PEER REVIEW DRAFT The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

The Agility Advantage:

A Survival Guide for Complex Enterprises and Endeavors

Dr. David S. Alberts

Last revised June 27, 2011

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

Prologue: A Call to Action

We find ourselves in a new, as yet unnamed age, in which we are increasingly interconnected, interdependent, and pressed for time. Our ability to predict, and hence to plan, has been greatly diminished as a consequence of the complexity and dynamics of our environments and the nature of the responses necessary to survive and prosper.

Survival in this new age requires, above all else, agility. This book explains why this is so. It explores the reasons why agility is an essential ingredient of the solution to many of the most challenging problems of our time. It probes the nature of agility and seeks to identify its enablers and the factors and conditions that present impediments to its realization.

Agility is, of course, not a new or recently discovered property of humans, collections of humans, or of the products they produce. Indeed, agility has been long recognized as a virtue. What has changed is the relative importance of agility in the scheme of things. For reasons that will be explained in this book, agility has moved from a nice-to-have capability to an essential, even existential, capability.

When viewed as only nice to have, agility has often been sacrificed to meet a schedule or to contain costs. Contributing to this failure to ensure that agility is an integral part and parcel of us, our enterprises, endeavors, and products, has been a lack of:

- appreciation of the costs of a lack of agility
- accepted metrics to gauge potential agility
- a definitive, empirically supported, quantitative link between levels of agility and performance or effectiveness
- how-to experience and educational materials

This book is a call to action.

The message is that the world has changed and that agility is the appropriate—perhaps the only—response. This message will fall on deaf ears or will remain just a bumper sticker or PowerPoint slide until the following four things happen.

First, the capability I call agility needs to be better understood.

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

Second, the importance of agility in this new age needs to be more generally recognized, quantified, and supported with empirical data.

Third, individuals and organizations will need to be provided with a set of concrete actions they can take to improve their agility and the agility of the products and services they provide.

Fourth, a way of measuring agility and translating degrees of agility into a measure of value needs to be provided and employed.

This book is intended to enable readers, their organizations, and the endeavors in which they participate in, answer this call to action. It will help readers think about and understand the consequences of our interconnected, interdependent, and fast-paced world and the resultant need for agility. It will help readers understand the grave consequences of a lack of agility, and of inaction.

This book, having hopefully motivated readers to take agility seriously, will provide a conceptual framework, a set of metrics, and the results of a series of experiments to bolster their ability to understand agility and take the actions necessary to improve their agility, the agility of their organizations, and the agility of the products and services they provide. Translating the concept and theory of agility into an implementation strategy and a set of practical steps that can make entities more agile will be difficult, but I believe well worth the time, effort, and costs involved since they are sure to be repaid time and time again. If there is anything we have observed from past failures, it is that doing it right the first time, even if it costs more and takes more time in the short run, turns out to provide us with greater capability at a lower cost in the long run. In this case, this means greatly increased attention to agility.

Chapter 1: Agility Myths

Although this book provides a detailed definition of *agility*, it is a common word and each of us has come to understand its meaning somewhat differently. Prior to reading this book, many readers will have formed an opinion about the wisdom of embarking on a journey to improve the agility of our organizations, enterprises, and endeavors, particularly in light of increasing pressure on budgets.

Based upon my discussions regarding agility with many of you, I have witnessed something similar to the discussions I had more than a decade ago, when the subject du

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

jour was network centric warfare (NCW). Now, as was then, "there is no shortage of exaggerated claims, unfounded criticisms, and just plain misinformation about the subject." Given the overwhelming and positive reaction to an identification and discussion of some myths attendant to NCW, I thought it would be useful to look at some of the myths and misunderstandings that I have encountered thus far concerning agility.

The following discussion of these myths will help set the stage for the more detailed discussion of agility and the accompanying evidence presented in this book. Hopefully, it will help prepare readers who may believe there is more than a grain of truth in some of these myths, or who share some of these misunderstandings, by alerting them to maintain an open mind and to carefully look at the explanations and examine the evidence before coming to any definitive conclusions regarding the meaning of agility or its applicability.

