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An Achievement Manifesto

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Introduction and Overview

Manifesto

A "manifesto" is a declaration of the aims, intentions and motives of the issuer. In this case, I am the issuer and my aims are to explore what I see as the issue at the heart of achievement; namely, the ability to control results, thereby ensuring the achievement of some goal or objective. To accomplish my aims, I will present four reasonably brief pieces in the pages that follow (the first four in the bulleted list below). The second, third and fourth items in the list below draw from Knowledge Worker columns published in ISPI's *PerformanceXpress*. (See the References portion of the Summary section.)

After the first four pieces, I will provide a summary, in text and visual form, a brief paragraph about me, and a glossary. As for my motives, I simply want to share what it is I believe to be the case about achievement and the control of results. It is my hope that at least some readers will find value in it. Subsequent sections of this manifesto are briefly described below.

- *Control & Controlling Results*. This section examines the nature of control as exercised by human beings and shows how that plays out in in achieving or controlling a result.
- *The Achievement Cycle*. The Achievement Cycle is the basic process by which we do or don't achieve our goals and objectives. It is an iterative cycle consisting of four basic elements: Aim, Act, Assess and Adjust.
- *The Achievement Path: A Simple Example.* The Achievement Path is the key to controlling and achieving a result. This section explains the nature of the Achievement Path and uses a simple illustrative example.
- The Achievement Path: A Workplace Example. As the title indicates, this section examines the Achievement Path in a workplace context, showing how a business result was achieved and the role the Achievement Path played in achieving it.
- Summary, Closing Comments and References. Here, the key points from preceding sections are briefly summarized, in text and in visual form, and I add a few closing comments. Here, too, I list the Knowledge Worker columns mentioned above with links to those columns.
- About the Author. A brief paragraph about me.
- *Glossary*. Several terms perhaps new to the reader are used in the various sections of this manifesto. They are listed in this section along with their definitions.

Control & Controlling Results

Living Control Systems

We are all "living control systems¹," which is to say, we, as human beings, try to control all manner of things – from the speed of our car to the warmth of our living room, the behavior of our children, the performance of our organizations and the balance in our checking accounts. You name it and, chances are, you, me, or someone else is trying to control it.

For the most part, we're pretty good at controlling things. Some of us are better at it than others and, at times, even the best of us can be overwhelmed by circumstances beyond our control. All of us could benefit from getting better at it. That's what this paper is about: getting better at control; more specifically, it is about getting better at controlling results. Doing that is a sure-fire way of improving performance.

To improve our ability to control results – to improve our performance – we need to know how control works; more specifically, we need to know how control works in human beings – and how we control selected aspects of the world around us.

The Components of Control

The first thing to know about controlling anything is that you must be clear about what it is you want to control. A useful way of thinking about that is to think of it as a variable. After all, if whatever it is doesn't or can't vary, it can't be controlled. For example, let's suppose you want a glass of water. The size of the glass is a variable. So is the amount of water in it. The variable you want to control is the "Target Variable" (in this case, the amount of water in the glass).

The second thing to know is that you must be clear about your goal, the result you're after. If you're trying to control a variable, you goal consists of a desired value for that variable; it defines the result you want to achieve and achieving it is the measure of your control. The desired value of the Target Variable is called the "Target Value" (in this case, let's say you want the glass about half full).

We now have two key components of control: (1) a Target Variable, which focuses your aim (the amount of water in a glass); and (2) a Target Value, which defines your desired result (about half full).

A natural next step is to compare the actual or current value of the Target Variable with its desired or Target Value. In a control loop, the comparison is performed by a comparator. As "living control systems," we are the comparator, we perform the comparison. When there is no gap or discrepancy, no action is required. However, if there is an unacceptable gap or discrepancy, you must do something to close it; you must take corrective action.

Two more components of control have just been identified: (1) a comparison of the desired or Target Value of the Target Variable with its current value, and (2) corrective actions intended to close any gap, to bring the current value of the Target Variable to its Target Value.

¹ The term "living control systems" is often associated with William T. Powers. However, it is also the title of a book by Leonard Bayliss, published posthumously in 1966, and a book which Powers cited. Perhaps that is where Powers got the term.

