I. Introduction

Albert Vicere has written an article on executive development with the specific aim of making suggestions about how an organization might construct such a program that would produce leaders that could maintain the dynamism and competitiveness of the organization over time and prevent it (the organization) from evolving into periods of decline and decay. (1) To get to such a program, Vicere first presents a model, which he calls the Strategic Leadership Process. His purpose is to examine the “typical patterns of leadership throughout the evolution of an organization over time.” (2) In order to do this he relates an organization’s orientation to change to the history of the organization’s development over time…from its inception through its potential demise. (3) The background material for an organization’s orientation to change comes from the work of Kirton and examines the firm’s ‘creative style’ as exemplified by the adaptor/innovator paradigm developed by Kirton. (4) Once he has captured the major relationships that exist between an organization’s orientation to change and the evolutionary history of organizations, he is able to say something about the characteristics that are necessary to build into the organization in order to sustain the growth and momentum of the organization.

The objective of this article is to go beyond what Vicere has done and dig deeper into the character traits that he deems important for achieving these organizational goals. Just identifying the important behavioral characteristics as adaptive or innovative doesn’t give a sufficiently fine definition of what it is that inherently makes a person either more or less adaptive, or, more or less innovative. Without refining the meaning of adaptive and innovative, an executive training program would not be as effective as it could be. This article is a step toward achieving an executive program that is more effective.
Jablokow and Mason have expanded the Kirton model in order to go behind the style characteristics captured by the adaptor/innovator model in order to get an even deeper understanding of how organizations adjust and change. This model goes behind the adaptor and the innovator to look at other style characteristics that help us to understand what is behind adaptive behavior and innovative behavior. Three foundational behavior traits have been identified that can be aggregated into the adaptor/innovator model that provides a richer understanding of how people behave and how their behavior can result in a performance more toward the adaptive end of the continuum or more toward the innovative end. These three style characteristics have been defined in terms of an individual’s perspective, risk tolerance, and vision.

In this article we will start out with the Vicere model for Strategic Leadership and then incorporate our ideas of how the three style characteristics we have identified fit into this model. Our effort leads to some specific conclusions about what types of considerations should be included in executive development programs to be more effective in producing dynamic leadership in an organization over time. In Section II of the paper, we present the Vicere model of Strategic Leadership and discuss how its implications can be used for executive development. In Section III, we introduce our extension of the Kirton model of organizational orientation to change. In this section we discuss why it is important to take the theory beyond what Kirton has done and why the three characteristics we identify give us a deeper understanding of what is behind an individual’s orientation to change. We end the section by comparing what we propose with the Vicere model and why we believe our approach is richer than that of Vicere. We examine our model in action in Section IV with references to the actions and performance of several different organizations. In Section V we consolidate the lessons that we have learned from reviewing these different organizations, which leads us to Section VI and a discussion of the implications of these lessons for Strategic Executive Development. Section VII contains our specific recommendations for the development of executive skills and leadership in order to achieve a more dynamic and competitive organization over time.
Our conclusion is that it is more imperative than ever for an organization to be intentional about providing a steady stream of executives for the maintenance of organizational growth and momentum. This, we believe is doubly important because to sustain the creativity that a modern organization needs, greater reliance is placed on more and more people below the top levels of the organization. Thus, we are not talking about the development of leadership skills for the very top management of an organization. These skills must be broadly dispersed within an organization so that new ideas are constantly bubbling up from the lower levels of an organization, bubbling up from those individuals that are closer to the markets and to the technology. It is with this dynamic picture of the needs of the modern organization that we present the following material.

II. A Model of the Strategic Leadership Process—Vicere

A. The Vicere approach

Vicere is interested in the *Strategic Leadership* of organizations and how an organization can develop this leadership capability and then maintain it over time. Within the context of strategic leadership, Vicere is concerned with Executive Development so that a company can create processes to build leadership talent so that it continually has a pool to draw from in order to sustain its performance over an extended period of time.

Since the organization is never the same, Vicere sets out to identify the various evolutionary stages that an organization might experience and hopes to use the understanding of this evolution to help organizations prepare the type of leadership that will keep the company at the top of its field in terms of performance. In order to understand the ‘ages’ that a company goes through, Vicere must begin at the beginning and proceed through the death of an organization. One of the purposes of his effort, however, is to understand what differentiates one stage of organizational evolution from another so that the company can focus on the periods when
performance is at its peak and hopefully find ways, leadership, that can sustain the organization in these highly productive periods and prevent it from moving into those stages of organizational history that either lead to stagnation or decline.

The trick is to find a way to describe personal and organizational behavior in a way that will help to provide the organization with an understanding of what type of leadership is needed at each stage of evolution so that the appropriate leadership development model can be used to sustain the company in a high performance mode of operation. The article is divided into three parts. In the first part he introduces the two key concepts of his argument. The first concept is that of the individual's or organization's orientation to change. For this, he draws on the work of Michael Kirton to serve as a foundation for his model. One's orientation to change is defined in the continuum going from innovative to adaptive to reactive. The second concept deals with how an organization evolves over time. Here Vicere can trace the development of an organization from emergence to growth to maturity to decline to decay. Although an organization may not go through all these phases, they represent what can happen to the organization if it travels the full gamut of its evolutionary life.

