Business Horizons (2015) xxx, xxx—xxx

Available online at www.sciencedirect.com

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We're leaking, and everything's fine: How and why companies deliberately leak secrets

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KEYWORDS
Secrecy;
Trade secrets;
Deliberately leaking secrets;
Knowledge management;
Intellectual property

Abstract Although the protection of secrets is often vital to the survival of organizations, at other times organizations can benefit by deliberately leaking secrets to outsiders. We explore how and why this is the case. We identify two dimensions of leaks: (1) whether the information in the leak is factual or concocted and (2) whether leaks are conducted overtly or covertly. Using these two dimensions, we identify four types of leaks: informing, dissembling, misdirecting, and provoking. We also provide a framework to help managers decide whether or not they should leak secrets.

1. Organizational secrecy

Organizations are open systems: they continuously interact with their external environments and share information across their boundaries (Scott, 1981). Examples are plentiful. Marketing campaigns, submissions to regulatory authorities, and communications with suppliers and partners are but a few of the myriad ways in which organizations deliberately share information with the outside world. But sharing information is not always beneficial, and for organizations to survive and thrive, they must manage such interactions carefully.

One critically important type of information sharing is the sharing of secrets. Many organizations keep secrets; that is, they possess information that is deliberately withheld from others (Scheppele, 1988). But on occasion, secrets are leaked outside the company, and those leaks can have substantial implications for the welfare of organizations (Hannah, 2005). In this article, we explore what we term *deliberate leaking*: the intentional choice by organizations to share secrets outside of their boundaries. Secrets are defined as any piece of information an organization possesses and has intentionally withheld for some reason (Scheppele, 1988). This can include many types of information such as business models, strategic plans, lists of customers, planned mergers and acquisitions, product launch dates, designs, formulae, and working practices. In deliberate leaks, organizations initially choose to protect their information but later choose to leak the secrets or a concocted version of them because there is a benefit in doing so. Herein, we discuss why and how organizations deliberately leak secrets.

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0007-6813/$ — see front matter
http://dx.doi.org/10.1016/j.bushor.2015.07.003

1.1. The benefits of keeping secrets

On the face of things, it may seem counterintuitive for companies to choose to leak their secrets. While organizations sometimes keep secrets simply because they are obligated to (e.g., the personal data of employees), organizations often keep secrets to extract more value from their knowledge (James, Leiblein, & Lu, 2013). For example, by keeping its formula a secret, the Coca-Cola Company has preserved the value inherent in being the only manufacturer of Coke and has benefited accordingly. If secrets are not protected, companies can and do suffer substantial losses: U.S. companies alone lose billions of dollars annually due to the misappropriation of trade secrets (Create.org & PwC, 2014). The popular press is replete with examples of companies and even governments suing one another to recover some of the harm done by the loss of valuable secrets (Hannah, 2006). Correspondingly, the academic and practitioner literature on trade secret protection has tended to focus on how to safeguard secrets, usually recommending rules and procedures that deter trade secret divulgence (Hannah & Robertson, 2015; Hermelinna-Laukkanen & Puumalainen, 2007; Liebeskind, 1997). We contribute to the topic by instead exploring how organizations can sometimes benefit by leaking their secrets.

1.2. The benefits of leaking secrets

On some occasions, organizations are required to share their secrets with suppliers, partners, regulators, investors, customers, and even competitors. For example, the U.S. Food and Drug Administration requires that biopharmaceutical firms disclose a range of secret information about the formula, manufacture, and marketing of any planned new drug. This sharing of secrets is a requirement of the drug approval process.

On other occasions, organizations deliberately leak secrets when they are not required to. For example, John Martellaro (2010), a former senior marketing manager at Apple, acknowledged that the firm has engaged in "controlled leaks." He described the leaking process as follows:

> The way it works is that a senior exec will come in and say, "We need to release this specific information. John, do you have a trusted friend at a major outlet? If so, call him/her and have a conversation. Idly mention this information and suggest that if it were [to be] published, that would be nice. No e-mails!"

