The diffusion of management ideas within the MNC: under the sway of the corporate immune system

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Abstract

Purpose – This paper aims to contribute to the multinational company (MNC) literature by studying the diffusion of a management idea within an MNC and its interaction with the MNC’s corporate immune system (CIS).

Design/methodology/approach – The qualitative single case study draws on evidence of how a management idea augments within an MNC and changes its development practice.

Findings – The study identifies four phases of the diffusion process and presents the interaction between the management idea and the CIS in each phase.

Practical implications – The more subsidiaries within an MNC that take the initiative to adopt a management idea, the harder will it become for the headquarters (HQ) to reject it. Thus, to ensure that changes in management practices are based on informed and, ideally, deliberate decisions, managers should critically evaluate management ideas immediately at inception.

Originality/value – The study breaks new ground by explaining how the CIS reacts to the diffusion of management ideas in MNCs.

Keywords Agile, MNC, Management practice, Corporate immune system, Management idea, Practice, Diffusion

Paper type Research paper

Introduction

One of the purported and well-researched advantages of a multinational company (MNC) over purely domestic firms is the ability to draw on geographically dispersed knowledge resources and leverage them globally (Bartlett and Ghoshal, 1989; Baskici, 2019; Kogut, 1991). Studies in international business (IB) global strategy have examined the intra-organizational diffusion of management practices within the MNC (Hultén, 2006; Kostova, 1999; Kostova and Roth, 2002), particularly the diffusion of human resource management practices (Ahlvik and Björkman, 2015; Ferner et al., 2012). The diffusion of management
practices within the MNC context has previously been predominantly portrayed as intentionally HQ-driven (Christmann, 2004; Ferner, 2000). These empirical accounts have often described how MNC practices changed on a global level because the company’s HQ standardized, transferred, and often imposed management practices on its global network of subsidiaries. Increasingly, however, studies have also shown that subsidiaries are capable of changing the MNC by proactively developing their own local initiatives (Birkinshaw, 1997; Birkinshaw and Hood, 1998; Delany, 2000) and practices (Edwards et al., 2005; Edwards and Ferner, 2004). These subsidiary-driven initiatives and practices add value to the MNC’s overall business (Ambos and Birkinshaw, 2010).

The literature on subsidiary initiatives has predominantly studied the diffusion and implementation of subsidiary practices and initiatives that originated from the local environment in which the subsidiary is embedded (Andersson, 2003; Andersson and Forsgren, 1996; Birkinshaw and Hood, 2000). Within this research stream, a common focus has been on resistance from the existing power bases within the MNC (Strutzenberger and Ambos, 2014) and the corporate immune system (CIS) (Birkinshaw and Ridderstråle, 1999). The CIS has since its conceptualization had a dominant role in the literature explaining HQs’ reactions towards subsidiaries’ initiatives (Schmid et al., 2014). It is important to note, however, in an increasingly globalized context faced by MNCs, that management practices initiated by subsidiaries do not always originate from the subsidiaries’ local contexts as internal innovations, but that subsidiaries also take initiatives to adopt management ideas [1] that are fashionable in the external global industry environment (cf. Chiang et al., 2017).

The prevailing literature on intra-organizational transfer of practices in IB has hitherto not distinguished between transferred practices based on internal innovations or those based on external management ideas, and the consequences that this entails (Kern et al., 2019). More specifically, although the CIS has been used to explain the diffusion of practices or lack thereof initiated by subsidiaries, our knowledge of how the CIS reacts to subsidiary initiatives based on external management ideas is limited. Hence, the first and main aim of this article is to contribute to the abovementioned literature by studying the reactions of the CIS to the diffusion of a management idea from an MNC’s global industry context that started as a subsidiary initiative. We particularly emphasize the MNC’s internal resistance and ask the following research question:

**RQ1.** How is a global management idea adopted by a subsidiary diffused within the MNC under the sway of the CIS?

We study the augmentation of the management idea of “Agile development” and the resulting change of development practice within the research and development (R&D) operations of an MNC. Our in-depth single case study offers an empirical account of how a fashionable management idea at industry level, Agile development, incrementally resulted in the whole MNC changing one of its management practices. In contrast to the common situation of practice change as a consequence of knowledge transfer between subsidiaries of the MNC, our case portrays how an MNC’s management practice may change by subsidiaries independently and locally acquiring knowledge of the management ideas. After being adopted by around half of the subsidiaries, the HQ uses the principles of the Agile idea to coordinate its development practice globally.

The paper continues with a depiction of the prevailing literature on the internal diffusion of practices within MNCs, with a particular focus on insights concerning the CIS, followed by a discussion on management ideas and their diffusion within and between organizations. Thereafter, we discuss methodological choices made during the study, followed by an empirical account of the case. Next, we discuss the empirical findings within the frame of our theoretical
framework. We sum up the main findings in the concluding part of the paper, where we also offer a discussion of the paper’s contributions and make a call for future research.

