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Sunny li Sun University of Missouri at Kansas City

Yanli Zhang zhangy@mail.montclair.edu

Zhu Zhu Montclair State University

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Turning Disruption into Growth Opportunity:

The Red Team Strategy

Sunny Li Sun Robert J. Manning School of Business University of Massachusetts Lowell One University Ave., Lowell, MA 01854 Tel: (913) 213-3098 Fax: (913) 839-6716 E-mail: <u>li_sun@uml.edu</u> ORCID: 0000-0001-8172-5262; ResearcherID: D-1726-2015

> Yanli Zhang Feliciano School of Business Montclair State University 1 Normal Ave, Montclair, NJ 07043 Tel: (973) 655-7863 Fax: (973) 655-7678 Email: <u>zhangy@montclair.edu</u> ORCID: 0000-0002-9901-6082

> Zhu Zhu Feliciano School of Business Montclair State University 1 Normal Ave, Montclair, NJ 07043 Tel: (973) 655-3255 Fax: (973) 655-7678 Email: <u>zhuz@montclair.edu</u> ORCID: 0000-0003-1154-4129

Structured Abstract:

Purpose

The purpose of this paper is to propose a broadened and integrated red team strategy with concrete steps to help companies better deal with the disruptive forces prevalent in our world today and turn disruptions into growth.

Design/methodology/approach

This paper synthesizes and builds on previous research and relevant business cases accumulated through our research and executive teaching experience. We offer a broadened and integrated red team strategy with practical guidance for business executives.

Findings

We suggest four key steps to help companies implement the red team strategy: 1) create a red team culture and encourage diverse perspectives, 2) establish an independent red team to overcome organizational inertia, 3) use the red team to embrace disruption and growth opportunities, and 4) take a milestone approach to red team execution and resource allocation.

Practical implications

Our red team strategy provides concrete steps to help companies in their efforts to adapt to and capitalize on disruptive forces.

Originality/value

The red team strategy extends the concept and application of red teams and integrates previously fragmented ideas and practices into a systematic model with simple steps, which make it easier for companies to cope with disruption.

Research limitations/implications

More research on red team strategy is needed to delve into the underlying factors and delineate the boundary conditions for specific details in this strategy and implementation.

Key words:

red team strategy, red team, red teaming, disruption, disruptive innovation, digital transformation, dynamic capabilities, exploitation and exploration, business strategy, business growth

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Our world today is becoming more disruptive than ever before, with various forces of creative destruction working simultaneously alongside each other, such as the deepening of the Internet, artificial intelligence, clean energy, robotics, cloud computing, blockchain, COVID 19, and the list goes on. One of the biggest challenges for executives nowadays is how they can maintain their companies' success and avoid downfall in a highly disruptive world. Under the devastating impact of COVID 19, companies across industries are now putting digital transformation on the top of their agenda, even though some industries had not deemed it as an urgent task before the pandemic. Established automakers such as GM, Ford, and Volkswagen are aggressively transforming themselves to refocus on the rapidly expanding electric vehicle market, and GM has even announced that it will phase out vehicles using internal combustion engines by 2035. Since Christensen's pioneering work on disruptive innovation (Christensen, 1997) and the many examples of companies who have failed among disruptions (e.g. Kodark, Motorola, Blockbuster, and Sears.), the need for companies to constantly adapt to new disruptive forces has been a top concern among business executives and academics alike.

What is the secret to not only surviving a disruption, but turning it into a growth opportunity? We have all witnessed companies who are masters at adapting to disruptive forces and have been able to sustain their leadership positions through technological change, by embracing the changing markets with lightning speed and quickly moving from one successful product or service to the next (e.g. Apple, Google, Amazon, and Microsoft). In essence, they have obtained dynamic capabilities (e.g. Teece et al., 1997) – a much sought-after goal of business

strategy to combat the changing environment. To achieve that, they have to engage in both exploration and exploitation: taking on innovations that upgrade companies' capabilities and lead to future growth while conducting their bread and butter businesses (March, 1991). While most managers recognize the need to achieve such dynamic capabilities and explore future growth in addition to exploiting current businesses, how to achieve these in practice has remained elusive and is much easier said than done. Furthermore, the vast majority of companies don't have as deep pockets as the big technology giants who can invest a lot of resources on new innovations and become super spawners of new businesses. Therefore, there is still a lack of concrete methods to guide executives in how to cope with disruption and succeed in a highly disruptive world.

