

The different  
interrelated  
components that  
influence  
performance



The construction industry is a very dynamic industry in which accommodates different uncertainties regarding new technologies, budgets, and development processes, in order to cope with these uncertainties, different interrelated components that influence performance should be considered. Performance measurement has influenced many construction companies, government sectors, clients, and other project stakeholders.

Navon(2005) stated that a control system is an important element to identify factors affecting construction project effort. For each of the project goals, one or more project performance indicators are needed. Performance measurement and benchmarking is the cornerstone for challenging any industry to become world class (Beatham et al. 2004). Amaratunga(2001) stated that “you can't manage.

What you can't measure” and Hayward(1998) added “if you can't measure it, how can you improve it”. Project success means different to different stakeholders. A project that may seem successful to the client may be a completely unsuccessful venture for contractors or end users. The traditional approach to evaluating the performance of a project relied on three indicators: cost, time, and quality. These financial measures of performance have been the sole measures of company's success.

Financial measures are useful, but they tend to measure the past. Kagioglou et al. (2001) argued that the three traditional indicators are lagging and fail to provide a balanced view when measuring. Neely (1999) stated that these types of measures are criticized because they: 1. Lack strategic focus and fail to provide data on quality, responsiveness and flexibility. 2.

Do not encourage continuous improvement. It has also been observed that exclusive reliance on these financial indicators or measures in management systems only short term behavior and don't accurately reflect the interests of stakeholders; fail to provide information on what customers really want; do not identify how competitors are performing; lack strategic focus and fail to provide data on quality, responsiveness and flexibility; give misleading signals for continuous improvement; and report on outcomes but do not communicate the drivers of future performance. To sustain competitiveness and to survive in a national and international market, construction companies should properly understand how they are currently performing and how they need to perform in the future. Hronec (1993), define performance measures as the vital signs of the organization, which "quantify how well the activities within a process or the outputs of a process achieve a specified goal". Neely et al. (1990) went on to propose definitions of performance measurement, a performance measure and a performance measurement system. These were: Performance measurement can be defined as the process of quantifying the efficiency and effectiveness of action." A performance measure can be defined as a metric used to quantify the efficiency and/or effectiveness of action.

"A performance measurement system can be defined as the set of metrics used to quantify both the efficiency and effectiveness of actions." Effective performance measures can let us know, how well we are doing, if we are meeting our goals, if our customers are satisfied, if our processes are in statistical control, and if and where improvements are necessary. Cheung et al. (2004), developed a web-based construction project

performance monitoring system to help project managers monitor and assess project performance. Performance measurements are objective quantitative indicators that are designed to track particular states of performance such as productivity, effectiveness, efficiency, customer satisfaction, quality and cost. Performance measurement is the regular collecting and reporting information about the inputs, efficiency (Takim et al, 2003).

The measurement of organizational performance is different from the measurement of project performance (Lin and Shen, 2007). Key performance indicators should be at the heart of every performance system. In 2003, private companies have spent a 1. 5 billion £ on tools for performance measurement (Edwards and Thomas, 2005).