Theoretical framework

Multinational company forward and reverse diffusion of practices

As mentioned in the Introduction, MNCs are vehicles that facilitate global diffusion of practices by combining intra-firm transfer mechanisms with a knowledge exchange with local organizations globally (Buckley and Casson, 2003; Kogut, 1991; Singh, 2007). The focus of the IB literature has been on the forward diffusion of practices mandated from HQ to subsidiaries and related reactions to these mandates from subsidiaries (Edwards et al., 2005; Kostova and Roth, 2002). In general terms, the higher HQ’s requirement for global standardization of a practice, the more barriers – such as liability of foreignness (Zaheer, 1995) and stickiness (Jensen and Szulanski, 2004; Szulanski, 1996) – HQ needs to overcome throughout the diffusion process for a practice. Similarly, a sense of patriotic superiority can result in people not adopting foreign practices (Edwards et al., 2010). Other impediments to forward diffusion include resistance from trade unions (Ortiz and Llorente-Galera, 2008) or subsidiary managers (Ahlvik et al., 2016), due to the not-invented-here (NIH) syndrome (Bartlett and Ghoshal, 1989). Other impediments to diffusion include subsidiaries needing to unlearn old practices (Bettis and Prahalad, 1995) or the practice simply lacking legitimacy within the local environment (Chan and Makino, 2007; Kostova and Roth, 2002).

More recently, research on the diffusion of human resource management practices within the MNC has observed and studied reverse diffusion – i.e. the transfer of practices from foreign subsidiaries to operations in the country of origin and other locations worldwide (Edwards et al., 2010; Edwards and Ferner, 2002; Edwards and Kuruvilla, 2005). Boussebaa et al. (2014) make a distinction between strict reverse diffusion, where practices from subsidiaries are transferred to the parent/home operation, and horizontal diffusion, where practices are diffused from one subsidiary to other subsidiaries. Compared to forward diffusion, reverse diffusion of management practices is more difficult because subsidiaries face challenges during the reverse diffusion of a management practice as a result of HQ’s ambitions to control international diffusion of capabilities (Blomkvist, 2012) or to avoid perceived duplication of inventive effort (Zander, 1999). Furthermore, as we discuss in greater detail below, reverse diffusion of management practices risks activating the CIS (Birkinshaw and Ridderstråle, 1999).

Corporate immune system

A subsidiary that adopts a management idea at its own initiative is a typical example of a subsidiary initiative, i.e. an “entrepreneurial proactive behavior in organizational subunits aiming to influence strategy making in the organization” (Strutenberger and Ambos, 2014, p. 315). If, by adopting a management idea, subsidiaries stretch their boundaries of operation too far in relation to HQ or too openly question the existing management ideas within the MNC, then resistance from the existing power bases within the MNC will be awakened (cf. Strutenberger and Ambos, 2014). Birkinshaw and Ridderstråle (1999), referring metaphorically to immunology, summarize this resistance with the term CIS, which they define as the set of organizational forces that suppress the advancement of creation-oriented activities such as initiatives. Since its conceptualization, the CIS has continued to have a central role in the subsidiary initiative literature, as noted in the literature review of subsidiary initiative research by Schmid et al. (2014).

Birkinshaw and Ridderstråle (1999) describe the CIS as a complex and two-layered system. The first layer is the visible manifestations or actions (or lack of action) taken by
managers within the MNC that provide resistance to an initiative. The second layer is the underlying interpreted predispositions, i.e. (sometimes subconscious) rationales for the actions that provide resistance from the same managers. Strutzenberger and Ambos (2014) suggest that the CIS reacts through resistance mechanisms in the form of bureaucratic difficulties and political interventions, strict resource allocation requirements, and delays in requesting greater justification from HQ managers. Additionally, Schweizer and Lagerström (2019) identify the absorption mechanism, whereby HQ engulfs the initiative within the prevailing schemata, rather than killing the initiative completely. Resistance occurs due to ethnocentrism resulting in the NIH syndrome (cf. Katz and Allen, 1982), suspicion of the unknown and resistance to change (Birkinshaw and Ridderstråle, 1999). Furthermore, an existing perception gap between HQ and the subsidiary (Birkinshaw, 2000) results in selective perception (screening out unfamiliar initiatives), conservatism (preferring tried and tested solutions) and availability (preferring easily recalled events) (Birkinshaw and Ridderstråle, 1999). Birkinshaw and Ridderstråle (1999) suggest various strategies for subsidiaries to pursue to overcome the CIS, including persistently selling the initiative, using personal relationships with corporate managers, and avoiding initial attention from and cooperation with HQ prior to proof of concept or market acceptance. In recent years the CIS concept has been applied in studies to explore the evolution of MNCs’ foreign research and R&D units (Schweizer et al., 2020), team formation and the performance of innovation labs in the financial industry (Fecher et al., 2020), internationalization of R&D among multinational companies (Lagerström et al., 2019), constant opposition towards subsidiary initiative opportunities (Ahworegba and Colovic, 2019), and HQ–subsidiary interaction during the introduction of a value product as an subsidiary initiatives in India (Schweizer et al., 2019).

Rövik (2011) – also using an immunology metaphor – presents six viral features that can afflict organizations when confronted with popular management ideas: infectiousness, immunity, replication, incubation, mutation and dormancy. Unless a formal decision is taken to adopt a management idea, an organization’s immunity feature leads to four possible consequences for intruding ideas: non-adoption due to internal resistance; isolation, i.e. ideas reside high up in the hierarchy, but are decoupled from practice; expiration, i.e. ideas are formally adopted, but a lack of materialization results in the idea fading away; and rejection, i.e. a strong “immune reaction” triggered by unintended consequences during implementation terminates the implementation process. It is important to note that Rövik’s (2011) model has hitherto not been applied in an MNC context. Furthermore, like most studies on management ideas, Rövik’s (2011) view of management ideas does not consider the intrinsic components of which they are made up. This view has been criticized as one-dimensional and atomistic by several scholars (Jones and Murphy, 2011; Lillrank, 1995; Winter and Szulanski, 2001; Yu and Zaheer, 2010), particularly in the study of complex management ideas such as Agile development and Lean production.

