

Organization Management
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Module No. # 01

Lecture No. # 04

**Longitudinal Thinking and Legacy Factors:
Organizational Growth (Contd.)**

Let us look at the processes of longitudinal thinking and organizational effectiveness, and we will put that in the context of the learning process, because we took the position, that no organization can grow, unless it is in a learning mode; no individual can grow unless he is or she is in a learning mode. And we have discussed the meaning of learning, so, there is no need to repeat it, but obviously, it has essentially ingredient of receiving a feedback and wanting to improve.

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**Longitudinal Thinking &
Organizational Effectiveness in
Learning Process**

- **Organizational learning is the sum total of the individual learning occurring in the workplace¹**
- **There is a marked shift to group learning**
- **Cowan (1995) made use of the Native American Medicine Wheel to describe this model of organizational learning²**
 - **Circular, longitudinal & integrative**

1. Argyris & Schon, 1996; Levitt & March, 1988; Normann, 1985; Weick & Westley, 1996)

2. **Patterns of Learning: Patterns That Bridge Individuals and Organizations** : David Cowan, 1995

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Organizational learning is the sum total of individual learning occurring in the workplace. It is a simplistic definition taken from Argyris and Shaun, Levittin March in 1988, Norman in 1985, and others, to show that it may be a simplistic definition, but many people have **swearred** by it.

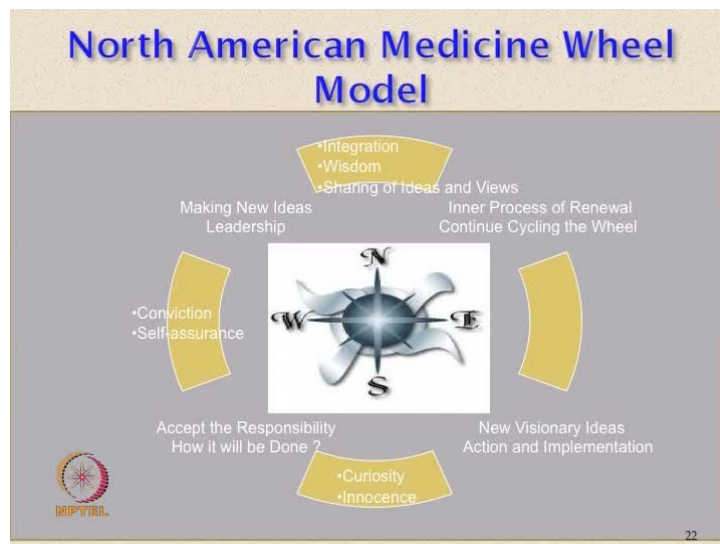
Where is this definition incomplete? This definition is incomplete, is complete because the sum total of individual learning may not be an additive process. I do not say that this was intended by the people who propounded it, but even if it was not intended, they certainly did not clarify it.

It is a very simple principle; say, an organization has four people; it is a small organization, and let us assume, those personalities are A, B, C, and D; the sum total will not be A, B, C, D; the sum total can be X, to emphasize therefore, the personality of an organization is not the sum total of the personality of the individuals. It is not simply an additive function. It can have a personality of its own, because when individuals interact with each other, they throw up a completely different behavioral profile.

Subsequently there was a marked shift to group learning and Cowan in 1995 made use of the Native American Medicine Wheel to describe this model of organizational learning which is circular, longitudinal, and integrative.

Now, it is important to look at the learning traditions of traditional societies, because the traditional societies have lived for a long many years, larger than the modern society ever has. They offer to pooh-pooh any traditional society only because it is a traditional society; it is both childish and uninformed.

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Let us look at the Native American Medicine Wheel. Now, this diagram, for want of a better title is captioned North American Medicine Wheel. What is the kind of learning they had in curative systems?

First of all, as you notice, they decided upon the direction: North, East, South, and West; again, typical of traditional learning systems because it has to do with the sunrise, the sunset, the direction of the wind, and all these impact upon the health. Now, no modern system of medicine talks of North, East, South, and West.

Now, again, this is not a value judgment. If you notice all along my remarks, I desist in getting into any act of faith, any act of a debate, any act of prayers or contamination; that I think is a judgmental factor, and you will have to take your individual positions on it. It is for me to analyze; it is for me to present; it is for me to show to you how it works; which side you are on, and what you believe is your choice.