Inspired by the idea of red teams from the military context and building upon our study of many successful business cases throughout our careers, we propose a red team strategy that can help executives not only survive but also thrive in today's increasingly turbulent environment, and turn disruptions into growth opportunities. Before we elaborate on this strategy, we first explain what the red team is in the military context, its origin, and its common uses in businesses today.

What is the Red Team?

The concept of the red team or red teaming is widely used in the military context, in which one team plays the role of the adversary and assesses the vulnerabilities of the battle plan from the enemy's perspective. The name originates from wargaming simulations, in which the US force is the blue team, and the opposing force is the red team. This technique was used by Field Marshal Bernard Montgomery to evaluate the Allied Forces from Rommel's perspective in World War II and then by the Israelis after suffering a serious surprise attack in the 1960s, but its wide adoption in the US and around the world occurred after the shock of the September 11th terrorist attack in 2001. Today, red team practices are being widely used in the US military and government agencies, such as the US Army, the CIA, U.S. Department of Energy, U.S. National Security Agency, NYPD. In addition, red teams are also frequently used in the military overseas, most notably in the Israel Defense Forces, UK Ministry of Defense's think tank - Development, Concepts, and Doctrine Center (DCDC), and the NATO Allied Command Transformation Alternative Analysis (AltA) cell (Zenko, 2015).

Immediately after September 11th, 2001, the CIA formed its red team named Red Cell, realizing shortcomings in ignoring the many signals before the terrorist attack. The Red Cell took a pronounced 'out-of-the-box' approach to brainstorm and simulate ways to attack America, in order to come up with security measures to prevent them. The intention was to provide alternative analysis rather than authoritative assessment, and they even recruited outsiders such as novelist Brad Meltzer to write plots. The Red Cell was deemed so effective that the 2004 Intelligence Reform and Terrorism Prevention Act mandated red teaming for all U.S. intelligence agencies (Zenko, 2015). The US Army created the Army Directed Studies Office in 2004, which until 2011 was the largest red team in the Department of Defense (DoD). In 2016, the U.S. Joint Chiefs of Staff mandated the use of red teams across all branches of the American military to "help commanders and staffs think critically and creatively; challenge assumptions; mitigate groupthink; reduce risks by serving as a check against complacency and surprise; and increase opportunities by helping the staff see situations, problems, and potential solutions from alternative perspectives" (Hoffman, 2017).

For the past two decades, red teaming has been used regularly (e.g. US Army, Marine Corps, Department of Defense, Federal Aviation Administration, Transportation Security Administration, etc.) to train key personnel in military leadership positions. In 2004, the US Army set up its red team training school at Fort Leavenworth, Kansas, formally known as University of

Foreign Military and Cultural Studies (UFMCS). The red team courses at UFMCS help commanders develop the capability to think outside the box and to constantly challenge existing plans, operations, and concepts, especially from the perspectives of potential adversaries (Zenko, 2015). As word spread of the Army's success with red teaming, other branches of the military sent their officers to UFMCS, and the Marines started their own red team training program at the Marine Corps University in Quantico, Virginia. Here, the US Marine Corps conducts a six to ninemonth red team training for selected marines so that they can participate in wargame simulations against domestic and international parties, challenge organizational processes, explore alternatives when examining plans, act as a built-in measure to counter groupthink, and question all given commands (Mulvaney, 2012).

In business, red teams have been used in many situations, most commonly in planning, crisis action, and cybersecurity settings. Many companies such as IBM, eBay, and Microsoft have used it to provide an outsider's view and alternative solutions, or simulate hackers and find vulnerabilities in their systems. Financial institutions in the U.S. and U.K adopt cybersecurity exercises such as Quantum Dawn and Waking Shark and use their red teams to test and ensure the financial markets' strength in the event of a systemic cyber-attack. IBM's X-Force Red Offensive Security Services Team is primarily tasked with hacking everything they can hack so that better security solutions can be found. This red team has become so successful over the years that not only does it do wonders for IBM's cybersecurity, it has long evolved to greatly contribute to IBM's core competencies and become the industry standard. Nowadays, this team is hired to break into hundreds of firms all around the world and help fix their most critical vulnerabilities.

