



Productivity improvement: Human Resource Development Strategy for Sustainable Growth

Engr. A. N. M. Shahidullah *

Productivity refers to input output ratio and while measuring productivity we focus on various issue like Labour Productivity, profit to value added ratio, Capital, machine and energy productivity, Research and Development, Creativity & Innovation etc., But we mostly ignore the capacity of the manager in order to lead the people and get the job done accordingly. Most significantly, low productivity caused by the inability of a manger to handle people at work.

This paper is focused mainly on the behavioral aspects i.e. intangible factors that hinder productivity. It is needed to emphasis on leader's role on productivity, motivation effects of emotional Intelligence, creativity and innovation, strategy for human resource development etc. to improve productivity

Concept of Productivity:

Productivity is a measure of the efficiency of production. Productivity is a ratio of what is produced to what is required to produce it. Usually this ratio is in the form of an average, expressing the total output divided by the total input.

- * In the widest sense, it may be said that productivity is the measurement of the economic soundness of the means" (Organization for European Economic Co-operation)
- * Productivity as an attitude of mind. It is a mentality of progress, of the continuous improvement of that which exists.
- * It is the certainty of being able to do better today than yesterday and continuously.
- * It is the continuous adaptation of economic and social life to changing conditions.
- * It is the continual effort to apply new & creative techniques and methods.

At the national level, productivity growth raises living standards because more income improves people's ability to purchase goods and services, enjoy leisure, improve housing and education and contribute to social and environmental programs. Productivity growth is important for the organization because it can ensure that the organization can comply its obligations to worker, shareholder, and government and also remain competitive or even improve its competitiveness in the market place.

Employers need to know that worker productivity is the key to an organization's success. If workers are not using their time and resources effectively they are wasting company resources. Unfortunately, measuring productivity can prove to be quite difficult-especially

in industries where work is primarily knowledge based. Traditionally, worker productivity was figured by dividing company revenue by the number of employees. However, this measurement fails to take into account the varying skill levels and job responsibilities of workers within a business. It is not logical to expect that a new entry level officer at your company has the same level of productivity as a mid-level employee with 10 years of experience. Counting billable hours in a manner similar to what is standard at law firm is also not a good idea. When people are working long hours with no time for rest and relaxation, then productivity decline. The goal of assessing productivity should be to encourage people to use their time and resources more effectively instead of simply putting in longer hours at their jobs.

Most experts now believe that assessing worker productivity requires a careful balance between objective and subjective measurements.

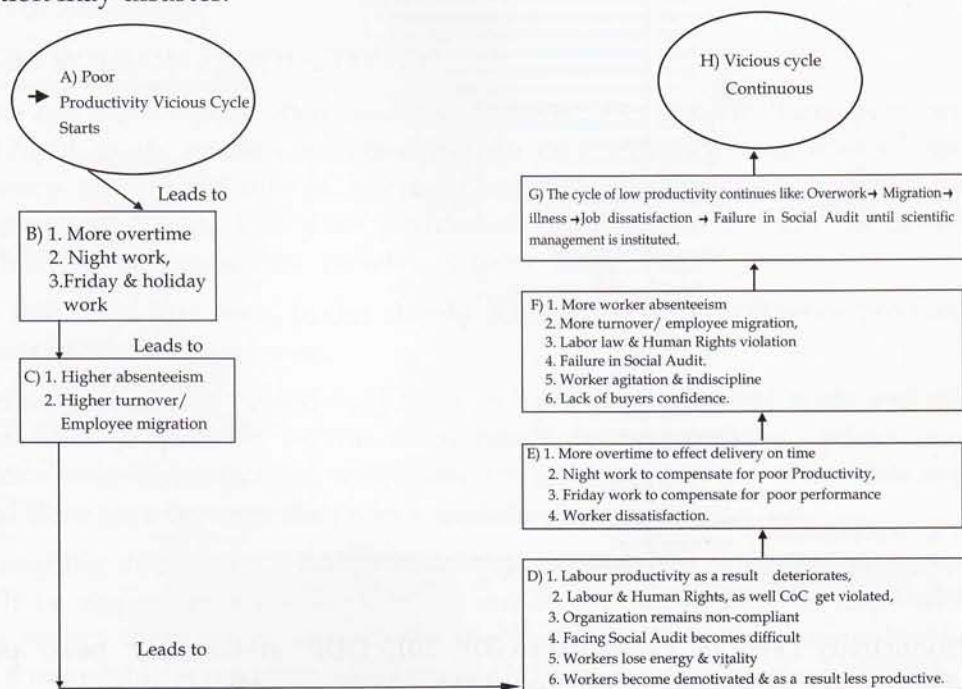
Objective performance data is relatively easy to find. For example, the number of sales calls made, reports written, products sold, or conferences attended can provide input into how an employee is utilizing his/her time.

