intervention discovers one of their own simple rules, the guide could encourage them to write it down, as this process further structures the idea.

Lessons learned. Despite being a well-known process in project management, a process which is routinely run in organizations, lessons-learned meetings are still to yield the expected effect (McClory et al., 2017). Love et al. (2016) argue that, to make the lessons-learned process more efficient, the lessons must be documented, communicated, and archived. We add to this that the project team must first make sense of what happened during the project, especially of the unexpected negative aspects, in order to derive lessons. Based on our findings and, especially, on the triple insight we found as source of simple rules heuristics, we propose a tool for the lessons-learned meeting, a simple framework to catalyze the sensemaking process and to articulate the learned lessons into pairs of simple rules heuristics. The project manager could start by leading the team to identify which were the unexpected negative aspects they encountered during the project and, then, could lead the discussions based on the following 3-questions framework:

Previously, we thought that...

But then, we realized that...

Now, we must...

This framework aims to catalyze, during discussions, the three insights: what was the false assumption that led to the respective negative situation, what is true instead, and how should we operationalize this new understanding. A real example for what such a framework could yield (from Atanasiu et al., 2022) is:

Previously, we thought that a client's creditworthiness can be financially calculated.

But then, during the financial crisis, usual client appraisal methods failed, so we realized that you cannot assess a client from a distance, by looking at numbers. We realized that the person is more important than the numbers.

Now, we don't send offers, we meet people face to face.

By adopting such a framework, a team can catalyze the triple insight and make sense of the negative situation and of what they need to learn. Moreover, the project manager should, then, lead the team to articulate the new understanding and its operationalization into a pair of simple rules heuristics (conceptual and operative). In our illustrative case, these are *'the person is more important than the numbers,'* and *'we don't send offers, we meet people face to face.'* Team effort should be put into the proverbialization of such insights, if their initial form is not short and memorable from the beginning. Going back to the criteria set by Love et al. (2016), we argue that simple rules heuristics are the perfect tool to capture collective insights as lessons during formal lessons-learned meetings. Encoded into proverb-like simple rules heuristics, these lessons are perfectly documented, adopted swiftly (as they yield from a team effort), can be easily communicated to others due to their proverbial form, and are safely but accessibly archived, not in a file cabinet, but in the team's folklore.

Conclusion

This chapter describes how managers naturally capture their intuitions and insights into simple rules heuristics. This articulated form allows for testing the intuition, and for refining and adapting the new understanding. It also facilitates the easy remembering, sharing, and applying of the intuitively-learned lessons. We propose that this natural process can also be replicated by individual managers and by teams for sparking insights and for uncovering intuitions that would not surface otherwise.

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