Strategic Foresight Methods in the Public and Private Sectors

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When talking to a person about the future, it can often seem ambiguous and unpredictable. What is the future? What can we expect from it? Some might inquire about predicting the future. The reality is that predictions are impossible to make with perfect confidence; as a result, very few individuals in futurology will use the term. Instead, *forecasting* is the term of choice. Partially, it removes the stigma around predicting the future, while also clarifying the field more accurately as estimation as opposed to concrete prediction. The goal is not to predict the future; it is to realize the importance of an event before it occurs.[1]

Nothing will prove to be flawless when it comes to forecasting using various methods. However, there are certain methods that are more reliable than others, with many of the reliable ones important to a variety of sectors. Governments, private companies, militaries, and even individuals seek this ability to be successful in whatever they desire—be it the defense of a nation, economic growth, success for a company or idea, disaster prevention, or some other aim. Defined as the study of the future for developing strategy, strategic foresight is how individuals attempt to make the future less ambiguous. In other words, the focus is on the process used for forecasting. Looking into strategic foresight further, the public sector and private sectors have distinct similarities and differences, derived in part from their differing goals. Summed up in a general sense, the private sector has the goal of maintaining relevance to its consumers and against competing companies—it is unlikely that any company would volunteer to become the next Blackberry or Blockbuster.[2] In comparison, the public sector has the overarching goal of exerting influence in one way or another over other nations—the US arguably does this more successfully than most, if not all, other nations.[3]

Before analyzing how the public and private sectors conduct strategic foresight, we set the stage with an overview of a cross-section of methods commonly used. As a concept, strategic foresight has been around for hundreds of years. Recognized as one of the first military strategists, Carl von Clausewitz is famous for defining the character and nature of war.[4] While there is research on both linear and nonlinear strategic development, little is offered in the realm of strategic analysis or development for the future. Unlike trend analysis, strategic foresight reaches beyond forecasting the

future of a given entity; it focuses on illuminating actions recommended today to achieve the desired end state of tomorrow. Common methods for doing so include the pursuit of disruptive and sustaining innovations, Blue Ocean Strategy, use of offset strategies for asymmetric advantages, scenario planning, war gaming, futurecasting, and threatcasting.

An overview of different methods begins with disruptive innovations, sustaining innovations, and Blue Ocean Strategy—all intending to identify ways of gaining or maintaining the advantage. Disruptive innovation, one strategy based on technology for the future, is a development that interrupts market processes in unexpected ways. Contrastingly, sustaining innovations are those that persist for an extended period. First coined by Clayton M. Christensen in 1995, *disruptive and sustaining innovations* identified abstract thoughts in business, developing them into a formal strategy (now called disruption theory). Christensen furthered his claims in his book *The Innovator's Dilemma* and its sequel *The Innovator's Solution*.[5] The norm has been to pursue sustaining innovations—those technologies that are improvements on an already-existing platform (that is, high-definition TV rather than standard television, faster computer processors, energy-efficient cars, and so forth).[6] Technologies widely accepted as disruptive are personal computers, smartphones, automobiles, and digital photography. In summation, a disruptive technology is a "game-changing opportunity" that will alter the market, the world, and individual lifestyles in a revolutionary way.[7] Disruptive technologies may or may not render others obsolete (that is, the automobile did not bring about the abolishment of trains, but online streaming platforms such as Netflix have rendered traditional movie rental companies noncompetitive).[8] Businesses that continuously develop and implement solutions to solve their customers' next-generation problems or satisfy emerging unfilled needs separate from mainstream commercialization—think Skunk Works, Phantom Works, or other small elite teams focused on advanced projects—will "catch the wave" of disruptive innovation.[9]

Similar to Christensen's disruptive and sustaining innovations business models, W. Chan Kim and Renee Mauborgne's *Blue Ocean Strategy* illuminates other methods for corporations to use. They argue that a business can be successful by entering or creating an uncontested market or "blue ocean" in which to operate; this is more desirable than a "red ocean," in which companies focus on their successes relating to competition.[10] Blue oceans are analogous to horizontal and vertical integration—a blue ocean would consist of a single company commanding a particular market and its subsequent products within that given market. Published in 2005, the use of Blue Ocean Strategy is still a new model for categorizing a company's success in strategic forecasting. Ford Motor Company and Apple Inc., are cited as successful blue-ocean companies for their "high product differentiation at a low cost."[11] However, it is too early to state conclusively whether this model is a successful one for strategic development or not.

