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STRATEGY FORMATION AND DYNAMIC CAPABILITIES: MOTOROLA'S ENTRY INTO CHINA

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Using a longitudinal case study of Motorola's Energy Systems Group in Tianjin, China, we examine the interplay between corporate strategic directives and capability development within strategic business units (SBUs). Through semi-structured interviews and an in-depth analysis of archival data, we illuminate the tension between corporate headquarters and lower-level SBUs, identifying the sources of strategic misalignment and pathways to overcoming them. Our findings emphasize the importance of developing dynamic capabilities within SBUs, which enable the integration of top-down, deliberate strategies with bottom-up, emergent initiatives. This adaptability allows SBUs to form and execute integrated strategies that are responsive to both corporate directives and local imperatives. Our finding underscores the dual role of dynamic capabilities in enhancing strategic responsiveness and achieving alignment within complex organizational structures. In an increasingly volatile, uncertain, complex, and ambiguous environment heightened by recent global disruptions, our study underscores the critical role of dynamic capabilities in enhancing SBU agility.

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Over the past 15 years, the global business landscape has been repeatedly upended by a cascade of black swan events—rare, high-impact disruptions that have redefined the rules of competition (Taleb, 2007). From the 2008 global financial crisis to Brexit, the COVID-19 pandemic, escalating technonationalism, and intensifying trade-related shocks, firms have been thrust into a world marked by volatility, uncertainty, complexity, and ambiguity (VUCA; Bennett & Lemoine, 2014; Millar, Groth & Mahon, 2018).[1] In this turbulent environment, traditional strategic planning has proven insufficient. Instead, firms must cultivate the ability to sense, seize, and reconfigure resources rapidly—hallmarks of what Teece (2007) defines as dynamic capabilities.

This barrage of unpredictable and disruptive events highlights the heightened importance of strategic adaptability, particularly the capacity for local initiative and innovation within SBUs. Previously

[1] The VUCA concept originated at the U.S. Army War College in the late 1980s to describe the complexity and unpredictability of the post-Cold War geopolitical environment (Barber, 1992). Over time, this military concept has been adopted within mainstream strategic management research and practice, reflecting the increasingly dynamic and unpredictable nature of contemporary business external environments.

considered a specialized area of international business (Meyer, Li & Schotter, 2020), the capability of SBUs to adapt and respond within their unique local environments has rapidly emerged as a central concern in strategic management. Given this seismic shift, the ability of SBUs to independently adapt and innovate while aligning strategically with overarching corporate objectives has become crucial for sustaining competitive advantage. Firms that are unable to navigate this delicate balance effectively face an increasing threat of strategic misalignment, operational inefficiencies, and inferior performance.

Moreover, tension between the corporate parent and the SBU is inherent in the strategy formation process. According to the positioning school (Porter, 1980), formulating strategy is primarily the responsibility of the chief executive officer (CEO). The CEO, driving the corporation through strategic initiatives, capital budgeting, resource allocation, and financial controls, is the head of strategy in a multidivisional corporation (Chandler, 1991).[2] Strategic imperatives are issued from the top and followed throughout the organization. In a multidivisional firm, CEOs and their corporate strategy staffers delineate plans for the rest of the units to follow. Other scholars, in contrast, view formal plans generated from above as the beginning of a strategy formation process, and extend them into the often complex realities of strategy implementation (Noda & Bower, 1996). These scholars paint a more process-focused picture of strategy, whereas the top-down approach is primarily concerned with the content of strategy.

To explore the dynamics between corporate parents and SBUs during strategy formation, this study investigates how capability development within SBUs influences the implementation of top-down strategies issued by the corporate parent. We investigate the capacity of SBUs to reconcile the structured strategic planning mandated by corporate headquarters with the flexible, adaptive strategic initiatives that emerge at the business unit level, driven by local conditions and unforeseen opportunities. Crucially, we aim to develop a comprehensive framework that integrates strategy formation with SBU capability development, thereby providing strategic guidance to practitioners navigating the fraught relationship between corporate parents and SBUs.

To this end, we undertake a comprehensive longitudinal case study of Motorola's entry into China.[3] This longitudinal study meticulously chronicles the lifecycle of a significant manufacturing facility with profit-and-loss responsibility over a 12-year period, from its inception in 1994 to its closure in 2005. Employing an extensive array of archival data and analyzing over 100 documents of various types from Motorola's corporate and business units enables us to evaluate the outcomes of the different strategic decisions implemented throughout this timeframe. The depth and breadth of the data afford a nuanced understanding of the interplay between strategic decision-making at the corporate and business unit levels within a dynamic international context.

The in-depth, longitudinal case study of Motorola's Energy Systems Group (ESG) Tianjin reveals three crucial insights:

1) Enhanced capability development within an SBU correlates positively with the emergence of strategic initiatives at the SBU level, suggesting that higher capabilities foster greater strategic responsiveness and experimentation.
2) Increased capability development within an SBU also heightens potential tensions between the intended strategies prescribed by the parent organization and the emergent strategic initiatives developed at the SBU. This situation indicates that while capabilities empower SBUs, they also create challenges in aligning strategies across different levels of the organization, often exacerbating strategic misalignment.
3) Cultivating dynamic capabilities within SBUs facilitates the adaptation and integration of top-down, deliberate strategies with bottom-up, emergent initiatives. This adaptability enables SBUs to form and execute an integrated strategy that is responsive to both corporate directives and local imperatives.

[2] Chandler's (1962: 13) definition of strategy resonates well with this perspective: "Strategy can be defined as the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals." (Chandler, 1962: 13). Such a description fits the focus of a top-down approach to strategy formation.

[3] Motorola in this time period was a jewel of U.S. innovation, not unlike Apple, Microsoft, and Nvidia today (see, e.g., Neuman, Cavanagh & Pande, 2000). The firm earned the nation's first Malcolm Baldrige National Quality award in 1988 and a spot in the top 10 list of America's Most Admired Firms from 1994–1996 (Fortune, 1996). The Malcolm Baldrige National Quality award is the highest level of national recognition for performance excellence that a U.S. organization can receive.

THE MULTIDIVISIONAL FORM AND STRATEGIC MISALIGNMENT

Publicly traded companies play a pivotal role in the U.S. economy,[4] contributing significantly to gross domestic product, employment, and innovation. These firms fund over half a trillion USD annually in research and development (R&D), underscoring their role in driving economic and technological progress. The multidivisional form (M-form) has been a dominant organizational structure among publicly traded companies since the mid-20th century. This structure, popularized by Chandler's (1962) seminal research, is characterized by an arrangement where a central corporate office oversees various divisions based on product lines, services, or geographic locations. However, the dynamics within the M-form structure, particularly the relationships between corporate parent firms and SBUs, are complex and often marked by significant tensions (Reilly, Scott & Mangematin, 2012). Specifically, the interplay between top-down, intended strategies formulated by corporate headquarters, and bottom-up, emergent strategic initiatives originating from the SBUs remains a vibrant area of research in strategic management and international business (Burgelman, Floyd, Laamanen, Mantere, Vaara & Whittington, 2018; Meyer et al., 2020). The sustained scholarly interest in these dynamics reflects the critical importance of the phenomenon for managerial practice.

Mintzberg's (1978) model of planned emergence integrates both approaches, emphasizing systems that allow lower-level initiatives to surface. Corporate leaders first craft an intended strategy based on internal and external analysis. This strategy is implemented from the top down. However, not all initiatives materialize—some are abandoned due to unforeseen events, resulting in an unrealized strategy. The final realized strategy blends corporate intent with emergent initiatives—unplanned actions and insights from within the SBU. When successful, these initiatives can reshape the SBU's strategic direction.

[4] Indeed, publicly traded companies are critical in developed economies, in general, not just in the United States. We chose the U.S. example as our data access is best for the U.S. economy. Observations are drawn from several government agencies, including the Securities and Exchange Commission, the Bureau of Labor Statistics, the Internal Revenue Service, and the Department of Commerce.

METHODOLOGY

While foundational to understanding the strategy process, strategy formation remains less explored than strategy content (Burgelman et al., 2018; Cozzolino, Verona & Rothaermel, 2018). This dearth of research is primarily due to strategy formation's complexity, which requires longitudinal, fine-grained research to capture its dynamic nature (Mintzberg & McHugh, 1985). To address this gap, we adopt an in-depth longitudinal approach to examine how strategy formation and capability development interact—an approach that is well-suited to capturing their iterative and recursive characteristics (Yin, 1984). Our methodology aligns with Teece's (2012) call for a detailed qualitative analysis of dynamic capabilities.

Research Setting

We selected a setting that would enable us to observe the evolution of strategy and capability over time. New organizations are particularly revealing due to their vulnerability to strategic and operational challenges (Stinchcombe, 1965). Rather than studying a startup, we focused on a new unit within an established firm to distinguish between intended strategies from headquarters and realized strategies at the local level. Unlike startups, such units inherit routines and structures, offering a clearer view of strategy evolution.

We targeted Asia for its rapid economic transformation, initially considering China, India, Malaysia, and Singapore. China's unmatched market scale and global relevance during the 1994–2005 study period made it the ideal choice (Luo, 2003; Chang & Xu, 2008). We selected Motorola's ESG facility in Tianjin, a newly established operation, as a rich case for examining strategy formation and capability development from inception through consolidation.

MOTOROLA'S ENTRY INTO CHINA

Motorola's journey into China began with a pivotal visit by its CEO in 1986, marking early recognition of the country's immense potential as an emerging market. By 1992, China had become a key production base, especially for pagers and semiconductors. Building on this foundation, Motorola expanded into cellular phones and established supporting divisions, including accessories, crystals, and filters.

Motorola's ESG launched a new manufacturing plant in Tianjin, China, in 1994 to produce batteries, chargers, and accessories for portable communication devices. With full profit-and-loss responsibility for products sold in mainland China, the plant offered a

unique lens to examine the interplay between corporate strategy and local operational imperatives.

Spanning from 1994 to 2005, the Tianjin plant's lifecycle, from launch and rapid growth to consolidation and outsourcing, mirrored Motorola's broader strategic evolution in China. This period underscores the need for agility in a rapidly evolving economy and global industry.

Data Collection and Analysis

We employed a multi-method research design to capture the lifecycle of the Tianjin plant, combining direct observation, semi-structured interviews, and extensive archival analysis (Eisenhardt, 1989; Yin, 1984). This triangulation ensured methodological rigor and enabled a nuanced understanding of strategy formation and capability development.