It begins with curiosity and innocence, goes on to accept the responsibility how it will be done; are you willing to accept it? Then goes to conviction and self-assurance, graduating to making new ideas - leadership, culminating in integration, wisdom, sharing of ideas and views; that evolves into the inner process of renewal, continue cycling the wheel. New visionary ideas, actions, and implementation - they used this wheel to implement a health care system where, curiosity overcame the innocence, led to a sense of responsibility, led to a conviction, new ideas, you integrated it, which led to an inner process of renewal and the cycle continued to led a new visionary ideas, an action and implementation.

The medicinal system had a full cycle effect. That was their philosophy of medicine just as in India; be it Ayurveda or be it Siddha; the system was not curative, and preventive. It is a completely different system of medicine, and when people want to apply yardsticks which applied to a curative system of medicine **to system of medicine** which is essentially preventive, then it is like **to it is like** feeding a goat on the kind of food which a tiger would need.

The physical system of a goat and the physical system of a tiger are totally different. You cannot apply those yardsticks. And then, a whole process of logic starts - Which is superior? Which is inferior? And if you only look at your experiences with different kinds of medicine personally, or in terms of family, you would understand what it is, but

again, that is a debate which I do not want to enter, and all along, I try to keep focusing on organization management.

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This is a diagram merely to help you to understand that the Native American Medicine Wheel describes a model which can be applied to organizational learning. And again, like any other analogy which I have given, like any other quotation which I have given, like any other reference which I have made, it is limited in character, and the rest is irrelevant to the discussion.

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New Premises for Learning

Learning need to be seen as part of every performance and every relationship within an organization.	We need to move from a linear view of learning to one that is circular or spiral.	Movement from Cross-sectional to Longitudinal thinking. Learning can occur on many levels and in different directions.	Our view of learning also needs to change from one that is compartmental to one that is integrative. This means valuing Wisdom rather than Expertise.
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So, what are the new premises for learning? And that is the only way you can integrate the old and the new. In fact, there is a classical book on this issue which has been around for at least 40 years - *The Tradition of Modernity and The Modernity of Tradition*; it takes a very simple view; modernity also creates its own myths; creates its own tradition.

How many of you know, what is the internal circuit of the single line diagram of this room, in terms of its electrical layouts? How do you know that, if you press that switch the light will come along? That is what they have told you and that is what you believe. It is an act of faith you are committing. You do not know the single line diagram of the electrical circuitry of this room; that faith is all right, but if the traditional tribal has a faith in something, he is outdated. It is not that traditional tribal may not be believing in superstition, but is it something confined only to the traditional tribal? Do not the modernists have their own superstition? What is so exclusive about tradition which makes it superstitious?

On thinking, belief is a characteristic of all schools of thought. You believe it because somebody else has said it. In tradition also, they believe it because somebody else said it; what is the big argument? And therefore, at your stage of learning, it is important to realize and recognize the significance of that word with which we would begin the discussion on longitudinal thinking, how do you think? and are you a thinking person? Can you observe? Can you benchmark? Can you analyze? Can you structure? Can you get meaningful derivations from that structure? That is what you should learn as an outcome of an exposure to a course of this order.

The ability to think and the ability to take informed positions, the ability to exercise informed choices, which is why the case method does not have any single correct answer; the case method can have as many solutions as you can logically sustain, and this is something very important. This is a hallmark of open ended thinking where, you can have a large number of answers; each one of them equally right or wrong; there is no, one correct answer. And, that is a hallmark of all organismic systems.

And as I was telling you, organization is an organismic system. So, there is no one way of leading an organization; there is no one way which will produce results, but you need to be scientific in understanding the situation; you need to be scientific in understanding the processes of structuring the situation; you need to be scientific in generating solutions

to better the situation; you need to be scientific in exercising your choices. And above all, you need to be scientific in embedding it in an organization; otherwise, you may have the finest choice, it will not work. That is what organization management is about, and that is why longitudinal thinking is so critical to operating organizations.