In the second part of the presentation, Vicere presents a classification of the various evolutionary phases of organizational change in terms of style characteristics. In this development, Vicere is attempting to capture the picture of how each evolutionary stage and orientation to change relate to each other and manifest themselves in a particular organizational culture. The descriptive styles that he presents dramatically highlight the different characteristics that are being examined.

In the final part of the article, Vicere discusses the implications of this model for the development of executives. The goal of his work is to create a model of executive development that will be more effective in producing organizational leaders that can operate more effectively within a changing technological environment and marketplace. This can only be achieved if one obtains an understanding of how an organization can train executives that will keep the organization
within the most dynamic portion of the life cycle of the evolutionary process. Vicere wants to formalize what Kirton refers to as “the Pendulum of Change” (4) and build it *intentionally* into the behavior of the organization. By making executive development intentional, Vicere argues that an organization may continuously sustain its vitality and momentum so that it will avoid slipping into periods of decline and decay. His aim is for managements to build organizations that have “the ability to stay the course while ‘rocking the boat’ so as to enhance organizational readiness and competitiveness in an unpredictable environment.” (5)

B. Leadership patterns throughout the evolution of an organization over time.

In Exhibit 1, from the original article, we see how Vicere presents the important variables that play a role in the performance and evolution of the organization. On the horizontal axis we see the continuum that Kirton has stressed between the adaptive personality type and the innovative. Vicere, as can be seen has expanded the continuum to include a reactive personality type. Here, Vicere introduces the basic behavioral characteristics that contribute to the various stages of the evolution of an organization. On the vertical axis, Vicere places the various stages of organizational evolution, beginning with the inception of the organization and proceeding finally to the ultimate potential decay of the organization. The crucial relationship between orientation to change and organizational evolution Vicere defines as organizational momentum and this is charted as beginning at the origin the quadrant and heading from there to the northeast. Basically as one moves from the lower left hand side of Exhibit 1 to the upper right hand portion of the exhibit, organizational momentum slows and can even decline.

**EXHIBIT 1**

It is hard to imagine that an organization can be anywhere else but around the line of organizational momentum in the space shown. For example, it is difficult to imagine that an organization that has an innovative orientation to change would be in the decay stage of its life
cycle. Similarly, it seems unreasonable to expect an organization to emerge if the people connected with the effort have a reactionary orientation to change. Thus, within limits, it appears that one must stay relatively close to the line depicting organizational momentum. One would expect this line to bisect the 90 degree angle of the axes. It might be the case that an organization can deviate from this line to a modest extent. That is, due to market conditions, the firm might be in the growth phase of its life cycle, yet the orientation to change of the organization is of an adaptive nature. In terms of the way that Vicere presents the material, however, the deviations from this line should probably be kept at a minimum.

C. The Stages of Strategic Leadership

Vicere extends the discussion by giving descriptive names to the character types. These names seem to exemplify the various combinations of orientation to change and evolutionary phase. They are presented here in Exhibit 2 (also from the original article). The definitions given help to dramatize the style of leadership that accompanies each evolutionary phase of an organization so that appropriate leadership skills can be related to each stage. As we shall see below the descriptions of the leadership styles seem to be more relevant than the specific names that are given them.

EXHIBIT 2

The crucial element that comes out of this exhibit is that each stage in this stylized view has some specific behavioral traits that distinguish the stage. For example, in the prophetic stage, the organization must contain a vision; in the Crusader/Barbarian stage, the organization emphasizes relentless development, whether through spreading the vision or transforming it; and in the Explorer/Builder phase, the organization focuses on ‘management’. These classifications cover the organizational development from inception through growth into mature structure. From here, Vicere sees the organization moving into the Administration stage where the emphasis is on
efficiency and control; the next stage is Bureaucracy where the organization becomes reactive rather than creative; and finally the organization evolves into the stage of the Aristocracy in which the organization just struggles for the survival of the entity.

Vicere relates these descriptions of stylistic behavior to the various stages of organizational evolution in order to highlight the positive phases. He does this so that the characteristics associated with them can be identified and stressed in executive leadership development. Also, the negative stages can be studied in order to highlight the character traits that need to be avoided in order for the organization to maintain the vitality and dynamic characteristics of the organization. The question then becomes, how to use this information to create strategic leadership within an organization.

D. Strategic Executive Development

Vicere contends that Executive Development needs to focus upon the cycle depicted in Exhibit 3 (also from the original article). In effect, Vicere’s desire is to help the organization stay within the innovative portion of the organization’s orientation to change. Given his chart, the organization, being an existing organization, will not be in the very innovative area where the organization is not being created from scratch. Yet, the question one needs to ask here is whether or not the organization is creating new entities that are a result of disruptive innovative changes. (6) Even though a company exists, one must not totally rule out the possibility that something new will emerge from the old.

EXHIBIT 3

The upper limit to the cycle Vicere depicts occurs before the firm becomes fully adaptive. The danger to the organization is that when the firm becomes fully adaptive, organizational momentum will tend to carry the organization over into the next stages, which, of course, are
those of reactive behavior. The organization must have the presence of mind to halt the momentum in this direction and reverse the trend of the organization so that it may remain relatively creative and dynamic in terms of its ability to grow and develop.