A key strength of our research design is its dual-investigator approach, leveraging complementary insider and outsider perspectives. One researcher, who directly contributed to the plant's startup and initial operations, provided granular insights into the nuanced decisions, challenges, and processes shaping the SBU's strategic trajectory. This embedded managerial involvement offered a rich, ethnographic understanding (Van Maanen, 1995) of how SBUs adapt corporate strategies, manage complexity, and develop critical capabilities. Conversely, the second researcher, unaffiliated with Motorola or the broader electronics industry, provided an essential outsider's perspective, serving as an objective counterbalance (Gioia, Thomas, Clark & Chittipeddi, 1994). This deliberate pairing of insider insight with external impartiality enhanced both the rigor and depth of our analysis.

Archival data formed the empirical foundation of our study. We systematically analyzed over 100 documents, including organizational charts, internal memos, performance targets, and strategic planning records, complemented by Factiva database searches and informant validation. These materials provided rare, contemporaneous documentation of strategic and operational transformations within the SBU over the 12-year study period. Table 1 presents a detailed summary of the 105 documents, categorized across eight distinct types.

Semi-structured interviews added critical depth to our analysis by capturing rich, firsthand accounts from plant managers, senior executives, and long-tenured decision-makers. We carefully designed these interviews to probe alternative scenarios ("counterfactuals"), the underlying rationales guiding key strategic choices, and the lessons learned throughout the SBU's evolution. This approach provided nuanced insights into how corporate strategy interacted with local adaptation. Table 2 summarizes the interviewees along with their respective organizational roles.

We analyzed our data iteratively, systematically cross-referencing archival documents, interviews, and direct observations to uncover recurring patterns and refine emergent themes. This integrative approach enabled us to construct a rich, detailed, and chronological narrative of the SBU, mapping key events across critical functional domains: finance, human resources, production, and engineering. Organizing our findings into distinct operational phases allowed us to trace the evolution of capabilities and identify their strategic implications. Specifically, our analysis identified four operational phases: startup, high-volume growth, diversification, and consolidation. Each phase captured the dynamic interplay between corporate-driven directives and locally generated initiatives, illustrating how capability development simultaneously drives and responds to strategic misalignment.

LIFE CYCLE OF MOTOROLA ESG TIANJIN

In 1993, Motorola's ESG generated over $400 million in annual revenue ($900 million, inflation-adjusted), producing battery packs, chargers, and accessories for

TABLE 1
Archival Documents Relevant to Motorola ESG China Expansion

Data	No. of documents	Examples
Production forecasts, actuals	21	Global worksheets
New product development rollout	12	Engineering launch plans
Annual customer or operations reviews	8	Comprehensive activity review
Presentations	20	Sourcing plans, cost
Internal memoranda	13	Meeting minutes, trip reports
Public information	31	SBU press releases, website
Total	**105**	

TABLE 2
Sources on Motorola's ESG Tianjin, by Role and Period of Direct Experience

Managerial Role	Timeframe
Director, cell sourcing	1994–1995
Director, operations	1995–2005
General manager, Tianjin	1995–1997
Director, Asia business	1995–1997
Manager, cell quality	1995–1999
Vice president (VP), engineering	1996–2003
Director, engineering	1996–2000
General manager, Tianjin	1997–2003
VP, Asia sourcing	2002–2005
Manager, finance	1994–2000
General manager, ESG	1994–2004

two-way radios, pagers, and cellular phones. Established initially as an internal supplier serving Motorola's radio division, ESG was restructured in 1989 to operate with greater autonomy, enabling it to pursue external customers while continuing to compete internally for Motorola contracts. ESG maintained a global manufacturing footprint, with facilities in Chicago, Ireland, Malaysia, and Puerto Rico. The corporate headquarters in Atlanta established top-down strategic directives that guided ESG and its global subsidiaries.

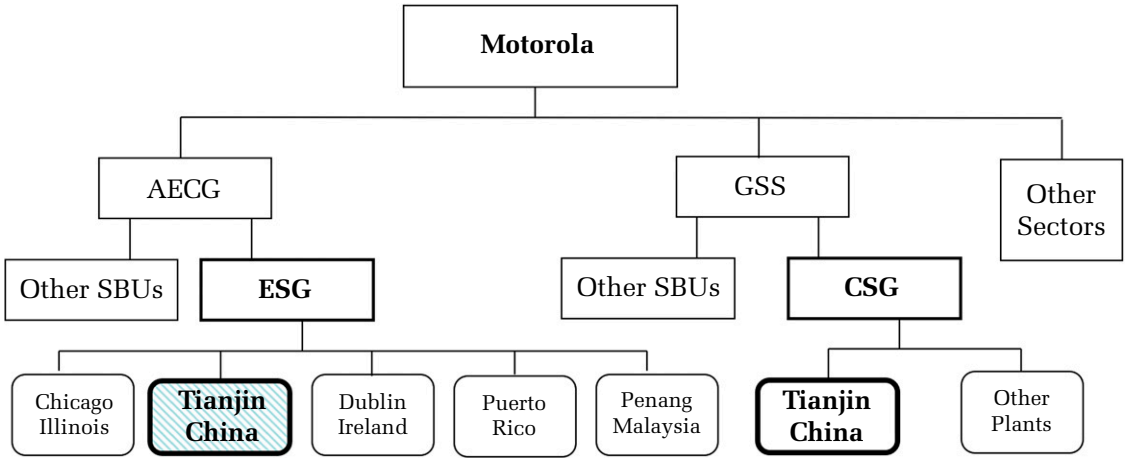
At the time, ESG's largest customer was Motorola's Cellular Subscriber Group (CSG), a unit whose revenue was approximately 10 times that of ESG. Although ESG and CSG operated at equivalent organizational levels, they reported through different divisional hierarchies: ESG via the Automotive, Energy, and Controls Group, and CSG through the General Systems Sector. Both units ultimately reported to Motorola's CEO, a structure that frequently amplified internal tensions. Given CSG's substantial financial clout, ESG's strategic decisions were often heavily influenced, highlighting a clear power imbalance between the two business units. Figure 1 depicts Motorola's organizational structure during this period.

Our data identify key developmental stages of ESG, illustrated in Figure 2, which charts employment and revenue at the Tianjin plant. Two patterns stand out: employment closely followed revenue growth, and the plant's evolution can be divided into four life cycle stages, each marking a key milestone in ESG's trajectory.

The Startup Phase (1994–1995)

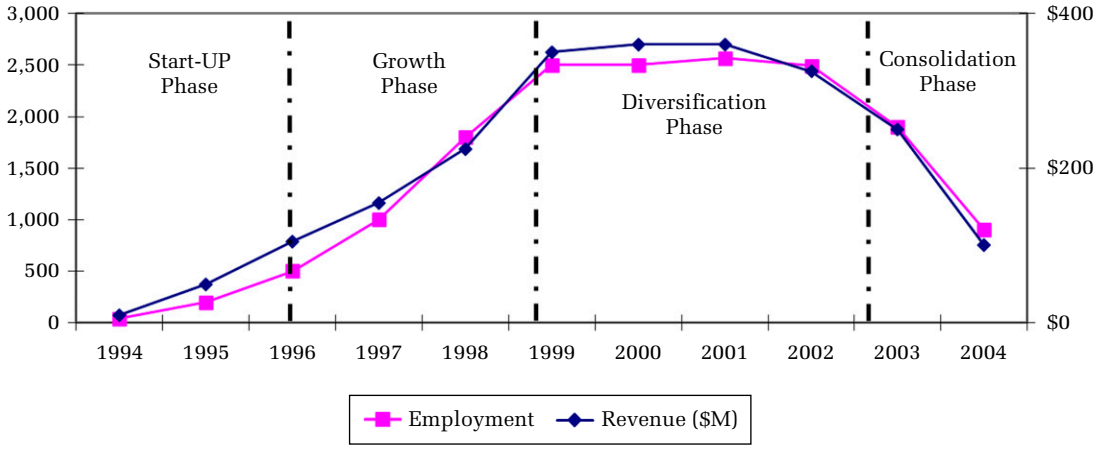
In January 1994, Motorola's ESG began operations in a newly constructed 90,000-square-foot facility in Tianjin, China, to fulfill local battery pack demand by the fall and comply with China's domestic content regulations. As the facility's construction progressed, ESG prioritized recruiting local talent and implementing training programs to build operational capacity rapidly. Offering competitive compensation, performance-based bonuses, and attractive career advancement opportunities helped ESG attract high-caliber local employees. Additionally, Motorola's

FIGURE 1
Motorola Corporate Organization Chart



Note: Data adapted from Motorola annual reports. AECG = Automotive, Electronics, and Controls Group; CSG = Cellular Subscriber Group. The focal customer for ESG. CSG makes handheld mobile phones for consumer and business markets worldwide; ESG = Energy Systems Group (our focal organization manufactures accessories, including batteries and chargers, for Motorola products, such as cellular phones and two-way radios); GSS = General Systems Group.

FIGURE 2
Motorola ESG Tianjin Employment and Sales Trends and Phases



Notes: Employment and revenue data are from Motorola's internal documents. Authors' estimate of life cycle stages.

robust employer brand significantly boosted recruitment efforts.

Motorola corporate leadership viewed Tianjin as strategically vital, prompting the Automotive, Energy, and Controls Group to prioritize the site's development. Recognizing its significance, they appointed a general manager, a position of elevated status compared to other ESG plants. The expatriate operations manager reported directly to this general manager, enabling the Tianjin facility to closely manage customer relationships, cultivate supplier networks, and strengthen Motorola's local manufacturing presence. The general manager played a central role, leading price negotiations with the CSG and actively pursuing local sourcing options for battery cells, the most costly component. While major contractual agreements still required approval from headquarters, Tianjin's local expertise played a crucial role in shaping strategic choices. This alignment between corporate objectives and localized market insights allowed ESG Tianjin to establish itself as a critical link in Motorola's global operations.

Despite having no prior experience in China, ESG leveraged Motorola's strong brand reputation. The company's dominance in the pager market and trusted name helped attract talent and facilitated government interactions. As the Tianjin finance manager recounted, "The Motorola name and level of resource commitment in the region allowed ESG to get items cleared through customs more expediently than other foreign enterprises in the economic development area."

During its first six months, ESG Tianjin benefited from informal knowledge-sharing across its global network. Other ESG manufacturing sites provided training and problem-solving support, fostering a collaborative environment that expedited the new plant's operational ramp-up. By the end of 1995, the Tianjin facility had produced over 2.5 million batteries, meeting its annual delivery, quality, and cost targets. ESG's headquarters in Atlanta developed these initial plant-level goals in collaboration with local management, ensuring alignment with broader strategic priorities.

A significant achievement during this phase was ESG Tianjin's rapid absorption of both technical and organizational knowledge, driven by a structured training process that leveraged established ESG technical experts and strategic human resource practices. Specifically, the SBU prioritized recruiting college graduates with one to three years of professional experience—adaptable young professionals who were eager to learn yet not deeply entrenched in preexisting work routines. "The professional local staff in Tianjin ESG were very driven and highly energetic," the Asia business manager noted. "They were like human sponges picking up as much information as possible from their interaction with Western engineers, technicians, and managers working in the plant." This targeted approach facilitated rapid capability development and smooth knowledge transfer.