Myth 1: Agility would be nice to have, but we simply cannot afford it.

This myth involves two faulty assumptions. The first is that we can be successful, given the challenges we face, without being more agile than we currently are. This book discusses the nature of these challenges and comes to the opposite conclusion—that we cannot afford not be agile. I conclude that our rigidity is an existential threat. However, even when the consequences of a lack of agility do not pose a threat to our existence, they are very costly.

The second faulty assumption is that becoming more agile will be very expensive. There are, of course, different approaches to improving agility, some which involve more investment than others. Indeed some changes that can make us more agile involve little or no cost. Readers will see, for example, how a simple policy change, such as enabling individuals to find alternate means to share information if the prescribed means is not working, can have a significant impact on agility. Furthermore, there is a relationship between efficiency and agility. Improved agility can actually reduce costs. Readers will see that being able to adapt to circumstances can reduce workload, improve performance, and enhance agility, while offering an opportunity to reduce costs under certain conditions.

_

¹ Network Centric Warfare, NCW Myths, p.5

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

Myth 2: We are already as agile as we can be.

Even if I conceded that there are entities that are as agile as they can be (which I do not), this is simply not the case for all individuals, organizations, processes, and systems. It seems more appropriate to first ask the following two questions: "How agile do I need to be?" and "How agile am I?" The answers to these two questions will determine how much improvement in agility is required. Only then are we concerned with the question of feasibility. The first phase of the agility improvement process outlined in this book is designed to ascertain an entity's agility shortfalls and the remedies that have the potential to improve their agility. It seems to me that coming to the conclusion that you cannot improve your agility, before you even know what you need to do, makes no sense.

Myth 3: Agility means you spend all your time preparing for something that will never occur.

Clearly one hopes that many things we currently prepare for will never occur. However, it still makes sense to prepare and prepare well. Agility is not only about reacting to an event or situation. It is also about being pro-active. If one can develop a capability to anticipate problems and, by taking some action, avoid them, so much the better. It makes no sense to prepare for everything one can think of. By the same token, one cannot think of everything that could occur. Agility is a new way of thinking about and preparing for the unanticipated.

Myth 4: Agility is just another word for indecision.

We admire a decisive person. However, we should not confuse decisiveness with prudence. Knowing when to make a decision is almost as important as the decision that is made. We all know people who will not act unless they have perfect information (or think they do). They wait and wait until the window of opportunity closes. We all know people who act too quickly and impulsively. Agility is not about postponing decisions, but it is about preparing oneself to be in a position to act. Agility is about dealing with the unpredictable or unanticipated. One should not confuse acceptance of the fact that one cannot adequately predict events nor fully understand the consequences of one's actions with indecisiveness.

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

Myth 5: Agility will undermine traditional command and management authority.

The truth of this assertion depends upon how one views command authority, how one applies the concept of agility to command and control, and upon the specific changes to command and control (C2) concepts, doctrine, and approaches made in an effort to improve C2 agility. There were critics that made this same assertion when NCW was introduced. After we engaged these critics, we found that their concerns had two separate origins. First, they simply misread or misinterpreted what was written. Some critics believed that the proponents of NCW were advocating replacing traditional C2 with self-synchronization. Some forgot that self-synchronization was based upon a premise of the existence of command intent, adequate shared understanding, competency, and training. Second, they had a very narrow view of command authority that did not, in fact, correspond to established military practices. For example, some of these critics believed that there was only one acceptable way of exercising command (e.g., command by order) and did not recognize the validity of mission command. The problem was not with the concept of NCW itself, but how it was interpreted. (N.B. This is not to say that some of the early writings could not have been articulated more clearly). Nowhere in this book, is it proposed that one should adopt an inappropriate approach to accomplishing the functions we associate with C2. In fact, the experimental results show that a traditional approach is the only approach that works in some circumstances. However, experimental results also show that a traditional approach does not work best (or work at all) in all circumstances.

