



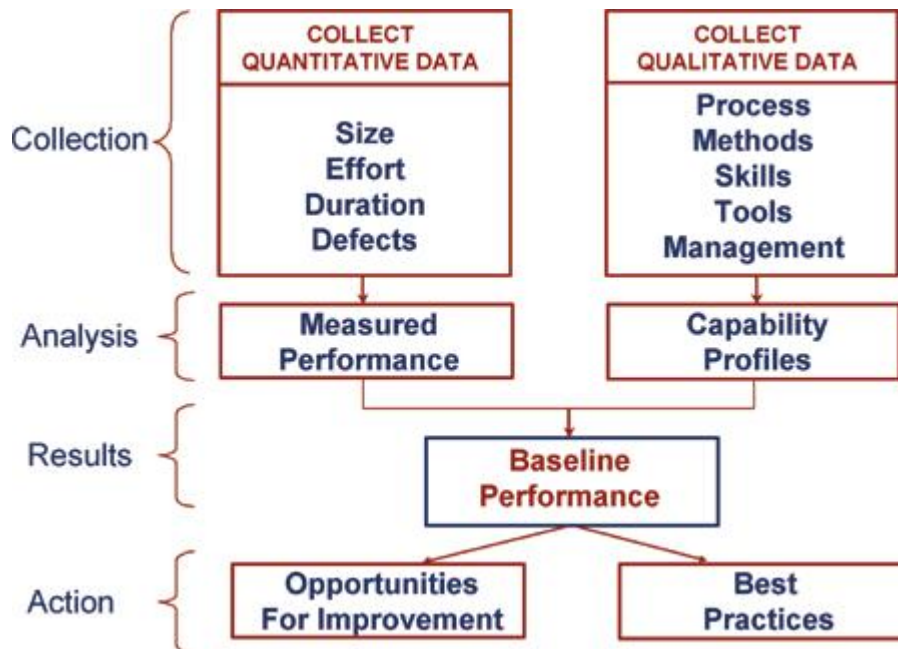
IDENTIFY YOUR ORGANIZATION'S BEST PRACTICES

Can you identify the following as your organization's goals and objectives?

- Reduce labor related project costs
- Improve time to market delivery of software
- Minimize defects delivered
- Improve performance relative to industry benchmark data points

To meet these objectives your organization needs to achieve **sustainable and measurable improvement** through the identification and proliferation of best software practices.

The key to successful performance improvement and management is performance measurement. The model below depicts the David Consulting Group (DCG) approach to identifying best practices within an organization.



This measurement model, which has been advanced by the Practical Software and Systems Measurement (PSM) program, suggests that an organization follow three steps:

- Identify the needs of the organization
- Select measures to determine whether the needs have been met
- Integrate measurement into the software development process



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Collected on a project basis, quantitative data can be displayed in a profile that indicates how well a project is performing compared to standard industry measures such as function points per person month, defect density and time to market.

Qualitative data (again collected on a project basis) identifies attributes that contribute to high or low yields of performance, such as those indicated below:

Management	Definition	Design
<ul style="list-style-type: none"> • Team Dynamics • High Morale • Project Tracking • Project Planning • Automation • Management Skills 	<ul style="list-style-type: none"> • Clearly Stated Requirements • Formal Process • Customer Involvement • Experience Levels • Business Impact 	<ul style="list-style-type: none"> • Formal Process • Rigorous Reviews • Design Reuse • Customer Involvement • Experienced Development Staff • Automation

Build	Test	Environment
<ul style="list-style-type: none"> • Code Reviews • Source Code Tracking • Code Reuse • Data Administration • Computer Availability • Experienced Staff • Automation 	<ul style="list-style-type: none"> • Formal Testing Methods • Test Plans • Development Staff Experience • Effective Test Tools • Customer Involvement 	<ul style="list-style-type: none"> • New Technology • Automated Process • Adequate Training • Organizational Dynamics • Certification

These two aspects of software development (quantitative and qualitative) contribute to an organization's baseline of performance. Baseline values are compiled from a selection of measured projects in order to represent the overall performance level of the organization.

Using these quantitative and qualitative data points, various process areas can be analyzed to determine their contribution to performance.

The following results represent an example of a composite view of an organization's high and low performing projects:

	High	Low
Average project size in function points (FPs)	148	113
Average duration (in calendar months)	5.0	7.0



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Average rate of delivery in FPs/person month (PM)	22	9
Average number of resources	2.4	1.8

Project attributes and their frequency of occurrence (%) can be determined in both the high and low performing projects.

	High	Low
Development staff very experienced with the design methods used	100%	33%
Full agreement on project deliverables, methodologies and schedules	100	33
No staff turnover during the project	100	50
Project management experience high	100	50
Formal processes used to gather requirements	100	67
Requirements clearly stated and stable	100	67
Fully automated source code management	100	67
Projects were not impacted by legal or statutory restrictions	67	33
Structured data analysis performed	67	33
Highly experienced analysts and designers	67	33
Significant reuse of code	67	33

A number of attributes are consistently present in the high performance group; these attributes are considered to be among the organization's best practices.

If you want to know more on how DCG can help you identify your organization's best practices, contact us at 610.644.2856 or send inquiry e-mail to info@davidconsultinggroup.com