
accuVista...

...measuring the Value of Enterprise Asset Management

A Ventureforth Methodology White Paper

February, 2001

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The logo for Ventureforth, featuring the word "VENTUREFORTH" in a yellow, monospace-style font on a black rectangular background.

VENTUREFORTH

Introduction

accuVista is a web-enabled tool for delivering comprehensive information to aid in decision-making processes. The initial phase of development is focused on Enterprise Asset Management (EAM). The vast majority of users of EAM software systems have spent millions of dollars in external cash flow as well as a significant amount of internal resources. This enabling technology is extremely important in making improvements in maintenance and materials management business functions. However, a major weakness of such systems is the lack of useful reports that help monitor and guide the users in making appropriate improvements and documenting the actual benefits achieved.

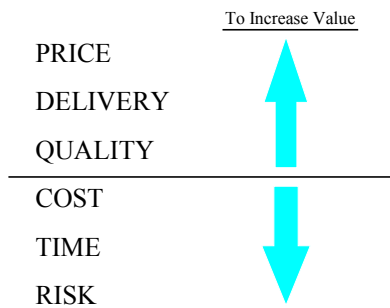
accuVista reports represent a major breakthrough in this area for two reasons:

- Library of standard field-proven reports certified for use with EMPAC
- Deployable enterprise-wide via corporate intranets through existing browser capabilities

accuVista provides a quick, low-cost solution that allows basic and advanced users to base decisions on data rather than perceptions. Specific types of reports address:

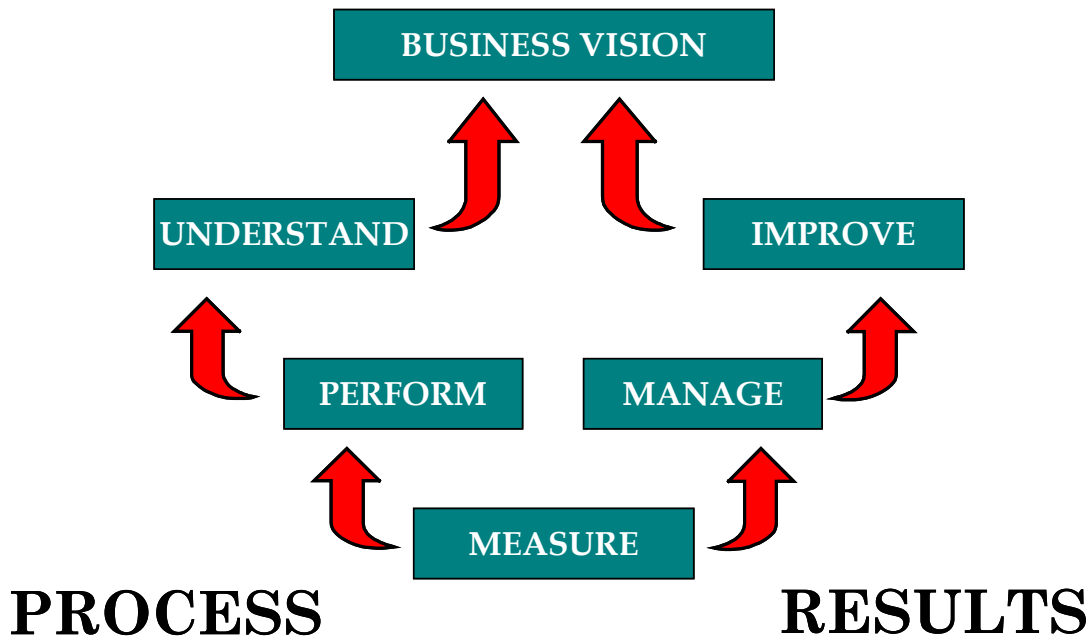
- Evaluate system interfaces
- Evaluate data quality issues
- Monitor business processes
- Measure functional and business key performance indicators

In addition, **accuVista** has no impact on Oracle or Indus licensing or support fees.



- To increase VALUE, one must increase price, delivery, or quality.
- To increase VALUE, one must decrease cost, time, or risk.
- To really increase VALUE, one must do both.

