ABSTRACT: Innovation leadership involves synthesizing different leadership styles in organizations to influence employees to produce creative ideas, products, services and solutions. The key role in the practice of innovation leadership is the innovation leader. Dr. David Gliddon developed the competency model of innovation leaders and established the concept of innovation leadership at Penn State University. As an approach to organization development, innovation leadership can be used to support the achievement of the mission or vision of an organization or group. In a world that is ever changing with new technologies and processes, it is becoming necessary for organizations think innovatively in order to ensure their continued success and stay competitive. In order to adapt to new changes, the need for innovation in organizations has resulted in a new focus on the role of leaders in shaping the nature and success of creative efforts. Without innovation leadership, organizations are likely to struggle. This new call for innovation represents the shift from the 20th century, traditional view of organizational practices, which discouraged employee innovative behaviors, to the 21st century view of valuing innovative thinking as a potentially powerful influence on organizational performance.

I. INTRODUCTION

To have a clear understanding of what innovation leadership involves, one must first understand the concept of innovation which is the development of new values through solutions that meet new requirements, inarticulate needs, or old customer and market needs in value adding new ways. This is accomplished through more effective products, processes, services, technologies, or ideas that are readily available in markets, governments, and society [3]. Innovation differs from invention in that innovation refers to the use of a better and, as a result, novel idea or method, whereas invention refers more directly to the creation of the idea or method itself.

Although there is some controversy over how it can be defined, through general consensus in the literature, it can be described as novel ideas of viable products that are put into operation. It includes three different stages, which are all dynamic and iterative (constant) [2]:

- Idea Generation
- Evaluation
- Implementation

The two types of innovation include exploratory innovation, which involves generating brand new ideas, and exploitative innovation, which involves modifying and improving ideas that already exist. It is of importance to note that the ideas generated need to be useful in order to be considered innovative [1]. Innovation should also not be confused with creativity, which is merely the generation of a novel idea that may not necessarily be put into operation, although these words are sometimes used interchangeably in research literature when speaking about innovation leadership. Innovation leadership is a quite complex concept, as there is no single explanation or formula for a leader to follow to increase innovation. As a result, innovation leadership encompasses a variety of different activities, actions, and behaviors that interact with one another to produce an innovative outcome.

II. INNOVATION LEADERSHIP MANAGEMENT

Innovation leadership management is the discipline of managing processes in innovation. It can be used to develop both product and organizational innovation. Without proper processes, it is not possible for R&D to be efficient; innovation leadership management includes a set of tools that allow managers and engineers to cooperate with a common understanding of goals and processes [2]. The focus of innovation leadership management is to allow the organization to respond to an external or internal opportunity, and use its creative efforts to introduce new ideas, processes or products. Importantly, innovation leadership management is not relegated to R&D; it involves workers at every level in contributing creatively to a company's development, manufacturing, and marketing. By utilizing appropriate innovation leadership management tools, management can trigger and deploy the creative juices of the whole work force towards the continuous development of a company. The process can be viewed as an evolutionary
Innovation processes can either be pushed or pulled through development. A pushed process is based on existing or newly invented technology, that the organization has access to, and tries to find profitable applications to use this technology. A pulled process tries to find areas where customers’ needs are not met, and then focus development efforts to find solutions to those needs. To succeed with either method, an understanding of both the market and the technical problems are needed. By creating multi-functional development teams, containing engineers and marketers, both dimensions can be solved. The lifetime (or product Lifecycle) of new products is steadily getting shorter; increased competition therefore forces companies reduce the time to market [1]. Innovation managers must therefore decrease development time, without sacrificing quality or meeting the needs of the market. Common tools include brainstorming, virtual prototyping, product Lifecycle management, idea management.

Innovation is one of those words that we all use, agree is a positive thing and for the most part want more of. However, the term “innovation” like “leadership” seems to challenge a universally acknowledged definition. There is no shared interpretation of what we mean or what we are observing when we use the terms. Moreover, we lack practices for deliberately and consistently producing “leadership” and “innovation” [4]. This is evident in the fact that in spite of thousands of books on these subjects, reading and understanding the books doesn’t enable us to be leaders or innovators.

Innovation and leadership are closely related. Leadership always has some focus on bringing about a better future. In this sense, leaders are necessarily innovators [3]. We would not normally consider a spectator of the status quo to be a leader. The term innovation also suggests some break with the ‘norm’ or the status quo [6]. I will show in this text that an ‘innovator’ and a ‘leader’ are cut from the same cloth, that these terms are distinguishing different but intersecting dimensions of the same phenomenon.

To begin, I will make a number of distinctions. There are obvious distinctions between the innovator (who), an innovation (what) and the process of innovating (how) [5]. This paper’s intent is to illuminate and inquire into the phenomenon of innovation (and leadership) before history judges an accomplishment as innovative or declares a person to be a leader. The focus will be on the innovator and the context or ‘way of being’ of the innovator.

III. MEASURING INNOVATION MANAGEMENT

There are two phases the first phase involves the design of the innovation and the second involves its implementation. The measure of innovation at the organizational level relates to individuals, team-level assessments, and private companies from the smallest to the largest. Measure of innovation for organizations can be conducted using surveys to establish internal benchmarking. There is now an emerging body of work around the Management Innovation Index as an effective analytic that uses regression analysis enabling the measurement of organizational innovation that focuses on the four organizational pillars of innovation - culture and environment, strategy, innovation practice and the personal traits, beliefs and attitudes of managers to creativity and innovation. In addition, the Management Innovation Index maps the flow of creative inputs through the organization's operating system that produces the organization's innovation, i.e. the creative outputs.