Obviously, this cyclical idea conforms very well with Kirton’s idea about “the pendulum of change.” The crucial thing that Vicere has added to this idea is that the organization needs to become intentional in adjusting to its changing evolution and have the leadership skills within the organization so that the right strategy can be applied at the appropriate times. Only in this way can an organization continue to be a dynamic structure that responds to both the needs of the market as well as the needs of the organization.

E. Summary and Conclusions from Vicere article

Vicere makes two very relevant arguments in his article. The first is that organizations evolve over time but they don’t have to progress through extinction. The second is that an organization needs to intentionally manage its evolution so that it can ‘reinvent’ itself and remain a dynamic and competitive presence in the marketplace. In order to combat the natural evolution of the organization into decay and decline, the management of the organization must build a leadership development program that creates an appropriate tension within the organization, balancing the interplay of the innovative and adaptive so as to provide it with the people its needs at the time it will need them in order to meet the changing nature of the marketplace. The specific innovative and adaptive characteristics that are important for this are the prophet, the explorer, the crusader/barbarian, and the administrator. Vicere argues that, “through executive development processes, individual leaders can be schooled in the art of building management teams and networks that embrace all four perspectives and are therefore more effective in dealing with the challenge of change. The creation of this kind of talent pool is the essence of changing paradigms for the utilization of executive development as a competitive force.” (7)
III. A Theoretical Model of Individual Problem Solving/Decision Making

A. Vicere does not present any theory or justification of how an individual acts. He assumes that his “styles” of strategic leadership are discrete boxes that people fall into and can be classified as such. Because of this there is great difficulty in treating the “styles” of leadership as a continuum. And, Vicere’s “styles” don’t map neatly into the Kirton classifications of adaptor and innovator.

The authors have worked with the Kirton classification scheme and attempted to identify behavioral characteristics from a deeper level that can be used to support the Kirton distinction between the more innovative person and the less innovative person. We have derived our approach from the classical model of statistical decision theory. This approach has led us to isolate three character traits, perspective, vision, and risk tolerance, that can be mapped onto the Kirton scheme. (7')

We propose to bring this classification scheme to the work of Vicere in order to determine whether or not greater insight can be gained concerning strategic leadership and executive development. The important reason for doing this is to produce a more specific model to be used in creating leadership programs.

Individuals have different propensities for considering a wide range of alternatives which we have defined as a person’s perspective, assuming risk which we have defined as the individual’s risk tolerance, and in dealing with the assumptions that are the foundation of their working models, which we have claimed are related to a person’s vision. A person can have a broader or narrower perspective. They can be more or less risk tolerant. And, they can be open or closed with respect to vision. Everyone faces a trade-off within these three characteristics in terms of how comfortable they are in making decisions or solving problems under uncertainty. Where one
is most comfortable within these categories defines whether they are more innovative in nature, or, more adaptive. Let us briefly review how this theory has evolved.


Innovation and change requires information. Innovation involves the creation of something new or different. At the time one begins on the path to innovation, one doesn’t fully know or understand what will result from the effort, whether it is the discovery of a new drug, the invention of a new machine, or the alteration in style of an automobile. Change involves the future and the future is always uncertain because one does not know what will actually happen at that future date. So, in all cases related to innovation and change, those involved in the process have committed themselves to the acquisition of information, either directly, as through running an experimental process, or, indirectly, by waiting until new knowledge becomes available.

It is the fact that people are dealing in incomplete information that uncertainty exists. A model of how people deal with making decisions in the face of incomplete information is the subject of statistical decision theory. Our approach has been to use this fundamental model as the basis for discerning the behavioral characteristics of individuals in making decisions or solving problems under conditions of uncertainty. All decision-makers work with schema or models to make predictions upon which they will make their decisions. All models or schema are built up from the assumptions or hypothesis that serve as the starting point for the models. These assumptions or hypothesis serve as the vision one has of how the world works. The models or schema of the individual are deducted from these underlying assumptions. Different assumptions will result in different models or schema.

Incorporated within the vision of a person is that person’s ability to deal with alternative assumptions and how the individual is able to handle and incorporate competing assumptions, even if they can, at times, lead to conflicting results. Some people are not capable of dealing with
multiple assumptions or juggling alternative models or schema. Others can handle the greater ambiguity that is present in multi-visioned views of the world. The former person will tend to be more adaptive in their behavior because they tend to hand onto their existing assumptions more readily and only change their world-view slowly and after their existing models prove to be more and more deficient over time. The latter individuals seem to be more innovative because they can incorporate new assumptions into their thinking more easily and tend to seek alternative assumptions more quickly when the predictions of existing models deviate from actual results.