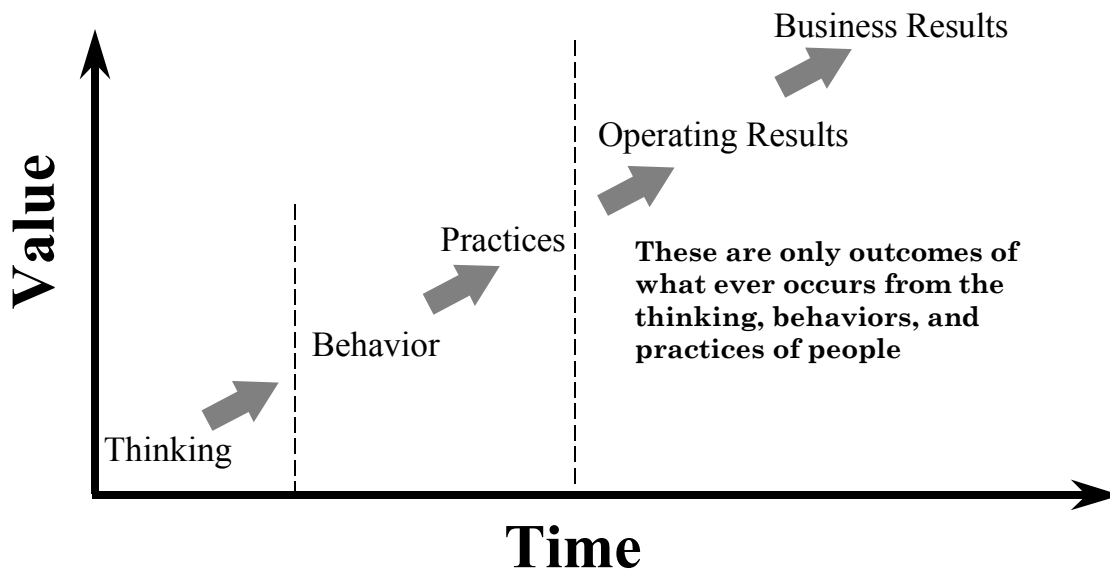
KEY ELEMENTS OF SUCCESS IN ACHIEVING VALUE



- In order to improve results, one must manage. Only chaos occurs without guidance.
- In order to manage, one must measure. “Result Measures” show how effective an organization is doing in achieving its objectives. But result measures alone are not enough.
- In order to improve results, one must improve how processes are performed. “Process Measures” show how efficient an organization is in performing its processes. They also are essential in creating an “Understanding” within the workforce regarding business process control that leads to self-monitoring and self-improvement.
- It is through the combination and balance between “result” and “process” measures that real value is achieved by an organization. The driving force in achieving value must be the goals and objectives established by the business vision.

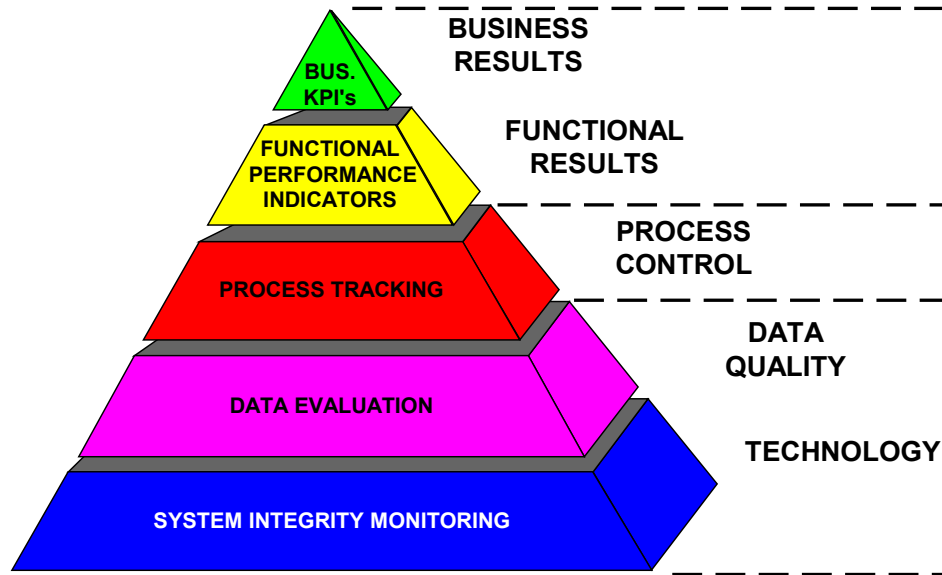
accuVista™ reports provide the tool to provide enterprise-wide reporting against any Oracle database for any user, regardless if they have access to the individual applications that manage the data contained in these databases. No knowledge or access to these applications is necessary.