Whereas disruptive innovation, sustaining innovation, and the Blue Ocean Strategy are more common in the private sector, the use of offset strategies remains wholly in the public sector. In 1952, President Dwight D. Eisenhower implemented the New Look strategy. Built on the tenets of deterrence, massive retaliation, and the potential use of nuclear weapons, the New Look targeted the Soviet Union during

the early stages of the Cold War.[12] At the end of the Vietnam War more than 20 years later, the US military saw significant manning losses and growing budget constraints. Secretary of Defense Harold Brown, at the time, sought to use technology as a means to counteract these limiting factors—stealth capabilities, precision-guided munitions, intelligence, surveillance, and reconnaissance platforms, and space capabilities formed the core tenets of Secretary Brown's initiative.[13] In 2014, Secretary of Defense Chuck Hagel tasked Deputy Secretary Bob Work with the development of a third offset strategy—one that "will require innovative thinking, the development of new operational concepts, new ways of organizing, and long-term strategies."[14] Termed the *Defense Innovation Initiative* (DII), or more commonly the third offset strategy, the US looks to use technology once again for expanding its military might.[15]

The New Look, the Offset Strategy, and the Defense Innovation Initiative (DII) all have the goal of achieving an asymmetric advantage over an adversary through the use or development of new technologies. The New Look used nuclear weapons and deterrence capabilities, the Offset Strategy sought for stealth, space, and other revolutionary technologies, and the DII looks toward artificial intelligence, human-machine teaming, and deep learning capabilities. All of these military strategies rely on technology for an advantage over any adversary the US will face. Arguably, the first two offset strategies were successful in gaining technology or capabilities that other nations would not have until years later.

Moving forward into other methods championed by the military includes scenario planning and war gaming. *Scenario planning* is "a disciplined method for imaging possible futures in which organizational decisions may be played out."[16] First termed in the modern sense by Herman Kahn at the RAND Corporation, *scenario planning* is the intentional development of simulations or scenarios for strategic development.[17] Likened to a glorified version of storytelling, it is inherently a method used to plan for the future. Both the military and private sectors use scenario planning more often than any other method for strategic development. However, *scenario planning*, as it is currently termed, was not popularized until the 1980s, when it became an independent field of study.[18] While there is no general consensus as to the exact methods by which to execute scenario planning, there are certain accepted techniques.

Used by both the military and private companies, scenario planning forms an integral part of many organizational models for strategic development. The military often acts out developed scenarios in war-gaming exercises. Accomplished through a variety of ways, war gaming can be done in a seminar with state actors, via a board game, conference, or through massive exercises with live troops and equipment. Perhaps the largest scale war games occurred during the Cold War in the 1970s and 1980s. Known as Operation Able Archer, the US conducted an annual troop movement with the North Atlantic Treaty Organization as a simulation of war preparations against the USSR.[19] The US is also known for creating mock up urban environments for military training exercises, as well as hosting conferences for strategic development during both wartime and peacetime. At its core, war gaming is the physical implementation of scenario planning for military use.

Similar to many other methods of future analysis or forecast analysis, scenario planning is often wrong. The value of scenario planning does not lie in creating or

acting out the scenario itself and being right about the outcome. The value lies in the identification of the necessary actions to be taken to achieve a desired objective through an iterative process.

Next are the lesser-known methods of futurecasting and threatcasting. A combination of scenario planning and science fiction, futurecasting is a unique methodology with the purpose of forecasting the future usually five to ten years in advance. Taking scenarios developed in a planning or modeling process, futurecasting selects a desired scenario and then plans actions in the present to reach the desired future, known as backcasting. Still a relatively new field of study, it is not used in any meaningful capacity by the military and has been successful only in rare instances within the private sector.[20]

The first mention of futurecasting, a methodology driven toward engineering a possible future, was likely in 1970 with Alvin Toffler's *Future Shock*. Describing a state of mind relatable to culture shock, future shock occurs when novelty, transience, choice, and diversity overwhelm an individual to the point of paralysis. In addition to this main point, he argued that the human race is living in an increasingly transient lifestyle and is "living faster." He also argued that humans have physical limits of adaptability; exceeding these limits leads to the state of future shock.[21] Paralysis may not be a legitimate worry in an ever-adapting society, but the concepts Toffler identified formed the foundation for futurecasting. He posited the processes futurecasting would come to follow—a human-centric approach to forecasting the future.