A second behavioral characteristic that has been identified as an important contributor to whether or not a person is more or less innovation is what we have called perspective. If a person has a very narrow view of what possible outcomes can be attained in the future, then one will not be as capable of integrating new, unexpected information into their worldview as if they have a broader perspective of what might occur. The reason for this is that people who have a narrow perspective of what might occur have little or no way to explain information that does not support their narrow view of the world. As a consequence, they tend to discard such information as random or unexplainable information and continue to work with their existing narrow range of possible outcomes for future occurrences. A person with a broader perspective is not as surprised with the new information and is, therefore, able to incorporate this additional knowledge into their understanding of the world and this results in better, more robust models with which to make further forecasts. The former person will only incorporate new, unexpected information into their models or schema slowly and hence will tend to be more adaptive in nature. The latter person will be able to use the new information more quickly and will tend to be more innovative in nature.

The third behavioral characteristic that we have identified is risk tolerance. We will define risk as the variance of possible results of a decision. If the possible results of one decision have a greater potential variance than those of another decision, then one can say that the first decision is riskier than the second. Roughly speaking there are three ways an individual can respond to
risk: they can be risk averse; they can be a risk lover; or, they can be risk neutral. We will not go into the technical definition of these behavioral characteristics. In terms of an individuals’ behavior, however, it is relatively easy to understand that a risk averse person tends to avoid risk more than does a person who is either risk neutral or a risk lover. So, we will present risk tolerance in this article only as a continuum running from those that are the least tolerant toward risk to those that are more and more willing to seek risk in the decisions or problems they address.

In terms of risk tolerance, it is understandable that a person that is more risk averse would tend to be more adaptive in nature. A totally risk averse person we could assume would assume no risk and hence would not want to accept the possibility of change at all. As a person is willing to accept some risk, the person will become adaptive in nature willing to take on some change but not too much because of the risk involved. As a person becomes less risk averse the person will become less and less adaptive and more and more innovative.

If we combine all three behavioral characteristics on one chart we get something that looks like Exhibit 4. The basic conclusion one can draw from this figure is that as one gets further out on all three axes the more and more innovative one would become. As one gets closer and closer to the origin, the more adaptive one becomes. Obviously, according to the theory that we are presenting, an individual could be anywhere in the three-dimensional space and still be more or less innovative or more or less adaptive. As we shall see below, there may be times when an organization needs someone that has more vision, but does not necessarily show strong behavioral patterns toward vision or risk tolerance. At other times, the organization might need people that have a broader perspective, but those people may not need to have as strong an inclination toward having vision. Thus this approach to understanding how different behavioral
characteristics can lead to innovative or adaptive consequences may be very helpful in allowing an organization to navigate the seas of leadership evolution.

C. How the theory works.

Let’s now apply these ideas to the evolution of the organization. At the inception of a new organization is the vision or the dream of something different. This particular area relies very heavily on new ideas, new concepts. The only way that one can change paradigm is to change assumptions. As we have stated, both in this paper and the earlier paper, assumptions are the foundation for any conceptual scheme or model. The only way we can substantially modify old models or come up with a radically new idea is to change the assumptions that we work with.

Thus, for the most dynamic portion of the evolutionary process, for the stage of emergence, the vision component is the most important. The person or organization with vision, who can work with the basic assumptions that have been used, and modify or change the assumptions to come up with something new that works, is the person or organization that is going to jump-start the whole effort to create something different, can give birth to an organization that can make a difference in the market place or society.

Let us present an example of a person, Carl Sagan, that tended to speculate quite freely and was capable of experimenting with many different assumptions, many in conflict with each other, and many different models, not all compatible. He was one who many said was very “skilled at harboring contradictory views.” (8) This is very a very important skill in being comfortable with handling different assumptions and exploring what models (views) a person uses in a particular case and using different models in other situations. Although the extreme visionary can be frustrating to work with because they are always ‘out there’ coming up with something new, they serve as a stimulus to thinking and play a role in forcing others to try and answer questions that they might not deal with otherwise.
Changes in assumption are the primary mover for a ‘new’ organization. And, clarifying this a bit, by ‘new’ organization we mean an organization that is introducing a new product, a new service, a new organizational structure, a new distribution system, a new whatever that is going to be disruptive to existing markets or the way society goes about its business. We do not mean just starting up a business that mostly duplicates what everyone else is doing but may capitalize on ‘friendliness’ or location. The reason that changes in assumption are the primary mover of new organizations is that one has to have a new model or schema in order to even start thinking about what the possible distribution of potential outcomes might be. So, in terms of new organizations, neither perspective nor high risk tolerance are the primary driving force to form a ‘new’ organization.

Having a broad perspective is an important factor in the next two stages of the evolution of an organization. It is important because it allows the organization to consider the many various possibilities available to it in terms of marketing the product and structuring the organization. As perspective tends to increase, the need for vision would tend to recede. The reason for this is that as open vision tends to challenge the underlying foundation of assumptions that the organization is working with. As the comes evolves out of the stage of emergence and begins to market and create a structure around its new function, it needs to stay with the assumptions that were present at the inception of the organization and build options around these assumptions in order to create the growth and success that is necessary to sustain the organization.