An Broadened and Integrated Red Team Strategy

Extending the concept of red team from the military context, and building upon our study of many business cases, we propose a red team strategy that enables red teams to play a much broader role in business. We suggest that red teams can be a powerful vehicle to help companies turn disruptions into growth opportunities. As an evolving concept, the red team has most commonly been used as a decision support tool in planning or vulnerability assessment, yet the full potential of the red team is much greater and largely untapped. Our red team strategy goes above and beyond common red team applications today, which are mostly confined to playing the devil's advocate role.

Red team strategy, when successfully implemented, can help companies capitalize on the growth opportunities brought by disruptive forces while maintaining their bread and butter. While elements of this strategy has already been utilized, e.g. in many of the top companies in the world formally or informally, our systematic model of red team strategy will be helpful to guide more companies on maintaining their successes and capitalizing on opportunities brought on by disruptions. We distill the key characteristics of red team strategy in Table 1. We then explain in detail the steps companies can take to implement the red team strategy: 1) create a red team culture and encourage diverse perspectives, 2) establish an independent red team to overcome organizational inertia, 3) use the red team to embrace disruption and growth opportunities, and 4) take a milestone approach to red team execution and resource allocation.

[Insert Table 1 Here]

1. Create a Red Team Culture and Encourage Diverse Perspectives

The first key to success in red team strategy implementation is to make sure that the key decision makers in the organization have a red team mindset, fully buy into the red team culture, and can analyze strategic decisions with the understanding that alternate views and openness to

failures are valued above maintaining harmony. Executives need to be open to develop diverse perspectives and willing to challenge the status quo. Apple's slogan "Think Different" summed up its red team mentality and philosophy very well. Facebook encourages employees to switch teams to bring diverse experiences to teams and maintains an open layout in its buildings to encourage everyone to walk by and provide a myriad of input and comments. Peter Drucker (Drucker, 2002) has said that decisions are made well only if based on the clash of conflicting views, and competing views are often the best Plan Bs.

In today's world full of uncertainties, it is increasingly difficult for companies to attempt to predict the future. Ren Zhengfei, the founder of Huawei, has publicly acknowledged that he didn't know what the future would bring, e.g. size of bandwidth, volume of data flow, and fluctuations in customer demand, and so on. On the surface, it seems astonishing that a prominent leader in the telecom industry would admit to such vulnerabilities. However, it is undeniable that companies today face more uncertainty than ever, and need to prepare for different scenarios. Ren Zhengfei said it well: Why wouldn't a large company bet on multiple directions? We need to invest in different directions, and even if they failed, it would still have served the purpose of training our people, enriching our thinking, creating a Plan B or Plan C, and making us more agile and adaptable... We need to be open to unorthodox thinking so that when black swans appear at any time, we are ready to welcome them to fly into our coffee cups and disrupt our businesses (Yang, 2019).

Since taking over as Microsoft's CEO, Satay Nadella has engineered an impressive turnaround of Microsoft from a company that was losing steam back to the upswing, surpassing the trillion-dollar market cap and becoming once again one of the most valuable companies in the world. He has achieved this largely by looking beyond Microsoft's traditionally Windows-

7

dominated culture and catching onto fast growth trains such as Azure - the cloud business, software as a service, platform as a service, and others. Importantly, he has also embraced open source e.g. by acquiring GitHub, which was unthinkable for Microsoft in the past, since open source was considered to disrupt Microsoft's business and cut into its key revenue source of software sales. However, Nadella realized he needed to update Microsoft's business model and make it more open; and the growth opportunities capitalized by reviving Microsoft's developer ecosystem far outweigh the lost sales of boxed software. Without a doubt, Nadella's diverse background and his red team mindset helped him look past Windows' past success and dominance and thus shift focus to new sources of growth for the company.

2. Establish Independent Red Teams to Overcome Organizational Inertia

It's important to create the red team as a separate organizational unit supported by and reporting to top executives. Without an independent organizational structure and the support of top managers, it will be very difficult for the red team to overcome organizational inertia and vested interests to carry out its mission (O'Reilly and Tushman, 2016). There have been plenty of great innovations that have been killed, ignored, or stolen due to the resistance from vested business interests and/or lack of support from the top: think Xerox's invention of GUI interface, Kodak's invention of digital cameras, and many more. PepsiCo experienced several backlashes from consumers in the past when it went too far in reducing the sugar and/or salt content of its traditional products. In response, Pepsi has to take a very gradual approach in making its favorite products healthier and at the same time set up different business units to engage in 'breakthrough innovations' in the health foods area.