The Growth Phase (1996–1998)

By 1996, ESG Tianjin faced mounting pressure from U.S. headquarters to expand its battery and electronics production significantly. Headquarters set

ambitious targets, aiming to more than double output and initiating a strategic shift toward designing and manufacturing switch-mode power supplies at the facility. This directive represented a critical pivot as integrated batteries and power supplies began to replace traditional chargers. To meet escalating demand, Tianjin rapidly invested in new equipment, accelerated hiring, and transitioned operations to a continuous, 24/7 schedule.

Employment at the plant surged, surpassing 500 by early 1997 and doubling again by year-end. In January of that year, ESG Tianjin achieved a significant milestone: producing over one million units in a single month. By the close of 1998, annual power supply production capacity exceeded eight million units, a remarkable increase from zero just two years prior. While battery production continued to expand, power supplies became the plant's operational centerpiece. Reflecting on these developments, the general manager noted, "The introduction and ramp-up of the power supplies were a real challenge for us, especially in a period where our battery demand was increasing dramatically as well."

The scale of ESG Tianjin's expansion was extraordinary, with headcount growing tenfold from approximately 200 to over 2,000 employees. Given limited internal expertise in power supplies, Tianjin strategically leveraged local knowledge and partnered closely with other nearby Motorola operations. One particularly valuable collaboration was with a Motorola paging plant located less than a mile away. As the operations manager recalled, "Many of our production purchases were from the same equipment manufacturers already in use at Motorola paging."

This proximity and collaboration enabled the Tianjin team to quickly master production nuances, refine their power supply designs, and optimize both costs and manufacturing processes more effectively than other ESG locations. The synergy of local innovation and shared organizational knowledge provided a solid foundation for sustained growth and operational excellence.

The Diversification Phase (1999–2002)

By 1999, ESG's accelerating global growth led Tianjin to expand further, leasing an adjacent facility to support warehousing and staging operations. Following a strategic realignment in 1998, ESG China's contribution to global revenue surged dramatically, from approximately 20% in 1996 to nearly 50% by 1999. With the ESG Tianjin plant surpassing 2,500 employees, local leadership faced substantial logistical and space constraints, prompting them to limit further growth in the workforce. As the operations manager explained, "It was clear we were outrunning the physical capabilities for busing and feeding the employees at the site in addition to having no factory floorspace for expansion."

One of the most transformative shifts during this phase was the establishment of an in-house design function in 1999. As product variety and complexity steadily increased, ESG Tianjin expanded its local engineering team to manage product customizations, drive cost reductions, and enhance both process engineering and quality control. By investing in these internal capabilities, Tianjin's design team successfully introduced numerous new products into the manufacturing pipeline. This initiative required the plant to efficiently manage pilot production, develop prototypes, and swiftly implement frequent engineering modifications.

By 2001, ESG Tianjin's product portfolio had expanded significantly, encompassing audio accessories and hands-free devices alongside its traditional battery products. Additionally, the plant began serving external, non-Motorola customers, further diversifying its output and customer base. With the facility running at full capacity, ESG Tianjin outsourced subassemblies to local suppliers, thereby enhancing production volume while reducing costs. This approach facilitated the transition from high-volume, standardized manufacturing to lower-volume, more complex products, such as audio electronics, car kits, and desktop chargers—effectively leveraging the capabilities developed during the intensive 1998 power supply ramp-up.

As the plant matured, ESG Tianjin emerged as a vital hub for developing critical complementary assets, notably in new product launches and product qualification processes. Locally designed training programs strengthened technical expertise and boosted employee retention. A director of engineering emphasized the continuity advantage:

> The Tianjin technical team was not large, but they were remarkably stable employees relative to our engineers in Malaysia, who tended to move to a new company in two or three years. This gave Tianjin experienced and capable people who could help outsourcing suppliers with production and quality issues.

Such stability provided the plant with valuable institutional knowledge, enabling effective collaboration with suppliers and consistently addressing production and quality challenges.

With further physical expansion no longer feasible, ESG Tianjin increasingly turned to outsourcing as a strategic alternative. As the general manager explained, "We started with outsourcing some circuit boards for the electronic products due to capacity crunch from safety circuits for the lithium battery products. Later, we added some battery sub-assembly outsourcing due to price pressures from our largest battery customer." These targeted outsourcing decisions enabled Tianjin to sustain its leadership in innovation and operational efficiency, even as the plant managed a rapidly diversifying product portfolio and customer base.

The Consolidation Phase (2003–2005)

In 2003, ESG Tianjin began outsourcing complete battery products, a major operational shift. Chinese cell suppliers, who had initially achieved product qualification in 2001, started "moving up the food chain," as described by the vice president (VP) of Asian sourcing. By 2004, the plant's tenth anniversary, the majority of ESG Tianjin's production had transitioned to these qualified Chinese suppliers. Consequently, parts of the Tianjin facility were subleased to another Motorola unit, and many displaced employees were reassigned within Motorola's broader operations in Tianjin. The remaining ESG Tianjin staff shifted their focus to production oversight, customer relationship management, logistics, and supply chain coordination. These strategic realignments, compounded by Motorola's broader corporate decline, ultimately led to the consolidation of the ESG plant into another Motorola facility and the sale of the original Tianjin site in 2005.

Despite these structural changes, the ESG Tianjin team preserved capabilities that remained highly valued within Motorola. An assessment team from the United States was particularly impressed with Tianjin's advanced capabilities in electronic testing and evaluation. According to the ESG cellular business director, "They made a special stipulation to keep the team together in the new organization structure so as not to lose this ability." Additionally, Tianjin's expertise in managing new product launches was widely recognized for its exceptional efficiency and effectiveness, even when coordinating closely with U.S.-based design teams across 12 time zones.

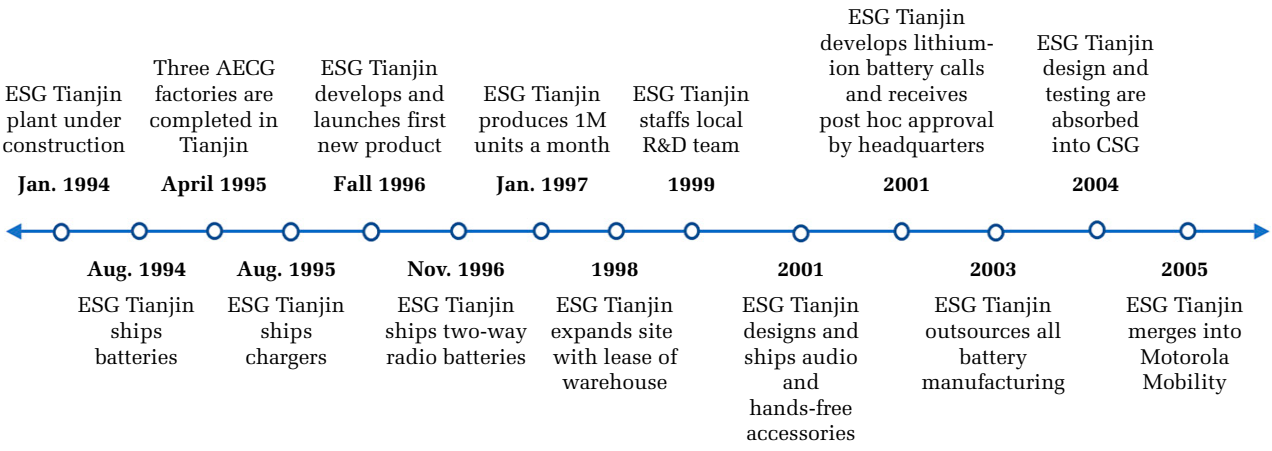
Although demand in Asia remained robust, third-party contractors now handled most manufacturing activities. China still provided cost advantages, but ESG Tianjin's core operational focus became uncertain. Under CEO Ed Zander's leadership, the Tianjin site was integrated into Motorola's Mobile Devices business, overseen by the CSG, signaling the end of its central role as a manufacturing hub. The corporate decision to consolidate the broader China ESG operation was primarily driven by the collapse of the telecommunications industry in 2002, an exogenous shock that reset strategic priorities (Hill & Rothaermel, 2003; Rothaermel & Hill, 2005). Despite these significant structural changes, ESG Tianjin emerged as a critical center for advanced technical expertise and innovation within Motorola's evolving global network of SBUs.

Motorola, Inc. (2005–2024)

Following ESG Tianjin's consolidation, the unit shifted primarily into a supply chain role, supporting Motorola's mobility and two-way radio product lines. However, Motorola itself soon encountered significant disruption. The 2007 launch of Apple's iPhone and Samsung's rapid imitation with its Galaxy line of phones caught Motorola unprepared. Despite the earlier success of the RAZR series, Motorola's continued reliance on physical keyboards and outdated operating systems left the firm poorly positioned for the emerging smartphone era. In 2011, Motorola split into two distinct entities: Motorola Mobility, focused on consumer mobile devices; and Motorola Solutions, targeting the enterprise and government markets. Google acquired Motorola Mobility in 2012 for $12.5 billion to bolster the Android ecosystem and secure valuable patents. Two years later, Google sold the smartphone hardware business, along with the Motorola Mobility brand and trademarks, to Lenovo for $3 billion, retaining Motorola Mobility's patent portfolio.

Under Lenovo's ownership, Motorola aimed for a revival by emphasizing its iconic brand heritage and launching affordable yet innovative smartphones, notably the Moto G series. As of 2025, Lenovo continues to market Motorola-branded phones globally, maintaining a solid presence in the highly competitive mid-range segment. Meanwhile, Motorola Solutions sharpened its strategic focus on public safety and commercial communications. Reflecting its leadership in specialized markets and ability to successfully navigate shifting technological landscapes, Motorola Solutions' market valuation surged from approximately $15 billion in 2011 to $40 billion by 2022, doubling again to reach $80 billion by 2025. Figure 3 presents a timeline of Motorola ESG China milestones, from inception to its absorption into Motorola Mobility.

FIGURE 3
Motorola ESG Tianjin Milestones, 1994–2005



Legend:

AECG - Automotive, Electronics, and Controls Group.

CSG - Cellular Subscriber Group.

ESG - Energy Systems Group.

ORDINARY AND DYNAMIC CAPABILITIES AT ESG TIANJIN

Understanding how firms achieve superior performance in fast-changing environments requires distinguishing between ordinary and dynamic capabilities. Ordinary capabilities are essential for day-to-day operations, enabling firms to orchestrate and deploy resources (Barney, 1991; Collis, 1994). These capabilities manifest in structures, routines, and organizational culture, forming the backbone of critical business functions such as supply chain management, manufacturing, and logistics. For instance, ESG Tianjin's processes, such as spot welding, infrared reflow soldering, and board-level testing, exemplify its ordinary capabilities. These capabilities emphasize "doing things right," ensuring operational efficiency and stability (Winter, 2003). However, ordinary capabilities often fall short when firms face market shifts or innovation demands, as they optimize existing resources and processes but do not inherently equip firms to adapt to rapidly changing environments (Eisenhardt & Martin, 2000).