To find subjective performance data, however, you'll need to ask the employees within a particular organizational department to assist in creating a system to measure worker productivity. Since managers are not generally involved in the day-to-day operation of a company, workers can provide valuable insight into what tasks are required on a regular basis. In situations where workers must perform as part of a team, measuring productivity presents additional challenges. Clashing personality types within a team may limit worker productivity. The consequences of low productivity may not be visible when it is co-related with profit.

VICIOUS CYCLE & LOW PRODUCTIVITY

Low productivity always brings in a vicious cycle in an enterprise. The vicious cycle continues and becomes more complex until right management technique is launched and pursued.

If poor performance is not intervened in appropriate time and in right earnest, the organization may disaster:



Six Factors Contributing Higher Productivity for Sustainable Growth

1: LABOR PRODUCTIVITY:

Labor productivity is the value of goods and services produced in a period of time, divided by the hours of labor used to produce them. Labor productivity measures output produced per unit of labor, usually reported as output per hour worked or output per employed person. Increases in labor productivity are driven by technological change, improvements in efficiency, improvements in the quality of labor and capital deepening (when more capital is added to a given amount of labor). When the word productivity is used, it is generally means labor productivity unless explicitly stated otherwise.

From the national perspective, the measure of labor productivity is defined as GDP per hour worked. There is a fundamental connection between productivity and economic growth:

Economic growth rate = Growth rate in labor productivity + Growth rate in total employment

An increase in labor productivity fundamentally affects the economic growth rate. Specifically, increasing labor productivity is essential to expanding the scale of an economy without relying on an increase in the number of workers. There is also a relationship between wages and productivity. When the labor distribution rate is constant:

Growth rate in labor productivity = Rate of increase in wages

Thus, as long as there is no change in the labor distribution rate, an increase in labor productivity is tied to an increase in wages. This means that an increase in productivity plays a major role in the prosperity of nations, corporations, and individuals. Productivity is therefore a crucial indicator that has been widely used in measuring economic and corporate well-being.



Labor Productivity Level by Per-Worker GDP, 2013 GDP at constant basic prices per worker Source: APO Productivity Database 2015

- the intensity of labor-effort, and the quality of labor effort generally are the creative activity involved in producing technical innovations.

These aspects of productivity refer to the qualitative, rather than quantitative, dimensions of labor input. If you think that one firm/country is using labor much more intensely, you might not want to say this is due to greater labor productivity, since the output per labor-effort may be the same.

There are both advantages and disadvantages associated with the different input measures that are used in the calculation of labor productivity. It is generally accepted that the total number of hours worked is the most appropriate measure of labor input because a simple headcount of employed persons can hide changes in average hours worked, caused by the evolution of part-time work or the effect of variations in overtime, absence from work or shifts in normal hours. However, the quality of hours-worked estimates is not always clear.

In contrast, total employment is easier to measure than the total number of hours worked. However, total employment is less recommended as a measure of labor productivity because it neither reflects changes in the average work time per employee nor changes in multiple job holdings and the role of self-employed persons (nor in the quality of labor).

2. MOTIVATION AND PRODUCTIVITY

The relationship between motivation and productivity is more substantial than simply a psychological connection.

- (a) Gender Differences
- (b) Age Differences
- (c) Caring Responsibilities
- (d) Hours Spent on Work
- (e) Sources of Motivation

3. LEADERS ROLE ON PRODUCTIVITY

Employees are impacted by their leader's behavior. An organization's performance is directly linked to its leader's effectiveness. In fact, extraordinary leaders can make extraordinary employees out of average employees while poor leaders can turn extraordinary employees into poor performers. And it has nothing to do with the organization's systems, processes, policies, or procedures.

There are five areas that every leader should consider to better influence productivity in their organizations. These areas are:

- i. Defining goals and objectives. Clarity around organizational goals and objectives and how projects fit within them needs to be provided. When employees understand the projects on which they are working, they are better able to identify and close gaps between the projects and the organizational goals.
- ii. Assigning ownership. For any work undertaken in the organization, there should only be one owner of the work. When one owner-employee takes responsibility for the project, there is a greater chance of project success. If there are multiple owners or if ownership is not clear, efficiency and productivity suffers.