Control & Controlling Results

Ah, yes, but how to determine the current value of the Target Variable? The short answer is that the current value of the Target Variable (the level of water in the glass) is what you *perceive* it to be. All any of us can know about the world around us is known to us through our perceptions. This gives us another component or element of control: perception or, more specifically, the Perceived Value of the Target Variable. In this case, you perceive the glass to be empty and so you fill it until it's half full.

There is one more component to consider. We don't exist in a vacuum and neither do the variables we seek to control nor the results we seek to achieve. We are all embedded in some larger structure and connected to one another in various ways. Some connections are very close and direct, and some are very distant, far removed in space and time. In addition, there are other actors and factors in the larger structure that can also affect the variable we wish to control. Consider, as an extreme but illustrative example, trying to fill the glass of water while standing at your kitchen sink versus trying to do so pouring water from a bottle while standing in a windstorm. The notion of disturbances or circumstances that interfere with our control is the last element in our examination of control.





The previously discussed components can be depicted in a closed-loop or feedback-governed arrangement as shown in Figure 1 which depicts a basic control loop². The comparator is the circle with a C where the Target Value and Perceived value come together.

Controlling Results

To recap, we have a goal, a *Target Value* for a *Target Variable* (a half full glass of water). We compare our *Perceived Value* of the *Target Variable* with its *Target Value* and, if there is an unacceptable discrepancy, a *Gap*, we engage in *Corrective Actions* aimed at closing that *Gap*. In this case, the glass is empty, so we fill it half full. If our actions are appropriate and effective, and if we are not overwhelmed by any *Disturbances* from other actors and factors, we succeed in closing the *Gap*, we achieve our goal. We can be said to be controlling the result. The result in this case is our perception that the glass is now half full.

Getting Better at Controlling Results

How do we get better at controlling the value of those variables we wish to control? Said a little differently, how do we get better at controlling results? The answer lies in the connections or linkages

between our actions and their effects on the Target Variable. When the variable of interest is directly

² The loop shown in Figure 1 derives from and based on Perceptual Control Theory (PCT) as articulated by William T. Powers (2005). See *Behavior: The Control of Perception* (2nd Edition). Benchmark Publications, Inc., New Canaan.

Control & Controlling Results

accessible, controlling its value is a relatively simple matter: *Aim, Act, Assess* and *Adjust*³. However, the variable of interest can be far removed from us in space and time. In such cases, it is not directly accessible. and we must find other variables that are (a) directly accessible and (b) somehow linked or connected to the Target Variable. These connections and linkages can be quite complicated, and the number of links can be quite large. And so, it is often the case that we must do something *over here* to make happen what we want *over there*. As the change pundits remind us from time to time, change is indirect, you don't change *it*, you change something else and *it* changes as a result.

To get better at controlling results, you must get better at (a) identifying the variables that are connected to the Target Variable and (b) finding the ones you can affect through direct, immediate action. These constitute what are known as "Points of Intervention." The changes you make through direct, immediate action ripple through the structure of the situation, altering the values of variables along the way, eventually making themselves felt as changes in the value of the Target Variable. That variable constitutes a "Point of Evaluation," a place where you can assess success. The other variables are also Points of Evaluation, places where you can assess progress. To get better at controlling results, you must improve your understanding of the structure of the situation in which you are intervening.

The path that connects the variables you can affect through direct, immediate action, with the variable you have targeted for control is known as the *Achievement Path*. Getting better at controlling results entails getting better at identifying appropriate achievement paths for the results you seek. To help you get better at that, the next three sections of this manifesto examine how to do that. They are:

- 1. The Achievement Cycle
- 2. The Achievement Path: A Simple Example
- 3. The Achievement Path: A Workplace Example

Good luck with your efforts to get better at controlling results.

³ "Aim, Act, Assess, and Adjust" define The Achievement Cycle, which is discussed in the next section.

The Achievement Cycle

Introducing the Achievement Cycle

Those who specialize in matters related to human performance know full well that performance is defined mainly by results, by the effects or outcomes of actions taken. As Tom Gilbert (1974) put it many years ago, "If you think about it, then, it is only the accomplishments of performance that we value – never the behaviors that produce them (p.13)."