On the other hand, dynamic capabilities enable an "organization to purposefully create, extend, or modify its resource base in a practiced and patterned manner" (Helfat et al., 2007: 1; Schilke, Hu & Helfat, 2018: 400). These higher-level competencies enable organizations to systematically sense emerging opportunities, seize these opportunities effectively, and transform their operational practices to sustain competitiveness in volatile markets (Teece, Pisano & Shuen, 1997). By facilitating the adaptive integration and reconfiguration of resources, dynamic capabilities empower firms to respond effectively to shifting market demands. For example, ESG Tianjin's ability to launch new products or enter new markets reflects dynamic capabilities. Unlike ordinary capabilities, dynamic capabilities provide the agility to innovate and reconfigure strategies, enabling firms to pivot as needed and to achieve sustained competitive advantage. The essence of this perspective is that superior performance is not derived from ordinary capabilities but rather from a dynamic reconfiguration of a firm's resource base (Helfat et al., 2007).

ESG Tianjin's capabilities evolved significantly between 1994 and 2004. Initially dependent on knowledge from other Motorola units, the business unit transitioned into a hub of capability transfer, eventually outsourcing to non-Motorola ventures. Over time, ESG Tianjin became proficient at adapting to changes in product markets and customer needs. The development of new product launch capabilities, supplier qualifications, and functional tests of new technologies exemplified its ability to reconfigure resources to meet high-velocity market conditions. These attributes align closely with the concept of

dynamic capabilities, demonstrating how ESG Tianjin successfully navigated a rapidly evolving business landscape.

While strong demand in the Chinese market was essential for ESG Tianjin's development of dynamic capabilities, demand alone does not fully explain their emergence. The booming market provided an ideal environment for the plant to refine and enhance its operations. However, ESG Tianjin consistently exceeded the directives set forth by U.S. headquarters. Instead of executing the intended strategy, the SBU demonstrated initiative and ingenuity, going beyond the prescribed strategy to address the unique challenges and opportunities in its local market.[5]

Kauffman's (1995) concept of a "primordial soup," drawn from evolutionary biology, provides a helpful metaphor for understanding the capability evolution at ESG Tianjin. The theoretical biologist describes the primordial soup as the foundation for life, which required a catalytic spark—such as lightning—to ignite the creation of complex organic molecules. Similarly, ESG Tianjin began with the primordial soup of ordinary capabilities shared by other ESG plants outside China (see Figure 1), including standardized manufacturing processes and supply chain practices. However, China's extraordinary demand and growth opportunities acted as the spark, igniting a process of capability evolution that allowed ESG Tianjin to develop dynamic capabilities.

Notably, while the lightning of Chinese demand provided the initial catalyst, the development of dynamic capabilities did not occur through self-organization alone. Instead, proactive and deliberate decisions by ESG Tianjin's management team were critical. For instance, their strategic focus on building lithium battery testing capabilities, qualifying local suppliers, and expanding into new product categories was informed by the profit-and-loss responsibilities of the SBU. These decisions went beyond merely reacting to demand; they reflect a purposeful effort to reconfigure and extend the unit's resource base, consistent with Helfat et al.'s (2007) definition of dynamic capabilities. Thus, while demand played a catalytic role, it was the deliberate and innovative actions of ESG Tianjin's leaders that transformed the primordial soup of ordinary capabilities into a thriving ecosystem of dynamic capabilities.

In this sense, the robust demand in China served as the spark that ignited a broader process of capability evolution. ESG Tianjin leveraged this momentum through bottom-up, autonomous actions to renew, redeploy, and recombine its resources, creating a finely tuned system of dynamic capabilities (Helfat & Peteraf, 2003). This transformation highlights how external market pressures and proactive internal adaptation enabled ESG Tianjin to thrive in a highly competitive and fast-changing environment.

Rather than "doing things right" by leveraging ordinary capabilities to maintain operational efficiency, ESG Tianjin chose to "do the right things" by cultivating dynamic capabilities. This shift enabled the SBU to respond swiftly to rapidly changing conditions and seize emerging opportunities. By launching innovative products and entering new markets, ESG Tianjin reconfigured its resource base to align with the high-velocity demands of the market.

This proactive approach underscores the strategic importance of dynamic capabilities in achieving long-term adaptability and competitive advantage. ESG Tianjin's decision to prioritize agility over stability allowed it to meet immediate challenges and redefine its role within Motorola's global operations. By embracing this dynamic orientation, the SBU demonstrated that superior performance depends on innovating and pivoting, rather than relying solely on established processes or static market advantages (Porter, 1980).

Capabilities and Emergent Strategy

Evident in our study of ESG Tianjin is the importance of increasingly complex processes over time, enabled by the development and evolution of ordinary and dynamic capabilities within the focal organization. Local technical assets, developed from almost nothing in the startup phase, when all the ESG sister units provided resources to ESG Tianjin for extended periods, evolved into highly developed technical skills. This capability transformation enabled the local team to implement taper integration (Rothaermel, Hitt & Jobe, 2006), allowing it to teach outsource partners how to build high-quality, reliable, and cutting-edge products that met Motorola's strict standards. Furthermore, locally developed knowledge was instrumental in providing test systems for state-of-the-art wireless accessory products, enabling ESG Tianjin to train its suppliers on these and other complex process

[5] In Appendix A, we provide several validity checks. In particular, we conducted comparative analyses across Motorola SBUs. These checks control for variations (a) among ESG SBUs in the same business line and (b) within Motorola SBUs operating under similar (demand) conditions in China.

capabilities. As these capabilities developed, the relative power moved away from the other ESG units towards ESG Tianjin. The group general manager at ESG in Atlanta, overseeing the various plants across different countries (see Figure 1), stated, "The people in Tianjin were technically comparable to those elsewhere, and the team developed processes to respond quickly to product and volume changes, which was key for our success."

We also found that ESG Tianjin leveraged its growing power base to accelerate new product launches and enhance design functions, thereby further expanding its capabilities. The design center, for instance, represented the prominent role of ESG Tianjin across Motorola's ESG units. A sister plant in Malaysia waited over a decade for a small design presence, while the China team landed one in only five years. An increasing power base combined with a higher level of capabilities creates a situation where emergent strategic initiatives can not only appear but also be pursued and implemented when deemed promising by the local managers: "The placement of a China R&D center was helpful to us at the plant for new product launch and also for developing a new local customer base within China," recalled the ESG Tianjin general manager, thus solidifying its profit-and-loss responsibility.

Another example of this shift in relative power towards ESG Tianjin, driving locally emergent strategic initiatives, is in the supplier qualification area. During the initial setup of the plant, the SBU established a cell qualification center. This laboratory was the only one of its kind outside the headquarters building. "The lab was set up to test nickel metal hydride cells produced in China to counteract a near monopoly on this key input supply by the Japanese firms. We wanted to drive the costs down while maintaining the quality," noted the manager of cell qualification. ESG provided the initial capital equipment and training for human resources to support this initiative. The intended plan was to test nickel-based rechargeable battery cells at ESG Tianjin as an initial screen and forward promising samples to ESG Atlanta for formal qualification testing. Tianjin set up appropriate processes for supplier visits, sample collection, testing, and feedback.

The Tianjin team, however, also wanted to test lithium-ion battery cells, but the U.S. headquarters initially squelched the initiative. Lithium products require careful handling during the destructive qualification tests. On the other hand, lithium was expected to be the battery chemistry of choice for future portable products due to its high energy density and light weight.[6] The Tianjin technical team continued to collect and test nickel-based cells. Finding suppliers of the required caliber, even partially to supplement the incumbent Japanese products, proved a much more significant challenge than the headquarters or the local team initially anticipated. While vetting these suppliers and samples, the Tianjin team gained extensive knowledge of battery cell testing and helped several promising local vendors eventually produce qualified parts.

The Tianjin team also won over skeptics at headquarters and began testing lithium-based products produced in China. They had kept meticulous notes on which suppliers were working on lithium products and were, therefore, able to quickly obtain samples and begin testing on a variety of sources once headquarters agreed to proceed with such complex testing. The idea to leapfrog into new chemistry testing lay dormant until the Tianjin team proactively demonstrated its testing prowess to headquarters, thereby realizing its bottom-up goal.

It is important to note that the strategic initiative to leapfrog into lithium battery chemistry originated from within ESG Tianjin. A strategic initiative is any activity an organization pursues to explore and develop new products, processes, markets, or ventures (Rothaermel, 2024). Strategic initiatives can emerge in response to external trends or originate from internal sources. As such, strategic initiatives can result from top-down planning by corporate executives or emerge through bottom-up processes. Here, the idea to leapfrog into new battery chemistry is a strategic initiative that emerged from within the focal organization through autonomous actions (Burgelman & Grove, 2007).

Autonomous actions are strategic initiatives rank-and-file employees take independently, often in response to unexpected challenges or emerging opportunities. These actions frequently bypass formal leadership channels without direct approval from the organization's top leadership. At their core, such initiatives combine existing capabilities in novel ways, creating new opportunities that may not align with the firm's intended strategy. However, these bottom-up strategic initiatives often emerge fortuitously and are difficult to predict. Still, they are not random because they are rooted in and constrained by the evolving

[6] Indeed, as of 2025, lithium-ion batteries are the primary power source for most portable electronic devices today, with an estimated market size of over $100 billion (MarketsandMarkets, 2025).

capabilities set of the organization. As such, we derive our first insight.

Insight 1: As SBUs build up capabilities, they unlock the potential for bottom-up strategic initiatives, sparking more experimentation and enhancing local responsiveness.

Tensions Between SBU Capability Development and Top-Down Strategy

Helfat and Peteraf's (2003) concept of the capability lifecycle (CLC) provides a robust framework for understanding how capabilities evolve. The CLC outlines transition points, such as founding, development, and maturity, and possible branching paths, including renewal, redeployment, and recombination. These paths highlight how firms can transition from basic to dynamic capabilities through deliberate investments in learning, experimentation, and adaptation.

In ESG Tianjin's case, capability mapping was instrumental in visualizing the evolution of engineering and operational skillsets. The mapping process involved tracking resource investments, headcount, and technological milestones to illustrate how basic manufacturing skills, such as board-level testing, evolved into sophisticated, dynamic capabilities like supplier certification and new product qualification. Transitioning from ordinary to dynamic capabilities often requires overcoming significant challenges, such as recombining and integrating disparate knowledge bases, as well as addressing organizational inertia. For ESG Tianjin, this transition was evident in its ability to manage supplier networks, innovate in battery and power supply production, and adapt to high-stakes market shifts in China, all while maintaining day-to-day operations and meeting headquarters' performance goals.