According to this and other accounts, Apple "was a ship that leaked from the top" (Carr, 2010). Apple executives allegedly chose to leak secrets, a notion that we examine in this article along with the reasons and strategic implications of such intentional disclosure. We answer the following question: *How and why do organizations deliberately leak secrets?* We begin by introducing two key dimensions of leaks: (1) the nature of the information in the leak and (2) the signals that organizations wish to send about the leak. Using these dimensions, we then explore how organizations can purposefully leak secrets, and the benefits and risks of doing so.

2. The content of leaks: Truth, or everything but the truth?

To understand how leaks can vary and when a particular type of leak is likely to benefit an organization, one must first ascertain the nature of what is being leaked. While some leaks may contain accurate information, this is not necessarily always the case. Therefore, one of the most critical dimensions of a leak concerns its truthfulness: the degree to which it contains *factual* or *concocted* secrets.

2.1. Deliberately leaking factual secrets

When a disclosed secret is factual, the information communicated is honest, accurate, and real. This is common in the areas of innovation and supply chain management, where companies leak accurate information about their product innovation plans to suppliers so that production resources can be set up to deliver the innovation and complementary products. For example, consider the computer and video game industry and the companies that manufacture video game consoles, such as Microsoft, Sony, and Nintendo. They must share information about their plans to launch new models with the firms (e.g., Electronic Arts, Valve, Ubisoft) that develop games to be played on the consoles. Because the lead time required to develop new games is typically 2—3 years, this must be synchronized with the 5—7 year timeline of developing new gaming consoles and coordinated with the launch schedules of both products (McCarthy, Lawrence, Wixted, & Gordon, 2010). As another example, when Google was preparing its initial public offering (IPO), it chose to leak factual secrets regarding its business model. During Google's start-up years, CEO Eric Schmidt considered the model to be one of the company's most important and valuable sources of competitive advantage (Levy, 2011). The hiding of this secret came to a deliberate end in 2004 when investment bankers arranging the IPO of Google's

shares needed to know how much money the company could make and how it intended to do this. It had been widely assumed that Google's revenue would come from fees charged to businesses and professionals for specialized Internet search services. In a meeting with the bankers on April Fools' Day in 2004, Google's then-CFO George Reyes reported respectable earnings and profits, which delighted his audience. Reyes then apologized, stating he had fooled them by supplying incorrect figures: the real earnings and profits were more than double what was presented (Levy, 2011). Google was not in the search business, Reyes and other firm executives explained, but rather in the business of advertising and media. The intentional revelation of this factual secret was necessary for investment bankers to calculate and justify the proposed allocation and pricing of shares in Google.

2.2. Deliberately leaking concocted secrets

Firms may also be deceptive when they leak secrets, choosing to leak concocted information to attain some form of competitive benefit. The information central to a concocted secret is invented, untrue, and not real, but it is leaked in a way that makes the secret seem truthful. In times of conflict and war, the practice of leaking concocted secrets is common. The Chinese general and military strategist Sun Tzu (2002, p. 3) believed that:

> All warfare is based on deception. Hence, when we are able to attack, we must seem unable; when using our forces, we must appear inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.

During World War II the Allied forces leaked concocted secrets as part of a shrewd deception called Operation Fortitude (Barbier, 2007). The aim was to convince the German military command that Allied forces would indeed land in France, but at Pas de Calais rather than the real landing site of Normandy. The concocted secrets were released through diplomatic channels that the Allies knew the Germans could glean information from, and to help the leaked secrets seem convincing, the Allies set up fake landing craft and fake airfields in locations that gave credibility to the information. Leaking and reinforcing concocted secrets is one way of producing disinformation (i.e., intentionally false or inaccurate information) to gain some form of advantage by misleading or distracting others.