However, we also know we can't focus on outcomes to the exclusion of action; the two are inextricably intertwined; the one leads to the other. We know further, even if somewhat obviously, that performance can't occur unless the outcome to be achieved is known. In addition, feedback or knowledge of results is essential; in other words, progress and achievement must be assessed. And, if we know anything at all, we know that the context or setting in which performance takes place often presents hindrances and obstacles to achieving the goal in question. Rummler & Brache (1995) put it this way, "If you pit a good person against a bad system, the system will win almost every time (p.13)."

The preceding factors give rise to a cyclical model of achievement I call "The Achievement Cycle" (see the diagram below).



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First, we *Aim*, we target some result to be achieved. To achieve it, we must be clear about two things: (1) the target and (2) the path we will take to hitting it. The ultimate target is always some variable and our aim is to bring its value to some specific level (e.g., an error rate of less than one percent). The path to the target leads from variables we can affect through direct, immediate action through other, connecting variables to the target. I call that path "The Achievement Path" and I will be addressing it in upcoming sections. Our aim, then, includes the Target Variable and the path leading to it.

Next, we *Act*, we do those things we think will lead to the desired result. Our actions have direct, immediate effects and those, in turn, lead to other, indirect and delayed effects. We must be concerned with both. If our aim is correct, the effects of our direct, immediate actions make their way along "The Achievement Path" to the Target Variable.

The Achievement Cycle

Having acted, we then *Assess*, we take stock of the effects and the effectiveness of our actions. We assess progress and achievement.

Finally, we *Adjust*, typically to unforeseen or changing circumstances and occasionally to obstacles and other hindrances. We might adjust our aim, our actions, or both. Achieving any outcome follows this cycle. And, because adjustments are almost always required, the cycle is iterative.

The iterative nature of The Achievement Cycle is shown in the diagram below. The initial pass through the cycle is the top part of the diagram. Assuming the result was not entirely achieved, the exit point of the Adjust segment in the top loop leads to a second pass via the bottom loop. Conceivably, that could lead to a third pass via the upper loop and so on. The iterations continue until the desired result is achieved or the effort is abandoned.



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The two diagrams above are tools that can be used to frame and guide thinking about matters related to human performance – in general and in specific instances. The four A's of achievement are also easily remembered: *Aim, Act, Assess* and *Adjust*.

The Achievement Cycle

A Note About Time & Emergence

Much is being made of late about the fact that rapid change and increasing complexity prevent us from planning in great detail, and then carrying out those plans. Instead, we must grapple with emerging, evolving, ever-changing situations. Consequently, our targets also emerge, as do our aims. And, of course, our actions must be tailored to the situation at hand. So, how, then, does The Achievement Cycle fit with those circumstances? My answer is as follows.

The core issue is one of time, specifically, the time it takes to achieve a goal, to hit a particular target. The time required varies with the target, the structure in which it is embedded, and the path that must be taken to hit it. The Achievement Cycle can take moments, a few hours, a few days, a few months or a few years, depending, as I said, on the target, the structure in which it is embedded, and the path that must be taken to hit it. Nevertheless, the Achievement Cycle applies regardless of the target, the situation, the scope and complexity of the effort, and any other factor. We can move through the cycle at high speed or at a leisurely pace, all depending on the circumstances. It is equally suited to taking a long, well-planned journey to known destinations or inching our way through unfamiliar territory. In all cases, we must *Aim, Act, Assess* and *Adjust*.

If you would like to read more about The Achievement Cycle, you can find a longer paper at this link: <u>http://www.nickols.us/AchievementCycle.pdf</u>.

References

- 1. Gilbert, T.F. (1974), *Levels and Structure of Performance Analysis*. The Praxis Corporation Technical Series, No. 1: Morristown, NJ
- 2. Rummler, G.A. & Brache, A.P. (1995). *Improving Performance* (2nd Edition). Jossey-Bass Publishers: San Francisco

The Achievement Path: A Simple Example

The previous section focused on the Achievement Cycle: Aim, Act, Assess and Adjust. This section focuses on the Aim and Action stages of the cycle; namely, what I call the "Achievement Path." Its importance is highlighted by this assertion: There is a single question you can ask yourself and your answer will tell you if you are likely to achieve a goal you are pursuing. The question is this: "Can you correctly specify the Achievement Path?" If your answer is "Yes," you are likely to achieve your goal. If your answer is "No," you are much less likely to achieve it.