Futurecasting found some limelight with Joel Kurtzman's *Futurecasting: Charting a Way to Your Future*. Providing a synopsis of the techniques and various processes used for futurecasting, Kurtzman developed futurecasting into a concrete methodology rather than the abstract concepts developed by Toffler. Kurtzman focused on the development of three topics: the complexity of the world and its connectivity, observations from critics, and trend analysis.[22] These three tenets added pillars to the human-centric foundation that Toffler developed. Later, these pillars would be refined more closely as expert interviews, trend analysis, and forecasting, and breaking down a complex problem into categories of information.

Another notable use of futurecasting, and the first major use by a corporation, came with Peter Schwartz's *The Art of the Long View: Planning for the Future in an Uncertain World* in 1991. Arising from the success of Royal Dutch/Shell Group's futurecasting in the 1970s, this book stresses the importance of using scenarios to drive action for a desirable future.[23] This brought futurecasting into the eyes of the private sector.[24] Intel Corporation now employs a "resident futurecaster," and other companies have futurecasters or futurists for strategic development and planning.

The last major addition to the futurecasting realm is Dan Gardner's *Future Babble*. Dividing the world into foxes and hedgehogs—foxes are those who draw information from a variety of sources and make cautious predictions, whereas hedgehogs pledge themselves to a single framework that fails more often than not—Gardner used an analogy to form his claims toward predicting the future. Arguing that the future is too complex to hope to predict, he asserted that it is not about getting a right answer, it is about getting an answer to begin with.[25] Predictions, he states, are about psychology, people would rather have a wrong answer instead of the lack of one.

Predictions or forecasts in futurecasting are not meant to be correct; their primary goal is to provide a possible way forward, similar to scenario modeling.

Another method like futurecasting, threatcasting is a new subset method with a focus on preventing, mitigating, and combatting future threats. Using a similar method as futurecasting, threatcasting branched out within the past 10 years. Brian David Johnson developed the threatcasting method around 2010, working with both the USAFA and Intel Corporation to develop it.[26] Whereas futurecasting focuses on actions toward a specific future in mind, threatcasting focuses on actions taken to counter a future threat.[27] The Department of Defense has used threatcasting in extremely limited environments and only for research application, such as in the Department of Homeland Security's Center of Innovation, and now more recently at the Army Cyber Institute. While both threatcasting and futurecasting are similar processes, it is important to differentiate the two, as their purposes are inherently different. Whereas futurecasting seeks to take action toward a desirable end goal, threatcasting focuses on taking action to prevent, mitigate, or combat a future threat.

The public and private sectors have a number of tools at their disposal for strategic development, many of which are annotated above. While each sector has a different goal than the other, it is clear to see why both pursue better methods for forecasting the future. Creating independent branches with this goal in mind, such as the Office of Net Assessment, the Federal Foresight Council, Defense Advanced Research Projects Agency, Phantom Works, or Skunk Works, is one way companies and organizations seek to maintain the competitive advantage in an evolving market. However, although research points to different methods for success, there is currently no comparison of these different methods for strategic foresight analysis or its effectiveness. While the private and public sectors seem relatively successful in their own right, much can be learned from analyzing strategic development methods within each sector and how each compares to the other sector. This would be an important milestone in strategic foresight studies.

Resulting from this study were a number of insights with regard to the method of strategic foresight and its effectiveness for both the private and public sectors. As a general overview, the public sector began the push for long-term strategic development with intentional steps toward achievable goals. As a result, it is more successful with developing and executing strategy roughly 20 or more years in advance, although it still has not tapped its full potential.[28] In comparison, the private sector underutilizes strategic foresight methods used for development of long-term strategy. As a result, many successful companies seek out sustaining or disruptive technologies to maintain upward growth.[29] Unlike the public sector, the private sector thrives on rapid adaptation, exemplified by the adoption of new technology in major companies. While the public sector "follows the threats" for strategic development, the private sector "follows the money."