As mentioned in the introduction, studies on intra-organizational diffusion of practices in IB have not distinguished between subsidiary-initiated transferred practices based on internal innovations or those based on external management ideas (Kern et al., 2019). We, therefore, discuss the more general literature on the diffusion of management ideas below.

**Diffusion of management ideas**

A management practice adopted by a subsidiary that is new to the firm does not necessarily have to be new to the world (Birkinshaw et al., 2008). Increasingly often, firms’ management practices are enactments of fashionable management ideas – more or less coherent visions, principles, and/or guidelines for managers and others to adopt when organizing resources and securing power and legitimacy (Benders and Veen, 2001). Some management ideas, such as
Agile development and Lean production, have managed to diffuse on a global scale and become norms in several industries. Nowadays, most MNCs work according to some management ideas. This is evident in how Lean manufacturing has become a norm within the automotive industry (Meyer, 2014). MNCs play a dual role as both consumers of management ideas and “global pipelines”, diffusing them globally (Bathelt et al., 2004; Kern et al., 2019).

Although research on management ideas has increased ever since the 1990s, particularly among scholars in organization studies, the MNC has been a neglected context (Sturdy et al., 2019).

Methods
The main aim of this study is to contribute to the literature on the diffusion of management ideas within the MNC by studying how the CIS reacts to the diffusion of a subsidiary-initiated management idea originating from the global industry environment. A single case study approach is chosen due to the exploratory nature of the study and the level of detail of the data required to understand MNC internal processes (Easton, 2010; Yin, 2003). The case study provides us with empirical insights that enable us to refine theory (Siggelkow, 2007) through an iterative process moving between data and theory, with the ultimate objective of matching theory and reality (Dubois and Gadde, 2002). Our case study is instrumental (Stake et al., 1994). We are aware that our particular case is conditioned by its context; however, the case allows us to expose the diffusion patterns of management ideas within the MNC and the CIS’s reactions (cf. Dubois and Gadde, 2002).

We study a global high-tech firm headquartered in Sweden (the MNC) and the global introduction of the Agile management idea (the practice) in the MNC. The idea entered the MNC through an initiative taken by the MNC’s Chinese R&D unit, which adopted an Agile management idea emerging in the global industry context. Later, the Swedish R&D unit adopted the idea, followed by a global rollout administered by HQ.

“Agile” is an umbrella term – a set of values, attitudes and principles that has proven to work in project management both within and outside software development. The Agile way of thinking, as formulated in the Agile Manifesto (Agilemanifesto.org), values a customer focus achieved through iterative and incremental development, and where requirements and solutions evolve through collaboration between cross-functional self-organizing teams and their customers. At the time of our study, just as Lean has become a de facto standard in today’s automotive industry, Agile had reached a similar status in the software development industry (Kurniawan et al., 2020; Meyer, 2014).

We became aware that the MNC had implemented a rollout of a new management idea initiated by its Chinese R&D unit when collecting data for another study (on how Agile played out in practice at the MNC’s globally distributed R&D locations). We realized that the diffusion path of the management idea originating from the industry context and initiated by a subsidiary – as observed in our case – had not been discussed in the IB literature. Since we already had good access to the firm, we decided to explore the diffusion of the Agile idea within the MNC in greater detail.

After deciding to study the diffusion of the Agile idea from its inception as an initiative driven by the Chinese R&D unit and eventually resulting in a global rollout, we carried out the first round of data collection focusing on developing a chronological depiction of the process (cf. Langley, 1999). We then continued our abductive journey by returning to the literature on the diffusion of practices within the MNC and the CIS. This stream of research offered us a conceptualization that we deliberately attempted to formulate relatively broadly (e.g. not formulating propositions), as we wanted to avoid being guided solely by the conceptualization when returning to the case for a second round of data collection (see
below). We ended the iteration of collecting data and searching for useful theory in parallel once we felt that we had a conceptualization, i.e. a process description consisting of various phases that matched theory with the data.

We conducted two rounds of data collection. Trying to cover all the important roles in the R&D organization, we interviewed 39 respondents (Table 1). To understand the role of the Agile

<table>
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<th>Interviewee</th>
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<td>Product Development Leader</td>
<td>Sw</td>
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<td>Sweden (Sw)</td>
<td>October 8, 2015</td>
<td>HQ Director of Strategy Development and Execution Change Leader, R&amp;D Operations</td>
<td>Sw</td>
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<td>May 22, 2015</td>
<td>Head of Site Line Manager</td>
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<td>Head of R&amp;D Site Site Head of Technology Site Technical Manager</td>
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Table 1. Interviews
idea in the industry, we also interviewed two senior software developers outside the MNC. Although we used a continuously updated interview guide, the interviews were largely determined by the respondents’ emphasis and emergent themes. We conducted the interviews—which lasted between 55 and 80 min—in English, Shanghainese/Mandarin or Swedish. All interviews were recorded and later transcribed in English (380 pages of transcription) to be collectively analyzed in Nvivo. We took reflection notes during every interview.