At this moment, you might be scratching your head and saying, "What the heck is the Achievement Path?" This section examines and explains the concept of "Achievement Path."

The Concept of Achievement Path

At the heart of all goals lies a variable and a specification of its intended or desired value. Consider, for example, room temperature. Room temperature is a variable and its intended value can vary quite a bit, as can its current value.

Right now, the thermostat in my living room is set to 69 degrees. As sometimes happens, my wife feels a wee bit chilly and asks me to turn up the heat, usually to 70 degrees. Shortly afterward, the furnace kicks in and warm air begins to flow through the ductwork and out the registers. After a while, the room temperature, as sensed by the thermostat, reaches 70 degrees and, from then on, that temperature is maintained. The thermostat turns on the furnace whenever it drops below 70 degrees and turns it off whenever it reaches 70 degrees. Once the room temperature reaches 70 degrees, I generally ask my wife if she's feeling warm enough and she usually indicates she's fine. Her goal of feeling warmer has been achieved.

The Achievement Path – for my wife wanting to feel warmer and for any other goal – begins with direct action that affects some variable. In this case, I can't directly affect room temperature or my wife's feeling of warmth, but I can alter the thermostat setting. The variables we can directly affect are known as *Accessible* variables.

At the other end of the Achievement Path lies the Target variable. In this case, the *Target* variable ties to my wife's sense of warmth. Clearly, I can't directly affect that, either. However, I can rely on what she says about feeling too cold or too warm. Something that does directly affect her sense of warmth is the temperature of the room. Any variable that directly affects the Target variable is known as a *Driver* variable. Room temperature is a Driver variable in relation to my wife's reported feeling of warmth.

Although I cannot directly affect room temperature, I can directly alter the thermostat setting and that causes the furnace to come on and blow warm air into the room via the ductwork and registers. The warm air affects room temperature. Variables between Accessible and Driver variables are known as *Connecting* variables. In this case, the furnace status (on or off) and the amount and warmth of air entering the room from the registers are Connecting variables.

The diagram in Figure 1 below illustrates the concept of Achievement Path using the example just discussed.

The Achievement Path: A Simple Example



Figure 1: Feeling Warmer Achievement Path

Recap

The Achievement Path for all goals runs from Accessible variables through Connecting variables to the Driver variables and thence to the Target variable. That sequence suggests, as we have known for a long time, that effecting change in organizations is often indirect; that is, you don't directly affect the variable that is at the heart of your goal, instead, you alter the value of other variables and the effects of those changes then ripple through the structure of the network in which those variables are embedded, eventually making themselves felt in the form of changes in the value of the Target variable. As noted earlier, our aim must include all the variables in the Achievement Path.

The heating system in my house is a given and I am quite familiar with such systems. In other words, I don't have to give much thought to how best to achieve my goal (raising the room temperature), thereby achieving my wife's goal (feel warmer). The Achievement Path requires little or no analysis on my part; I simply operate the heating system. The same is true of many situations in life and at work. But many other situations, especially some of those encountered in the workplace do require thought, often considerable thought and analysis, to identify an effective Achievement Path for a goal.

Perhaps the most critical aspect of identifying the Achievement Path is lurking in the following portion of a statement from the first paragraph in this section: "... you alter the value of other variables and the effects of those changes then ripple through the structure of the network ..." Identifying the Achievement Path for a workplace goal entails identifying and analyzing the structure of the network in which the Target variable is embedded. Also embedded in that same structure are the Accessible, Connecting and Driver variables. With that structure or network of variables identified, you can then examine it, looking for an Achievement Path.

The Achievement Path: A Simple Example

If, as is theoretically the case, the Target variable, is also directly accessible, then it is also an Accessible variable and there are no Connecting or Driver variables. Taking aim is much simpler in this case.