In order to try and understand the concept of perspective more clearly, let us try and distinguish by an example the concepts of vision and perspective. Vision deals with assumptions. In the case of Carl Sagan mentioned above, it was noted that Sagan was skilled in harboring contradictory views and this meant, to us, that he was comfortable working with many different assumptions. As a contrast, we present the image of a friend and collaborator of Sagan’s, a well-respected space scientist named Jim Pollack who worked at NASA’s Ames Research Center.
“Jim was like a farmer who will ‘grow something, and grow it again, and again and again and make it better and better...’ Pollack did not play around with assumptions much but tended to work within a narrow range of possible outcomes, given his basic assumptions, and refine his results in a deliberate and methodical way. Sagan, on the other hand, “would come up and have some idea that was totally out in left field, that you hadn’t thought about.” (9) This was because Sagan would change the basic assumptions that he was working with.

Perspective has to do with the number of possible alternatives one might consider to be feasible, given the assumptions that one is working with. Pollack could be said to have only a narrow perspective. Not only did Sagan play around with assumptions, but he tended to consider the possibilities within a given assumption as much larger than did many other people. Sagan not only assumed that life was present on many other planets, he felt that one should expect that life might take on many different forms. Sagan has written, for example, “It is important that we extend our identification horizons, not just down to the simplest and most humble of forms of life on our own planet, but also up to the exotic and advanced forms of life that may inhabit, with us, our vast galaxy of stars.” This would be considered by most analysts to be a relatively broad perspective. (10)

A high risk tolerance is important throughout all three of the early stages of organizational evolution. If a person has a high tolerance for risk, they tend to focus on fewer projects and work to see them through rather than trying to diversify their risk by building a portfolio of projects that will tend to reduce the variance of potential outcomes. Thus, in the earlier stages of an organization or in the new initiatives of an older organization, the emphasis is upon what is new and different and the effort to develop the project, to find a market for it, and to build an organizational structure that supports the product or service. As the organization matures in its present form, the emphasis would be to become less risk tolerant and hence this would place more and more emphasis upon developing a portfolio of projects to diversity.
What goes into the next three phases? It has been argued that vision would start to disappear in the organization first as focus is shifted to growth and success. Emphasis is placed on making it, not upon reinvention. There is not the need to challenge the way things are done. There is not need to change assumptions. Although perspective is important in stages two and three, this starts to fade in stage four. In the end, the tendency is to hold on to one’s model. It has been successful, perhaps very successful. It becomes the only view of the world that is accepted. The organization, in a sense, becomes fundamentalist in that it only accepts that one possible state of the world can occur. All else is just random noise.

In stages two and three, the decline in risk tolerance is picked up in an increased emphasis for the organization to build a portfolio of projects in order to diversify its efforts at innovation. As the organization de-emphasizes vision and perspective declines, efforts become more and more adaptive in nature, so that diversification becomes even less risky. The organization, when it considers any change, begins to think about ‘not failing’ rather than succeeding.

In the end, the firm loses almost all desire to consider something new. Risk tolerance approaches zero, because no one in a bureaucracy or an aristocracy wants to make a mistake. (11)

But, then something happens if the organization is to have any possible future at all. There becomes a call for a re-invention of the firm. Now, vision is needed once again, and then perspective must become broader and, of course, to consider changes, substantial changes is risky so that the organization must bring people into the picture that are willing to assume risk, perhaps major risk. A dying organization is not a risky one because in the later stages, there is little variance to the possible outcome of the organization. The only risk that is possible is the one associated with the resurrection of the organization and that is like starting over. In one sense, a re-organization is not risky in the sense that the organization is failing, yet it is very risky because
it is dealing with a change in assumptions and a change in perspective. One, according to Vicere, goes back and attempts to operate within the first three stages of the organization.

D. Overlay of Vicere’s “Strategic Leadership Styles” and our theory.

We believe that we can use our approach to expand on the work of Vicere and introduce a greater richness into the understanding of organizational development and the differing needs of executive leadership. We will concentrate primarily on organization connected with science and engineering but we believe that the lessons that are observed there can be applied in other situations. We will stick with Vicere’s model of expanded leadership styles.

The Prophet: In the case of the inception of an idea that leads to the emergence of an organization, the basic issue is one of identifying a new technology. In order to identify a new technology, a leader must be able and willing to change assumptions and assume risk. As presented in the problem-solving model, coming up with something that is substantially new requires that the problem solver modify the assumptions she works with in a fairly significant way. Thus, the prophet must be a person that is able to break with the past and change some of the underlying foundation of existing thinking so that something new can be created. For example, in a world of large, centralized mainframe computers, the idea that everyone should have a personal computer on their desk represents a radical change in assumptions.

The Crusader/Barbarian: At this stage in the development of the organization, technology is not the problem. Marketing is the problem. The goal here is to find out what kind of products and services that the potential consumer wants that the organization can provide with the technology they are working with. Here the emphasis of the organization should be on spreading the technology or transforming the technology to satisfy customer demands. One problem with a new technology, however, is that the potential customer may not know what it is that they want.
An example of a company that had outstanding new technology but failed to market it was the Xerox company and their research wing Xerox PARC. (12)

With this leadership style we do not work with changing assumptions as does the prophet. Here we have the technology, but we cannot interpret the technology so narrowly that we cannot see what the possibilities are for satisfying customer needs. Thus, the crusader/barbarian needs to have a broad perspective in order to take in possibilities for customer usage so that she does not leave anything out in terms of bringing the new technology successfully to the marketplace.

