Snapshot of Personnel Productivity Assessment in Indian IT Industry

Thamaraiselvan Natarajan, NITT-National Institute of Technology Tiruchirappalli, India
Saraswathy R. Aravinda Rajah, NITT-National Institute of Technology Tiruchirappalli, India
Sivagnanasundaram Manikavasagam, NITT-National Institute of Technology Tiruchirappalli, India

ABSTRACT
Measuring the productivity of employees has been one of the concerns of IT organisations globally. It is indispensable to calculate the cost of the project vis-a-vis the time estimate. While calculating the lines of coding (Loc) has generally been the common criteria for programmers, it is not always considered an effective measure of the actual work done. The time spent on activities like attending training programmes, participating in meetings, co-coordinating with colleagues, or conceptualising, is presumably unaccounted. Questions lurking unanswered relate to the effective criteria and international benchmarks. Amusingly most companies have their own home-grown productivity calculators to track the progress of their projects. Productivity measurement is equally important for an organisation as well as an IT worker. Awareness of productivity paves way-for mutual progress-self and the organization. This paper, through illustrative-case examples, provides a holistic perspective of personnel productivity assessment methods used in Indian IT industry.

Keywords: Data Envelopment Analysis, Economic Value Added, Employee Engagement, Function points Analysis, Knowledge Worker Productivity Assessment, Personnel Productivity Assessment Methods

INTRODUCTION
The computer software industry in India is in the midst of phenomenal growth. The annual growth rate of the industry has been above 50% for the past three years. Many companies have posted a growth rate of over 100%. Revenue growth in IT/ITES industry spurted from $1 billion in 1997 to an approximate figure of $60 billion during the financial year 2009-10. Rising wage cost and the desire to move up the value chain for software services has prompted many Indian firms to go in for personnel productivity enhancement. Human factor forms the critical input in software. Flow in the IT/ITES business to India also saw an upsurge in the number of employees in the recent years. Reckoning the individual employee’s contribution to the overall profitability of the concern helps to gauge...
the effectiveness of the company HR policies and other decisions.

With a number of IT/ITES companies coming up in India in the recent years, understanding how the company’s key investment fairs in the industry helps in restructuring the company policies to face the competitors effectively. Competing successfully in an environment surrounded by the MNCs who have a great experience in the field requires proper data and strategy.

Fixed-fee, time-and-material, or minor variations of the same are the types of contracts used in export projects in the Indian software industry. The deliverables as well as the deadline for the project is decided in a fixed-fee contract. The contract may include penalty clauses for late delivery and for poor quality. The client pays on a man-hour basis and the project team size is decided in consultation with the client in a time-and-materials contract. Focusing simultaneously on decreasing costs while increasing software productivity is the order of the day due to shifts in economic conditions. As the cost of software of big software companies are shooting up tremendously improving software personnel productivity is highly imperative. Measuring the productivity of employees has been one of the concerns of IT organisations worldwide. From conducting objective and subjective manual research and calculations to conducting complex performance appraisals systems, numerous ways have been devised to identify the importance of each employee. Such ways or methods to measure employee productivity are called Productivity Metrics.

The article is structured as follows: This paper begins paper begins with an introduction to Indian IT companies, subsequently an overview of knowledge worker, knowledge worker productivity, difference between manual work and knowledge work is given. The next section presents the literature review. We then introduce and define the concept of productivity assessment methods followed in IT companies, followed by elaboration of case examples of personnel productivity assessment methods followed in Indian IT companies. Implications of the approach are then considered, limitations noted and future research direction outlined and closes with a conclusion.

OVERVIEW

People who, as a primary aspect of their work, create knowledge, share it with others, or apply it in decisions and actions. Most of what they do takes place inside the brain. The measure of the efficiency and effectiveness of the output generated by workers who mainly rely on knowledge than on labour in the course of production process is known as knowledge worker productivity. Knowledge work is invisible, holistic, and ever changing. Situational knowledge is used by knowledge workers to get things done in a dynamic environment. Mostly knowledge workers are formally educated. They obtain knowledge through an amalgamation of education, experience, and personal interaction. They then use knowledge gained to holistically achieve organizational goals in a dynamic environments. This work is generally project oriented.

At the moment there is currently no standard measurement of knowledge work productivity. Based on categorization of research spanning back to the 1940s divulges that knowledge work productivity has mainly been analysed along the dimensions of: quantity, cost, quality, timeliness, autonomy, project success, customer satisfaction, creativity, responsibility level, perception, and absenteeism, in addition to assessments based on efficiency and effectiveness.

Knowledge work can eventually be judged on the occurrence or non-occurrence of three things: When something successful that never existed previously, is now up and running; when something successful that existed previously has been improved or expanded; or 3) when something unsuccessful that existed previously has been stopped. Based on the speed with which it is accomplished, and the cost required to finish the job productivity could be adjudged.
Related Content

An Empirical Evaluation of E-Government Inclusion Among the Digitally Disadvantaged in the United States
www.irma-international.org/article/empirical-evaluation-government-inclusion-among/46632/

A Road Map for the Validation, Verification and Testing of Discrete Event Simulation
www.irma-international.org/chapter/road-map-validation-verification-testing/14064/

Knowledge Flow Identification
www.irma-international.org/chapter/knowledge-flow-identification/13908/

Knowledge Management Enablers within an IT Department
www.irma-international.org/chapter/knowledge-management-enablers-within-department/4598/

Enabling B2B Marketplaces: The Case of GE Global Exchange Services
www.irma-international.org/article/enabling-b2b-marketplaces/44559/