In the next section, I will examine the concept of Achievement Path using a workplace example from my time as Division Director of the Custom Operations Division (COD) at Educational Testing Service (ETS). We will see just how it is an Achievement Path can be identified.

In the meantime, here's a little exercise for you: Think of a goal you're trying to achieve and ask yourself the following questions:

- What is the Target variable I am trying to affect?
- What is its desired value?
- What are the Driver variables, those that directly affect my Target variable?
- What are the Accessible variables, those I can directly affect with my actions?
- What are the Connecting variables, those that connect Accessible and Driver variables?
- What does the Achievement Path for my goal look like?

The Achievement Path: A Workplace Example

A Workplace Example

In the previous section, I examined the concept of Achievement Path and provided a simple example involving the thermostat and heating system in my house. As promised in that section, this section presents an example of an Achievement Path related to a problem encountered when I was head of the Custom Operations Division (COD) at ETS.

The primary purpose of this section is to illustrate how identifying and analyzing the structure in which the Accessible, Connecting, Driver and Target Variables are embedded facilitates identifying an effective Achievement Path.

The Problem: An Increase in Charges to Programs

At the time, much of ETS, including my division and the programs it supported, had recently moved into new and more expensive space. Compounding my division's cost-of-space problem was the fact that we now occupied *more* space as well. As might be expected, my division's charges to the programs it supported had increased and the program directors were demanding that I do something about the increase.

The Search for A Solution

Initially, the goal was obvious: Reduce charges to the programs. Clearly, Charges to Programs was the Target Variable. Ah, but how to reduce those charges? Here is where the analysis of structure comes in. Shown below is a diagram depicting the structure of the calculation of COD's Charges to Programs.



Figure 1: The Structure of COD Charges to Programs

The diagram clearly reveals that Charges to Programs result from adding Load to the Direct Costs of Work. That makes both of them Driver variables, but neither of them is directly accessible. We must continue our analysis.

Load is the product of multiplying the Direct Costs of Work by another variable called Load Rate. We can add Load Rate to the list of Connecting variables, but, like Direct Costs and Load, it cannot be accessed directly. On with the analysis.

The Achievement Path: A Workplace Example

As it happens, program directors were quick to suggest I needed to do something about Load Rate. They understood it was used to determine Load and it was Load that had increased. The Direct Costs of Work, which is basically employee labor charges against the program, had not increased.

The two variables that connect to Load Rate are Direct Costs of Work and Indirect Costs, neither of which is directly accessible. Direct Costs had not increased so my attention focused on Indirect Costs. Of these, the only one that had changed significantly was Allocations from Corporate. The basic structure of that variable is shown below.



Figure 2: The Structure of Allocations from Corporate

In the old scheme of things, my division had occupied 17K SQ FT in less expensive space. After the move, it occupied 20K SQ FT in one building and 5K in another, an almost 50 percent increase in space occupied. Reducing Load Rate and thence Load and Charges to Programs, hinged on reducing the amount of space my division occupied, thus reducing the charges for space occupied.

There is a very important point to be made here. Starting with Charges to Programs and working backward through the structure of the constituent programs and on through Allocations from Corporate to Space Occupied, represents a path that leads from the abstract world of measurements and calculations to the physical world of space, facilities, equipment and people. This is how an Achievement Path connects those two worlds.

A New Goal

At this point, I had a new goal: Reduce the amount of space occupied by COD. Space Occupied now became my new Target Variable. But, like the other variables, it is not directly accessible. In any case, the best I could hope for was to find a way of eliminating the need for the 5K SQ FT in Building 2. I had about 3K SQ FT available in Building 1 but that wasn't enough to accommodate the operation in Building

The Achievement Path: A Workplace Example

2. But I did have a measurable goal: Reduce the space occupied by COD from 25K SQ FT to 20K SQ FT. Or said a little differently, my Target Variable was space occupied by COD and its Target Value was 20K SQ FT.