The truthfulness of a leak can also be linked to the desire to trick and catch people and organizations who themselves are doing unwanted leaking. For example, after a series of leaks at Tesla Motors in 2008, CEO Elon Musk reportedly sent employees slightly different versions of a sensitive e-mail to see which version would be leaked and thus reveal the leaker. This approach to leaking is known as the 'Barium meal test' in the world of espionage (Wright, 1987), named after a drink consumed before x-rays that illuminates one's innards during the examination.

3. Signaling the intentionality of a deliberate leak

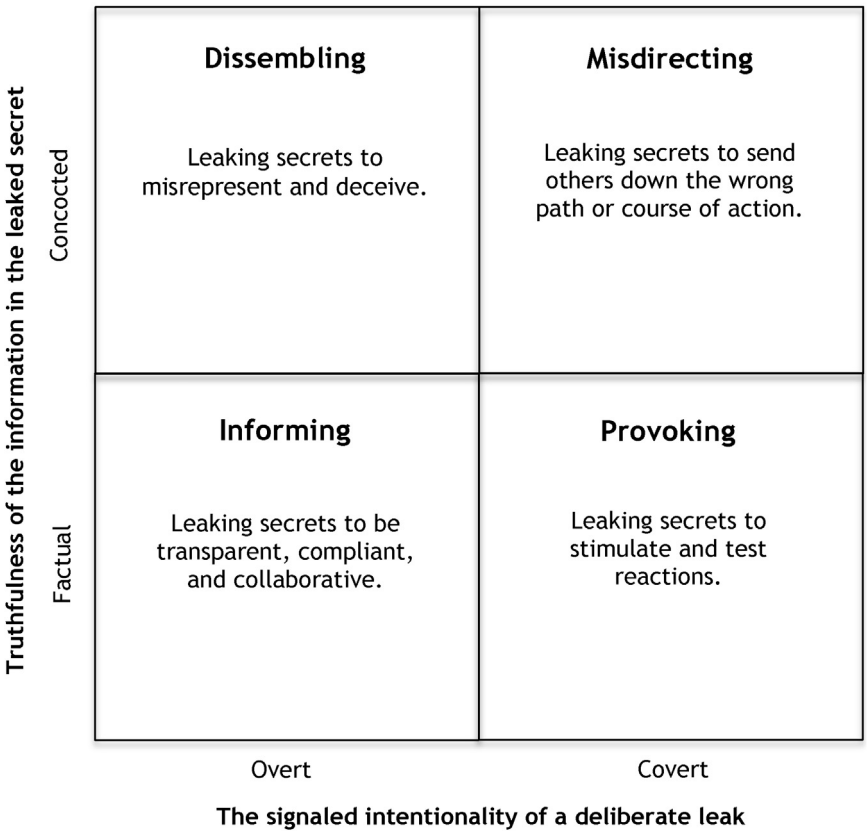
The second dimension in our framework focuses on firms' attempts to influence how customers, suppliers, competitors, and regulators perceive a deliberate leak. Sometimes firms wish to conceal the fact that they have deliberately leaked a secret, preferring to give the impression that the leak was unintentional. To include this important distinction in our typology, we distinguish between *overt* leaks (the company freely admits it purposely leaked the secret) and *covert* leaks (the company falsely claims the leak was a mistake or pretends not to know it has occurred).

3.1. Overt leaks: Deliberately leaking and being open about it

In an overt leak, a firm signals that it has made the deliberate decision to leak secrets to outsiders. Consider the aforementioned Google example: Google openly informed its investment bankers that the firm was sharing secrets with them. Thus, this was an overt leak. In another example, Toyota announced that it would share the secret technology behind its hybrid cars with its Chinese partners in order to improve manufacturing operations efficiency (Roberts, 2013). In another instance, filmmakers of the new Star Wars movie *The Force Awakens* uploaded a promotional trailer onto YouTube that includes several scenes from the film. While many aspects of the filming were held as closely guarded secrets (Johnson, 2014), the overtly leaked trailer offered fans tantalizing select glimpses, including images of the beloved Millennium Falcon spaceship. In the first 2 months following its release, this trailer was viewed over 55 million times, thereby demonstrating how the leaking of a secret can draw interest from consumers.