Respondents interviewed during the first round of data collection were asked to tell their story of the introduction of the Agile management practice so that we could get an understanding of the process over time. During the second round of interviews, we asked specific questions to confront our emerging conceptualization of the various phases of the diffusion process. We increased the quality of the interviews by relating them to observations (cf. Barley and Kunda, 2001), because one of the authors was shadowing the daily work of the teams by attending all meetings in both Shanghai and Stockholm over the course of two weeks (cf. Gherardi, 2006). Our third source of data was internal documents from the firm’s intranet, consisting of 256 pages of material. Having these three different sources of empirical data—in addition to the large number of interviews—was important, because the study is partly retrospective. Hence, we were able to reduce the risk of post-rationalizing previous actions, thoughts and decisions, as well as problems related to memory, through triangulation (Bryman and Bell, 2015). To strengthen the reliability, respondent validation (Van de Ven and Poole, 1990) was applied by discussing the findings with managers at the company as work progressed.

As common in qualitative studies in IB using case studies (Welch et al., 2011), we followed an abductive logic during the theory-building phase of the study in line with Dubois and Gadde’s (2002) systematic combining approach. Hence, our theoretical framework, empirical fieldwork and case analysis evolved largely simultaneously. This approach was chosen since it is argued to create fruitful cross-fertilization where new combinations are developed through a mixture of established theoretical models and new concepts derived from the confrontation with reality (Dubois and Gadde, 2002).

The analysis of our collected data can be divided into three steps. First, we wrote a case narrative following a timeline to reconstruct the historical development of the diffusion of the management idea within the MNC (cf. Langley, 1999). In a second step, we analyzed the interview transcripts and coded all phrases (in Nvivo) that mentioned resistance to the management idea in any way. We tried to stay as close as possible to the data by using quotations in the narrative. Finally, we used the narrative to compare the empirical findings with the theoretical framework. We first applied the literature on the diffusion of practices within the MNC and the diffusion of management ideas to interpret the case, which resulted in a proposed process description of four identified interrelated phases: inception, multiple local learning, absorption and global HQ coordination. We then used the insights from the research on CIS to suggest propositions related to how the management idea circumvented the CIS.

Case
This study focuses on the R&D organization of a high-tech firm headquartered in Sweden. At the time of the study, the MNC had around 30 developments that made up the firm’s globally distributed R&D function. Due to the complexity of the R&D organization, “HQ” is a simplified construct consisting of respondents from several organizational units in different hierarchical layers above the development sites. In past years, the R&D organization’s core practices of software development and project management had changed according to the management idea of Agile development. Internally, this change
process had been called “the Agile transformation.” Below, we describe how the new software development practice first entered the MNC as a subsidiary initiative at the development site in Shanghai, and later diffused throughout the MNC globally. Figure 1 summarizes the diffusion process graphically.

The management idea makes an entrance as a subsidiary initiative

As a result of a strategic decision within the R&D organization that each development site should have a low-cost secondary site, a new development site was set up in Shanghai in 2007. Two Swedish managers from the Swedish site were sent to Shanghai as expatriates, with the primary mission of setting up a site where mature and basic products could be transferred from Swedish sites for future maintenance. The managers set high ambitions to build an organization that could also take on more complex development. To achieve this, they focused on building a flexible organization with a broad technical domain that could develop a wide array of products. HQ trusted the managers and gave them the autonomy to set up the site as they deemed appropriate. The site went from developing basic to increasingly complex products, which HQ originally never thought would be possible at the new site. Because of the rapid growth in capability, the Shanghai site quickly received more development responsibilities, not at least due to HQ’s efforts to achieve R&D budget targets. The Shanghai site went from 2 to 40 employees in the first year, and after 4 years (at the time of the study) had grown to 400 employees. With only 1% of the employees being of non-Chinese origin, local staff dominated.

Since 1989, the MNC has developed software according to a highly standardized project management model, in this paper called Plug. After having been applied for three decades, Plug was highly institutionalized throughout the MNC and was said to be “in the firm’s blood.” The two Swedish managers who set up the Shanghai site had previously experienced problems with software development following the Plug waterfall methodology. When evaluating how best to develop the new organization, they decided to try out the Agile systems development management idea. The introduction of a new development practice was considered to be an opportunity, as the Shanghai site had autonomy and no legacy from Plug. Around the same time, a site in Finland also started to experiment with Agile practices. Respondents were not unanimous about which site was ultimately first, since this was considered as a matter of definition. Regardless, the main point in this study is that the adoption started as a subsidiary initiative. It is important to note that although Agile practices were new to the firm at that time, the management idea had emerged as the trendy new industry-wide concept offering more influence to developers. The managers selected the most suitable employees to drive change and sent them on courses to become Agile coaches. One of the expatriates recalls the initiative:

![Figure 1. Timeline of diffusion](image-url)
“Let’s try these methods out, and then we draw a conclusion based on it. Just because it says so in the book doesn’t mean it suits us best. We select and stick to what works, the rest we either ditch or think about why it doesn’t work so well, or we just skip it. […] We started small and, in the end, the whole organization was Agile. We were very autonomous, in the sense that – as long as we delivered – it was up to us “how” we did it.”

