

OPM[®] : A SYSTEM FOR ORGANISATIONAL PERFORMANCE MEASUREMENT

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Abstract

The CSIRO Organisational Performance Measurement (OPM[®]) system is based on the principles of Alignment, Process Thinking and Practicability. The system starts at the **strategic level** to determine external measures driven by stakeholder perspectives of the organisation’s performance. The system then works through the organisation to align organisational and operational measures with this focus. A set of Key Performance Indicators operates at the **tactical level** enabling the prediction and management of organisational performance. At the **operational level**, measures are utilised for monitoring, control and improvement of the way in which the organisation creates and delivers its products and services.

Introduction

CSIRO Australia is currently implementing its OPM[®] system for organisational performance measurement. The system has been developed from empirical case study based research in both large enterprises and SMEs (small and medium enterprises). This research investigated ways of helping organisations work out what performance measures they need in place to monitor all aspects of organisational performance. The purpose of this paper is to explain the basis of OPM[®] and to describe in broad terms the way it is being implemented in Australian enterprises to provide them with effective organisational performance measurement systems.

We first provide the findings of the research. We then discuss the principles underlying OPM[®], and the overall system for measurement that serves to unify and focus the work of the enterprise on its strategic goals. Next, we address the practical issue of how to deploy OPM[®] effectively throughout an organisation. Finally, we describe briefly how OPM[®] is being made available to the wider community.

The reader is referred to Dransfield *et al.* (1999) for a more extensive discussion of the theory underlying OPM[®] and the role of Statistics and statisticians in its effective deployment.

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Performance Measurement Research

CSIRO has worked with large Australian enterprises for many years to improve their approaches to performance measurement. A federally-funded project initiated in 1995 extended this work to incorporate SMEs. This research was undertaken with a variety of enterprises representing different sizes (from small to large) and industries (public, private and the not-for-profit sectors). The objective of the first phase of this initiative was to ascertain the status of performance measurement systems. For a report on this work, see Barnes *et al* (1998).

The common themes identified in this research were:

- a lack of alignment between strategic intents of the enterprise and what is actually measured and reported
- information that is limited in scope – usually just focussed on financial performance
- information that does not support measurement and evaluation across the range of management levels and roles
- information that is largely operational
- a lack of data and information to evaluate performance at the tactical level: typically, only aggregated operational data are used to assess organisational performance
- scant attention to consistency of measurement (*e.g.* through the use of operational definitions)
- lack of processes to ensure that relevant data are available in a timely fashion
- approaches to measurement that reflect little or no understanding of variation
- approaches to measurement that reflect little or no understanding of the management and improvement of processes
- the use of presentation formats that do not assist the appropriate analysis and interpretation of the data (*e.g.* limited use of appropriate graphical methods for displaying data and information)

The OPM[®] system, comprising a framework and an assessment/implementation methodology, has been developed to assist organisations to address the above deficiencies in their performance measurement systems.

The Underlying Principles of OPM[®]

The OPM[®] approach to measuring organisational performance is based on three fundamental principles, relating to **Alignment**, **Process Thinking**, and **Practicability**.

Alignment

It is a truism that ‘Measurement drives Behaviour’. Accordingly, the selection of performance measures must serve to encourage people to align their efforts with the strategic directions of the enterprise. In particular, the OPM[®] approach emphasises the importance of alignment between measures relating to:

- the ultimate outcomes or impacts desired by the enterprise

- the way in which the enterprise is managed to produce the required outputs including consideration of performance management issues such as:
 - measurements relating to each individual’s Authority, Accountability and Responsibility
 - the Reward and Recognition system
- process metrics linking clearly to desired outcomes, at all levels of the enterprise

In this last regard, a paradigm due to Myron Tribus provides a very helpful guide to developing measures in any given circumstance:

- What products or services are produced and for whom?
- How will ‘quality’, or ‘excellence’ of the product or service be assessed and how can this be measured?
- Which processes produce these products and services?
- What has to be measured to forecast whether a satisfactory level of quality will be attained?