PROGRESSION OF CHANGE IN ACHIEVING VALUE



- The focus in most EAM implementations is on software, hardware, infrastructure, data, and tactical business processes associated with entering data into the system.
- Real value in achieving operating and business results can only be achieved when the thinking and behavior of the workforce and management are aligned through implementation of best business practices.
- In order to accomplish this alignment, it is essential to provide direction and feedback that will influence the thinking, behaviors, and decision-making within the organization.
- **accuVista** reports provides the mechanism for establishing and communicating process and result measures allowing the organization to monitor practices, operating results, and business results which are the outcomes of the thinking, behaviors, and practices.

THE REPORTING PYRAMID



accuVista takes into consideration the natural hierarchy of reporting levels contained in the reporting pyramid.

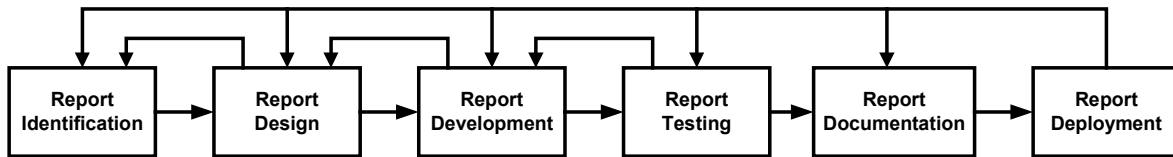
- The lowest level provides for monitoring of system integrity, this involves the underlying system technology of business applications, such as interfaces, hardware reliability, etc.
- The second level provides for evaluating the quality of data contained in the application, such as missing or invalid data, inappropriately assigned data, or obsolete data.
- The third level provides for tracking the business processes, such as work process flow and materials process flow
- The fourth level provides for measuring the functional area results, such as equipment cost, preventive/corrective maintenance ratios, inventory turnover, and on-time delivery
- The highest level provides for measuring business results, and generally does not use data in EAM systems.

THE REPORTING MATRIX

<u>Reporting Pyramid Level</u>	<u>Category/Subcategory</u>			
BUSINESS KEY PERFORMANCE INDICATORS	<u>Plant Production</u> <u>Production Quality</u> <u>Product Delivery</u> <u>Product Cost</u>		<u>Environmental Compliance</u> <u>Safety Performance</u>	
FUNCTIONAL KEY PERFORMANCE INDICATORS	<u>Equipment</u> - Availability - Reliability - Downtime - Maintenance Cost	<u>Work Management</u> - Cycle Time - Maintenance Cost - Proactive/Reactive Ratio	<u>Inventory</u> - Turnover - Accuracy - Investment Level - Service Level	<u>Requisitions</u> - Late <u>Purchase Orders</u> - Late
PROCESS TRACKING	<u>Preventive Maintenance</u> - Asset Coverage - PM Compliance - Condition Monitoring Compliance <u>Engineering Analysis & Support</u> - New Equipment Reviewed		<u>Work Requests</u> - Awaiting Approval - Not on a WO <u>Stock Issue Requests</u> - Created, Issued, Backorder <u>Requisitions</u> - Awaiting PO	<u>Work Orders</u> - Created, Backlog, Closed - Parts Short - Planning Accuracy - Scheduled <u>Purchase Orders</u> - Created, Closed
DATA EVALUATION	<u>Assets</u> - Criticality Assigned - Invalid G/L - Asset BOM Coverage - Parent ID Assigned - PM Coverage	<u>Work Orders</u> - Planner Assigned - Invalid G/L - Failure Code - Reconciliation Code	<u>Stock Location</u> - Operational Criticality - UOM Mismatch - ROP/ROQ/ORO/Sourcing - Stock BOM Coverage - Mfr./Supplier Catalog	
SYSTEM INTEGRITY MONITORING	<u>Database Operation</u> - xxx	<u>Application Integration</u> - xxx	<u>Network Operation</u> - xxx	<u>Webserver Operation</u> - xxx