Subsidiaries follow suit
Since originating among internet startups in the Silicon Valley, Agile development had evolved into a fashionable management idea with an increasingly global footprint. Following the growing popularity of Agile development, HQ managers were aware of the idea and did not consider Agile practices to be creations of the subsidiaries that initially adopted them. The Shanghai site had close cooperation with a development site in Sweden, which closely followed the site’s experimentation with Agile practices. In 2009, after observing the Shanghai site for nearly two years, the Swedish site introduced Agile practices by re-organizing from a matrix organization to cross-functional teams. Unlike in Shanghai, the Swedish site had several decades of systems development legacy according to Plug. Together with the Shanghai site, the subsidiaries in Finland and Sweden were among the first within the MNC to initiate what internally later came to be called the Agile transformation.

Important to note is that knowledge diffusion, in this case, was not a consequence of knowledge transfer internally through the MNC network, e.g. through people traveling between the sites. Instead, each site within the MNC that transitioned to Agile practices learned the practices from local consultants or training firms. Hence, the transition to Agile practices was the result of the sites’ efforts to individually acquire the knowledge of Agile locally. As our interviews revealed, whereas communication between the sites was frequent (particularly for subsidiaries working on the same products) and whereas for example the Finnish site that internally was considered to be highly Agile was visited by interested managers from other parts of the MNC, sites that decided to adopt Agile did not primarily acquire the knowledge from any other site. To give one of many testimonies from our interviews, as described by an Agile coach at the Shanghai site: “Other Agile coaches and I were trained by external consulting firms. After becoming certified coaches, we coached our own organizations to become more agile.” This local learning was possible because Agile had become a fashionable management idea on a global level, hence the sites had external consultants offering training on Agile within geographic proximity.

By 2012, six of the R&D sites within the MNC had started the transition from waterfall to Agile practices to various degrees. Although representatives from subsidiaries in the initial stages of the Agile transition visited and observed subsidiaries that had made more progress, knowledge exchanges between the subsidiaries on the new Agile practices were limited. Thus, the subsidiaries did not learn from each other about implementing Agile practices. Instead, each subsidiary learned about Agile practices through local training courses, consultants and hiring new staff with experience of Agile methods. The transition began with a bottom-up approach with several individual subsidiary initiatives and HQ remained passive.

HQ-coordinated diffusion
Since the introduction of Plug three decades previously, the number of sites within the MNC’s R&D function had multiplied and the heterogeneity of the MNC, in terms of both technology and localization, had increased due to product portfolio growth. Each development site could have more than a thousand employees, developing products that consisted of hardware, software or a combination of technologies, catering to different types
of customer categories and belonging to different life cycle phases. With this in mind, there was a consensus at HQ that a single development practice could no longer meet the needs of all the R&D sites. Even though the R&D sites were heterogeneous, they all had in common that they conducted large scale software development.

In 2013, following increasing initiatives by R&D sites to replace Plug with Agile practices, HQ conducted a large-scale system development study to review the development practices of the MNC’s global R&D function from a future-oriented perspective. The study was preceded by a discussion on two dimensions of their practices: the “how” dimension, concerning how to do things and the “what” dimension, examining the development values to focus on. One of the main conclusions from this study was that the different R&D units within the MNC could not really adhere to one single standardized development practice due to the complexity and heterogeneity of their operations. One manager at HQ described his attitude toward Agile as follows: “I love Agile! But no matter how much I love it, it’s not a universal solution for everything, and it will never be”.

By this time, around half of the R&D sites had adopted Agile practices to varying degrees. In parallel with the development sites’ Agile initiative, a large share of the firm’s IT-savvy main customers was also undergoing Agile transformations. Hence, there was a pressure, both internally from the subsidiaries and externally from the market, to work according to the Agile idea. If HQ had decided to transfer a fully standardized practice based on the Agile idea within the global R&D organization, this would have counteracted the ambition to meet the demands of the R&D sites’ heterogeneous needs. Instead, HQ presented a corporate “development framework” consisting of principles that were largely based on the Agile idea. Instead of transferring one completely standardized practice to its subsidiaries, HQ decided to transfer only the principles on which practices should be based on the subsidiaries. This meant that the different parts of the R&D organization were free to use any practices they deemed appropriate – as long as these practices were aligned with the R&D principles established by HQ. Compared to the principles of the Agile Manifesto, the MNC had more detailed principles and included some additional principles (e.g. “We keep order and control of everything we do”) to capture the MNC’s context of large-scale development, i.e. the need to coordinate thousands of products that had to stick together. HQ deliberately excluded references to Agile and similar management ideas, to avoid Agile becoming an end in itself. Instead, HQ encouraged its development units to treat Agile like a toolbox with various practices from which to choose.

In 2014, HQ started to transfer its new Agile-based development principles to its R&D sites. By this time, most R&D sites had already been working according to Agile practices for a couple of years, and as HQ’s development principles were based on the Agile principles, this meant business as usual for most sites. Those sites that had not started the Agile transformation process went through a significant organizational change. At the time of the study, there was an aspiration among R&D sites to become as Agile as possible.

Discussion
Below, we discuss the outcome of our abductive journey described in the methods part. The CIS of the portrayed case did not react as expected according to the extant literature, and we found the absence of resistances to be particularly intriguing. Of the traditional forces of resistance (Birkinshaw and Ridderstråle, 1999), delay is the only resistance that can be clearly identified in the findings, referring to the slow response by HQ. We argue that the unexpected reaction from the CIS was primarily due to the legitimacy and geographical imprint of management ideas. These features of management ideas affect two crucial interpreted predispositions (Birkinshaw and Ridderstråle, 1999) – suspicion of the unknown
and ethnocentrism – which underlie resistance and dampen reactions from the CIS in two ways.