At the end of the day, after you have done this course, you will still not be a specialist in organization management. All this notion that you become a specialist by doing two courses in any given area is something to which I would not like to put an objective, but it is so amusing that I do not even want to comment on it. What you would have begun is your processes of understanding organizations.

It is therefore important that the 15 topics around which it circulates be understood in their fundamentals. What we have tried to do is - explain to you the significance of longitudinal thinking, legacy factors correlated to organizational growth, and hopefully, help you to observe correctly, analyze scientifically, and choose in a manner which is sustainable, and creates lasting results.

All this boils down there for to learning. Learning needs to be seen as a part of every performance and every relationship within an organization. I suggest you read this very carefully, and if possible, preserve it in your notes.

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New Premises for Learning

Learning need to be seen as part of every performance and every relationship within an organization.	We need to move from a linear view of learning to one that is circular or spiral.	Movement from Cross-sectional to Longitudinal thinking. Learning can occur on many levels and in different directions.	Our view of learning also needs to change from one that is compartmental to one that is integrative. This means valuing Wisdom rather than Expertise.
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Learning needs to be seen as a part of every performance and every relationship within an organization, and all the four components of this premises of learning are equally significant and seminar.

We need to move from a linear view of learning to that which is circular or spiral. You understand spiral; spiral is that which keeps rotating and rising. That is spiral, but if the basic truths of life are the same, you keep rediscovering them over and over again. Remember my reference to the simple dictum **Satyam Vadha, Dharmam chara**. And I had explained to you the meaning of the word **Dharm** there; it is ethical conduct; it does not mean religious; it means - do your duty. And the word **Dharm** in Indian tradition means something very different to what the word religion means in the Anglo Axon tradition, but that is another story.

The concept of - practice the truth and do your duty, is a concept which can never get dated, and it will confront you in your life over and over again; that is the meaning of circular concept; it keeps coming back; it keeps coming back in human relationships; it keeps coming back in investments; it keeps coming back in work; there is nothing in which it would not come back. Therefore, to think that the world moves in a linear manner is at the best I think a very amusing concept. There is no linearity you build upon each other, but if you think you keep progressing sequentially, that is something which I will like to the comment on.

The movement from cross-sectional to longitudinal thinking, learning can occur in many levels, and in different directions. Now, this again is important concept; learning can occur on many levels and in different directions. You can learn as a person; you can learn as a professional; you can learn spiritually; you can learn in terms of interpersonal dynamics. In fact, learning is an all pervasive phenomena, is an all pervasive situation, and only that person can be successful who is a learning person.

If at the age of 25, you are exactly as you are at the age of 15, that is something wrong. And if at the age of 35, you are exactly as what you are at the age of 25, then again, that is something wrong.

Learning is pervasive; it takes place in all directions, and finally, our view of learning also needs to change for one that is compartmental to one that is integrative; this means valuing wisdom rather than expertise. It does not mean that expertise is irrelevant, but it

is a question of what is it that you value more. This is how the concept of the longitudinal thinking, the legacy factor, becomes a living reality at each moment of institutional functioning, and that is where I want to bring your thinking so that you can analyze it for yourself, and you recognize that legacy factor is not a onetime analysis of a situation, but it is an all pervasive situation in all the components, in all its manners.

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Longitudinal Thinking and Organizational Planning

We need a plan before planning


- ▣ **High-level planning activities**
 - **Establish the high-level goal**
 - **Scan the environment**
 - **Analyze the high-level goal**
 - **Develop strategies and tactics**
 - **Develop schedules and assign responsibilities**

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Longitudinal thinking and organizational planning: We need a plan before planning. High level planning activities requires establishing high level goals. It means scanning the environment, analyzing the high level goals, developing strategies and tactics, developing schedules and assign responsibilities. In fact, since management is the art of the possible, since there is the responsibility of a craft, it is the making of a practitioner, you have to end up by assigning responsibilities; you have to end up by assigning accountability; you have to end up by getting a feedback on what was achieved. That is the difference between management and any other discipline.


Management is the only discipline which insists on the process being incomplete unless the goal is achieved, which is why the definition of an organization is - A group of people brought together for the fulfillment of a given goal. And if you do not share that goal, it is not an organization, whatever else it may be, and in this process, longitudinal thinking and legacy factor, like any other component will be talking of is it critical element.