Thus, the principle of Alignment addresses a wide range of issues: ensuring constancy of purpose, clear job descriptions and clarity about what constitutes a job done well, focusing improvements in areas of priority, and so forth.

Process Thinking

While alignment may be considered to be primarily associated with planning and deployment, process thinking primarily addresses the management system itself, that is, the design and operation of organisational processes to deploy strategic intent and to create and add value for stakeholders. The measurement system should be linked appropriately with system and process monitoring, control and improvement. Improvements in organisational performance are generated through the improvement of the processes. Whereas traditional organisations are often described in hierarchical structural terms typically related to functions, contemporary organisations pursuing ‘business excellence’ are more likely to be described in terms of core (business) processes acting in concert to form a system. Core processes are broad cross-functional processes that constitute the means by which an enterprise delivers its products and services. Process thinking is concerned with understanding the influences on, and drivers of, performance in all processes, without the constraints imposed by vertical organisational structures. Closely allied to Process Thinking is the concept of Statistical Thinking. This has been defined by the American Society for Quality (ASQ 1996) as a philosophy of learning and action based on three fundamental principles:

- All work occurs in a system of interconnected processes
- Variation exists in all processes
- Understanding and reducing variation are keys to success

(but see Dransfield *et al.*, *op. cit.* for further discussion).

Practicability

Without practicability, alignment and process thinking cannot be translated into a measurement system. Translation of principle into practice requires that at any level in the enterprise there is a consistent process for identifying the sorts of measurements that need to be collected, and for assuring the data quality and fitness for purpose.

The OPM[®] System for Measurement

The OPM[®] system incorporates two key management related constructs: Zones of Management and Open Systems theory.

Zones of Management

Zones of Management were utilised in the management courses designed and presented by Sarasohn and Protzman in early post-World War II Japan as part of McArthur’s revitalisation of Japanese industry (Sarasohn and Protzman, 1998). The ‘zones of management’ concept describes distinctive levels of management with clearly differentiated authorities, responsibilities and accountabilities and provided an essential insight into the appropriate design for an organisational measurement framework. That is, the system of measurement should mirror the system of management and facilitate the assignation of accountabilities and responsibilities within each zone. Whilst Sarasohn and Protzman (1998) use the terms ‘Top Management’ and ‘Supervisory Management’ to denote specific zones with further delineated sub-zones, the OPM[®] system utilises the more conventional management terms strategic, tactical and operational to denote relevant zones of management.

Open Systems theory

Open Systems theory considers enterprises as productive systems located within a larger system commonly described as their ‘environment’. A dynamic relationship exists between the enterprise and its environment: for example, the environment provides essential inputs to the enterprise, the enterprise carries out various processes and provides outputs back to the environment. Several groups or constituents exist in the environment that use or are affected by the outputs of the enterprise, and they will make judgements about those outputs; that is, they will judge its performance. As such, these groups or constituencies will determine the success and sustainability of the enterprise in the long term.

The OPM[®] system postulates 5 *Value-Adding Areas*, in which an organisation must be successful to survive and prosper. These are:

- Business, which typically includes stakeholders such as owners and shareholders
- Customers, typically segmented into a number of stakeholder groups who may have conflicting interests
- People, the employees of the enterprise
- Strategic Partners, the key contractors, suppliers or collaborators whose long-term support is critical to the viability of the enterprise
- Community, which typically includes a range of professional, industry and local groups

In the OPM[®] model, success is not defined in absolute terms. Rather, for each Value-Adding Area, Success is assessed in terms of the additional value that the enterprise provides to the stakeholders beyond that available elsewhere. Thus, these measures may be interpreted as being based on the ‘investment’ of money, labour, resources, support *etc.* that the different stakeholder groups make in an enterprise, compared with an alternative ‘investment’; and Measures of Success are perceptual.