One benefit of an overt leak is that when recipients of the information know the source of the leak, they presumably have more reason to trust the secret being leaked to them. In fact, overt leaking

Figure 1. A typology of deliberate leaks



is central to the practice of information transparency, which fosters effective collaboration (Akkermans, Bogerd, & Van Doremalen, 2004). If Toyota's Chinese partners learned about manufacturing secrets through a mysterious source, they would be less likely to believe the information while also being wary of Toyota, which had not shared the secret. Similarly, fans of Star Wars knew the images in the film trailer were accurate because the film studio overtly released the trailer.

3.2. Covert leaks: Deliberately leaking but not acknowledging it

In a covert leak, a firm pretends that the leak was unintentional (i.e., a mistake) or feigns ignorance that the leak occurred. Consider the example of an Apple engineer 'misplacing' a top-secret, unreleased, fourth-generation iPhone at a bar during a field test (Hughes, 2010). The phone subsequently found its way to Gizmodo.com, a popular blog that reports on consumer electronics, which then shared the technical specifications of the device with the world. Apple has repeatedly denied authorizing the leak, claiming that it was simply a blunder by the employee (Nosowitz, 2010). If Apple's denials are untrue, then this is an example of a covert leak.

The deliberate leaking of information that the Allies engaged in during World War II is a confirmed example of a covert leak. The Allies pretended they were unaware of the leak because they wanted the German command to wrongly believe that the leak was a mistake. If the Germans believed otherwise, they would certainly have disregarded the information, or even used the information against the Allies.

4. The four types of deliberate leaks

Having introduced two key dimensions of deliberate leaks—the truthfulness of what is leaked (factual versus concocted) and the signaled intentionality (overt versus covert)—we now describe how these dimensions combine to generate a typology of approaches to the deliberate leaking of secrets. We propose four types of deliberate leaks: informing, dissembling, misdirecting, and provoking (see Figure 1). Next, we explain each type of leak, describe its benefits and risks, and provide real-life illustrations.

4.1. Informing

When a company leaks secrets truthfully and signals that it has done so intentionally, the firm is engaging in what we term *informing*. Informing is probably the most common form of deliberate leaking and is frequently motivated by the need and obligation to share secrets with external stakeholders (e.g., suppliers, regulators, partners). When firms engage in informing, it is because the benefit accrued by external stakeholders having access to the secret outweighs any cost in making the secret known. For example, most product manufacturers would share the launch date of an item to signal to outsiders such as accessory producers, suppliers, and retailers that they must allocate resources to related activities. In turn, retailers must notify suppliers of any specific advertising or promotional campaigns such that the suppliers can deliver sufficient quantities of product at the correct time. Thus, the leaking of factual secrets can help firms to align their activities with others in supply chains in ways that benefit everyone.

Informing leaks can also have marketing value (Hannah, Parent, Pitt, & Berthon, 2014). They can get customers excited about upcoming product offerings, such as the new Star Wars movie. In other cases, they may keep consumers from buying competing products in anticipation of leaked release dates or feature sets. Informing leaks can also put competitors on the defensive and steal their thunder from marketing efforts or product launches.

While there are benefits to the informing type of leak, sharing secrets in this way also creates vulnerability for three reasons. First, once a secret is released, even if the recipient of the secret has signed a confidentiality agreement, there is increased risk that the secret will be inappropriately divulged to others (Hannah, 2007). Suppliers that provide materials for competing firms may be tempted to share secrets of one firm with another, especially if by doing so they can increase the value of their business. Second, a risk from a marketing perspective is that disclosure of the secret may underwhelm consumers. For example, if the new Star Wars movie trailer was met with derision by viewing audiences, it could lead to a backlash against the film. Third, an informing leak creates expectations that a firm must later meet. Within the computer industry, the term 'vaporware' is often used in a disparaging way to refer to product announcements that never led to actual products (Townsend, 2008).