Myth 6: An agile force is a force that cannot do anything well.

This myth takes aim at two components of agility—flexibility and adaptability. The implication is that only by focusing on one way of accomplishing something can one develop adequate capability; that is, any effort to be flexible (learn more than one way) or adaptable (to be able to adopt more than one organizational approach to a mission) will result in unacceptable performance. Let's put aside, for the moment, the reason we seek flexibility and adaptability. Rigidity results from the inability to change (e.g., when the school book solution does not work and the entity is incapable of doing anything else). There is evidence that learning more than one way to do something is not only possible, but that it results in a better understanding of the what is needed for success in different circumstances. Agility does not require that an entity develop a large number of approaches. As readers will see from the results of experiments, a well-selected few can greatly enhance agility.

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

Myth 7: It is not human nature to be agile; we are creatures of habit.

While we are creatures of habit, there is ample evidence that humans are the most agile ingredient in organizations. Human behaviors make up for many shortcomings in organization structure, policy, processes and systems. Without the exercise of common sense, organizations would fail far more than they currently do. The agility of individuals regularly finds its expression in the informal organizations and the work-arounds that occur in almost every organization and undertaking. To the extent that individuals do not exhibit initiative, it is probably more a result of the constraints imposed by organizational rules, incentives, and cultures than it is a result of an inherent quality of humans.

Myth 8: Survival of the fittest determines what is important. If the institutions that have survived are not agile, then agility is not important.

One of the points made early on in this book is that we are witnessing the dawning of a new age. Institutions that are well-adapted to a previous age are not necessarily well-suited for a new age. In fact, one could make a better case that the institutions that are optimized for the characteristics and nature of the last age (and accustomed to success) will have more than their share of problems adjusting to a new age. The experiments reported on in this book, where the nature of the mission challenge was varied, graphically illustrate this point.

Myth 9: Agility is not a new idea. If we could be agile we would be.

It is true that each of the aspects that comprise what I mean by agility here are not new. However, they have not been treated holistically before. The synergies that are possible have not been adequately explored. Of equal importance is just because we know something, does not mean we behave accordingly. If we did, there would certainly be less obesity around. Furthermore, we have spent almost all of our lives in an age where we were able to succeed using an industrial age approach. Even if agility is not new, the need for it has increased. With this increased need, increased interest, attention, and progress will be sure to follow.

Myth 10: Decision-makers demand quantifiable results. Agility is not quantifiable.

The Agility Advantage: A Survival Guide for Complex Enterprises and Endeavors

This book demonstrates that agility can be quantified, and that the agility of two options can be compared. Furthermore, more agility does not necessarily result in more cost. However, the question of "How much agility do you really need?" is a far more difficult question to answer, but it is not any more challenging than the same question applied to many of the areas in which we currently make large investments (e.g., how much cyber security do we need?). In fact, many of the difficult questions that are front and center in the minds of those making investment and policy choices today involve risk assessment and management. Investments in agility are ultimately about what risks we are willing to take and what risks we are not willing to take. Being able to make these investment decisions involves risk management. Enhanced agility actually helps manage and reduce these risks.

Myth 11: Agility is all about speed of reaction, but sometimes speed is not as important as ensuring an appropriate response.

Actually, agility is about responsiveness rather than speed. Speed is an absolute measure (e.g., how many seconds did it take to react?). Agility requires that, if action is necessary, it be taken in a timely fashion. Timeliness is not an absolute measure, but a measure relative to the situation. Agility does not require that one act as soon as they are able to act; rather it involves a consideration of when would be the appropriate time to act. Readers will see, in the discussion of responsiveness, that agility can involve an option to buy time, so that adverse consequences are mitigated while preparations for a more effect response are made.

A Caution

It is important to realize that each of these myths reflects a valid concern. It would be unfortunate if, because of these concerns, that agility was not pursued vigorously. It would be equally unfortunate if, because of the way in which these concerns are addressed, they are dismissed out of hand. The concerns that give rise to these and other similar statements must be given due attention on our journey to agility.