First, it is argued that a management idea with legitimacy reduces suspicion of the unknown. At the time of the study, Agile idea had become a management fashion (Czarniawska, 2008) and was already diffused geographically to such an extent that both software developers who enacted the idea and firms that provided training on Agile could be found globally. The high adoption rate of the idea among software development firms contributed to its status as a new norm in software development globally. Since Agile was not unknown to managers at the HQ, and software developers at the sites perceived the management idea as legitimate, common manifestation by the CIS were not triggered. We argue that the CIS would have reacted more strongly were it not for the legitimacy of Agile within the epistemic community of software developers, and the legitimacy of the idea inhibited the CIS.

Second, it is argued that management ideas are geographically imprinted with their location of origin, rather than the location of the subsidiary that takes the initiative to adopt them. The CIS indicates that the predispositions of managers, such as ethnocentrism, trigger the NIH syndrome. Extant studies have also shown how the resulting resistance is encountered from all sides, not only from HQ (Birkinshaw and Ridderstråle, 1999). We argue that geography matters, and we suggest that most subsidiary initiatives trigger the NIH syndrome due to their geographical association with the subsidiary. Unlike most subsidiary initiatives, management ideas are geographically imprinted with the location of their origin and not the location of adopting subsidiaries. Hence, management ideas do not trigger the CIS as they do not activate the NIH syndrome to the same degree as internally innovated subsidiary initiatives with stronger geographical imprints. As shown in the findings, although the adoption of Agile was initiated by the subsidiary in China, corporate managers did not express any emotions of ethnocentrism toward the initiative as they did not associate the initiative with China but with what is considered to be the most innovative location in the IT industry: Silicon Valley in the USA, the Agile idea’s location of origin.

Based on these arguments, we propose that the diffusion of a management idea within MNCs that is perceived as legitimate within its industry, and that is initiated at the subsidiary level, can be divided into four distinct phases. These four phases constitute a process that drives the diffusion forward and is illustrated in Figure 2, which is further explained in the remainder of this section that elaborates on each individual phase of the presented model.

**Phase 1: inception**

Why did the management idea first make its entrance in a subsidiary, geographically distant to HQ? Our interviewees at the site in Shanghai point toward a sense of autonomy due to the geographical distance from HQ. Birkinshaw and Ridderstråle (1999) distinguish between “core” and “peripheral” subsidiaries, where peripheral subsidiaries are situated away from the center, both hierarchically and geographically. Further, the advantages for peripheral subsidiaries when taking initiatives are demonstrated. In a similar vein, Glückler (2014) conceptualizes this phenomenon as “global information viscosity” and shows how subsidiaries on the periphery are more likely to innovate due to their distance from the HQ. A handful of interviewees at the Swedish site also mentioned the disadvantage reported by Bettis and Prahalad (1995) whereby, in contrast to the distant younger sites with limited legacy, they had to unlearn old practices. As one Agile coach in Sweden put it:
It’s so much more difficult trying to change the way people develop software at a site like this, where people have used the same [Plug] method for thirty years, it’s in our blood. As the saying goes, you can’t teach an old dog new tricks.

Although the literature warns about organizational resistance toward new management ideas and other initiatives using the metaphor of virology (Birkinshaw and Ridderstråle, 1999; Røvik, 2011), interviewed software developers at subsidiary level expressed a curious and welcoming attitude toward Agile rather than resistance. We revisit the classic text by DiMaggio and Powell (1983, p. 152), which states that one important source of isomorphism of professionalization is “the growth and elaboration of professional networks that span organizations and across which new models diffuse rapidly.” Since this seminal article, there has been an increased interest in what they call “professional groups”. Networks of practice (Brown and Duguid, 2001) and the more well-known Epistemic communities (Knorr-Cetina, 1999) are two examples of similar conceptualizations of these types of groups that also stress professional norms. Although the importance of legitimacy is emphasized in the extant literature on the CIS, legitimacy is generally referred to in terms of consistency with prevailing norms of the corporation (Birkinshaw and Ridderstråle, 1999), with limited reference to legitimacy from the industry or an epistemic community. In line with these works, we propose that when a management idea has been adopted by prominent actors in the industry and established itself as a legitimizing norm in an epistemic community, members of the community will have a positive attitude toward the management idea. Employees who identify as members of an epistemic community are subject to isomorphic pressures and likely to adopt management ideas from that community. The small arrows in phase 1 in Figure 2 symbolize the initial adoption of a management idea as a subsidiary initiative. In our case, Agile had developed into a legitimizing norm with expanding global reach in the epistemic community of software designers, which decreased the sense of suspicion of the unknown and facilitated its inception into the MNC.

**Phase 2: multiple local learning**

In our case, the Agile idea did not diffuse within the MNC network by spreading like a virus from one site to the other. Although sites that took a progressive approach to adopt Agile certainly inspired other sites to follow, each site primarily acquired knowledge on Agile from the local context. The small arrows in phase 2 in Figure 2 represent the flow of knowledge from the local contexts of the subsidiaries into the MNC network. Hence, while
Agile augmented in the MNC our case was not the consequence of any diffusion internally within the MNC such as horizontal diffusion (Boussebaa et al., 2014). Inspired by the multidimensional view of embeddedness put forward by Martin Hess (2004), we provide an alternative explanation for the diffusion.