4.2. Dissembling

Dissembling, the second deliberate leaking approach in our typology, occurs when a firm openly discloses a concocted leak. Consider the case of Enron, which was named America's Most Innovative Company by *Fortune* magazine for 6 consecutive years (1996—2001). In 2000, Enron claimed it had attained revenues of nearly $111 billion. To explain this remarkable performance, Ken Lay, then-CEO of Enron, made a claim about the secret to Enron's success: "Basically, we are entering or in markets that are deregulating or have recently deregulated" (Scheer, 2013). However, the real secret was that Enron engaged in a range of complex transactions and fraudulent accounting practices designed to convey false profits by hiding operating losses.

Companies also dissemble to their customers by openly releasing concocted secrets that make false claims about the amazing features of their products. For example, the Dannon Company touted that its Activia brand yogurt had a secret formula that helped relieve constipation and could reduce the propensity of individuals to catch colds or the flu. Dannon also advertised that there was scientific proof to back up these claims (McMullen, 2010). Similarly, the high-end manufacturer of workout clothing Lululemon Athletica claimed that one of its products, clothing made of seaweed, had health benefits: releasing "marine amino acids, minerals, and vitamins into the skin upon contact with moisture" (Strauss & Waldie, 2012).

When dissembling is successful, firms can convince customers to purchase products and services and send regulators and even competitors down false paths. Regarding the latter point, some professional sports teams may leak false information about player injuries in order to trick competitors; for instance, former New England Patriots football team members have accused the organization of putting false information on injury reports (Smith, 2014). However, firms that dissemble risk costs to their reputation, to their economic welfare, and even to their legal standing if they are later caught in their deceptions. In 2010, Dannon agreed to pay $45 million dollars in damages for deceptive advertising and to drop the claims about the benefits of its Activia yogurt (McMullen, 2010). Lululemon was forced to recant its claims about the health benefits of its seaweed-based clothing; consequently, the company's stock prices and reputation suffered (Strauss & Waldie, 2012).

A more innocent type of dissembling involves misleading the public about the secrecy of information, but in a way that signals to the public that there is a deception. This is dissembling in a way that is overtly about marketing, and done with a nod and a wink. For example, Cadbury manufactures a chocolate bar that is sold in Canada under the Caramilk name. The company maintains, tongue

in cheek, that it has a secret method for getting caramel inside the Caramilk bars, and has built multiple successful marketing campaigns around the concocted secret (Hannah et al., 2014). In these situations consumers may enjoy playing along with the deception and choose willingly to suspend their disbelief.

4.3. Misdirecting

With our third type of deliberate leaking, *misdirecting*, firms create a 'strategic feint' to send competitors, regulators, investors, or consumers along the wrong path or course of action. In misdirecting leaks, a firm shares concocted information while at the same time signaling that the leak was unintentional. In other words, a firm plants disinformation that others interpret as genuine. The misdirecting firm then gains an advantage when the receiving parties, believing they have access to true information, allocate (i.e., waste) time, money, or other resources toward trying to understand the decision embedded in the leak and defining an appropriate response. Competitors might be stalled, regulators manipulated, and consumers confused into buying a product based on concocted information.

McGrath, Chen, and MacMillan (1998) described how the leading U.S. producer of pet foods, Ralston, used a concocted secret to create a strategic feint. In the 1980s, the U.S. pet food industry was changing in two major ways. One was the rise of healthier and more expensive pet food as owners were increasingly concerned about their pets' diet. The other was that the supermarket, the incumbent mass-market channel for pet food, was being eroded by pet supply superstores such as PetSmart and Petco. To strengthen its position, Ralston developed and launched a high-end food for pet superstores, but at a very low price point. This action was promoted to the press as a strategic change in the offerings of the company. In response, Ralston's competitors reorganized their production, supply chains, and marketing to start selling even higher-end product lines at lower prices. The result was that competitors allocated significant resources to respond to Ralston's move and became locked into a low margin product in a very competitive channel. With the deception successfully enacted, Ralston continued to consolidate its position with its more lucrative products and the more profitable supermarket channel.