What are the variables that connect to and affect space occupied? They include things like people, the operations they perform, furniture, equipment, filing systems, workstations, foot traffic, etc. The operation in Building 2 had a unique feature; it made use of tub files, literally, large, round wash tubs on legs. They were scattered about most of the 5K SQ FT the operation occupied in Building 2. There was no way they would fit into the 3K SQ FT of space available in Building 1.

The Solution

The space occupied by the operation in Building 2 was driven by the fact that the tub files required lots of horizontal space. The solution was obvious: Shift to a vertical filing system.

To make a long story short, a viable, vertical filing system was located, purchased and installed, the operation in Building 2 was relocated to Building 1, the 5K SQ FT space in Building 2 was turned back to corporate, COD's Load Rate went down, as did Load and Charges to Programs. The program directors were placated.

The Achievement Path

To recap visually, the variables making up the Achievement Path for reducing charges to programs, are shown in Figure 3 below:



Figure 3: The Achievement Path for Reducing Charges to Programs

The Achievement Path: A Workplace Example

In taking aim at the Charges to Programs, I also took aim at the Accessible, Connecting and Driver variables. All were part of the Achievement Path and all were changed along the way.

In action terms, the Achievement Path for reducing charges to programs looked like this:

- Shift to a Vertical Filing System
- Improve Space Utilization
- Reduce Space Required
- Relocate Operation to Building 1
- Reduce Space Occupied
- Reduce Charges for Space Occupied
- Reduce Allocations from Corporate
- Reduce Indirect Costs
- Reduce Load Rate
- Reduce Load
- Reduce Charges to Programs

For those interested in things like financial impact and ROI, the cost of the vertical filing system was a one-time charge of \$16K and the savings from reducing charges for space occupied were \$225K annually. That's a pretty good ROI.

Identifying an Achievement Path

The place to start when it comes to identifying an Achievement Path is with the Target Variable. You work backward from there, identifying any Driver Variables. You continue working backward through as many Connecting variables as are necessary until you can identify Accessible variables. In the workplace example just discussed, I started with Charges to the Programs and worked backward from there until I came to some physical variables, namely, space occupied, space location, space utilization and the kind of filing system used.

It is often the case that the Target Variable is some measured variable (financial or operational). These are also usually calculated values and they are easily decomposed into their constituent variables. Figures 1 and 2 above illustrate the decomposition of the calculated quantity of Charges to Programs.

As you take apart a measured or calculated quantity, you will eventually move out of the world of abstract measurement and into the concrete, physical world of people, materials, equipment, facilities and other tangible items. It is in this physical world that your actions will have their direct, immediate effects. In the physical world, the direction of the effects of actions through the Achievement Path is the reverse of the direction for identifying the Achievement Path (see Figure 4 below).

The Achievement Path: A Workplace Example



Figure 4 – Direction of Path Identification vs Direction of Effects of Actions

Achieving a result, which entails identifying an Achievement Path and then traversing it, typically entails moving from the abstract world of measurement into the physical world of action and back again. An Achievement Path links those two worlds.

For more about what might be termed "the architecture of results" and the analysis of measurement systems, see the papers listed below.

- The Architecture of Results. <u>https://www.nickols.us/ArchitectureofResults.pdf</u>
- Finding the Bottom-Line Payoff of Training. <u>https://www.nickols.us/finding.pdf</u>
- Roadmaps to Results. <u>https://www.nickols.us/roadmaps.pdf</u>
- Understanding Your Company's Performance Architecture. <u>https://www.nickols.us/understandin_archiecture.pdf</u>

The next section of this manifesto presents a summary of what has been presented thus far.

Summary & Closing Comments

Summary

The essence of this manifesto is that to achieve a result is to control relevant aspects of the world about you. Achievement, therefore, is an exercise in control. Accordingly, achievement was examined from a control theory perspective; more specifically, from the perspective of Perceptual Control Theory (PCT). A closed-loop, feedback-governed model was presented. The key elements of that model are listed below:

- Target Variable
- Target Value
- Perceived Value
- Gap
- Corrective Actions
- Disturbances

The model indicates that we compare our desired value for a Target Variable with its perceived or current value. If there is a discrepancy, a gap, we act in ways meant to close that gap. Unless we are overwhelmed by circumstances beyond our control, our actions also compensate for the effects of any disturbances.