Figure 1 depicts the measurement system, emphasizing the external nature of the Strategic Zone of Measurement.

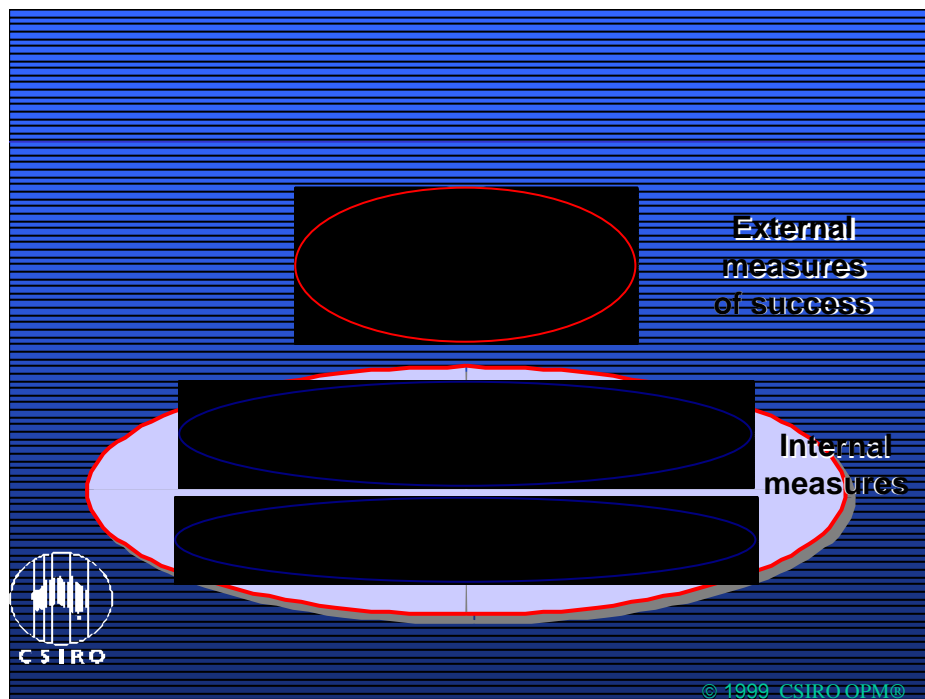


Figure 1. The broad OPM[®] system postulates three Zones of Measurement, with the Strategic Zone being external to the enterprise.

The development of the internal measures in an OPM[®] system is based on a sound understanding of the drivers of created and added value for the external stakeholder groups.

At the top of the organisation, **Tactical** measures provide lead indicators of success. Thus, this level of measurement reflects what the organisation needs to do and produce to deliver value. The OPM[®] system defines these measures as Key Performance Indicators (KPIs). They collectively capture the current performance of all critical aspects of the internal workings of the organisation. Key Performance Indicators are used by the senior management team to manage and improve the core processes of the enterprise and are typically reported monthly or quarterly.

Measurements at the Operational level relate to the “real” work of the organisation, that is, to the basic processes that deliver, or support of the delivery of, products and services to external customers and stakeholders.

In summary, Success Measures at the strategic level tell the enterprise whether value has been delivered, Key Performance Indicators tell the organisation whether value is likely to be delivered and reflect the major outputs that the organisation must deliver, and Operational measures reflect the lower level activities and outputs and, in turn, are predictive of the results for the Key Performance Indicators.

The overall OPM[®] system is represented in detail in Figure 2.