Figure 4 visually represents the evolution of ESG Tianjin's capabilities over the study period, building on Helfat and Peteraf's (2003) CLC framework. The horizontal axis indicates the timeline, while the vertical axis reflects the difficulty of building specific capabilities, adjusted through triangulation with interview subjects from initial engineering headcount and budget records.[7] The figure encapsulates the interplay between ordinary and dynamic capabilities, illustrating how ESG Tianjin transitioned from dependency on external support to becoming a hub of dynamic capability development and capability transfer.

Following Helfat and Peteraf (2003), the positively sloping lines in Figure 4 represent the progressive development of capabilities, including new product launch expertise, supplier qualification processes, and advanced testing methods. These trajectories reflect incremental learning and resource accumulation, which allowed the plant to adapt to the shifting demands of the Chinese market. Branching points in the figure, indicated by upward-sloping lines, highlight moments of capability transformation where ESG Tianjin transitioned to higher-order competencies. In contrast, downward-sloping lines signify the retrenchment or cessation of specific capabilities.

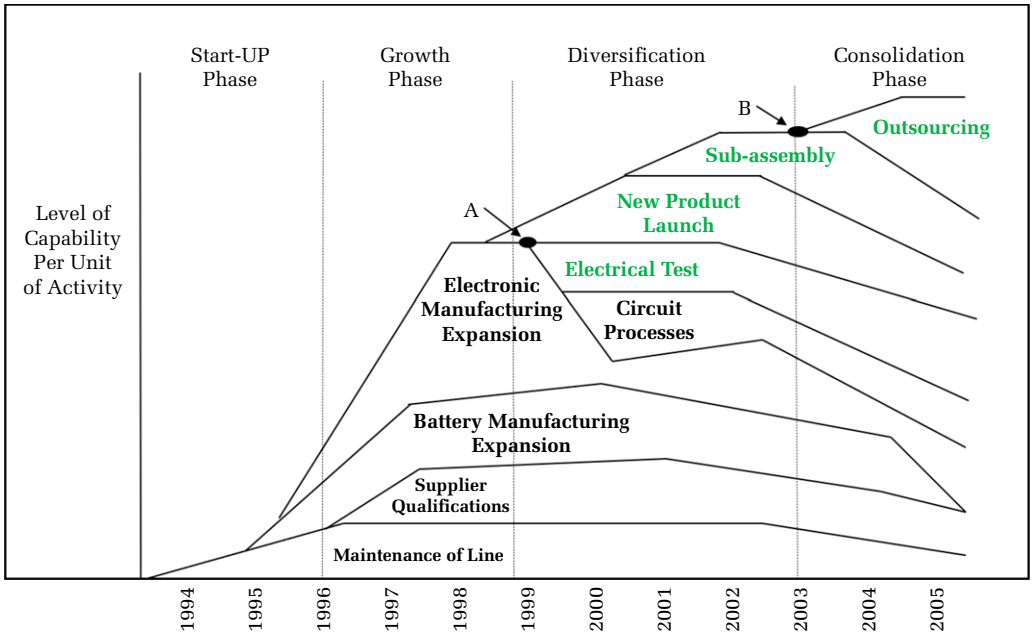
We discovered that increasing internal capabilities at ESG Tianjin often led to a synergistic tension with the formal strategic plans for the organization, which were developed at higher levels. Point *B* in Figure 4 illustrates a pivotal moment in 2003 when ESG Tianjin leveraged its local sourcing initiatives to offset capacity constraints while managing the transition to outsourced manufacturing. Although unsanctioned by headquarters, this activity reflects the emergence of dynamic capabilities at the subsidiary level. By cultivating a robust network of sub-assembly suppliers, ESG Tianjin enhanced its production flexibility and responsiveness, creating a competitive edge that aligned with local market demands but diverged from the initial corporate strategy.

The headquarters group was unaware of the extent of the local sourcing activity at ESG Tianjin. After the local ESG team identified and qualified third-party vendors for production, sub-assembly work was moved from the focal plant to the vendor facilities, thereby increasing the plant's overall output without increasing Motorola's employment or space requirements. The VP of sourcing recalled, "The China plant flew under the radar with their expansive network of sub-assembly suppliers." Indeed, there were more general comments about feeling an overall "loss of control" by our U.S.-based informants while ESG Tianjin was thriving in generating more efficient plans to grow the business, which now was a significant component of the total China business.

The fact that U.S. headquarters did not fully sanction the local, autonomous actions by ESG Tianjin resulted in some unintended consequences. For example, the local ESG management moved proprietary Motorola equipment to third-party suppliers. By the time headquarters discovered this decision, the business had relied upon the increased capacity; in

[7] Helfat and Peteraf (2003) use the "level of capability per unit of activity" to proxy for the degree of difficulty in building specific capabilities.

FIGURE 4
Ordinary and Dynamic Capabilities Within the ESG Tianjin Operation, 1994–2005



	Ordinary Capability	Dynamic Capability	Explanation
Maintenance of line	X		Capability to keep equipment properly running, supporting the status quo efficiently.
Supplier qualification	X		Capability transferred from other ESG locations and primarily supports ongoing operations.
Battery manufacturing expansion	X		Capability transferred from other ESG locations to increase the volume of current products.
Electronic manufacturing expansion	X		New capability developed, but only results in competitive parity with other electronic power supply providers and is short-lived.
Circuit processes	X		Capability transferred from other Motorola locations in support of the power supply (electronic) business.
Electrical test		X	New capability developed to support power supply production and then redeployed to build new businesses for more complex electronic products.
New product launch		X	New capability developed by ESG to launch new products independently in support of local strategy goals.
Sub-assembly		X	New capability developed by ESG to train sub-assembly suppliers to drive ESG's successful growth strategy.
Outsourcing		X	New capability catalyzed the recombination of suppliers and elevated them to partners, thereby evolving manufacturing beyond the ESG organization, which in turn aided the overall Motorola strategy to reduce company-owned assets.

almost all cases, the equipment stayed where ESG Tianjin had sent it, with subsequent agreements formalizing these transfers. The concessions by headquarters to accept the facts created on the ground demonstrated the increased clout exerted by ESG Tianjin. In turn, the increasing power of ESG Tianjin, combined with significant information asymmetry between ESG headquarters in the United States and local Chinese leaders, allowed emergent strategies to flourish locally and be implemented. Frequently, the most rational option remaining for U.S. headquarters was to sanction the ESG Tianjin actions after it became aware of them.

As their bottom-up strategic initiatives gained traction, the leaders at ESG Tianjin embraced an approach of "creating facts on the ground" and "asking for forgiveness, rather than permission." This mindset was reinforced by the higher organizational rank of the expatriate leaders at ESG Tianjin compared to those at peer ESG SBUs, granting the Tianjin unit greater autonomy in its operations. Additionally, corporate headquarters managed ESG Tianjin at arm's length, relying primarily on financial metrics and output-oriented controls. While this approach ensured accountability, it failed to capture the complexities and nuances of the rapidly evolving conditions on the ground. This combination of autonomy and limited oversight empowered ESG Tianjin to innovate and adapt strategies independently, seizing opportunities that would not have been possible under tighter corporate control.

Despite some stress on the relationships between the U.S. headquarters and ESG Tianjin, in retrospect there was agreement on the value of the China team's actions and the capabilities they developed from subassembly outsourcing. As the sourcing VP noted, "The skills [ESG Tianjin] honed in that business … were invaluable when larger outsourcing agreements were required." A business director echoed these sentiments: "The outsourcing scenario would have been a huge problem without the ESG Tianjin expertise because the U.S. was largely over-simplifying what it took to bring some of these suppliers and products online at required quality and cost levels." Thus, while ESG Tianjin took actions in concert with its perspective on achieving both local and top-down business goals, these decisions created several conflicts that resulted in strategic misalignment. The regional team's ability to develop and implement these strategic decisions autonomously was central to this dichotomy. In the earlier years of the plant lifecycle, such choices would not have been possible due to the limitations of the locally available capabilities that could integrate such ideas into an executable action plan.

Our longitudinal data, therefore, led us to conclude that an inverse relationship exists between the level of internal capability development and the willingness to conform to top-down intended strategies. More specifically, it appears that dynamic capabilities catalyze the emergence of strategic initiatives from the bottom-up. These emergent strategic initiatives, in turn, drive the realized strategy in new directions, which sometimes are not aligned with the intended goals of the formal strategy. In most cases, these changes result in positive outcomes and new opportunities that may not have otherwise developed. Therefore, this creative tension can be a beneficial force for the organization. Taken together, we derive our second insight.

> *Insight 2: As SBUs build up capabilities, tensions intensify with corporate headquarters, as empowered SBUs may deviate from the parent company's top-down strategy, leading to strategic misalignment.*

Of course, not all bottom-up strategic initiatives are beneficial. At times, forces outside the organization can hinder the implementation of new initiatives that could become realized strategies. One such example in our data had the potential to change the course of the consolidation phase. In 2001, at the height of ESG Tianjin's internal capabilities, there was a serious discussion of divesting ESG China from Motorola. This discussion was based on some initially unsolicited interest in the business. The ESG VP and general manager recalled,

> The China [Tianjin] plant was central to the discussions. We were even going to move the headquarters to China if that were required for the right deal. The general manager at the time was a great supporter of spinning ESG out from Motorola as a way of further developing a global business for a variety of customers.

Had such an agreement been made, the plant's future would likely have been different and more favorable for the ESG Tianjin and the entire ESG organization. However, organizational changes at corporate Motorola in Chicago prompted by severe underperformance resulted in the abandonment of these negotiations. Note that even though this action did not happen, the high level of dynamic capabilities contained in ESG Tianjin fueled such discussions in the first place.

On the other hand, the decision enacted to consolidate the plant and the entire China ESG organization into a larger business unit was not in keeping with the

emergent strategy of ESG Tianjin. The ESG Tianjin management team did not agree with the large amount of outsourcing executed in the latter years of our study period. They felt that many of the cost savings justifying the moves could be matched with internal production and design enhancements. Therefore, moving the production to a third party outside of Motorola was unnecessary. The Tianjin general manager said,

> We started much of the outsourcing to meet our increasing capacity demands; we always felt if the production unit growth slowed down, we would revisit potential cost improvements in parts, processing, and design. But we never got that opportunity. It seemed that ESG China got overruled by corporate pressures for headcount reductions and other immediate actions in the last two years of our operation.