In his reconceptualization of embeddedness, Hess (2004) suggests that actors are embedded in three different dimensions of embeddedness: societal, network and territorial embeddedness. In our case, the two latter dimensions are particularly relevant. The network dimension concerns the embeddedness in networks, such as the MNC network that preoccupies IB scholars. The territorial dimension emphasizes the spatial dimension by capturing the notion of “the extent to which an actor or set of actors is “anchored” in particular places and regional networks” (Hess, 2009, p. 426). For example, diffusion in the territorial dimension has preoccupied economic geographers in their studies of spatial diffusion of innovations. Hence, each research field has a natural tendency to focus on one particular dimension of embeddedness in diffusion studies.

Building on Hess’s (2004) reconceptualization of embeddedness, we argue that the diffusion in our case was the result of a crossflow of knowledge between two dimensions of embeddedness, from the territorial dimension to the network dimension of the MNC. This crossflow of knowledge was repeated each time a subsidiary of the MNC adopted the Agile idea by learning from actors in the local context. Thus, in contrast to extant studies on the CIS where initiatives diffuse through internal knowledge flow between subsidiaries within the MNC network, our case shows the diffusion of an initiative through knowledge flowing from multiple host markets into the MNC network via the subsidiaries.

According to Rövik’s (2011) virus theory, resources devoted to educating and training organizational members about various aspects of management ideas are an important mechanism that may facilitate or hamper the outcome of whether or not management ideas are transformed into practice within organizations. The diffusion of Agile on a global level facilitated learning about Agile at the different subsidiaries of the MNC and how to materialize the idea, through local consultants, training firms, and other actors that were active in the various host markets. When subsidiary after subsidiary decided autonomously to adopt the Agile management idea, there was an increase in the number of sites that adopted Agile. The diffusion was not a result of adoptions that were linked to each other like a domino chain – there was no transfer of knowledge between the sites. Instead, the diffusion was a consequence of subsidiaries deciding autonomously to learn about the management idea from their respective local context, in other words multiple local learning (represented by the multiple small arrows in phase 2 in Figure 2). This was made possible since the subsidiaries were able to both gain knowledge of the management idea locally and invest in the training needed.

From our observations, we found the MNC to have comparatively low structural power (Birkinshaw and Ridderstråle, 1999) that provides its subsidiaries with a high degree of autonomy. This observation was confirmed by interviewees, such as a manager who was involved in setting up the Shanghai site: “It was up to us how we wanted to work. As we had read positive things about Agile, we just said – Let’s try these methods out!” Based on our findings, we propose that management ideas are more likely to diffuse through multiple local learning within MNCs with low structural power.

Phase 3: absorption
What finally made HQ react? We propose that the same theories that explain why the peripheral Chinese site was one of the initial sites to adopt Agile can also help to answer this question. As mentioned in the discussion of phase 1, several studies (Birkinshaw and Ridderstråle, 1999; Glückler, 2014; Regnér, 2003) have demonstrated the advantages for units located geographically distantly from their HQ when taking subsidiary initiatives.
According to these studies, the timing of HQ’s reaction and the adoption of Agile by the site in Sweden were not a coincidence. Indeed, other than the evident proximity to the powerbase at HQ, several interviewees also described the Swedish site’s comparatively high degree of influence. Geographic proximity to HQ often increases subsidiaries’ weight and voice (Bouquet and Birkinshaw, 2008), which made it more difficult for HQ to ignore the progressive internal change in R&D practice. By this time, it would have been difficult for HQ managers to reject the management idea; not only had it already been adopted by a number of core subsidiaries (Birkinshaw and Ridderstråle, 1999), but by rejecting Agile HQ would had rejected a management idea with increasing legitimacy within its industry.

According to the extant literature, the most likely response to the growing pressure for the management idea would have been for HQ to create its own translation of Agile to be pushed out as a new standardized R&D practice (Lillrank, 1995; Winter and Szulanski, 2001). In our case however, instead of imposing a full new R&D practice on the sites, HQ only asked the sites to adhere to principles that were based on Agile. This solution provided the sites with autonomy to select the R&D practices that they deemed appropriate for their operations, as long as they complied with the principles. Thus, instead of adopting the whole management idea, HQ only adopted one component of the management idea – the principles. We perceive this reaction by HQ as an empirical example of the CIS mechanism “absorption,” as identified by Schweizer and Lagerström (2019). This case shows the importance of taking the intrinsic components that constitute management ideas into consideration, since such a perspective is required to capture this phenomenon. The vertical diffusion of the management idea upwards to HQ level is represented by the arrow in phase 3 in Figure 2.

Phase 4: global HQ coordination
This study demonstrates how the principles of a management idea may be used by MNCs as a novel coordination mechanism that the literature has hitherto neglected. In general, the IB literature has treated management ideas as monoliths, disregarding the perspectives on management ideas offered by scholars in related disciplines (e.g. economic geography and organizational studies) who perceive practices as consisting of different components. Lillrank’s (1995) perspective is one of the most acknowledged views, suggesting that management ideas consist of three components: principles, organizational structures and tools. Principles are the normative values concerning what is important, whereas organizational structures concern organizing, and tools relate to applications such as IT software and statistical quality control.