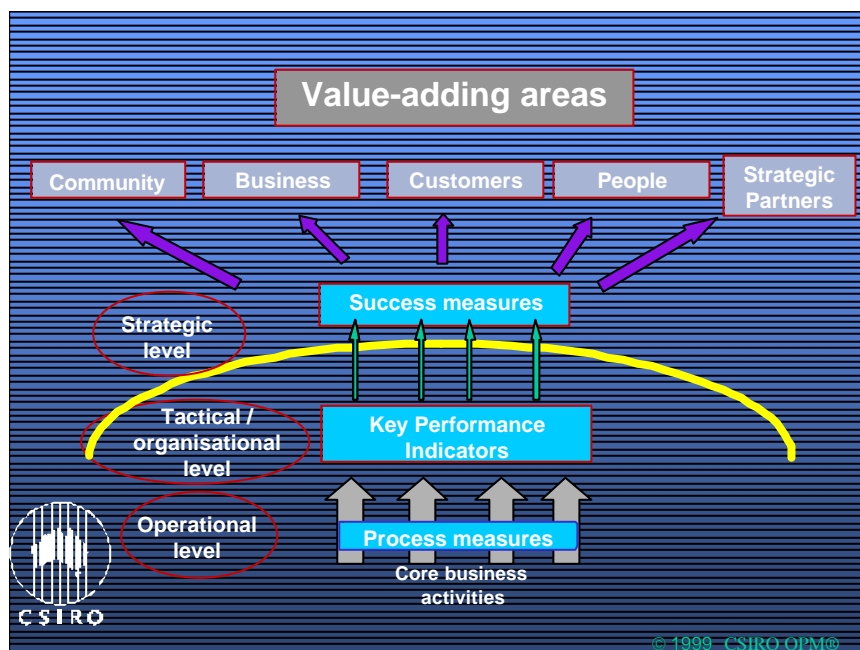


Figure 2. The detailed OPM[®] system, showing linkages between the different Zones of Measurement

Promulgation of the OPM[®] System

In order to make the results of the research widely available to Australian enterprises, a plan has been developed based on identifying all channels utilised by managers to learn about and acquire new approaches. The major conduits were identified as public courses, in-house educational sessions and consulting services within their workplace. In all cases, the provision of the materials in course structures would facilitate learning transfer. Thus the development of materials appropriate to both short courses and lengthier study programs was a key objective.

The OPM[®] system and associated methodologies are now disseminated in Australia through both academic instruction and consulting services. The underlying intellectual property currently comprises:

- Course materials for instruction
 - directed at self assessment using the eight dimensions of the OPM[®] system
 - implementation of an OPM[®] system
- Self assessment instrument
- Case study support materials
- Implementation guides

As far as its use in academic institutions is concerned, OPM[®] is a major component of a postgraduate subject offered by an Australian university in its Master’s streams at both its domestic and international campuses. Students in these management courses carry out a major assignment using the OPM[®] system and assessment dimensions to evaluate the performance measurement system of an enterprise (which is typically their current or previous place of work). The initial trial occurred at the university’s Dubai campus, where the subject was received with enthusiasm. The students perceived the approach to be highly relevant, and it provided a valuable supplementary tool for business analysis. Subsequent use by domestic students has confirmed that OPM[®] provides an interesting and stimulating basis for evaluating enterprise performance. The system is currently being integrated into graduate programs in other management schools in Australia.

Concerning its use as part of a consulting service, CSIRO is distributing OPM[®] through a licensing network that includes academic instructors who also offer consulting services. Licensees deliver OPM[®] through experienced consultants trained in OPM[®]. Consultants are accepted into the network according to their experience and knowledge in the area of performance measurement and related selection criteria. The OPM[®] training course for licensees, that replicates the application of OPM[®] within a third party enterprise, is currently provided and facilitated by CSIRO. The consulting practice advocated within the licensing training is based on:

1. initial training of an internal team to carry out a self assessment
2. a self assessment
3. report and recommendations
4. selection of priorities

5. implementation

Early indications from clients of the educational and consulting services indicate that the OPM[®] approach adds significant value to their current management approach.

Summary

CSIRO have developed an approach to organisational performance measurement that has proved effective both in assessing how an enterprise uses data and information in support of managing its business, and as a means to creating an effective performance measurement system. This methodology is now being disseminated to Australian enterprises in a variety of ways, including components of courses in postgraduate management programs, and by training and licensing consultants.

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