The Explorer/Builder: The focus at this stage is on management, to grow and feed the market. In a real sense the strategy that is now taken is one of risk reduction. The organization has the technology and it also has the market. Now it must continue to supply the market with a steady stream of new products and services, or at least new generations of current products and services. The risk reducing strategy that allows the organization to accomplish this goal is the building of a portfolio of new projects that can be managed and supported that will lead to a regular supply of new products and services that the organization can bring to market. In essence, the portfolio is a collection of Real Options that the organization must nurture and support so that the company can remain competitive against other organizations that rise up to challenge it. At this stage, much of the portfolio that the organization manages will consist of modifications to existing products. The organization at this stage is not changing assumptions about its technology; it is only adapting what it has to the threats brought it by its competitors.

The Administrator: The emphasis at this stage shifts to building efficiency and control into the organization. Thus, management and structure become more of an issue. The focus is changed in that the perspective of the organization is narrowed and the assumptions that the management work with become codified. Now people want to become more effective, they don’t want to be more adventuresome. The is a reaction to undertaking risk and the effort on the part of
management is to only introduce things, changes, that have very little variance to their potential outcomes.

The Bureaucracy: At this stage the organization really becomes reactive rather creative. The organization has been quite successful to get to this stage and, the general tendency is that the more successful an organization is the less willing it is to change its assumptions. The bad thing is that it begins to believe that IT has all the answers. Therefore, the organization begins to institutionalize the answers. Thus the perspective of the organization narrows even further and the assumption of risk is almost totally eliminated.

The Aristocracy: The emphasis at this stage is solely on the survival of the organization and the preservation of what it has stood for in the past. Now there is only one possible outcome that is perceived, the outcome it has promoted all of its life. As a consequence, the organization does not accept new information, will not change in response to new information, and will defend its view of the world against all comers. Change under the current administration is out of the question. No one in this type of organization is willing to take any kind of risk at all.

Thus, one can see that the various stages of organizational change that Vicere has presented can be transformed into the categories that are consistent with our model. Early on in an organization's history, the challenging of assumptions and the taking on of risk predominates. The organization, as a consequence, is very innovative. As the organization evolves, the general approach is to have a broad perspective about potential outcomes within the given assumptions so as to respond to customers and competition. A maturing organization will move from one that challenges assumptions and assumes risk to one that takes on a narrower and narrower perspective and will also tend to be less risk tolerant. If there is nothing that comes to stop this pattern, the organization will become more and more rigid until it freezes its assumptions, has the narrowest of perspectives and is totally unwilling to take on any kind of risk. Thus, it would
appear that any approach to the development of executive leadership needs to deal with the issues of vision, perspective, and risk tolerance.

F. Explanation of why our approach is much richer than Vicere’s approach.

The Vicere approach works with the Kirton model and interprets the various ‘productive’ stages of organizational evolution in terms of the need to be adaptive or innovative. The suggestion that Vicere makes is that in the educating and training of executives for leadership, more emphasis should be given to developing skills that for adaption and innovation that can be used at various times in the life cycle of the organization. In this way, the organization can continue to remain more dynamic. Since we can go behind these aggregate characteristics and work with traits that that actually be worked with and improved, creating a development program that actually works on the relevant characteristics is highly valuable.

IV. Our Model in Action

Example of culture being created at the top and the creation of leaders that are problem solvers: Jack Welsh and GE? Bill Gates and Microsoft? Slip this in subtly. Organizations that reinvent themselves: 3M, Microsoft, Intel… Organizations that widen the perspective… Organizations that are willing to change assumptions… Organizations that use a bottom-up approach.

V. Lessons Learned

The essence of decision-making in organizations as it is in life is that people must continually engage in problem solving. By this we mean that people must continually compare results against predictions to test whether or not their perception of the world remains an adequate
model or schema to work from. The world, markets, life, they change. As the world and we become more sophisticated, the questions that we ask change. As a consequence, we need to modify our models or schema in order to make better forecasts or to make forecasts of different things. If we fail to do so, we fall behind, we cease to be effective, and we become superfluous. We lose our reason for being.

Thus, an organization is faced over time with the continual need to reinvent itself. The problem is to be aware of this pressure and to become intentional in preparing for the changes that will inevitably take place. This means that an organization must build a talent pool that is able to recognize when different questions need to be asked or to realize when existing models no longer forecast with the required accuracy to allow the organization to remain relevant and competitive.

As Vicere suggests, for an organization to become intentional in problem solving and capable of being able to solve new and different problems does not mean that the organization needs to actually change leaders. (13) In our view, it is essential an organization to build executives that know how to go about problem solving in a methodical way and to create a culture that accepts the need to problem solve and to develop new ways of doing things at different times. Within this culture it also needs to be realized that sometimes the organization will need to be more adaptive in the way it approaches its business and at other times it must be more innovative. But, the culture must always be one the is capable to stepping aside and taking an honest look at itself and be able to ask the hard questions about what it is doing and even what are the correct questions.

