



Good Practice Note No. 7

# Formulating Information Technology Performance Indicators

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*Part of a series of notes to help Centers review their own internal management processes from the point of view of managing risks and promoting good governance and value for money, and to identify where improvement efforts could be focused. The good practices described in this series of notes should not be interpreted as minimum standards in every case, as not all may be appropriate to every Center.*

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## INTRODUCTION

Indicators and metrics are numeric and graphical representations of physical events. Much like a car's speedometer or roadside milepost, they enable management to quickly "visualize" where the organization is in relation to where it is committed to be. Performance Indicators (PI) are a metric that helps illustrate how well an organizational unit (such as IT) is doing in meeting its objectives or achieving desired outcomes. They are a means of assessing and evaluating the characteristics of products, services, processes and operations of the organization. PIs use both qualitative and quantitative information to help determine an organization or organizational unit's success in achieving its objectives. They are used to track progress and provide a basis to evaluate and improve performance. They need to be relevant to the organization or unit's desired outcomes and objectives, quantifiable, verifiable and free from bias. Experience shows that what gets measured, gets done. When used as a guide to performance, PIs can provide this incentive to achieve. However, it is essential that they measure the right things, otherwise the wrong things might get done.

## GOOD PRACTICE

There are several methods of designing PIs - two common ones being a checklist of PIs used in similar environments, and the other, by way of a brainstorming session(s). The problem with the checklist approach is the usual one with checklists: they get stale with time and they don't cater for innovative thinking and ideas. Their advantage is that they supply a 'shopping list' and persons can select out those PIs they think both helpful and appropriate.



### Some hints for preparing good performance indicators:

- Write the objective clearly. (What is it that we want to measure? Is it measurable?)
- Clarify and identify the linkages between desired outcomes and actual outputs.
- Ensure that key performance indicators are endorsed by the Center's executive.
- Promote an organizational culture that emphasizes the achievement of objectives, self evaluation, staff participation, and consultation.
- Preferably, use people with the appropriate skills to develop satisfactory indicators.
- Make sure that your objectives focus on user needs and desired outcomes.
- Use performance indicators for IT Unit's operational levels.
- Remember PIs, by definition, provide indicative rather than absolute and all-embracing information.
- It may not always be possible to achieve 100% against a PI immediately, or in some cases it might never be cost justifiable to achieve the maximum performance. It might be acceptable to say, set the criteria initially at 85% rising to 95% within two years.

### Having prepared our PIs, we will need to:

- decide what information is needed to support the PIs. It is quite common to design PIs but later find there is no way that data can be collected to measure the performance. This is especially true when the performance required borders on 'motherhood'-type statements, such as "Provide and efficient and effective service to all users". It is sometimes difficult to measure high-level, organizational-type PIs, which is why it's preferable to concentrate on organizational units such as IT departments;
- establish if the information is available. If it is not determined that information will be available when the PI is first set up then the design has failed;
- if necessary, establish the management information systems to collect the data required and the necessary controls to ensure the integrity of the data collected, stored and analyzed.
- collect, collate and analyze the data;
- decide an appropriate reporting format. IRRI IT management uses a very effective means of communication, which they refer to as the 'dashboard'. In effect, it is the use of graphical tables condensed so as to be contained in three A4 size documents, under headings such as Infrastructure, Services, and Miscellaneous. Whilst not in a strict PI format there is an implied standard for much of the data reported; and
- report the information in a manner which helps users (both external and internal) to make judgments about the performance of the unit.



### Some examples of PIs that might be appropriate in a CGIAR center's IT environment

- Extent of satisfaction with IT services and products.
- Extent of awareness within the Center's research community of IT's support role.
- The effectiveness of communication channels between IT and its users.
- Effective integration of IT and financial planning, and research projects.
- Effective integration of IT into management and administration across all spheres of the Center.
- Level of reliability of equipment and services.
- Extent of use of IT by the research community.
- Success in meeting user needs as measured by objective means.
- Maximum and average communication bandwidth usage.
- Mean time for vendors to respond to call outs.

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