Telecom giant Huawei set up its red team in its strategic planning unit more than two decades ago. Led by top executives, it is charged with playing devil's advocate, reviewing and

8

debating current strategies, finding their pitfalls, and exploring disruptive innovation and revolutionary products (Zhou and Sun, 2020). In the late 2000s, Huawei was planning to sell its handset business to Bain Capital. However, the red team recognized the importance of the handset as a key access point and proposed the strategy of integrating the cloud, bandwidth, and terminal and, thus, prevented its sale. Today, Huawei has become one of the largest smartphone makers in the world, alongside Samsung and Apple.

The red team needs to be supported by ample resources and report directly to top executives. Executives need to advocate for the red teams, and the red teams and the executives that they report to need to have absolute trust in each other. To have a functional red team, the employees playing the role must have no doubt that their challenges and queries are valued by the organization, the moment that they become afraid to voice their concerns, the whole exercise falls apart. CEO Ren Zhengfei has openly advocated the red team on various occasions: We need to provide protection for the red team and its standing in the company. It is OK that the red team seems to talk 'nonsense' and 'crazy'; you never know - they might be onto something big. In Huawei, having red team thinking is essential training for executives. Ren Zhengfei has also revealed to his employees: If you want to be promoted, join the red team first. Don't expect to be promoted if you don't have red team experience. If you don't know how to defeat Huawei, that means you have reached the ceiling (Tian and Wu, 2012).

To run the red team, many of the rules developed in the original Lockheed Martin Skunkworks are still relevant and widely used today, such as the red team manager must be delegated complete control, use a small team of good people, and restrict access by outsiders. Many newspapers such as The New York Times and USA Today set up their digital subscription departments a long time ago and had them run independently like red teams, with their separate resources and reporting directly to top executives. These departments are now commanding a large and growing number of subscribers and contribute significant revenue critical to survival in the challenging newspaper market.

3. Use the Red Team to Embrace Disruption and Growth Opportunities

Other than playing the devil's advocate and finding weaknesses in the current plan, the red team is a powerful vehicle to help a company break the status quo and embrace big growth opportunities brought forth by disruptive forces. In industries fraught with technological change, companies need to move on to find growth in new areas before their existing competitive advantages have been exhausted (McGrath, 2013). Whether a firm treats disruptions as a threat to be mitigated or an opportunity to be embraced can drastically alter their survival and long-term outcomes. For example, when the threat of the digital revolution loomed over the camera film industry, Fuji viewed it as a cue to aggressively diversify into many new growth fields such as healthcare and cosmetics, while Kodak languished by trying to cling onto and safeguard its declining film business until it was too late to turn things around. Big technology companies such as Google, Amazon have been able to sustain a double digit growth rate even after becoming trillion dollar companies because they have become super spawners and spawned new high growth businesses even before their main businesses matured or got disrupted. Google's YouTube has made up for the decline of search ads in the mobile era, and Amazon's Web Services has enabled it to capitalize on the powerful trend of cloud computing and become a major growth and profit driver for Amazon. Traditional automakers such as Volkswagen and Ford have embraced the future of electric vehicles via heavy investments and adopting entirely new approaches in design, production, and distribution, and as a result have been able to take significant market share away from Tesla.

Executives can use the red team to undertake innovative or special projects to create future growth engines for the company. Lockheed Martin's famously successful SkunkWorks, which developed many of its next-generation fighter jets, has been the model for many corporate incubators or accelerators nowadays, such as in Google, Facebook, Walmart, and many others. Google encourages its employees to spend twenty percent of their time experimenting with different projects independent of what they are doing. Amazon's famous "Day 1" philosophy is about being constantly curious, nimble, and experimental, so the company can always be innovating and avoid the decline and stasis of "Day 2". As Bezos wrote in his 2016 Letter to Shareholders, "Staying in Day 1 requires you to experiment patiently, accept failures, plant seeds, protect saplings, and double down when you see customer delight."