4.4. Provoking

In *provoking*, a firm puts forth effort to elicit a reaction from others by leaking truthful information. Also known as a 'trial balloon,' a provoking leak is intended to elicit a reaction from an audience, with the reaction providing useful information to the leaking firm. In contrast to informing leaks, provoking leaks ensure that the leaking firm can disavow its role in the leak, thus avoiding any backlash. John Martellaro (2010), a former senior marketing manager at Apple, wrote about why Apple often engaged in provoking leaks:

> Often, information floated in leaks isn't final, and something about the product will change before production actually occurs, and if there's no trail and no evidence to point to, both Apple and the news outlet are protected against claims of having disseminated false information. Official leaks are published after the close of the stock market to avoid accusations of stock manipulation.

As noted in the preceding quote, the information in provoking leaks is frequently something that is truly being considered, but is not yet finalized. For example, before launching the iPad, Apple reportedly was considering a price point of $1,000 and leaked secrets about that fact to gauge the reaction of consumers, retailers, and even the stock market (Martellaro, 2010). If Apple had done so overtly, the company might have been viewed as unethical, manipulative, and possibly even guilty of illegal deeds if it seemed it was attempting to manipulate the market. Other examples could involve firms leaking details of earnings reports in order to see how stakeholders and the stock market respond, or leaking evidence of wrongdoing in order to learn about appropriate public relations strategies. Provoking leaks are common in the political arena, where they are used to gauge public reaction to proposed policy initiatives, political appointments, or controversial decisions (Reardon, 2009).

Provoking leaks can backfire in at least two ways. First, if stakeholders receive information that is tentative and assume it is final, especially if there is something unwanted in the leak or there is something wanted that is later not provided, there could be a backlash. Second, if a firm is found to have leaked something intentionally yet earlier tried to signal that it was not responsible for the leak, the firm could suffer reputational harm and negative legal standing.