IV. ADAPTIVE LEADERSHIP AND INNOVATION

Leaders who exhibit an adaptive leadership style monitor the organization’s external environment, and use this information to keep the organization competitive and ensure continual organizational learning by adapting to variations in the external environments [5]. These leaders absorb, understand, and integrate new information and ideas and are sensitive to the needs of very different kinds of businesses and adapt to variations in the external environments. Being immersed in the organization’s external environment enables these leaders to obtain customer feedback, learn about their customers’ problems and needs, and obtain market information, which they can then pass along to individuals in the organization. By facilitating this flow of information, this style of leadership helps to foster incremental, but not radical product innovation.

Unlike incremental innovations, radical innovation typically requires deep expertise and the exchange of more knowledge about specialized and leading edge technologies. Because such deep expertise usually comes about from intensive immersion in a specialized field, it is unlikely that adaptive leaders, whose job is to manage the company, not develop radically new products, will have been able to maintain either the deep expertise or knowledge.
that is needed to directly impact on radical innovation.

However, because these leaders serve as conduits for information between customers and the organization, they are in a position to link customer needs and problems with product development efforts within the organization. But, innovation focused on meeting customer needs and solving customer problems is incremental in nature. Radical innovation, on the other hand, is stimulated by more basic technological and scientific investigation and focuses on generating products that do not simply satisfy current customer needs, but rather on offering new technologies to new markets.

Because of the adaptive nature of this leadership, with its focus on continual innovation, also argue that adaptive leadership will impact on the organization’s ability to generate internal process innovations. The information that adaptive leaders bring into the organization from the external environment serves as a platform for innovation. It can inform the organization regarding the need to update the ways of doing things better and stimulate thinking about what new processes, workflows, and structures might look like.

Thus, it is proposed that:

- There will be a positive relationship between adaptive leadership and incremental product innovation.
- There will be a positive relationship between adaptive leadership and internal process innovation.

V. DISTINGUISHING INNOVATION

To many, innovation is equated with change. But, this view tells only one part of the story. Change is happening all the time whether we’re aware of it or not. A random event, insight or an accident may be novel but I do not consider it to be an innovation. What one can observe and do in the context of a novel occurrence or insight might very well lead to innovation [5]. For example, all of us have had ‘big ideas’ from time to time and done nothing about them only to learn later that someone has succeeded in bringing about exactly what we had imagined. This is what might distinguish a leader/innovator from a dreamer.

A more powerful way to think of innovation is that it means: intentionally ‘bringing into existence’ something new that can be sustained and repeated and which has some value or utility. That is, innovation is always related to some practical ‘in-the-world’ value. It is about making new tools, products or processes, bringing forth something ‘new’ which allows human beings to accomplish something they were not able to accomplish previously.

Art is creative and may have value to its consumers, but requires no utility to be art. Art might be seen as the artist’s self-expression or experience of their world. Innovation on the other hand must allow for something else, some possibility or accomplishment or value beyond the innovation itself. If someone comes up with a new hammer that does what our existing hammers do, then that is a design change and design is an ‘art’. When someone creates a new kind of hammer, however, such as a ‘nail gun’ or a new method of hammering, then we can distinguish that as innovation. In this sense, we can also see that we can innovate within an art form, such as painting with acrylic at one point allowed artists to create effects that were not possible with traditional oils.

When we create a new tool we are innovating. When we are not innovating we are the tool or the ‘tool’ is an extension of us. For example, the typewriter was an innovation in writing. At some moment, the typewriter becomes transparent (to both the typist and those concerned with what is being typed) and we simply have a typist typing. The tool appears again only when there is a breakdown or it no longer serves its purpose. I am claiming that our relationship to the circumstances, especially when there are breakdowns, is the primary factor in determining whether we respond as leaders and innovate, or simply resist or cope with what is happening.

Whether we are speaking about leadership or innovation, our concern is about accomplishing some sustainable change whether large or small, continuous or breakthrough. While leaders and innovators participate in both kinds of change, I distinguish leadership as always occurring in a context of some intention to create the latter: Breakthrough, to break with the status quo. Both leaders and innovators change the context, the paradigm or frame of reference of the innovator/leader and those who have a stake in the innovation. However, another distinction between leaders and innovators comes from the observation that leaders’ actions exist within a context of ongoing relationships with other human beings.

If change is happening all the time and innovation and leadership both imply deliberate acting, then are there (deliberate) ways of being in the world that define our relationships with change? And, is there an “order” underlying such possible ways of being?

VI. CONCLUSION
Innovation takes place at different levels from modest improvements on an existing product or process to dramatic and even historically significant breakthroughs in how we relate to the world. In all cases, the capacity to innovate will be a function of our commitments, what we want to accomplish and our relationship with the circumstances we perceive we are in. If we are resisting or coping, we see no innovation and whatever change we generate will be as a reaction to the circumstances and part of the process by which those circumstances persist [6].

When we are responding or choosing we are in a position to innovate and will do so naturally and consistently as a function of what we observe to be possible or what we observe is missing in our perspective of the world.

Change based on this view is likely to be an improvement on what already exists. When we are bringing forth or creating we are not only in a position to innovate but are predisposed to do so. Further, in these ways of relating to circumstances, we have few if any limitations on what we can imagine and generate.

We are likely to be generating breakthroughs or even creating entirely new spheres of possibility. Innovation Leadership Management will birth indisputable innovation, invention and Creativity.

VII. REFERENCES