Integrated Strategy: Harmonizing Corporate Directives with Local Imperatives

Although Mintzberg's (1978) strategy formation model resonates with what we find in our in-depth case study, he remains silent on the mechanisms underlying his observations. One crucial finding of our research is that as the divergence between the top-down intended strategy articulated by the parent organization and the operational realities encountered at the SBU level increases, the dynamic capabilities of the SBU emerge as crucial in mediating the tension. In particular, dynamic capabilities held at the lower-level organization enable it to modify the intended strategy handed down from above and transform it into a novel realized strategy by fusing it with emergent strategic initiatives.

Consider the pivotal decision depicted at point *A* in Figure 4. In 2000, U.S. headquarters issued a directive for ESG Tianjin to exit the power supply market, driven by intense pricing pressures. This decision reversed a prior strategic initiative that had required substantial investments in equipment and human capital at ESG Tianjin to establish a foothold in the market. Despite these significant strategic commitments, headquarters decided to slow production down once the inventory was depleted. Instead of executing this top-down mandate, ESG Tianjin's leadership charted a different course of their own volition. They decided to leverage the facility's advanced electrical testing capabilities to pursue new opportunities. In particular, the Tianjin team repositioned the plant as a hub for complex electronic accessories, assuming profit-and-loss responsibilities for these new product lines. This pivot preserved the plant's investments and viability, transforming its resource base. ESG Tianjin expanded its operations to include hardware and software testing for other ESG facilities, further solidifying its role as a center of technological excellence.

These autonomous actions enabled ESG Tianjin to build a core competency in testing, and influenced corporate-level strategy. As these newly realized capabilities proved successful, they attracted more complex product lines to the plant, establishing a positive feedback loop that reshaped subsequent strategic plans. When corporate consolidation occurred five years later, ESG Tianjin's testing expertise proved successful, enabling the plant to reconfigure resources and processes for various new products.

This transformation underscores the creative tension Helfat and Peteraf's (2003) CLC framework highlights. ESG Tianjin's ability to exceed corporate expectations and adapt to local market conditions exemplifies how dynamic capabilities enable SBUs to navigate strategic misalignment and contribute to organizational resilience. This case illustrates the crucial role of SBUs in developing emergent strategies that strike a balance between corporate objectives and local requirements, thereby enhancing the overall agility and performance of the organization.

Middle managers are pivotal when autonomous actions bubble up deep within the organization. They prescreen and assess new opportunities arising from lower levels and promote those that align with the strategic orientation of the business unit (Ren & Guo, 2011), independent from corporate directives. Middle managers at ESG Tianjin played a crucial role in promoting bottom-up strategic initiatives that bridged the gap between operational realities and corporate-level strategies. For example, the Tianjin team autonomously identified and qualified local sub-assembly suppliers without prior approval from corporate headquarters. This action significantly increased the plant's production capacity without requiring additional headcount or factory space. This emergent initiative met rising market demand and showcased middle management's strategic foresight and adaptability.

Additionally, the local leadership in Tianjin demonstrated innovative problem-solving by reallocating proprietary Motorola equipment to third-party suppliers, thereby enhancing capacity. Although this action was initially unsanctioned, it later received retroactive approval from headquarters due to the operational benefits it delivered. This ability to act autonomously reflects how middle managers at ESG Tianjin navigated between the constraints of

top-down directives and the demands of local market conditions, ensuring that corporate objectives were met while seizing emergent opportunities. These examples highlight the critical role of middle managers in fostering dynamic capabilities at the SBU level. Middle managers are essential connectors (Ren & Guo, 2011), evaluating bottom-up and top-down initiatives. They champion and execute initiatives that align with local conditions and the SBU's strategic objectives, while discarding those that do not.

These findings underscore the significance of examining the micro-foundations of dynamic capabilities (Rothaermel & Hess, 2007; Teece, 2007). At ESG Tianjin, dynamic capabilities were embedded within internal knowledge networks (Grigoriou & Rothaermel, 2014), which foster novel recombinations to drive adaptation and innovation. Such networks fulfill the resource-based view's criteria of being valuable, rare, and hard to imitate (VRIO) (Barney, 1991) and thus can lead to competitive advantage.

Moreover, the local team as the locus of dynamic capabilities also explains the agility and responsiveness at the SBU level. ESG Tianjin's ability to bridge strategic misalignment with its corporate parent highlights how dynamic capabilities can foster coherence and adaptability within complex, multidivisional organizations. By aligning emergent initiatives with operational realities, ESG Tianjin contributed to a more effective strategy implementation process, showcasing the potential for dynamic capabilities to drive innovation and resilience in global markets.

Insight 3. Dynamic capabilities within SBUs enable them to bridge the gap between top-down strategy directives and emergent bottom-up initiatives, resulting in an integrated strategy harmonizing corporate directives with local imperatives.[8]

The Strategy–Dynamic Capability Matrix

The insights from our research coalesce into an integrated framework for strategy formation, wherein dynamic capabilities within SBUs mediate the increasing divergence over time between intended and realized strategies. This framework highlights the role of dynamic capabilities in enabling SBUs to address the tension caused by strategic misalignment with the corporate parent and to respond more effectively to local needs and market conditions, thereby enhancing SBU performance.

Our research offers a nuanced understanding of the interplay between top-down strategic intentions and bottom-up emergent strategies within multidivisional corporations, utilizing Tianjin, China, as a focal case study for one of Motorola's ESG SBUs. We identify that capability development within SBUs significantly influences the implementation of top-down strategies issued by corporate headquarters. Dynamic capabilities within SBUs mediate the divergence between intended and realized strategies, enabling SBUs to respond effectively to local market conditions and unforeseen opportunities.

Strategy Formation and the Dynamic Capability Matrix

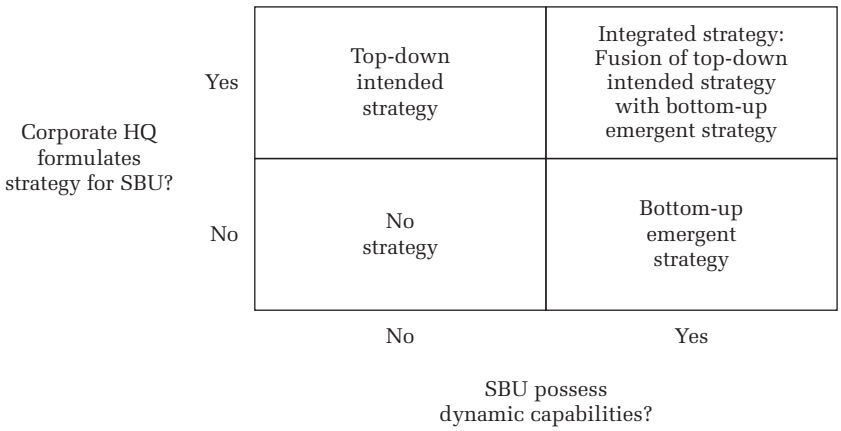
These findings underscore the dual role of capability development in enhancing strategic responsiveness and complicating strategic alignment within complex organizational structures. As such, strategy formation and capability development influence each other recursively. In particular, the 2×2 matrix in Figure 5 elucidates the strategic alignment between corporate headquarters and SBUs by examining the interplay of top-down and bottom-up approaches while emphasizing the mediating role of dynamic capabilities. This matrix offers critical insights into how organizations can achieve a coherent strategy by balancing deliberate and emergent processes.

Integrated strategy. The top-right quadrant presents the crucial insight of our study. When corporate headquarters formulates an intended strategy, and SBUs possess dynamic capabilities, an integrated strategy emerges. This synergy enables a fusion of the top-down intended strategy with bottom-up emergent initiatives, allowing SBUs to adapt effectively to local conditions and unforeseen opportunities. For instance, ESG Tianjin's ability to leverage its test engineering skills to develop new products showcases how integrating dynamic capabilities with corporate strategy fosters innovation and responsiveness.

Emergent strategy. In scenarios where corporate headquarters does not provide a clear intended strategy, the strategy is predominantly emergent (bottom-right quadrant). This bottom-up approach empowers SBUs to initiate strategic actions autonomously, as seen in ESG Tianjin's local supplier development for battery components. Though initially unsanctioned, such initiatives can significantly enhance the unit's performance and align with broader organizational goals over time.

[8] In Appendix A, we present detailed validity checks through analyses of comparative capabilities and top-down versus bottom-up strategic initiatives drawn from the case.

FIGURE 5
The Strategy–Dynamic Capability Matrix



No strategy. Without a top-down and a bottom-up strategy, organizations risk having no coherent strategy (bottom-left quadrant), resulting in a competitive disadvantage. As such, this quadrant highlights the importance of strategic direction and capability development for effective management and organizational success.

Top-down strategy. When corporate headquarters formulates an intended strategy, but SBUs lack a bottom-up emergent strategy, the strategy remains predominantly top-down. This situation can lead to more pronounced strategic misalignment. SBUs may struggle to adapt to local conditions, especially in VUCA environments, thus highlighting the necessity for capability development at the unit level.

By understanding and leveraging these insights, practitioners can better navigate the complexities of strategy formation, ensuring that SBU dynamic capabilities and strategic initiatives align with corporate goals, enhancing organizational agility and performance.

Real-World Relevance

Strategic misalignments are commonplace in M-form organizations. Indeed, some of them have been so illustrative that they have been incorporated into strategy textbooks (e.g., Rothaermel, 2024). Although we illuminate the black box of strategic misalignment in our study of ESG in Tianjin, we include some examples here to showcase the prevalence of strategic misalignment, highlighting the importance of the implications for managerial practice and business policy that we present subsequently. We aim to help managers overcome some of those common pitfalls. Our study of ESG Tianjin helps us gain a deeper understanding of how these tensions can be addressed, leading to a more effective strategy.

Honda's Entry into the United States

The case of Honda's entry into the U.S. motorcycle market, as detailed by Pascale (1984), provides a profound illustration of the complexities inherent in strategy formation and implementation. This case resonates with the findings from the ESG Tianjin study, particularly in terms of the importance of dynamic capabilities and emergent strategies.

Strategic complexity and emergent strategy. Pascale's (1984) research into Honda's U.S. market entry reveals a significantly different narrative from the structured, strategic planning approach outlined by the Boston Consulting Group (BCG, 1975). BCG attributed Honda's success to a deliberate and highly structured strategy focused on exploiting economies of scale, aggressive pricing, and systematic market penetration. However, Pascale's in-depth case study, based on interviews with Honda executives, highlighted a more nuanced and emergent strategy. He found that Honda's success was not due to top-down strategic planning but rather to the firm's ability to adapt flexibly to the market and incorporate on-the-ground insights into its strategic decisions at the local level. This contrast emphasizes that the strategy, structure, and systems approach alone cannot explain Honda's success.