- iii. **Managing employee expectations.** This includes ensuring employee job satisfaction and providing incentives and rewards. If employees are empowered and receive appropriate support (e.g., training, resources, etc.) to complete their work, their job satisfaction increases. In addition, recognizing and rewarding employees helps increase their self-esteem and further strengthens their resolve to continue working hard on behalf of the organization.
- iv. **Communicating.** This is a two-way experience. Leaders need to be clear in their communications with employees, but they also need to listen to their employees and act on what their employees are telling them. By engaging in open communication, leaders build trust with their teams, further empowering productivity.
- v. **Innovating.** Without innovation, organizations will not grow. Leaders need to embrace and encourage Innovation & Creativity in the workplace. Creating or inventing/ re-inventing new markets, products and services - that is how successful organizations thrive.

A core business goal, productivity is under the direction of leaders. Leaders who are able to motivate and inspire their employees will be the leaders of successful organizations. Those who do not, may soon find themselves out of work.

Often when leaders talk about increasing productivity, what they really mean is that they think people should work harder. This is not a very motivating concept because what they are actually saying is that they do not believe their teams are working hard enough. This actually has the opposite effect, and it demotivate teams. It just isn't good leadership.

4. Benchmarking for Productivity

Benchmarking is a systematic process of comparing processes and performance against others, to improve business practices.

Benchmarking may be performed internally by comparing similar operations or functions within an organization, or externally against other organizations. These could include competitors or organizations with exemplary practices in other industries. Following table shows the common types of benchmarking used by organizations.

Types of Benchmarking;

Type	Definition
Internal	Compare similar activities within an organization
Competitive	Compare against direct competitors within the same industry
Functional/ Process	Compare against other organizations identified to be leaders of that particular function or process. Such organizations need not be from the same industry
Generic	Compare against organizations recognized as having world-class products, services or processes.

Benchmarking compares indicators and processes or functions that are critical to an organization's competitive advantage. Based on the benchmarking findings, organizations can put in place specific action plans to adapt and implement the best practices to improve their productivity.

5. Emotional Intelligence (EI) and Productivity:

Emotional Intelligence is the capacity for recognizing our own feelings and those of others for motivating ourselves and for managing emotions well in us and in our relationships, which are the key to behavioral productivity.

Emotional Intelligence reflects one's ability to deal with daily environmental challenges and helps predict one's success in life, including professional and personal pursuits.

Why Emotional Intelligence important?

Most people spend more time than they would like thinking about when they lost control or misunderstood others. To mature and to be congruent in the company of others, we each have to connect with our inner selves and our uniqueness.

A high Intelligence Quotient (IQ) is not enough to guarantee success in life. When you have a high Emotional Quotient (EQ) you are proficient at interpreting the emotional roots to your own thinking and behavior and choosing your actions to influence outcomes. You are also capable of making good insights into the behavior of others.

We all know that changing behavior in a sustained and genuine way is extremely difficult. Change Agents need both a high EQ and practical techniques for dealing with others when stressed by change issues.

For many leading companies, EI has become the core of soft skills and management competencies. Whereas IQ is more or less a given, EQ can be increased by your own development even as an adult. The distinction is about your way of being, not of doing.

Improvement cannot be achieved solely by attending a training course or reading a book to acquire knowledge. Skills associated with emotional intelligence develop throughout life. Training and sustained development activity at work can improve emotional competence. This makes assessments a valuable tool for identifying an individual's improvements and for measuring the effectiveness of organizational productivity development program as a whole.

There is no single view of what EI is; there are a number of different views based on situation, individual and related constraints.

Emotional Competency Inventory (ECI)

Daniel Goleman considers an emotional competence to be a learned capability based on Emotional Intelligence that contributes to effective performance at work. Daniel Goleman and Hay/McBer have defined a set of emotional competence which are the basis of the Emotional Competence Inventory (ECI) and differentiate individuals by his or her Emotional Intelligence. The framework falls into four clusters and each has a set of competencies. ECI can be used to evaluate the individuals within an organization, as well as the whole.

Emotional Competency Inventory (ECI) Clusters

- i) Self-awareness: Capacity for understanding one's emotions, one's strengths, and one's weakness:
 - Emotional self-awareness,
 - Accurate self-assessment
 - Self-confidence.
- ii) Self-management: Capacity for effectively managing one's motives and regulating one's behavior:
 - Self-control,
 - Trustworthiness,
 - Conscientiousness,
 - Adaptability,
 - Achievement
 - Initiatives.
- iii) Social Awareness: Capacity for understanding what others are saying and feeling and why they feel and act as they do
 - Empathy,
 - Organizational Awareness
 - Service orientation.
- iv) Social Skills: Capacity for acting in such a way that one is able to get desired results from others and reaches personal goals
 - Developing others,
 - leadership,
 - Influence,
 - Communication,
 - Changes catalyst,
 - Conflict management,
 - Building teamwork
 - Collaboration.