5. Lessons for leaking secrets

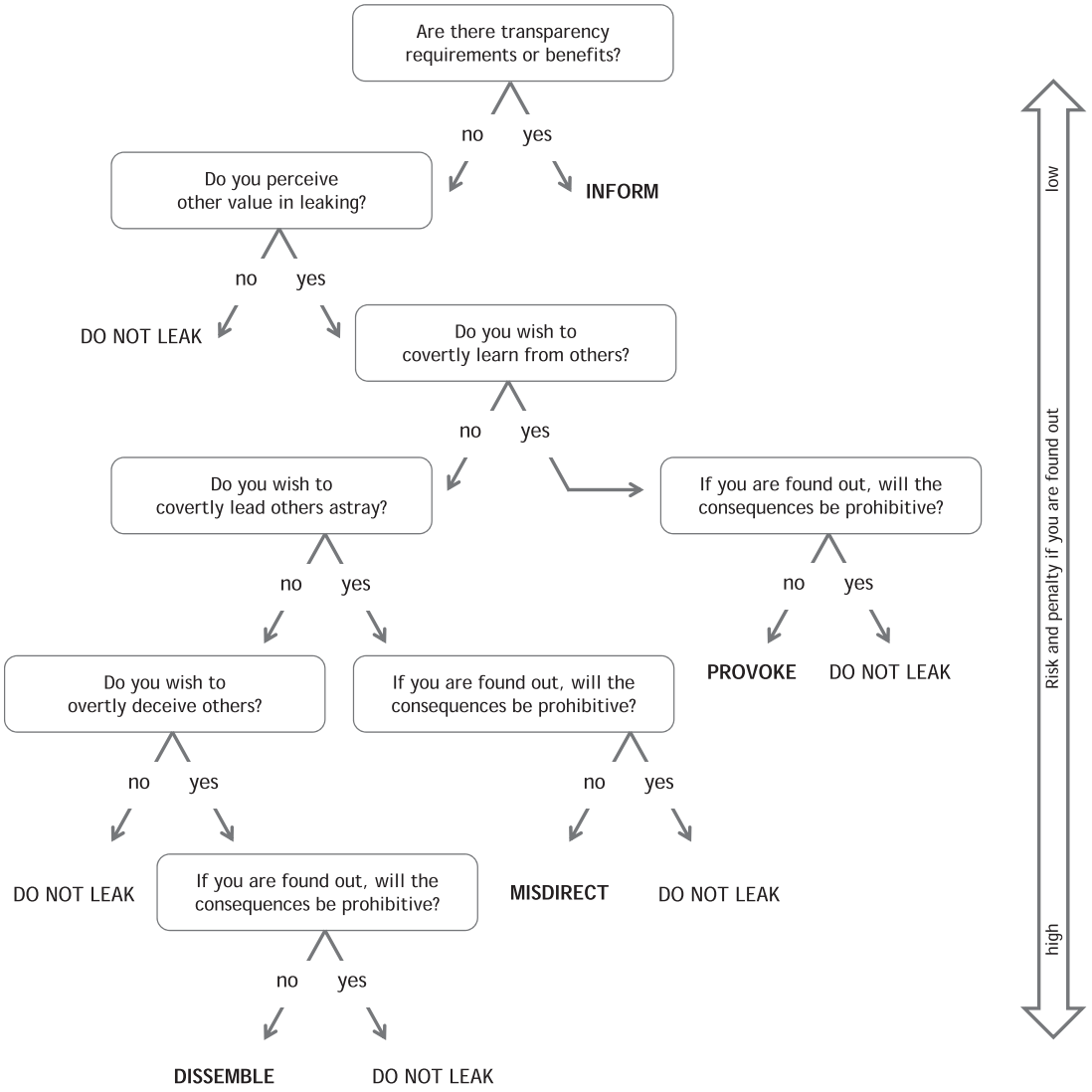
A central point of our article is that the deliberate leaking of secrets can be beneficial to organizations. Thus, rather than automatically try to plug all kinds of leaks, firms should recognize that deliberate

leaks can sometimes create value. To conclude, we elaborate on four issues related to why and when organizations should deliberately leak secrets. First, we discuss how our typology provides the basis for a decision-making framework that can help managers determine when they should and should not leak different types of secrets. Second, leaks can have a lifecycle in that they begin as one type of leak and then evolve and become other types. Third, it is important to recognize that the truthfulness and signaled intentionality of a leak are continuous and changeable dimensions, and thus, a leak may not fit neatly into one of the four types. We explain how organizations can hybridize, or crossbreed, leaks. Fourth, we discuss the legality of leaking and highlight situations in which deliberate leaking breaches laws and industry regulations and expectations.

5.1. To leak, or not to leak: That is the question

Three of the four types of leaks in our typology come with risks and possible costs for organizations if it is revealed that they deliberately leaked the secret. Consequently, as shown in Figure 2, it is important to consider some of the key decision steps for understanding when managers should consider leaking secrets. The first criterion entails whether an organization is required to disclose a secret because of transparency conditions and benefits. This includes leaking for legal reasons (e.g., U.S. biopharmaceutical firms sharing with the FDA) and for collaboration (e.g., sharing with supply chain partners or with investors). On these occasions, firms face a straightforward choice about whether or not to leak their

Figure 2. Why and how organizations should deliberately leak secrets



secrets and should generally engage in the informing type of leak.