Integration of dynamic capabilities. The Honda case underscores the importance of dynamic capabilities, including flexibility, innovation, and responsiveness, in achieving strategic success. Honda's initial entry into the U.S. market was marked by significant

challenges, including mechanical issues with its larger motorcycles. Instead of persisting with the original strategy, the local Honda team in the U.S. pivoted to promote its smaller, more reliable models, such as the Super Cub, which eventually gained massive popularity. This emergent strategy allowed Honda to turn a potential failure into a significant success. Similarly, the ESG Tianjin study demonstrates the importance of developing SBU-level capabilities to adapt and innovate, aligning local operational realities with broader corporate strategies.

Management style and shared values. Pascale's (1984) findings highlight the critical role of management style and shared values in shaping strategic outcomes. Honda's management fostered a participatory approach, encouraging employees at all levels to contribute to strategic decisions. This inclusive strategy process facilitated bidirectional knowledge flows, enabling the emergence of innovative ideas and adaptive initiatives critical for overcoming initial market setbacks. In contrast, BCG's report suggested a top-down management approach that underestimated the importance of grassroots innovation and flexibility. The success of ESG Tianjin also stemmed from a similar participatory approach, where SBU capabilities and insights were integrated into the corporate strategy, fostering a culture of innovation and shared purpose.

Lessons from ESG Tianjin. The ESG Tianjin case provides valuable insights into the complexities and nuances of strategy formation in multinational enterprises. Much like Honda's experience in the U.S. market, ESG Tianjin highlights the crucial role of dynamic capabilities and local adaptation in attaining strategic success. Over time, ESG Tianjin developed substantial capabilities, which allowed it to align top-down strategic directives with local operational realities. This integration of local knowledge into broader corporate strategies facilitated the emergence of innovative ideas and adaptive strategies. The participatory management style at ESG Tianjin, which encouraged bidirectional knowledge flows, was instrumental in fostering a culture of innovation and responsiveness. These insights underscore the importance of developing dynamic capabilities within subsidiaries to manage strategic misalignment and enhance competitive advantage in global markets.

In summary, the divergent narratives of Honda's U.S. entry, as provided by BCG (1975) and Pascale (1984), alongside insights from the ESG Tianjin study, underscore the necessity of an emergent, integrative approach to strategy formation. By fostering dynamic capabilities and valuing local insights, multinational corporations can navigate the complexities of global markets more effectively, achieving sustainable success.

GM, Opel, and Vauxhall

The case of General Motors (GM), Opel, and Vauxhall provides valuable insights into the complexities of parent–subsidiary relationships and the strategic implications of failing to leverage subsidiary knowledge (Rothaermel, 2024). This scenario parallels the dynamics observed in the ESG Tianjin case, particularly in terms of integrating SBU-level capabilities into a broader corporate strategy.

Strategic misalignment and reverse knowledge flows. Despite owning European carmakers Opel in Germany and Vauxhall in the United Kingdom, GM struggled to incorporate their expertise in small, fuel-efficient car designs into its U.S. operations. This inability to capitalize on reverse knowledge flow from its foreign subsidiaries placed GM at a competitive disadvantage against Japanese automakers, who were rapidly gaining market share in the United States (in the 1970s) with their fuel-efficient models during an era of rising gas prices.

Cultural and political challenges. Political tensions marred the relationship between GM's Detroit headquarters and European subsidiaries. Strategic leaders in Detroit did not value the engineering capabilities of Opel and Vauxhall, often dismissing their smaller cars as inferior ("little shoe boxes") (Curbside Classic, 2022). This lack of respect and unwillingness to invest in European know-how stymied potential synergies and innovations that could have benefited GM in the U.S. market. Moreover, resentment grew as Detroit accused the subsidiaries of manipulating the capital budgeting process, and Opel and Vauxhall faced the threat of shutdowns during GM's bankruptcy restructuring (2009).

Integration of dynamic capabilities. The ESG Tianjin case underscores the importance of developing dynamic capabilities within subsidiaries to manage strategic misalignment. Over time, ESG Tianjin cultivated capabilities in new product launches, supplier qualifications, and functional testing, enabling it to adapt corporate strategies to local conditions. The increase in dynamic capabilities at ESG Tianjin facilitated emergent strategic initiatives that complemented and sometimes diverged from corporate directives, an approach that could have benefited GM.

Lessons from ESG Tianjin. Similar to GM's challenges, ESG Tianjin faced the task of aligning SBU-level capabilities with corporate strategy. However, unlike GM, ESG Tianjin successfully developed dynamic capabilities to adapt and innovate autonomously, integrating local knowledge into broader strategic initiatives. ESG headquarters in the United States could have quickly shut down the Tianjin

initiatives once they were discovered, and there was some immediate sentiment to do so. However, "cooler heads prevailed," recognizing the financial and customer benefits of following the lead of the Tianjin team. This ability to leverage local expertise was crucial in maintaining operational effectiveness and driving strategic success.

Taken together, the challenges and outcomes experienced by GM with Opel and Vauxhall, as well as the successes observed in ESG Tianjin, highlight the critical role of SBU capability development and strategic alignment in international business. By fostering dynamic capabilities and promoting a synergistic approach, multinational corporations can better navigate the complexities of global markets, mitigate the liability of foreignness (Zaheer, 1995), and achieve sustainable competitive advantages.

Walmart in Germany

The case of Walmart's unsuccessful venture into Germany and its retreat offers critical insights into the strategic missteps and cultural misalignments that can occur during international expansion (Rothaermel, 2024). This scenario echoes the dynamics observed in the ESG Tianjin case, particularly in terms of capability development and strategic adaptation.

Strategic misalignment and cultural insensitivity. Walmart's entry into Germany in the late 1990s, through the acquisition of local chains Wertkauf and Spar, aimed to replicate its U.S. low-cost leadership strategy. However, this approach overlooked significant cultural differences. Walmart's American-style customer service, including practices like door greeters and the prohibition on employee relationships, clashed with German norms. This cultural insensitivity, operational inefficiencies, and intense local competition from entrenched discount retailers like Aldi and Lidl led to Walmart's exit in 2006.

Operational inefficiencies and local competition. Walmart's failure to achieve economies of scale in Germany, due to higher labor costs and less efficient distribution networks compared to its U.S. operations, resulted in higher costs, leading to prices that were less competitive than intended. This inability to localize its cost structure, combined with the intense price war initiated by local competitors, further eroded Walmart's market position.

Integration of dynamic capabilities. The ESG Tianjin case underscores the significance of dynamic capabilities in mitigating strategic misalignment. Over time, ESG Tianjin developed capabilities in new product launches, supplier qualifications, and functional testing, which allowed it to adapt corporate strategies to local conditions. This capability development facilitated emergent strategic initiatives that complemented and sometimes diverged from corporate directives, similar to the adaptive strategy that Walmart could have benefited from in Germany.

Lessons from ESG Tianjin. Like Walmart's challenges, ESG Tianjin faced the complexity of aligning top-down strategic directives with local market realities. Initially dependent on in-sourcing capabilities from other Motorola units, ESG Tianjin evolved to develop substantial capabilities, allowing it to adapt and innovate autonomously. This local adaptation was crucial in maintaining operational effectiveness amid shifting strategic goals from corporate headquarters.

In essence, the failures and successes illustrated by Walmart underscore the critical role of SBU-level capability development and cultural alignment in international business strategy. By fostering dynamic capabilities and enabling local adaptation, multinational corporations can better navigate the complexities of global markets and achieve a more sustainable competitive edge.

THOUGHT LEADER TAKEAWAYS: BRIDGING SCHOLARSHIP AND PRACTICE

The following managerial insights are specifically crafted to guide thought leaders in navigating complex strategic management challenges. Each takeaway is firmly grounded in evidence-based research derived from our in-depth longitudinal case study of Motorola's ESG in Tianjin, China. By directly linking scholarly findings with actionable management implications, these recommendations empower practitioners to address thorny yet urgent and important strategic issues effectively.

1. *Inclusive strategy process.* Encouraging strategic initiatives from various organizational levels can lead to innovative solutions and improved performance. Managers should create an environment where employees feel empowered to propose and pursue new ideas ("open strategy"; see Hautz, Seidl & Whittington, 2017). ESG Tianjin's internally initiated local design function, particularly the in-house engineering team's management of customizations and frequent engineering changes, demonstrates bottom-up initiatives that significantly shape strategy.
2. *Building SBU capabilities.* Investing in local expertise allows SBUs to develop first-order capabilities comparable to those found in the corporation's primary locations. Managers should emphasize local talent development. ESG

Tianjin's targeted hiring and comprehensive local training approach effectively developed advanced technical and organizational capabilities, facilitating rapid absorption of essential knowledge and operational excellence.

3. *Encourage local experimentation.* Managers should actively encourage and facilitate local experimentation to induce innovation. Fostering an environment that supports local R&D can significantly enhance technical expertise and strategic advantage. ESG Tianjin's achievements in building robust local supplier networks and advanced technical capabilities illustrate how prioritizing local innovation initiatives can effectively drive regional growth and strengthen competitive positioning.
4. *Facilitating bidirectional knowledge transfers.* Managers should establish structured mechanisms to promote effective two-way knowledge transfers between corporate headquarters and SBUs. Such mechanisms include developing dedicated knowledge-sharing platforms, forming cross-functional teams, and supporting collaborative projects. The successful informal knowledge exchanges between ESG Tianjin and other Motorola locations underline the value of practical knowledge transfer systems. However, organizations frequently fall short in this area, often due to cognitive biases reinforced by hierarchical top-down strategy implementation. This approach mistakenly assumes that an SBU manager's primary role is to execute a centrally devised strategy rather than actively contributing local insights. Overcoming this misunderstanding is crucial to resolving strategic misalignment and enhancing overall organizational performance (Rumelt, 2022).
5. *Fostering SBU dynamic capabilities.* Developing dynamic capabilities at the SBU level is crucial for adapting to rapidly changing environments. Managers should proactively invest in cultivating these higher-order capabilities—that is, an SBU's deliberate ability to generate, enhance, or adapt its resources and competencies in their quest for superior performance. ESG Tianjin's development of testing capabilities for lithium-based batteries is a prime example of how dynamic capabilities can drive a strategic pivot and enhance overall performance.
6. *Team-based dynamic capabilities at the SBU level.* Dynamic capabilities at the SBU level often emerge as team-based competencies embedded within internal knowledge networks. These collective capabilities align with the VRIO criteria of the resource-based view, providing the foundation for sustained competitive advantage.[9] ESG Tianjin's collaborative technical team exemplifies this, significantly enhancing innovation and operational effectiveness through collective knowledge and expertise. A corporate-level assessment team notably recognized ESG Tianjin's advanced electronic testing and evaluation capabilities, emphasizing the importance of preserving the team's composition. Additionally, Tianjin's expertise in managing new product launches was highly valued.
7. *Integrated strategy: Constructively managing strategic misalignment.* Managers should proactively address strategic misalignments by balancing structured top-down strategies with flexible, bottom-up insights from SBUs. While top-down directives provide organizational coherence, bottom-up emergent initiatives introduce essential adaptability and responsiveness to local market conditions. ESG Tianjin's initiative to source battery components locally, initially undertaken without corporate approval, significantly enhanced production capacity at high quality and low cost. Headquarters later sanctioned the local sourcing approach and adopted it corporate-wide. Leveraging an SBU's dynamic capabilities enables a structured yet flexible approach to integrating top-down strategy with bottom-up, emergent initiatives.