Clusters i) and iii) are about awareness of self and others.

Clusters ii) and iv) are about management of self and others.

Clusters i) and ii) are about internal capabilities while iii) and iv) are externally manifested capabilities.

The competencies in the first three clusters must be in place in order for an individual to be effective in the last cluster. Daniel Goleman suggests that last cluster mainly drive the organizational productivity.

6. Creativity & Innovation in Organization

Generally innovation means the practical application of creative Ideas. The people who generally didn't block their innate creativity and who focus their ability in various aspects of life are generally regarded as creative people

Creative Thinking is the innate talent that someone were born with and a set of skills that can be learned developed and utilized in organizational problem solving.

Blocks to Creativity included:

- Negative attitude,
- Following rules,
- Assumptions,
- Excessive stress,
- Fear of failure
- Believing that someone is not really creative.

There are also blockbusters included in the following:

- Attitude adjustment
- Breaking Old Rules
- Checking Assumptions
- Stress Safety Valves
- Risk Taking Techniques
- Creative Beliefs

The concept of innovation is quite diverse, depending mainly on its application. For example, the success of the firm means increased revenues, access to new markets, increased profit margins among other benefits.

Innovation has become a way of life for the firms to survive in the face of global competition. The usual tendency of the management to award the dynamic changes and development and to run the firms alone on the basis of conventional measurement of efficiency/ growth like IRR, ROI, market share are not paying off in the long run. The R & D is needed to be functional and the Creativity & Innovation well-nursed and managed.

The management of innovation has various dimensions which bring success to the firms.

These are:

- a. Capability and vision of management to support the right innovations;
- b. Motivation of the executives to innovate;
- c. Sharing the high cost of R & D;
- d. Parallel development;
- e. Product churning;
- f. Reverse engineering.

THE GLOBAL CREATIVITY INDEX					
Rank	Country	Technology	Talent	Tolerance	Global Creativity Index
81	Mongolia	75	47	98	0.370
82	Thailand	38	84	105	0.365
83	Saudi Arabia	50	59	122	0.362
84	Kazakhstan	72	54	98	0.357
85	Senegal	—	112	64	0.355
86	Kuwait	108	—	39	0.351
87	Afghanistan	—	124	54	0.349
88	Turkey	58	53	123	0.348
89	Mali	—	114	64	0.347
90	Mozambique	63	117	50	0.346
91	Bermuda	104	41	—	0.346
92	Nepal	97	99	29	0.343
93	Honduras	60	93	89	0.319
94	Lebanon	—	55	132	0.317
95	Bangladesh	90	101	43	0.316
96	Benin	—	101	86	0.311
97	Paraguay	90	86	69	0.303
98	Ethiopia	103	95	42	0.295
99	India	52	92	108	0.292
100	Uzbekistan	74	111	64	0.288
101	Central African Republic	—	128	67	0.286
102	Algeria	68	77	116	0.279
103	Armenia	83	50	133	0.269
104	Tunisia	—	72	131	0.260
105	Moldova	85	57	128	0.256
106	Sri Lanka	100	96	61	0.255
107	Qatar	58	122	—	0.255
108	Bosnia and Herzegovina	77	70	119	0.253
109	El Salvador	109	100	50	0.248
110	Azerbaijan	98	78	92	0.244

In the global creativity index Bangladesh ranking is 95. The Global Creativity Index 2015, Martin Prosperity Institute, Rotman School of Management University of Toronto

(An innovative people will be the backbone of the envisioned society in 2021. These individuals will acquire appropriate knowledge, skills, and abilities through a strong learning system consisting of pre-primary, primary, secondary, and tertiary education; and through the application of research, science, technology, and innovation. Innovation will be fostered in education and at work. Creative citizens will be the driver of Bangladesh's journey to middle income and high HDI country status by 2021. The creation of these innovative people will demand vast information technology efforts during the Perspective Plan period. ICT will be the vehicle through which a Digital Bangladesh will be created. This will raise efficiency and productivity across all sectors of the economy, including agriculture, health, education, training, and e-governance, and will help to bring greater transparency in governance.)

(Perspective Plan of Bangladesh 2010-2021).

Among the different possibilities to innovate, those related to product or process innovations are known as technological innovations. Other types of innovations can relate to new markets, new business models, new processes and organizational methods. Or even new sources of supply.