We should, however, note, that from time-to-time, leaders may need to be changed or they will leave the organization. As Kirton has pointed out, if the stage an organization is in is not compatible with the primary characteristics of an individual they will have to ‘cope’ with the existing paradigm. (14) If an organization is in a period in which adaption is the primary mode it is operating in, a person who tends to be an innovator will have to cope with the existing situation
and submerge, somewhat, this basic trait. Some individuals may not be good at coping and hence will opt to leave the organization. Others, who have gained leadership positions when another paradigm was in place, may not be able to be as effective in their leadership position in the new regime and so will have to be replaced. It is our feeling that if the organization goes about its training and development of executives in an appropriate fashion that these situations will be kept to a minimum and the organization will not only be able to maintain its dynamic performance over time, it will be able to retain longer term and loyal leadership over time.

Executive development must concentrate on creating leaders that are problem solvers. They must understand what it means to work with particular models or schema and how these models or schema serve and the formal or informal basis for what the organization does. They must understand that these models provide them with the predictions that they work with when making decisions that will affect the performance of the organization. They must be willing to admit when the model or schema they are working with no longer provides adequate forecasts because they are not performing at the level that they need to. And, they must be willing to work through the process of modifying their models to provide better predictions or to answer new questions. These processes can be learned.

The crucial cultural factor that must be present in implementing and enforcing such a development program is the atmosphere that exists at the very top of the organization. The chief executive sets the tone for the rest of the organization and her adherence and support of such an atmosphere must be reflected in everything that she does. The atmosphere that must permeate the organization is one of questioning and reflection on whether or not what is being done in the organization is satisfactory in terms of how the organization is achieving its goals and objectives. If the chief executive is not willing to dedicate herself to the constant promotion of this type of atmosphere, then the organization will not be able to achieve the intentionality that it needs to achieve and maintain high performance.
There are four lessons that are provided by organizations that have created such an atmosphere and have been able to adjust to changing market conditions as well as to changes in technologies that require the organization to ask different questions. The first lesson is that organizations must be intentional in their efforts to re-invent themselves. In this, organizations can institutionalize their process by engaging in time pacing. (15) In time pacing the organization builds into its operations metrics for introducing new products and services or making other changes in the way it does things. The 3M Company set a goal to have % of the products it had on the market being new in the past five years. This takes other forms, like the “DYB/CYB” approach taken by Jack Welch at General Electric. The DYB/CYB stands for Destroy Your Business/Create Your Business. The philosophy behind this is that competition will eventually destroy your existing business. Welch argued that if this were true, then rather than waiting for it to happen, the leadership should do it themselves and re-create themselves so that they maintained the initiative in the process. Microsoft and Intel attempts to ‘re-invent’ themselves on a regular basis tied to the calendar and not to what their competitors are doing.

The second of these is that the organization must be willing to increase its scope of possible outcomes. Organizations that only look at a limited range of possible outcomes, cannot process new information as efficiently as an organization that considers a broader range of possible outcomes. In expanding one’s horizon in this way one is not increasing the riskiness of the process. What is threatening to people in trying to work with a wider perspective is that they lose the certainty that is attached to narrow views of the world. To work with a wider perspective, people have to accept models or schema that more ambiguous because they don’t give nice, neat, narrow distributions of outcomes. What is considered here is that one open up ones mind to more and more possible outcomes. This is what is meant by ‘thinking outside the box.’

Third, the organization must be willing to challenge its assumptions and produce new ones as is necessary when the performance seems to get out of line with expectations. One challenges assumptions when either the predictions of one’s model or schema seem to be substantially out-
of-line with what happens, or when new questions begin to be asked where the old models or schema do not seem to be able to produce good answers. The effort here is to get a model that does produce relatively better forecasts. In order to get a better model or schema, one must change assumptions in order to deduce the better model or schema. The general procedure is to start changing the assumptions that are the least important to the ‘core’ assumptions of the organization. Changes will need to be made in more and more important assumptions until a model or schema results that give predictions that are considered to be sufficiently adequate that the search for new assumptions can stop.

Obviously, the deeper one goes into the assumptions, the more difficult it may come for the organization to give up old, closely held ideas. Yet, there are times when this must be done. One always is faced with the choice to make smaller changes on a regular basis or make larger changes infrequently. For the continuity of the organization and the stability of commitment to the goals and objectives of the organization, it is perhaps better to make smaller changes in assumptions more frequently. If this is the case, then the process of addressing the contribution of different assumptions to the success of the organization should be a part of the culture of the organization and be intentionally incorporated in the ongoing efforts of the leadership.

Finally, the leadership needs to look to the lower levels of the organization for the broader perspective and the new assumptions that will drive the business in the future. There are two reasons for this. People at the lower levels of the organization are closer to the markets, closer to the customers, closer to the products and services, and closer to the technology. They can set the perspective on what can be done and they can tell you what assumptions need to be changed or added to the existing ones.

In addition, in the type of dynamic organization that we want to create, it should be the case that the leaders at the top got to where they are by introducing broader perspectives or by challenging assumptions. The danger they face is that they have a lot invested in the changes that they
made so that they will be more reluctant to question the existing practices that they brought into the organization. They should be the ones, however, that can re-enforce atmosphere of questioning and reflection. These leaders must be trained to facilitate the culture that allowed them to get where they are and that has contributed to making the organization a dynamic force within the marketplace.