accuVista reports are intended to provide comprehensive coverage of all reporting levels identified in the reporting pyramid. This reporting matrix provides an outline of the type of reports which might be being developed and could be used for an individual customer.

REPORT DEVELOPMENT METHODOLOGY



- Ventureforth utilizes a comprehensive report development methodology in constructing, enhancing, and documenting **accuVista™** reports.
- **Report Identification**
 - This step ensures report development meets detailed reporting requirements specified by our senior level consultants or customers including report audience and how the report is to be used.
- **Report Design**
 - This step establishes the specific data, sorting, grouping, summary statistics, and layout of the report.
- **Report Development**
 - This step creates the report using our extensive knowledge of report development technology, EAM application data architecture, and **accuVista™** views developed by Ventureforth
- **Report Testing**
 - Extensive unit and system tests are conducted based upon the requirements of the identification and design steps. These include tests by the developer and user within the report development application as well as within the browser environment
- **Report Documentation**
 - Detailed documentation is created for use by Ventureforth developers regarding all steps of the development process to ensure effective and efficient support and enhancement activities can be conducted.
 - User documentation is created for use by customers regarding the installation and use of each report. On-line capabilities through the use of RoboHelp are planned.
- **Report Deployment**
 - Deployment is accomplished in two phases. The initial phase involves setting up **accuVista** user application and administration application software, establishing the web-server environment, installing **accuVista** views in the EAM database, and installing the initial group of reports.
 - The second phase involves adding additional reports as developed through our eService. This will entail the users going to the Ventureforth web site, previewing reports, selecting the reports to be purchased, and emailing the reports, views, and other necessary information to the **accuVista** Administrator at your site. These new reports can be added quickly and easily and deployed immediately to your users.
 - User documentation is provided regarding how the reports should be run, who will be using them, how they will be used, and what decisions can be made with the reports.

CUSTOM REPORT DEVELOPMENT SERVICES

- Although the source files for the reports included in **accuVista** are included for the users use, we can also provide “tailoring” of our existing reports to your company’s individual needs.
- In addition, we expect additional reports not currently addressed by **accuVista** will be needed. We can provide “custom” reports on any topic you desire, and we can update and include your existing reports. This is accomplished this with as little on-site time as possible through our eService, eCommerce, and eSupport.
- The process is to submit a report request via our web site. A business consultant and report developer will review the request and will advise you of the appropriate course of action. It is possible that a suitable report will already be available for purchase.
- If a new report is needed, a business consultant will contact you to determine specific report requirements. At this point a detailed report design will be developed and an estimate of the cost provided.
- Once authorized by you, we will develop the report (along with any views needed) and put the report on our web site for your review and testing.
- Once the report has passed all internal and user tests, it will be packaged for deployment.

e-Services: e-Commerce & e-Support

Registered accuVista users benefit from e-Services through Ventureforth's integrated e-Support site and e-Store:

- Buy software online - Get updated reports via the web through a secure e-Store
- Integrated technical support via the web – Including factsheets, technical documents, FAQs and trouble ticket registration.

Summary

- Deploy and distribute reports quickly and simply over the web
- Add new reports at low cost directly from the Ventureforth portal
- Web based support
- Real time access to data over your corporate Intranet
- State of the art reports from *The Center of Excellence*
- Plug and play your own reports quickly and easily



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