Also presented was the Achievement Cycle, which is an iterative framework, consisting of the following four stages:

- 1. Aim
- 2. Act
- 3. Assess
- 4. Adjust

To aim is to set your sights on some variable – the Target Variable – as well as any other variables that lie between you and the Target Variable. These include Accessible, Connecting and Driver variables. It is through this network of variables that the effects of your direct, immediate actions make their way from you to the Target Variable.

A key element in the control of results is The Achievement Path. The Achievement Path runs from those variables you can affect through direct, immediate action, through Connecting variables, to those variables that directly affect the Target Variable. As mentioned above, these are known as Accessible, Connecting and Driver variables. Accessible Variables are always physical variables. Some of the other variables might be as well.

Two examples of an Achievement Path were presented, one having to do with a simple situation at home and the other dealing with a more complex matter at work.

Identifying an Achievement Path requires you to work backward from the Target Variable to the Accessible Variables. The effects of actions, however, travel in the opposite direction – from Accessible variables to the Target variable. An Achievement Path links the abstract world of measurement and calculations to the physical world of action.

Summary & Closing Comments

Another way of summarizing most of what has been presented is in the form a diagram depicting what I see as the eight elements of achievement.

The Eight Elements of Achievement



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Eight Elements of Achievement come into play in achieving an objective. First, is the *Structure* or network of variables making up the situation in which you find yourself. Embedded in that structure is the *Target*, a variable with a value you wish to change. Your *Objective* is to bring the value of that variable to a specified level. If your *Actions* bring about appropriate changes in the structure, you achieve your objective. To do that, the *Effects* of your actions – direct and indirect – must travel along a *Path*, a set of linkages that runs from you through other variables to the Target. *Feedback* – information about the current state of affairs – enables you to gauge progress and make adjustments. *Disturbances* are unwanted, disruptive effects of other actors and factors that, on occasion, can prevent you from achieving the objective.

The preceding concludes the summary.

Summary & Closing Comments

Closing Comments

A lot of ground has been covered in this paper. Perhaps the single most critical element of all that has been discussed is the task of identifying an appropriate Achievement Path that will lead to the result in question. In many cases, we are adequately familiar with the structure of the situations in which we intervene – we know *this* leads to *that*. We know, even if intuitively, the path to achieving our goal. However, in many other situations, we do not adequately understand the structure of the situation and so we must examine it, perhaps even "map" it. Why? Because if we cannot say *this* leads to *that*, we are simply and irresponsibly shooting in the dark, and the achievement of our goal is a matter of sheer luck. In short, getting the Achievement Path right is the key to successful achievement.

References

I have chosen to list here the three Knowledge Worker columns mentioned at the outset of this paper. Each has a link to the .pdf version on my web site.

- 1. The Achievement Cycle. *PerformanceXpress* (April, 2018). ISPI: Silver Spring, MD. <u>https://www.nickols.us/The_Achievement_Cycle.pdf</u>
- 2. The Achievement Path. *PerformanceXpress* (May 2018). ISPI: Silver Spring, MD. https://www.nickols.us/The Achievement Path.pdf
- 3. The Achievement Path A Workplace Example. *PerformanceXpress* (July 2018). ISPI: Silver Spring, MD. <u>https://www.nickols.us/AchievementPathExample.pdf</u>

The next section of this manifesto is a glossary of terms. Below is a paragraph about the author.

About the Author

Fred Nickols is a knowledge worker, writer and columnist, consultant, and former executive who spent 20 years in the U.S. Navy, retiring as a decorated chief petty officer. In the private sector, he worked as a consultant and then held executive positions with two former clients. Currently, he is the *Chief Toolmaker* and *Lead Solution Engineer* at <u>Distance Consulting LLC</u>. His website is home to the award-winning <u>Knowledge Workers' Tool Room</u> and more than 200 free articles, book chapters, and papers. Fred is a longtime member of the International Society for Performance Improvement (ISPI) and writes a monthly column titled "Knowledge Worker" for ISPI's *PerformanceXpress*. Feel free to contact Fred by email.