Some may argue that perhaps now more than ever it is imperative that the US armed forces anticipate adversarial actions. In a world of increasing rapidity and transiency, the military finds itself at the forefront of what some may call a new era of warfare.[30] Whether it was because of emergent threats, a directive provided from a higher authority, or a new way of preparing for warfare, the military now utilizes a number of strategic development methodologies to prepare for current and potential

future conflicts. From a superficial point of view, one can state that the US military has been successful in their foresight endeavors with lower casualty levels than ever and remaining a dominant conventional force in the world.[31] For the last 70 years, the US has operated without near-parity in all conflicts.[32] However, none of these successes are the clear result of proper foresight or strategy implemented by the military.

Since the Cold War, the military has expanded its strategic foresight largely through scenario planning and war-gaming exercises—many of which are in conjunction with allied nations or coalitions.[33] In this way, US forces have been able to maintain parts of long-term strategies, carrying across multiple administrations. One of the prime examples of this continuity was with Andrew Marshall, the so-called "Yoda" who recently retired as head of the Office of Net Assessment (ONA). In addition to these long-term strategies are an increasing number of new foresight committees, including the Public Sector Foresight Network and the Pentagon's long-standing Checkmate. These organizations work to plan for and counter long-term threats the US may face. Meanwhile, military leaders effectively seek to develop asymmetric advantages over adversaries (commonly through Offset Strategies).[34]

Although the military has found success through these scenario-based methods, they are limiting in nature. Unlike other methods of strategic foresight that involve the development of probable, plausible, and unlikely futures, scenario modeling and war gaming are largely constrained to the specific scenario at hand.[35] Possible futures not explored in these scenarios could pose a threat to an unprepared military. Rather than relying solely on contingency planning resulting from scenario modeling, the military could use these scenarios and war games in conjunction with other methods that require alternative solutions to unconventional problems.

Aside from these common methods, the US military also utilizes the geopolitical forecasting and net assessment methodologies in a limited capacity. Geopolitical forecasting, a lesser-known method of foresight based on the effects of geography in the future, is rarely used by the military.[36] Many experts might argue that the application of this method could have led to the preparation for World War II, the Russian invasion of Ukraine, and other conflicts.[37] Similar to geopolitical forecasting, net assessment is also a little-understood method of foresight. Used most often in the ONA, the military uses this form of strategic foresight to make long-term decisions. A method that is gradually becoming more common, net assessment was popularized by Andrew Marshall, the first director who served for more than 30 years.[38] Little is known about the ONA; however, its importance in military planning is not questioned. Although it plays a major role in long-term planning, the use of net assessment is extremely limited, similar to geopolitical forecasting.

The military as a whole entrenches itself in a standard way of solving problems—for a military that has the advantage in budget, technology, and quality of forces, this is not an issue. However, should an unconventional problem arise, this type of force—the US military—will find itself with no way to create and implement a feasible solution.[39] This is exemplified with the current struggles with Russia's hybrid warfare and China's Anti-Access/Area Denial (A2/AD) strategies. Therefore, while the US military has a number of entities that focus on strategic foresight, the public sector, overall, is mediocre for using accepted methodologies to develop strategies.

Whereas the US military keeps its focus on external threats, the private sector primarily looks to competition as the main threat. Analogous to an existential threat for a nation is the fear of business failure for a major corporation. For this reason, the private sector also has begun to undertake strategic foresight methods to ensure private companies' own survival and success. However, there is little to no information on how companies employ strategic foresight into their planning processes, with the exception of a few case studies.

The first major success story of strategic foresight within a large corporation was Shell's use of exploring alternative futures. Beginning in 1987 with the establishment of the Global Business Network, Shell focused on analyzing and anticipating future trends to form the basis of organizational level decisions.[40] This method is extremely similar to the threatcasting and futurecasting methodologies, and its proper employment rose Shell to the top of prosperous oil companies.[41] The Shell case study is a classic example used to emphasize the important role strategic foresight can play.

Another common case study for utilizing strategic foresight is Skunk Works, a proprietary lab within Lockheed Martin. Created for the sole purpose of innovation, Skunk Works is an elite team of expert engineers focused on designing the next generation of aircraft.[42] Results from this team arose in the form of the U-2, F-117, F-22, and F-35.[43] All aircraft won major contract deals from the US military, possibly proving that a small team with minimal oversight can create unconventional solutions.