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Longitudinal Assessment for Grading System in Performance Appraisal

- ▣ **Based on the performance during the performance appraisal term**
- ▣ **Each individual compared to their own beginning level**
- **Assessment by means of**
 - **Process, effort, and participation as tools of learning.**
 - **Practice in generating and developing ideas.**
 - **Thinking skills, problems solving skills, and dexterity skills.**

 **Grades on basis of 'learning to think'.**

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Longitudinal assessment for grading systems and performance appraisal: Now, this is an analysis which shows, how longitudinal thinking becomes live and as a factor in the working of an organization from day to day; otherwise, people thinking - we have, let us give the history; we know the history; longitudinal thinking finishes there. The longitudinal thinking does not finish there. Longitudinal thinking is a reality in all aspects of organizational life and all that organizations do. Or, I have given you a several examples in that direction, and I would like to spend some time discussing with you longitudinal assessment for grading systems in performance appraisal.

It is based on the performance during the performance appraisal term; each individual compared to his own beginning level. Remember, the best assessment is an assessment against two compatible parameters; one is your own potential; the other is the standards that were set. And any appraisal system which does not recognize that there are two inherent parameters of evaluation will go wrong; it does go wrong. What I am sharing with you is so simple, but, alas, it is so often observed in total violation.

When you are talking of the potential, you are talking of the legacy variable also. When you are talking of standards, you are also talking of the legacy variable. And I am emphasizing the word also so that you do not become a monocausarist - a person who starts believing that longitudinal thinking is everything. No. Longitudinal thinking is just one critical component of larger managerial thinking, and let us be very clear on that.

And longitudinal thinking legacy factors effect standards because no performance is an autonomous variable. For every performance, there has to be some preceding performance from which some components come. And no performance is terminal because every performance in turn passes on that task or that product to another set of people to work on. It is always a value chain, and at each level of the chain, everyone who is working on that product on that process is supposed to add value, and the organization implies you for the purposes of adding that value.

So, how can your performance be an autonomous factor? Just think of what it takes for **we** even to deliver this lecture for this group, or for the video casting, the technicians which are needed, the engineers which are needed, the power systems which are needed, the telecasting instruments - which of them is not important? You break the chain anywhere; the telecast will not take place.

My own performance is a factor of the quality of recording, the quality of the acoustics, the quality of editing, and whole host officials, and this is a parallel of what happens in every organization with performance at any given task. Each task is integrated with something before it and is integrated with something which follows. Therefore, each one is inheriting something and each one is bequeathing something. This process of inheritance and bequeathal is in turn internal and circular. So, it is the whole philosophy of work. To confuse it with the linearity is over simplifying management to a point of dysfunctionality. Linear progression is theoretically and operationally impossible. There are always multiple causalities, there are always multiple players, and ultimately the result always depends upon the integration, the fusion, and the synthesis of a very large number of competencies structured in a sequenced manner, not necessarily linear; sequence does not mean linearity. It can be a circular sequence. All that sequence means is something follow something, but it does not have to be in a straight line, and for anyone who believes that sequence is a straight line, he does not understand mathematics. It can be any process where, something follows something else.

The assessment: Each individual is compared to his own beginning level; assessment by means of process, effort, and participation, as a tool of learning practice in generating and developing ideas, thinking skills, problem solving skills, dexterity skills, grades on the basis of learning to think. So, as we conclude the treatment of the subject on legacy

factors, longitudinal thinking, organizational growth, what we began with, let us go back to rewind ourselves with what we are trying to cover here.

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Longitudinal Thinking and Organizational Planning

We need a plan before planning

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I deliberately had this at display for a given period of time so that **you made no confuse** you had no confusion on this longitudinal thinking and legacy factors as correlated to organizational growth. And I hope the way we have gone about the subject matter have helped you to establish this linkage which is essential to understanding organizational growth.

