Integrated Information Engineering

Peter Ney
Richard Irwin Associates (RIA)
Postbus 15348
1001 MH Amsterdam, The Netherlands

Overview

Much industry attention is currently being focused on methods of creating production environments within Information Systems departments that effectively support corporate strategy. There is a powerful drive to improve the efficiency and quality of the IS function, as the growing cost of maintenance of systems that have been poorly designed, managed and constructed is appreciated. There is a pressing requirement for a comprehensive environment that supports the management, design, construction, documentation, change management and maintenance of informations systems. Clearly the data dictionary and its associated tools are seen as the core of such an environment.

The HP3000 community at the moment does not have access to truly integrated and user-friendly facilities that support such an environment. It is most likely that in the near future this area will be addressed with a release of a new range of products, but meanwhile there are techniques and methods that can be used to approach the ideal information engineering support environment reasonably close with existing tools and facilities.

This paper discusses what is currently a very dynamic area in the HP community, that of System Dictionary, its associated products, integration services and Computer Aided Software Engineering (CASE). Because of certain developments currently taking place in this area, I have decided not to submit the full paper for inclusion here, as some of its detail is very likely to be affected by these developments, thus effectively making the paper "out of date" by the time it is presented at the Conference.

The presentation will examine the strategy and methods leading to integrating data, functional and resource information on a corporate level using the System Dictionary on the HP3000.

The System Dictionary, when considered as the hub of the IS department, must be structured to effectively support the development and production functions. Currently System Dictionary has many critical problem areas. Some of these, such as the poor user interface, no access via 4GLs, lack of true version control or support for coexistance with Dictionary/V, can be "lived with" in the hope that these and other annoying shortfalls will be resolved by HP in the near future. There are some problem areas, however, that actively discourage the use of System Dictionary to successfully support the IS environment, and these must be overcome by the user in the short term if effective use of the product can be currently made.

One of the main problem areas is the current open-endedness of the System Dictionary coreset that does not encourage a sophisticated use of the product. There is, for example, no standard provision for data and functional analysis (eg. EAR models and Data Flow Diagrams), and users have to independently customise the coreset to support this area. Not surprisingly, many choose not to bother.

Partly linked to this is the current lack of a standard interface to CASE tools, the use of which is spreading in the HP3000 community.

In the presentation I hope to discuss ways of coping with the available tools and attempt to create a corporate integrated information engineering environment in order to give effective support to today's IS department.