While there are success stories for using strategic foresight, there are also companies that failed. Blockbuster and Blackberry, once two giants in the technology field, now find themselves in shambles. Both are still around today, but they are not nearly as successful as they were previously—Blockbuster having been acquired by Dish.[44] Both companies failed largely for the same reason. In short, they failed to adapt to a changing environment, one in which consumers flocked to competing companies.[45] Both believed that the strategies they implemented in the past, leading to their success, would continue to work in the future.[46] This assumption was incorrect and ultimately led to their downfall.

Currently, there are no specific case studies for uses of time series analysis and Blue Ocean Strategy. Time-series analysis, most commonly used to make stock market trades, is likened to pattern analysis.[47] Rather than a foresight method, it takes on the subset role within a larger method. Blue Ocean Strategy, published in a book in 2005, similarly offers little for continuous strategic development in the long-term.[48] More of a way of thinking about competition in the private sector than a method of strategic foresight, Blue Ocean Strategy argues that businesses must develop an independent operating sphere, one that shuts out competition and allows for free market space operation.

While there is little information on the private sector and its implementation of strategic foresight, the few case studies available show its value. Typically, businesses will pursue a sustaining or disruptive innovation on which to form their base—tech companies thrive on these developments.[49] Overall, similar to the public sector, the private sector also fails to accommodate strategic foresight methods into business strategy. Similar to the public sector that reacts to potential and present threats, the private sector reacts to growth, expansion, and competition.

Table 1. Summary of results

Public sector	*Similarities*	*Private sector*
Excels in developing and executing strategy 20-plus years in the future	Failure to employ strategic foresight methods can prove disastrous	Relies on disrupting/sustaining innovations for growth
Strategy based on historical analysis and scenario planning	Underutilizes strategic foresight methods	Thrives on rapid adaptation
Slow to adopt new technologies and strategies	Overall growth in the use of strategic foresight methods	Follows the money
Follows the threats	Case studies demonstrate the success of foresight analysis	
Reliance on war gaming for planning conflicts and contingencies	Utilizes small elite teams or agencies for advanced, long-term planning	
	Use of subset foresight analysis within larger and multiple methods of foresight analysis	

Although strategic foresight is still a developing subject, the public and private sectors must realize each method's limitations. The military largely utilizes scenario planning and war gaming as methods of strategic foresight—results of these methods lead to huge decisions on asset allocation, force structure, and even how the US may interact with other nations. However, both of these methods have certain inherent limitations. In other words, as stand-alone approaches, neither scenario planning or war gaming allow for the development of alternative futures—possible occurrences, anomalies, or other unforeseen circumstances that could drastically alter the scenario. Similar to the public sector, the private sector also limits its strategic foresight capabilities. Relying primarily on disruptive and sustaining innovations to maintain legitimacy during an extended period, companies largely do not employ other methods of strategic foresight. However, in the instances when companies utilized strategic foresight as a part of their decision-making process, they were extremely successful.

If both the private and public sectors intend to make well-informed decisions toward their respective goals, strategic foresight must be a part of this process. The results of this study show the benefits of any method of strategic foresight. No military desires an existential threat, and no corporation seeks to become overshadowed by competition. Strategic foresight methods ultimately help avoid undesirable end states by planning for future possibilities. Throughout this research process, some methods have shown their worth.

However, each method also has its shortcomings. This can be summed up by a method's level of *fitness*. Defined as a method's effectiveness and suitability to fulfill a particular role or task given the objectives of a specific organization, a less effective method only has suitability and utility in a very limited number of situations.[50] In addition to fitness is the level of flexibility afforded by a certain method. *Flexibility* is the assessment of a method's level of modification or adaptability.[51] From

these two definitions, strategic foresight methodologies can be plotted on a chart with flexibility on the x-axis and fitness on the y-axis (see the figure below). The strategic foresight model illustrates the level of desirability for each method, plotting its respective level of fitness and flexibility.