So ultimately your ability to think is that essential. There are several cases which are available, which establishes in a scientific manner. There is a thesis, for example, on a pharmaceutical company which has looked at longitudinal thinking in the growth of the organizational structure of that pharmaceutical company, and ultimately, it was run through a software program, and that thesis is available in the central library of IIT Delhi which talks of management of change or elements of longitudinal thinking in a pharmaceutical company. Take a look at it. We do not have the time here in the session to take up a case, distribute it, and discuss it because that is not the way these sessions go. But all I am trying to say is, **there is** there is plenty of evidence available even in the Indian environment which establishes the relevance of a longitudinal thinking in the understanding of different components of an organization.

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Organizational Legacy and Entrepreneurial Firm Performance

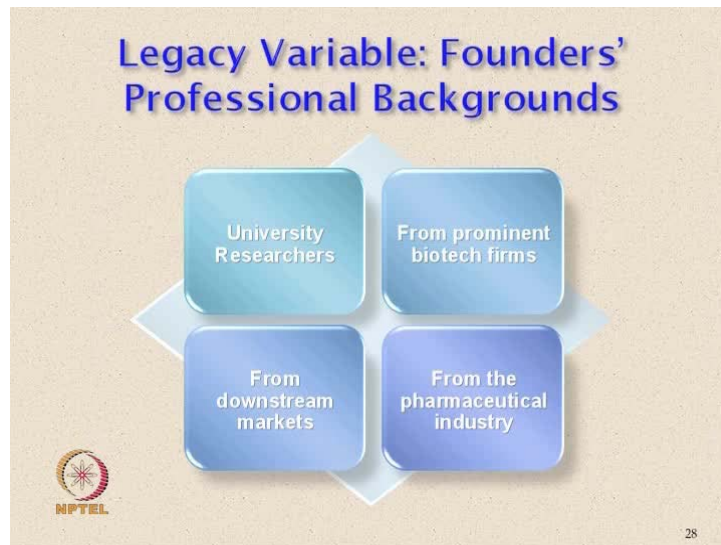
- ▣ **Study done on Swedish and Danish biotechnology start-ups**
- ▣ **Founders' immediate prior experience affects the performance of their new venture.**
- ▣ **Differentiation between financial performance and product development**

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Organizational legacy and the Entrepreneurial firm performance studied on a Swedish and Danish biotechnology start-up just as I was referring to this Indian pharmaceutical company, founders' immediate prior experience affects the performance of their new venture, something which I have already discussed, and differentiation between financial performance and product development is to be understood only on where the finance is coming from, and what are the traditions of finance, how the product is being developed, and what have been the traditions of productive development.

Because when you talk of product development, there is the nature of the material; there is a kind of energy which goes into it; there is the kind of the mold which gives the shape to the manufacture, and all of them have legacy variables.

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So, even at distinction between the financial performance and product development, we will have a look at the legacy factors, the legacy variables founders' professional background, and we have discussed that the evidence of it comes from the university researchers from the prominent Biotechnology firms, from the Pharmaceutical industry, and from the downstream markets. I am basically summing up what I have spent some time trying to discuss with you and analyze for you.

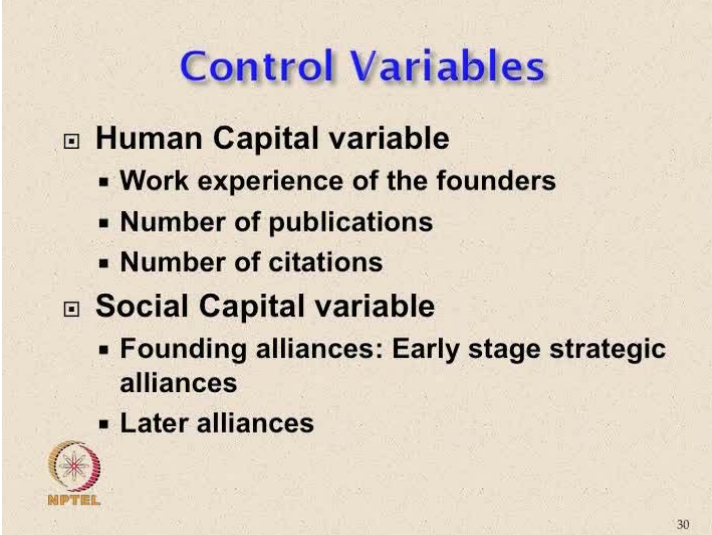
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You will notice that the background has a great role to play in their work management methodology. A university researcher will have tendency to produce innovations that have great product or developmental potential. Pharmaceutical industry firms have better financial performance. From prominent biotechnological firms, one learnt that, firms performed well in product innovation and financial performance.