CONCLUSION

Our careful study reveals three crucial insights into how capability development within SBUs influences strategy formation in multidivisional corporations. First, we demonstrate that as SBUs develop capabilities, they unlock the potential for bottom-up strategic initiatives, sparking increased experimentation and enhancing local responsiveness. Second, this newfound autonomy intensifies tensions with corporate headquarters, as empowered SBUs may veer away from the parent company's top-down strategy, leading to strategic misalignment. Finally, dynamic capabilities within SBUs enable them to bridge the gap between top-down strategy directives and emergent bottom-up initiatives, resulting in an integrated strategy that harmonizes corporate directives with local imperatives.

[9] According to the resource-based view, the VRIO framework posits that sustained competitive advantage arises from resources that are valuable, rare, and costly to imitate, and that the firm is organized to capture the value (Barney, 1991).

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APPENDIX A
VALIDITY CHECKS: COMPARATIVE CAPABILITIES AND STRATEGIC INITIATIVES

To strengthen the robustness of our findings on ESG Tianjin's transformation from ordinary to dynamic capabilities, we conducted comparative analyses across Motorola SBUs. These checks control for variations (a) among ESG SBUs within the same business line and (b) within Motorola SBUs operating under similar conditions in China.

Table A1 provides a detailed comparison, juxtaposing ESG Tianjin with two key entities: (1) ESG Malaysia, a sister SBU in the same line of business; and (2) Crystals Tianjin, another Motorola SBU located in China. Spanning the founding dates of these sites through 2004, the analysis highlights how differences in context, strategy, and capability development influenced their respective capability trajectories. ESG Tianjin stands out for evolving multiple dynamic capabilities, while its counterparts remained primarily confined to ordinary capabilities, each developing only a single dynamic capability.

Cross-ESG SBU Comparison

ESG Malaysia, established over a decade before ESG Tianjin, began as a manufacturing hub producing batteries for two-way radios sold across Southeast Asia. As Table A1 illustrates, Malaysia's capabilities were primarily ordinary, focused on replicating existing products designed elsewhere. The site supported production with process engineering and supply chain management capabilities, improving quality and reducing costs. However, ESG Malaysia lagged in dynamic capability development. It only started

TABLE A1
Comparative Capabilities of ESG Tianjin vis-à-vis ESG Malaysia (cross-ESG SBU comparison) and Crystals Tianjin (within-Motorola China Comparison) from Respective Site Founding to 2004

	ESG Tianjin	ESG Malaysia[a]	Crystals Tianjin[b]	Ordinary Capability	Dynamic Capability
Capability					
Replicate production	X	X	X	X	
Process engineering	X	X	X	X	
Supply chain management	X	X	X	X	
New product launch	X	X			X
Business management and price discretion	X		X		X
Battery cell safety and testing	X				X
Produce electronics	X			X	
Product R&D center	X				X
Outsourcing	X				X

[a] Cross-ESG SBU comparison. Malaysia has been an ESG production location since the early 1980s; it initially manufactured battery products for two-way radios (see Figure 1).
[b] Within-Motorola China comparison. Crystals Tianjin was a sister line of business. The crystals factory was colocated with the ESG Tianjin plant, as the site housed all Automotive, Electronics, and Controls Group businesses (see Figure 1).

manufacturing new products years later in the period, a change partially attributed to Tianjin's earlier success in launching new products. Unlike Tianjin, Malaysia had not developed advanced battery cell safety and testing capabilities, outsourced or established electronics production, or developed R&D capabilities or business management authority within ESG. Throughout its existence, ESG Malaysia remained a production facility specializing in battery packs for handheld walkie-talkies and a small portfolio of non-Motorola customers.

Within-Motorola China SBU Comparison

Crystals Tianjin, another Motorola SBU established in early 1994, offers a second point of comparison. Initially, both Crystals and ESG Tianjin were part of the Automotive, Electronics, and Controls Group, working to supply parts for the CSG in China. ESG Tianjin launched operations first, with Crystals following six months later under the leadership of an expatriate plant manager. Like ESG Malaysia, Crystals primarily replicated production from other sites, developing process engineering and supply chain management capabilities to support these activities.

However, Crystals Tianjin achieved a measure of business management and pricing authority, driven by the complexities of navigating local sourcing and import duties in China. Unlike ESG Tianjin, Crystals did not diversify beyond Motorola customers or engage in price negotiations with non-CSG groups. Crystals' focus remained tightly aligned with supporting Motorola's existing internal demands without the broader market engagement that defined ESG Tianjin's dynamic trajectory.

Comparative Capabilities

The comparative analysis underscores ESG Tianjin's unique capability evolution. While ESG Malaysia and Crystals Tianjin primarily honed ordinary capabilities, ESG Tianjin's development of multiple dynamic capabilities allowed it to navigate market complexities and pursue strategic growth. This divergence highlights the distinct pathways SBUs can take in leveraging local conditions and responding to corporate strategy, providing valuable insights into the interplay between ordinary and dynamic capabilities in global operations.

Strategic Initiatives

Table A2 illustrates the interplay between top-down intended strategies and bottom-up emergent initiatives at ESG Tianjin, highlighting the outcomes of these initiatives. The findings underscore a critical evolution: as ESG Tianjin's capabilities matured, the frequency and efficacy of emergent strategies grew, while the influence of top-down directives diminished or were often locally adapted.

Top-Down Strategic Initiatives

Headquarters initially set two clear objectives for ESG Tianjin: qualify local suppliers of nickel-based cells for testing and rapidly produce battery packs for the CSG to meet urgent demand in China. The local management team at ESG Tianjin

TABLE A2
Representative Examples of Top-Down Intended Strategy and Bottom-Up Emergent Strategies

Top-Down Intended Strategy	Years	Result	Representative Information[a]	Representative Quote
Develop Chinese battery cell suppliers	1994–1995 for Nickel–Cadmium (NiCD) chemistry	Implemented	Tested 29 different suppliers and found five viable.	"The lab [was] set up … to counteract a near monopoly by Japanese firms" (Cell qualification manager)
Tacit production knowledge transferred to Tianjin	1994–1995	Implemented	All four existing factories sent experts to Tianjin, some for several months.	
Grow aftermarket (consumer batteries) business in China	1997–1999	Not implemented	Counterfeit replacements were difficult to distinguish from genuine ones, and the price point was unattainable.	
Design and launch power supplies from China	1997–2000	Partially implemented	The design was primarily from headquarters, and production was handled in China. It never reached cost goals and was eventually discontinued.	"The introduction and ramp-up of power supplies was a real challenge [for China, especially] with increasing battery demand" (General manager)
Grow non-Motorola Chinese customers	1998–2000	Not realized, the focus shifted to Europe and the United States	Initial China contacts did not develop into accessory product customers.	
Outsource major production	2003–2004	Implemented	Large-volume products were moved to outsourced vendors in China.	"Tianjin got overruled by corporate for immediate headcount reductions" (General manager)

[a] Representative information from a variety of archival resources, such as contemporaneous memos, presentations, and forecasts.

Bottom-Up Emergent Strategy	Years	Result	Representative Information[a]	Representative Quote
Testing Lithium-ion Chinese cells	1997–2003	Implemented without headquarters' ex ante approval	Became headquarters initiative once it showed success from local China team	
Power supply knowledge grew into related products	1998 and beyond	Partially implemented	Cost pressures in power supplies sparked discussions in Tianjin about local design and outsourcing.	"Tianjin developed processes to respond quickly to product changes. [This was] key for our success" (ESG group general manager)
ESG Tianjin caps employment levels at 2,500 associates	1999 and beyond	Implemented with headquarters' approval	After ESG Tianjin had limited the number of employees at its site, headquarters had to decide on whose product would be the priority in the Tianjin factory.	"It was clear we were outrunning the physical capabilities... at the site in addition to having no factory floorspace for expansion" (Operations manager)

TABLE A2
(Continued)

Bottom-Up Emergent Strategy	Years	Result	Representative Information[a]	Representative Quote
Outsourcing of major sub-assemblies	2000–2003	Implemented without ex ante approval from headquarters	The autonomous decision by ESG Tianjin to outsource made it easier for headquarters to close down the ESG factory. The supply chain team moved into CSG and purchased products directly from these third-party vendors for CSG.	"We started with simple circuit boards … [and] later added completed batteries." General manager
Significant electrical test capabilities were added	1999–2004	Implemented without ex ante approval from headquarters	Capabilities needed for broader product portfolio and significant outsourcing.	"Tianjin flew under the radar, and the US team felt it lost control." (Sourcing VP)

[a] Representative information from a variety of archival resources such as contemporaneous memos, presentations, and forecast.

successfully executed these directives, supported by expertise from other Motorola units. The testing initiative laid the groundwork for ESG Tianjin's technical evolution, while the battery production effort enabled early market entry.

A later directive to expand into switch-mode power supplies became a turning point. Despite significant investment, this initiative failed to yield profitability due to intense pricing pressures and the rapid learning curves of competitors. Nevertheless, the effort built essential expertise in Tianjin that the local management later repurposed for diverse electronic accessories. Other headquarters-driven efforts, such as penetrating China's replacement battery market, faced external challenges, including counterfeit products, which demonstrated the limits of top-down strategies in navigating complex local conditions.

Bottom-Up Strategic Initiatives

Autonomous initiatives emerged as ESG Tianjin's capabilities advanced. The local team identified an early shift from nickel to lithium-based batteries among suppliers despite initial resistance from headquarters. Their persistence led to the qualification of local lithium cell suppliers, positioning Tianjin ahead of global trends.

As the power supply business declined, Tianjin proactively diversified into accessories like audio devices and car adapters. By leveraging its expertise and resourcefulness, the team cultivated a broad product portfolio and optimized capacity through sub-assembly outsourcing—this shift, driven by local insights, increased profitability and flexibility while limiting reliance on corporate approval.

Strategic Implications

These examples showcase the dynamic interplay between deliberate top-down strategy and adaptive bottom-up actions. ESG Tianjin's ability to harmonize these approaches through evolving capabilities demonstrates how SBUs can align corporate objectives with local market demands. By nurturing dynamic capabilities, organizations can empower subsidiaries to act autonomously, ensuring strategic adaptability in high-velocity environments. This integrated approach provides valuable lessons for bridging the gap between corporate strategy and operational execution in *M*-form organizations, reinforcing the importance of dynamic capabilities in achieving sustainable success.