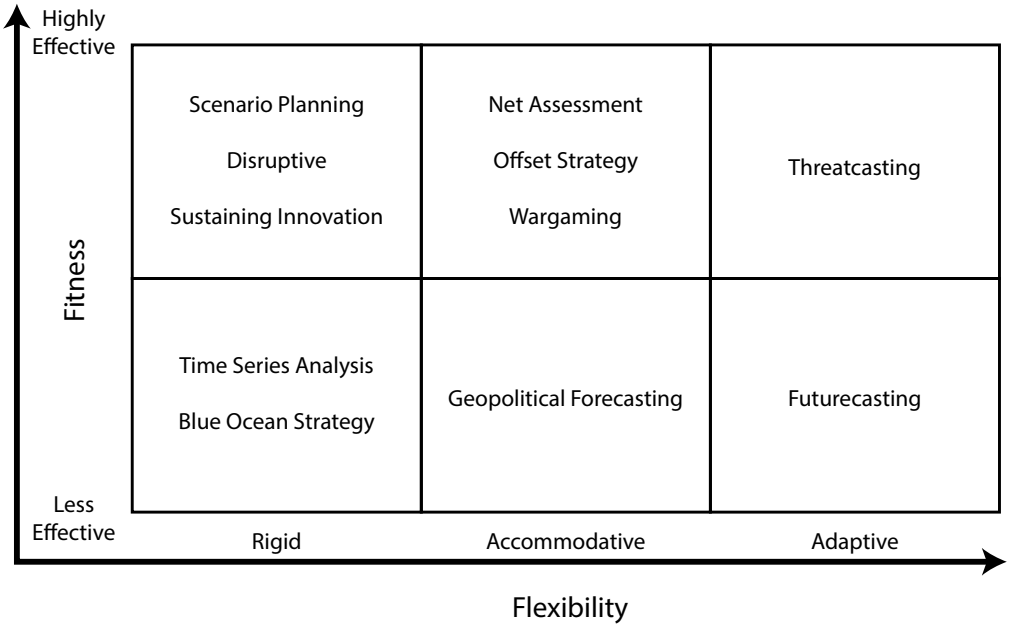

Figure. Strategic foresight model

To qualify which method belongs in what portion of the model, it is important to identify certain criteria that must be met for each section. For fitness, methods will be plotted either in the top or bottom half. The top half contains methods proven to be predictably successful, or fit—either in specific case studies or for larger scale uses. These are all methods with clearly defined stages of development, execution, and analysis. Unlike the top half, the bottom half contains more ambiguous methods of study—most do not have clearly defined steps that allow anyone to execute a strategic forecast. Additionally, they have not proven to be as successful as their counterparts in the top half. Next is the qualification of flexibility. Divided into three sections, each method was categorized based on how each could be modified or altered by the user. Methods in the far left section can only be modified in a restricted manner, if at all. Methods in the middle are adaptable in some respects—throughout the process they can be altered to fit objectives or by the users themselves in limited capacities. Lastly, the far-right section contains methods with highly adaptable frameworks, major opportunities for user change, and overall fluidity to their development and execution within an overarching framework. For the sake of simplicity, each type is named for ease of description. To summarize the model, see table 2 for a list of characteristics for a method in its respective classification. In

addition to the characteristics each method has, a description of sample methods plotted on the model will be discussed in further detail.

Table 2. Strategic foresight model descriptions

	Rigid	*Accomodative*	*Adaptive*
Highly effective	• Unable to change or adapt • Predictably successful • Clear development, path to execution, and analysis	• Change and alterations within the method are allowed in a limited capacity • Are predictably successful • Clear development, path to execution, and analysis	• Allows for user flexibility, input, and creativity • Are predictably successful • Clear development, path to execution, and analysis
Less effective	• Unable to change or adapt • Limited application to public and private sectors • Difficult to implement	• Change and alterations within the method are allowed in a limited capacity • Limited application to public and private sectors • Difficult to implement	• Allows for user flexibility, input, and creativity • Limited application to public and private sectors • Difficult to implement

Beginning with highly effective-rigid methods of the model are scenario planning, sustaining innovation, and disruptive innovation. Regarding scenario planning, the US military utilizes this method in many respects—from large force exercises to conferences that use scenarios to develop contingencies. However, all of these methods offer little flexibility. Scenario planning is limited only to the specific scenario design; it cannot be fundamentally altered in any way. Additionally, sustaining and disruptive innovation rely on the development of technology for success—no amount of planning or design can overcome this.