From downstream markets, we learn that, firms do well in financial terms only. Therefore, the type of organization you have when put together with a type of people who have populated that organization will determine the nature of organizational growth. So, there is no standardized formula of organizational growth, and if you have understood that, I think the larger issue of understanding, the correlation amongst all these factors is relevant.

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Control Variables

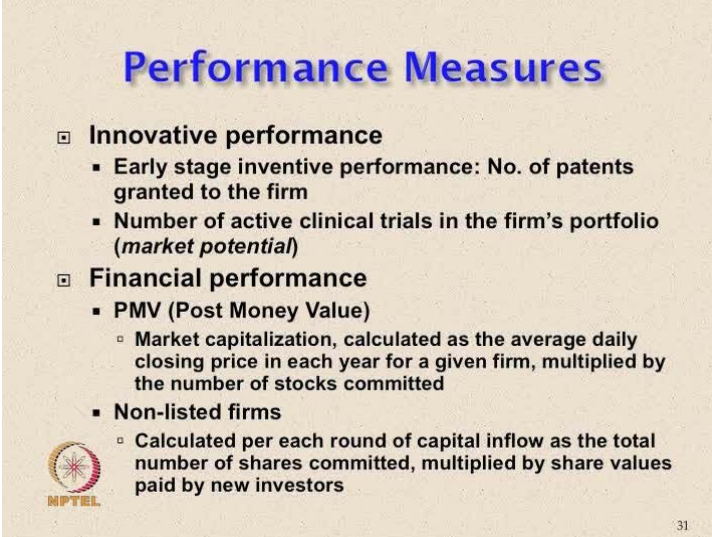
- ▣ **Human Capital variable**
 - **Work experience of the founders**
 - **Number of publications**
 - **Number of citations**
- ▣ **Social Capital variable**
 - **Founding alliances: Early stage strategic alliances**
 - **Later alliances**

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To conclude that, the control variables are human capital variable; the work experience of the founders; the number of publications; the social citations for the social capital bearable founding alliances, later alliances, and for each profession there are a different set of criteria.

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Performance Measures

- ▣ **Innovative performance**
 - **Early stage inventive performance: No. of patents granted to the firm**
 - **Number of active clinical trials in the firm's portfolio (*market potential*)**
- ▣ **Financial performance**
 - **PMV (Post Money Value)**
 - **Market capitalization, calculated as the average daily closing price in each year for a given firm, multiplied by the number of stocks committed**
 - **Non-listed firms**
 - **Calculated per each round of capital inflow as the total number of shares committed, multiplied by share values paid by new investors**

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Finally, I look at the performance measures. How do you measure the impact? You measure the impact by innovative performance. You measure the impact by financial performance.

Early stage inventive performance: Number of patents granted to the firm; number of active clinical trials in the firm's portfolio.

Financial performance: Post money value market capitalization, calculated as the average daily closing price in each year for a given firm, multiplied by the number of stocks committed.

Again, if you are not able to follow the detailed research under pinning of this, it is not material. The important takeaway for you is that this business of longitudinal thinking, legacy factors, and organizational growth, can be measured in specific terms, and so long you are registering the various parameters on which it can be measured. It does not really matter, if you do not know, how to measure it because that is not what the course is about; that would be a separate course with a specialization in longitudinal thinking. Your takeaway is so far, as organization management is concerned, these are measurable variables.

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The results: Effects of legacy, organizational legacies: Organizational legacy plays a substantial role in shaping the performance of firms. So, that is your terminal takeaway. Organizational legacy plays a substantial role in shaping performance of firms, and prior work experience of the founder can be aligned with good performance on a particular performance criteria.

In other words, so long as you register the character of this variables, what you do with it is a factor of the nature of the product line, the nature of the firm, its size, its complexity, and the way it works; go back to what was explained to you in terms of the nature, scope of the subject matter, and organization management.

We shall conclude the discussion on this topic here, and we shall take up a different topic from the next day.

Thank you very much.