The Internet, despite being more than thirty years old, has continued to be one of the most disruptive forces for almost all industries. Due to the Internet's revolutionary power in reducing transaction costs across all kinds of activities, companies with a robust digital strategy have been able to achieve tremendous efficiency gains and thus competitive advantages, and vice versa. We have witnessed countless companies who have failed because they ignored the digital trend and also many established companies who have renewed themselves by embracing disruption and the opportunities it brings, often aided by a red team approach. The retail industry is a prominent example: over the years many large retailers have file for bankruptcies due to lack of digital presence (e.g. ToysRUs, Sears, Lord & Taylor, and most recently Fry's Electronics under the double disruptions of Internet and COVID 19), while some retailers that are quick to build a robust digital strategy have been able to sustain good performance (e.g. Walmart, Nordstrom, Best Buy). Walmart's acquisition of Jet.com and running it independently in the initial stage - a typical red team approach - helped jumpstart Walmart's online initiative and helped fend off the threat from

Amazon. Similarly, Nordstrom has drastically increased the number of engineers and data scientists that work in a red team fashion in recent years to shift the focus on in-store experiences towards blending everything seamlessly with web and mobile experiences.

H&R Block's tax preparation business - which makes up 80% of its revenue - was heavily disrupted by the COVID 19 crisis due to the IRS extension of tax deadlines. To cope with the challenge, in late 2020, H&R Block unveiled a new strategy of expanding into financial products such as debit and savings accounts and year-round payroll, invoice, payment, and other services for small businesses, while continuing to provide tax preparation to individuals and small businesses. This is a typical red team approach, using separate red teams to expand into new high growth areas, while continuing to exploit the current businesses using the main team – blue team. H&R Block's Emerald prepaid debit card which can also act as a digital wallet, is expected to capitalize on the high growth Fintech area, despite accounting for only about 3% of sales now. Its acquisition of Wave Financial, a software platform that handles small businesses' invoices, payroll, and payments needs helped it expand into this area, which accounted for 4% of revenue yet was able to grow 32% in its fiscal quarter ended January 31, 2021 compared to a year ago. Clearly, this red team approach allowed H&R Block to capitalize on high growth areas, while continuing to exploit its main businesses.

4. Take a Milestone Approach to Red Team Execution and Resource Allocation

To successfully execute the red team strategy, it is paramount to take a milestone approach when allocating resources to the red team. One of the biggest challenges facing companies is: How can they reinvent themselves with innovations and growth opportunities without putting their whole companies at risk? Allocation of resources to the red team needs to be done in a milestone approach, which helps companies limit the cost of failure while experimenting with high growth opportunities. Instead of going all in overnight, companies can initially allocate a limited investment to experiment with special projects, while still committing the majority of their resources to existing products and technologies. This amount of investment to the red team should be based on considerations such as how convinced the company is in the project, how resourcerich the company is, etc., and re-evaluated as time passes. The less resources the company has, the more focused it needs to be in its red team endeavors to center on the highest potential opportunities with the least amount of risk. If the red team initiatives get validated by the market and meet certain milestones, then they will be granted more resources in stages and may eventually enter into the execution phase and become fully realized components of the main business. If not, the red team will move on to other projects without risking too many company resources.

X - Alphabet's moonshot factory and lab for secret and often crazy projects (renamed from Google X) is a typical red team. Here, most projects have a two-year deadline and, after that, they will either be let go or, if successful, transferred to Alphabet or spun off into a new subsidiary company. According to Astro Teller, the head of X, he and his team easily drop a hundred projects a year because it becomes clear early on in the development process that they don't make sense. Many projects failed, such as the safe jetpack, space elevator, teleportation, etc. However, the ethos behind X remains one of trying everything, even the insane ideas, to see what sticks and to help the company achieve its most ambitious goals. Some projects have made it to the commercialization stage. This approach helps Google capture potential blockbuster opportunities without putting the whole company at risk.