An Achievement Manifesto Glossary

ACCESSIBLE VARIABLE. A variable with a value that can be changed by direct, immediate action.

ACHIEVE. To successfully realize or bring about some desired state of affairs.

ACHIEVEMENT. A result or outcome gained through effort.

ACHIEVEMENT CYCLE. An iterative cycle consisting of four stages: Aim, Act, Assess and Adjust.

ACHIEVEMENT PATH. Known simply as "The Path," it connects your direct, immediate actions to their effects on Accessible variables, then passes through Connecting variables, eventually affecting the Driver and on to the Target variable. In problem-solving parlance, this is known as the "Solution Path."

ACT. Behave in ways meant to achieve a specified result or outcome.

ACTIONS. The things you do to achieve your objective.

ADJUST. Make modifications based on information about the effects of actions taken. Modifications might be made to the goal or to actions.

AIM. Identify and focus on the variables that constitute the Achievement Path, with special emphasis on the Target Variable.

ASSESS. Take stock of the effects of actions taken, especially those that lie along the Achievement Path.

COMPARATOR. The function in a control loop that compares the Target Value for a Target Variable with its Perceived Value. In the case of "living control systems" like human beings, the comparator is an integral part of the human being in question.

CONNECTING VARIABLE. A variable that lies between those variables you can access and affect directly and the Driver variable(s). They connect the effects of your direct, immediate actions on Accessible variables to the Driver variable(s) and thence to the Target variable.

CONTROL. To achieve and maintain a specified value for a selected or targeted variable, compensating for any disturbances.

CORRECTIVE ACTIONS. Actions intended to close any gap between the Target Value and the Perceived Value of the Target Variable.

CURRENT VALUE: What you perceive to be the existing value of any of the variables making up the Path. Also known as Perceived Value.

DISTURBANCES. The independent effects of other actors and factors on the value of any of the variables making up the Achievement Path, especially the Target Variable. If severe enough, disturbances can disrupt or prevent control and achievement.

DRIVER VARIABLE. A variable that is directly connected to and directly affects the Target Variable.

EFFECTS. The changes resulting from your actions. These can be direct and immediate, or indirect and delayed.

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FEEDBACK. Information about the current state of affairs of all relevant factors that can be compared with the intended state of affairs.

GAP. A difference or discrepancy between the Target Value for the Target Value and its Perceived or Current Value, arrived at by comparing the two. In Perceptual Control Theory, this gap is referred to as the "Error Signal."

GOAL. The desired value of a targeted variable (e.g., a unit cost level of \$1.80 or less), having at its heart some targeted variable (e.g., unit cost) and an accompanying intended value (e.g., (\$1.80 or less).

GOAL DISTANCE. How far the goal is removed from you in space and time.

OBJECTIVE. The intended value for any of the variables along the Achievement Path.

OUTCOME. The effect of action. Synonymous with result.

PERCEIVED VALUE. What you perceive to be the current value of the Target Variable. Also known as the Current Value.

PERCEPTIONS. What your senses tell you about the world around you.

POINTS OF INTERVENTION. Places in the structure of the situation where you can take direct, immediate action and affect Accessible Variables.

POINTS OF EVALUATION. Places in the structure of the situation where you can assess the direct and indirect effects of actions taken, to determine progress and/or success. Can include any variable in the structure.

RESULT. The outcome of action taken. Synonymous with outcome.

SOLUTION PATH. The same as Achievement Path when used in the context of problem-solving.

SURROUNDING STRUCTURE. The network of variables that encompasses Accessible, Connecting, Driver and Target variables. Often referred to simply as "Structure."

TARGET VALUE. The desired or intended value of the Target Variable. Achieving this value is the goal or objective to be realized. In Perceptual Control Theory (PCT), this is referred to as the "Reference Signal."

TARGET VARIABLE. A variable at the heart of your goal, your ultimate aim. In Perceptual Control Theory (PCT), this is referred to as the "Controlled Quantity."

VARIABLE. Some aspect of the environment that can have different values (e.g., room temperature, the position of your car in its lane, the balance in your checking account). Typical workplace variables include sales, profit, earnings-per-share, retention rate, unit cost, inventory turnover, and product quality to name a few.