However, if there is no requirement or benefit to leak for transparency reasons, the decision of whether or not to leak secrets becomes more complex. Managers should consider the purpose of the leak. If the goal is to covertly learn from others, a provoking leak should be contemplated. To covertly lead others astray, managers could order a misdirecting leak. To openly deceive, a dissembling leak could be employed. Each of these three reasons, and the corresponding type of leak, presents organizations with potential risks or penalties if the organization is revealed to have deliberately leaked the secret. Consider the case of the Allied Forces trying to misdirect the enemy. When this act of covertly leading others astray was revealed, public reaction in the Allied Forces nations was positive and approving in nature. In contrast, if an organization employs misdirection to gain competitive advantage, it runs the risk that the public may view this negatively. Similarly, if consumers learn about a provoking leak, they may view it as a clever way to test reactions to the leaked information or as a sneaky, manipulative ploy to trick customers for the company's benefit. Dissembling often carries the highest risk. Once revealed, the act of openly deceiving others will be viewed as dishonest, and may even be illegal. Dannon and Lululemon suffered stock price and reputational harm; Enron went bankrupt and its leaders faced criminal charges. The more benign type of dissembling, whereby consumers are in on the deception, is less risky.

5.2. The lifecycle of a leak

Each of the four types of leaks we present offers advantages but also risk to the firm. In some cases, a firm should focus on one type of leak, such as when factual secrets should be leaked to inform business partners or to provoke a response from competitors, or when concocted information should be leaked to misdirect others. In other cases, firms should consider a combination of different leak types over time. Obviously, firms cannot retract an overt leak, but they can make a covert leak overt, or shift from concocted to factual information. Firms should, from the outset, think through the desired lifecycle of a leak and consider the strategic advantages of moving from one type to another. For example, a firm developing a new product could first use misdirecting leaks to send competitors down wrong paths, then use provoking leaks in order to test consumer and market reaction to certain product features and price points, and eventually employ informing leaks when a product is ready to launch.

5.3. Crossbreeding different types of leaks

Firms should also consider whether it is worthwhile to concurrently engage in more than one type of leak. While our typology identifies four distinct and discrete types, each resulting from different combinations of their common dimensions, in reality leaks may or may not be of one discrete type. Mutual exclusivity is likely to exist in the case of signaled intentionality: a leak can either be overt *or* covert, but not both at the same time. However, when it comes to truthfulness of the secrets in a given leak, things can be more complicated. Factual secrets should not include concocted information, because this would defeat their purpose. Concocted leaks need not contain exclusively false information, though; like rumors heard on the street, concocted leaks must be somewhat believable in order to have the desired misdirecting or provoking impact. Firms may therefore wish to mix in some credible, factual truth with concocted conclusions and lies. The recipient could verify the true information and therefore be more likely to believe the untrue information.

5.4. Leaking and legality

Leaking concocted secrets deliberately may harm the public image of a company when people find out that they have been deceived; discovered concoctions might even taint entire industries, raise ethical questions, or lead to legal consequences. For instance, the long-kept secret of the severity of Steve Jobs' illness became the topic of a corporate disclosure and compliance debate regarding the firm's responsibility to shareholders, employees, the board, and other stakeholders. The consensus was that when Apple dissembled, it should have informed, factually and overtly. Fortunately for Apple, there were no clear and enforceable legal criteria that required the firm to disclose this secret (Temin, 2012). Thus, while we suggest firms consider all of the potential advantages of leaks, we also caution firms to be careful not to fall on the wrong side of the law.

6. Conclusion

At the beginning of this article, we noted that organizations often share information with the outside world. Our goal was to illuminate one aspect of this—the decision to deliberately leak secrets—and the challenges and opportunities that accompany it.

We have identified four types of leaks, introduced a decision-making framework that companies can use to guide their decision making when considering whether or not to leak their secrets to outsiders, and illustrated our ideas with real-life examples of leaked secrets and leaking firms.

Ultimately, a firm's choice regarding whether or not to leak secrets involves weighing the risks of a leak against the potential returns. In this article, we have worked to clarify the risks and returns of each type of leak. In doing so, we have provided managers a way to arrive at more informed decisions about whether or not to leak secrets. We encourage academics to devote more time and attention to this important aspect of organizational functioning. After all, the evidence suggests that firms that leak secrets may be doing very well; it appears that some of the most prolific and careful leakers are also among the most profitable companies in the world.

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