The eCommerce giant Alibaba conducted a bold strategic experiment around ten years ago, which proved pivotal to its current status among the most valuable companies in the world. In 2011, there was heated debate within Alibaba on which direction to take Taobao, already a highly

13

successful business in the international eCommerce market. Unable to resolve the debate and see the future clearly, Alibaba conducted a bold experiment and split Taobao into three independent and competing business units. Each unit would pursue a different direction based on its view of the future: Taobao would focus on smaller brands and the consumer-to-consumer (C2C) market; Tmall on larger brands and the business-to-consumer (B2C) market; and Etao on product search by aggregating information across different platforms. By early 2013, it was clear that Taobao had grown its dominant position in the C2C market, Tmall had won market leadership in the fiercely competitive B2C market, and Etao had phased into a niche product and was then integrated back into Alibaba. Instead of trying to find the right answer for a future that is still highly uncertain, Alibaba's strategic experiments let the market decide the winner, creating two hugely successful future growth engines for the company. In light of the huge opportunities created by this experiment, the cost involved was well worth it (Zeng, 2019).

In *The Art of War*, ancient Chinese military general Sun Tzu said that to win in fighting, you need the main force to maintain defense, and a surprise force to secure victory. Those generals who are good at battles use the surprise force in infinite variations and combine the main and surprise force in unlimited maneuvers to attack the enemy and win the battle. The main force and surprise force can also lead into each other, which in turn creates never-ending possibilities. Like the surprise forces in the war which help secure victory in the battle, companies can use red teams to capture big growth opportunities, continuously innovate and rejuvenate the company and create never-ending dynamic capabilities.

Conclusion

"Today, we confront a set of systemic global challenges, including a pandemic, severe economic weakness, heightened inequality, racial injustice, and a climate emergency" (Tufano, 2021, p.897), and there has never been a greater urgency for companies to adapt themselves to capitalize on the growth opportunities offered by crises and disruptions. Our red team strategy can guide companies in their endeavors to embrace these disruptive forces and turn them into growth. Even though similar ideas and practices have been utilized in limited and fragmented ways, we believe an integrated model as presented in this article will help provide a more concrete guideline to executives who are searching for ways to better thrive during turbulent times with a forward thinking growth mindset.

Turning disruption into growth is a big undertaking and there remains a lot to research into the nitty gritty of the red team strategy. For example, how much should companies invest in new trends at different stages, based on their situations? What kinds of technologies should companies invest in and at what stages should they start investing, depending on their resources? These are complex but critical questions, and we believe the devil is in the details and there is no one-sizefits-all formula in strategy. Therefore, it's essential to further investigate the underlying factors and delineate the boundary conditions for key strategy and investment decisions in the red team strategy. More research and efforts in this area are greatly needed to help companies in their efforts to survive and thrive in this changing world.

Bibliography

Christensen, C. M. (2013) *The Innovator's Dilemma : When New Technologies Cause Great Firms To Fail*. Boston, Massachusetts: Harvard Business Review Press.

Drucker, P. F. (2009) *The Effective Executive: The Definitive Guide to Getting the Right Things Done.* Revised edition. New York: HarperCollins.

Hoffman, B. G. (2017) *Red Teaming: How Your Business Can Conquer the Competition by Challenging Everything*. New York: Crown Business.

March, J. G. (1991) 'Exploration and Exploitation in Organizational Learning', *Organization Science*, 2(1), pp. 71–87.

Mulvaney, B. S. (2012). 'Strengthened Through the Challenge'. *Marine Corps Gazette*. July 2012, pp. 63-66.

O'Reilly Iii, C. A. and Tushman, M. L. (2004) 'The Ambidextrous Organization', *Harvard Business Review*, 82(4), pp. 74–81.

Teece, D. J., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, 18(7), pp. 509–533.

Tian, T. and Wu, C. (2012) Will Huawei Be the Next to Fail? Beijing: CITIC Publishing.

Yang, A. (2019) Huawei's Dedication. Beijing: China Machine Press.

Tufano, P. (2021) 'Training leaders to win wars and forge peace: Lessons from history', *Business History Review*, 94 (4), pp. 807-833.

Zeng, M. (2019) Smart Business. Boston: Harvard Business Review Press.

Zenko, M. X. (2015) *Red Team : How To Succeed by Thinking Like The Enemy*. New York: Basic Books.

Zhou, W. C. and Sun, S. L. (2020) 'Red teaming strategy: Huawei's organizational learning and resilience', in Zhang, W., Alon, I., and Lattemann, C. (Ed) *Huawei Goes Global: Volume II: Regional, Geopolitical Perspectives and Crisis Management.* Cham: Springer International Publishing, pp. 299–317.