Highly effective—accommodative methods contain the offset strategy, net assessment, and war-gaming methodologies. Net assessment, similar to geopolitical forecasting in its ambiguity, is a method becoming more and more common within the public sector. Similar to scenario planning, the US military also heavily relies on war gaming to develop contingencies, develop strategy, and analyze potential adversarial actions. Lastly, offset strategies are created with the purpose of gaining an asymmetric advantage over adversaries. All these methods bring about highly desirable outcomes, but what they do not allow for is flexibility. While not as limiting as scenario planning and sustaining or disruptive innovations, these methods still fundamentally bound themselves. War gaming allows for independent actions, but only within the rules of the game. Similarly, net assessment and offset strategies only function within official directives as well as a specified data set.

Located in the less effective-rigid box are the time-series analysis and Blue Ocean Strategy methods. Time-series analysis historically has been used in very limited capacities—its most common use is for stock-market trading. It does not lend the user any insight as to what action must be taken, this method only allows for pattern identification. The Blue Ocean Strategy, another form of strategic foresight most commonly applied to the private sector, is a still undefined method that does

not identify how an organization should act. Instead, it argues that an organization's goal should be to establish its area of operation.

The lone less effective-accommodative item is geopolitical forecasting. A largely ambiguous method of strategic forecasting, it is not desirable within the public or private sector for this reason. While the public sector occasionally uses geopolitical forecasting to forecast long-term developments, it is rarely, if ever, used within the private sector. However, geopolitical forecasting does allow for slightly more flexibility, more so than time-series analysis and Blue Ocean Strategy.

The only method that classifies as less effective-adaptive is the lesser-known method of futurecasting. A method that combines science fiction and scenario planning, futurecasting champions flexibility as one of its prime strengths. This method requires creativity and alternative futures to find success and develops some future scenarios from which strategic planning can arise. However, while futurecasting has high levels of flexibility, this method does not account for potential threats, competitors, or other obstacles. Therefore, it is less desirable. Any organization wishes to plan for potential threats that may lie in wait.

Where futurecasting falls short is what the threatcasting methodology rectifies. A highly effective-adaptive method, threatcasting allows for the highest levels of desirability and flexibility out of all other methods analyzed. Similar to futurecasting, threatcasting differentiates itself by solely focusing on developing future states based on a specific threat, then plans for how to prevent, mitigate, or counteract the threat in question. For the military, this method is extremely useful for long-term planning, strategic development, or countering adversarial strategies. Additionally, the private sector can find value by beating out competitors with the threatcasting method, aiming for a strategy of sustainment and growth.

How can the future best be forecasted? This question was the primary motive for the study. As can be expected, no single method appeared to be an all-encompassing answer—it depended on the context in which a forecasting method was used that determined its success. However, the Strategic Forecasting Model provides new insight as to how each forecasting method can be defined. *Flexibility* and *fitness* accurately describe the level of effectiveness a single method can have in a given situation. In a rapidly increasing pace of operation the world finds itself in, strategic foresight methods can change how the public and private sectors prepare for the future. Whether an organization "follows the money" or "follows the threats," strategic development and foresight will play an important role. ✪

Notes

1. John M. Kamensky, "Is Foresight an Ethical Imperative?," *IBM Center for The Business of Government*, 2 February 2015, http://www.businessofgovernment.org/blog/business-government/foresight-ethical-imperative.

2. Blackberry and Blockbuster are categorized here as company failures. For multiple reasons, both companies failed to forecast the direction consumers were taking successfully—toward smartphones and digital media.

3. This article will focus on the US government and active private companies, including those not based in the US, for comparison.

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5. Clayton M. Christensen, "Disruptive Innovation," in *The Encyclopedia of Human–Computer Interaction*, 2nd ed., 17, ed. Armin Zahirovic et al., The Interaction Design Foundation, 21 February 2017, https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/disruptive-innovation.

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15. Ibid.

16. Mats Lindgren and Hans Bandhold, *Scenario Planning—The Link between Future and Strategy* (New York: Palgrave–MacMillan, 2003), http://innovatiecentrum.be/upl/doc/20160610-9FqTm-Scenario%20Planning%20-%20The%20link%20between%20future%20and%20strategy.pdf.

17. "Scenario Planning Literature Review," US Army Corps of Engineers National Economic Development Manuals, accessed 5 February 2017, http://www.corpsnedmanuals.us/FloodDamageReduction/FDRIncludes/FDRYoeLitReviewSept2204PG102504.pdf.

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