VI. Implications for Strategic Executive Development

Increasing risk tolerance probably cannot be done. People are either able to operate well in an ambiguous situation with lots of potential variance in outcomes or not.

Teaching to have a greater perspective is possible.

Also, working with people to examine assumptions and try new ones is another thing that people can learn from.

What is it that should be stressed? Depends upon the phase of the cycle the organization is in. If the need is to induce a lot of stimulus into the organization, then perhaps more emphasis should be given to working with the assumptions. If the emphasis is upon increasing growth or re-structuring the organization, then perhaps more emphasis should be given to increasing the perspective of executives.

Risk…it will change given the different things the organization is trying to do. For something new…greater variance of outcomes. For growth or re-structuring…more emphasis on broadening perspective.

And, if the company is in decay or decline?
Not really an all or nothing to training…just a change in emphasis at different times.

VII. Recommendations

Creating executive skills and leadership is very important for the continued success of an organization over time. To achieve such a program a management must be very intentional.

Here is where the leadership provided at the very top is so important. As stated earlier, the atmosphere of the whole organization must come from the very top. Without a full and consistent effort by the chief executive, the organization will never be able to develop the kind of executive development program that is needed to produce a continuously dynamic performance.

The recommendations are:

1. Vicere: “View management as a process of interpretation, not a process of control.”
   Top management becomes a facilitator, not the initiator. Planning must not become an exercise of embedding the historically successful philosophy of the organization into the structure. The effort is to open up the organization to reinvention and this is going to come from those closest to the products and the markets.

2. Vicere: “View executive development as a process of building commitment to strategic intent and engendering focus on markets.” Let lower level leaders lead. This not only increases the dynamism of the organization, but it helps develop the confidence and foresight of the next generation of leaders.

3. Vicere: “Design executive development strategies to create a talent pool of strategic leaders at all levels of the organization.” The new paradigm—hire the most talented people, create opportunities for them to grow and develop in leadership, and then let them have the opportunity to produce.
4. Vicere: “Focus executive development efforts on building both the individual and collective talents of leaders.” Leaders must be developed that can make decisions, but also can let go and let others make decisions.

5. Vicere: “Recognize executive development as a competitive capability that assists in the development, implementation, and revitalization of organizational strategy.” Change must be perpetual. Thus, leaders must be developed that can deal with ambiguity, incomplete information, and the need to change.

6. Vicere: “View executive development as an element of strategic business development.” Having good, talented people around, giving them what they need to grow and development, and then giving them the opportunity to perform is the necessary ingredient today to keep the company ‘reinventing’ itself and meeting the competitive pressures of today’s markets.

7. Vicere: “Make executive development part of a consistent HR strategy that blends the processes of recruitment, selection, development, appraisal, and rewards into an integrated system for talent pool management.” An organization must always be going to the well in today’s environment.

VIII. Conclusions

Nothing is standing still today. The environment is one in which those that stand still, fall behind. It is imperative for organizations to become very intentional in their executive development. They must make executive development an integral part of everything that they do. This attitude, however, cannot start anyplace else but the top of the organization. The culture of the organization must be permeated with the idea that change is a reality of life and that one must construct an organization and its environment in which it is very purposeful in how it meets this challenge of change.

It is crucial that in any executive development program that is instituted the effort must focus on those things that really seem to produce the character traits that are needed in order to achieve
the right balance or combination of innovative or adaptive behavior that is appropriate for the stage the organization finds itself in. As stated in the article, risk tolerance is something that probably cannot be taught. And, an organization really doesn’t want all of its people to be risk lovers, just as it doesn’t want all of its people to be risk averse. An organization, as it matures probably should become somewhat risk averse in that it should develop a portfolio of potential products so that it will be fairly confident that it will be bringing new products and services or new generations of products and services to market on a regular basis. It should not just work on a few, disruptive innovative initiatives. (16)

The major focus of executive development should concentrate on developing the skills of perspective and vision. These behavioral traits can be taught and how they are applied at various times in the evolution of the organization will contribute to whether or not the organization is adaptive or innovative in nature at that particular moment. The crucial leadership element will be the decision pertaining to when it is most acceptable to question the basic assumptions held by the organization and when it is appropriate to expand the number of possible options that are considered in the decision making or problem solving of the organization.

As usual, the crucial element in the leadership and management of an organization will be how the organization decides on what the balance is between questioning assumptions or not, and whether or not a broader perspective is desirable or not. The more practice executives get “on-the-job” in having to be flexible in their choices and in having to achieve an appropriate balance of differing approaches, the better off they, the executives, and the organization will be over time. This is the best way for an organization to constantly stay ‘new’ and to continue to be a force in the marketplace.

Notes
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2. ibid., pp. 15.
3. ibid., pp. 16.
7. Vicere, op. cit., pp. 27.


16. We discuss this point in greater depth in K. W. Jablokow and J. M. Mason, *Thoughts on the Innovator's Dilemma*, manuscript.