People often confuse between 'innovation processes' and 'continuous improvement processes'.

Innovation to be characterized as such, it must cause a significant impact on the production technology, pricing structure, market share and company's revenue, etc.

Continuous improvements are not usually able to create competitive advantages of medium to long term, but they are able to maintain the competitiveness of the products in terms of cost.

The Global Innovation Index 2016

Global Innovation Index 2016 rankings (continued)

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Efficiency Ratio	Rank	Median: 0.65
Ethiopia	24.83	110	LI	7	SSF	14	0.83	18	
Madagascar	24.79	111	LI	8	SSF	15	0.74	35	
Mali	24.77	112	LI	9	SSF	16	0.74	37	
Nigeria	24.46	113	LM	34	NAWA	18	0.49	111	
Nigeria	23.15	114	LM	23	SSF	17	0.67	60	
Nepal	23.13	115	LI	10	CSA	8	0.58	94	
Nicaragua	23.06	116	LM	24	LCH	18	0.41	120	
Bangladesh	22.86	117	LM	25	CSA	9	0.52	107	
Cameroon	22.82	118	LM	26	SSF	18	0.58	93	
Pakistan	22.63	119	LM	27	CSA	10	0.64	71	
Venezuela, Bolivarian Rep.	22.32	120	HI	49	LCH	19	0.46	114	
Benin	22.25	121	LI	11	SSF	19	0.43	118	
Burkina Faso	21.05	122	LI	12	SSF	20	0.28	127	
Burundi	20.93	123	LI	13	SSF	21	0.39	122	
Niger	20.44	124	LI	14	SSF	22	0.36	125	
Zambia	19.92	125	LM	28	SSF	23	0.64	72	
Togo	18.42	126	LI	15	SSF	24	0.36	124	
Guinea	17.24	127	LI	16	SSF	25	0.49	112	
Yemen	14.55	128	LM	29	NAWA	19	0.34	126	

Source: The Global Innovation Index 2016, World Intellectual Property Organization

Requirements for Innovation

A complex balance of factors has been identified that are necessary for innovation to occur in the organization. These factors include:

- * time to innovate (including incubation time)
- * intrinsic motivation
- * clear lines of communication
- * cooperation across different functional department
- * an intuitive personality
- * mental flexibility
- * passion (freedom to make choices and freedom to make mistakes)
- * celebration of success

CONCLUSION:

This paper discussed six factors that affecting productivity in organization. We can easily envisaged through assessing our working environment, organizational culture and structure, stress level of worker, level of motivation, level of job satisfaction and many more issues that affects directly productivity of the employees. Introducing hi-tech machine, ICT application, quality material, layout of the factory surely contribute to productivity but the lack of intrinsic motivation, improper role of leaders, absence of emotional intelligence, absence of creativity and innovation hinders productivity. Therefore it is the time to undertake more empirical and action research to address this issues including measuring productivity in organization and national level.

Productivity measurement is an important means to an end. It provides valuable information on how an organization is performing, where it would like to be and how it can achieve goal. Usually in organization behavioral aspects of productivity are not that much emphasized. Proper attitude and behavior are the back bone for the innovative organization

Productivity measures are only useful if they reflect the goals and objectives of the organization. This requires commitment from senior management, teamwork, participation from all employees, innovative culture in the organization.

RECOMMENDATIONS:

1. Future of the country as mentioned in "Perspective Plan of Bangladesh 2010-2021" depends on skills in "Creativity, Innovation & Productivity". Thus we need to modernize our education system from very beginning, like starting from pre-school up to professional higher education.
2. Special and well-conceived effort should be undertaken to improve the capability of human ware and more specifically through enhancing emotional competencies.
3. ICT infrastructure need to improve and also to ensure availability of information system throughout the country.
4. In order to achieve long term goal and also to focus on vision 2021 & vision 2041 as declared by the Govt. it is really essential to consider "Creativity & Innovation" as a thrust area for any organization. Govt. may also consider the concept of "National Creativity & Innovation day" for enhancing national productivity movement.
5. In organizational Human Resources Development process "Creativity & Innovation" need to consider as a generic area of "Training & Development" for all organization to improve organizational productivity.
6. The human rights issues shall get extra priority for all organization.

References:

1. Technology Management and Development of Nations;
Dr M Anwarul Azim, Ex Vice Chancellor DUET
2. Measuring Productivity: OECD Manual
3. A guide to Productivity Measurement-Spring Singapore
4. Emotional Intelligence-- Jill Dann.

Engr. A. N. M. Shahidullah *

Senior Management Counsellor
Bangladesh Institute of Management