Drawing on Lillrank’s (1995) reasoning, HQ established a framework consisting of the principles of the Agile management idea to balance the conflicting needs of the R&D organization. Within this framework, the sites enjoyed full freedom in terms of the other two components, i.e. tools and organizational structure. With regard to the focus on principles, we conceptualize this novel coordination mechanism as practice coordination by principles. We further theorize on three related implications of this mechanism. First, we argue that barriers related to the institutional context are reduced. Second, the internalization of new practices is facilitated as a result of subsidiaries’ autonomy to enact the principles. Third, compared to a coercively imposed standardized management practice, there may be a decreased sense of global integration. Practice coordination by principles may provide a feasible compromise between context adaptation and the traditional standardized practice transfer. The arrow in phase 4 in Figure 2 symbolizes HQ’s coordination of practices. In contrast to the classic formal approach of coercive transfer of a standardized practice, these insights contribute to an alternative informal approach to how the MNC coordinates its
practices. As an informal coordination mechanism, practice coordination by principles is in line with Martinez and Jarillo’s (1989) observed pattern of evolution toward an increase in informal coordination mechanisms among MNCs.

Table 2 provides a summary of the interactions between management ideas and the CIS, corresponding to the identified phases.

Conclusions

The aim of this paper was to increase our understanding of the reactions of the CIS to the diffusion of a management idea from an MNC’s global industry context that started as a subsidiary initiative. As discussed in the introduction, despite well-established concepts of conservative forces such as the CIS (Birkinshaw and Ridderstråle, 1999) and the virus theory (Røvik, 2011), most MNCs now work according to some management idea. In addition to a description of how a management idea takes over an MNC network, we also contribute to the subsidiary initiative literature that has hitherto largely neglected the adoption of management ideas, by arguing that subsidiary initiatives that comprise adopting fashionable management ideas circumvent the CIS since they avoid triggering the interpreted predispositions that underlie resistance (Birkinshaw and Ridderstråle, 1999), particularly suspicion of the unknown and ethnocentrism. This is possible since management ideas have industry legitimacy, they do not become geographically imprinted with the location of the subsidiary taking the initiative, and they can diffuse within the MNC network through multiple local learning. Furthermore, the study contributes to the management idea literature, in which the MNC has been neglected (Kern et al., 2019), by offering a number of propositions on the interaction between management ideas and the CIS. Finally, in contrast to extant literature in IB where the augmentation of a management idea within the MNC generally is perceived as a consequence of internal diffusion within the MNC, often as intentional transfer of management idea based practices by the HQ to subsidiaries (Björkman and Lervik, 2007; Jensen and Szulanski, 2004; Kostova, 1999), our study also contributes by showing how the augmentation of a management idea can also be the result of multiple local learning; when knowledge about a management idea flows into subsidiaries from their respective local host market.

Our study also offers insights for HQ managers on how to handle fashionable management ideas. The study confirms previous studies (cf. Glückler, 2014) and shows that management ideas are likely to be initially adopted at peripheral subsidiaries. The more subsidiaries that adopt a management idea the harder will it become for the HQ to reject it, thus, managers will have to respond to subsidiaries’ initiatives to adopt management ideas quickly to be able to reject them, particularly those management ideas with strong legitimacy. This is especially true for MNCs with low structural power that gives subsidiaries a high degree of autonomy. In general, we believe that managers should

<table>
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<th>Phase</th>
<th>Corporate immune system and management idea interaction</th>
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<tr>
<td>1 Inception</td>
<td>Inception of management ideas (MIs) is more likely at peripheral subsidiaries</td>
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<tr>
<td>2 Multiple local learning</td>
<td>Adoption at multiple subsidiaries facilitated by</td>
</tr>
<tr>
<td></td>
<td>• MNCs with low structural power</td>
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<tr>
<td></td>
<td>• The weak geographical imprint of MIs</td>
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<tr>
<td>3 Absorption</td>
<td>The CIS mechanism absorption enables HQ to absorb the MI’s principles</td>
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<tr>
<td>4 Global HQ coordination</td>
<td>The absorbed principles allow for HQ practice coordination by principles</td>
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</table>

Table 2. Corporate immune system and management idea interaction
critically evaluate management ideas immediately on inception, to ensure management practice changes are based on informed and, ideally, deliberate decisions.

Our findings are subject to the common limitations of a single case study (Yin, 2003) in that they obviously cannot be straightforwardly generalized to all types of management ideas in other MNCs. Hence, our main call for further research involves studying the diffusion of other management ideas in other MNCs. Finally, when referring to the reactions of the CIS, we primary refer to the (lack of) visible manifestations or actions taken by managers within the MNC. Hence, designing a study that captures managers’ underlying interpreted predispositions would be an interesting proposition.

Finally, in line with extant literature, we perceive the (lack of) visible manifestations or actions taken by managers within the MNC to be a direct consequence of their underlying interpreted predispositions. We believe it would be valuable for the theoretical development of the CIS for future studies to further explore and verify these relations using quantitative methods.

Note
1. In the extant literature, phenomena such as Agile development or Lean production are frequently referred to as management ideas, as well as management practices (Sturdy et al., 2019). In line with Bort (2015), who makes a temporal distinction whereby a management practice is a management idea that has become implemented in an organization, both terminologies are used interchangeably in this article.

References


