

Critical Issues in Developing and Implementing Dynamic Organization-Wide HR Information Systems

Robert Michel, Paul Rossmeissl



AMERICAN INSTITUTES FOR RESEARCH

Problem

- **Develop and implement a system that can help organization make strategic and tactical HR decisions**
 - **Workforce planning**
 - **Recruiting**
 - **Assignments**
 - **Crisis management**



Aspects of the Problem

- **Choosing a data model**
 - Data collection and structuring
- **Gaining and sustaining organizational support**
- **Developing the system**
 - Requirements
 - Assessments
- **Validation and maintaining the system**



Case Studies

- **Large Government Organizations**
- **Multiple Missions**
- **Technology Intensive**

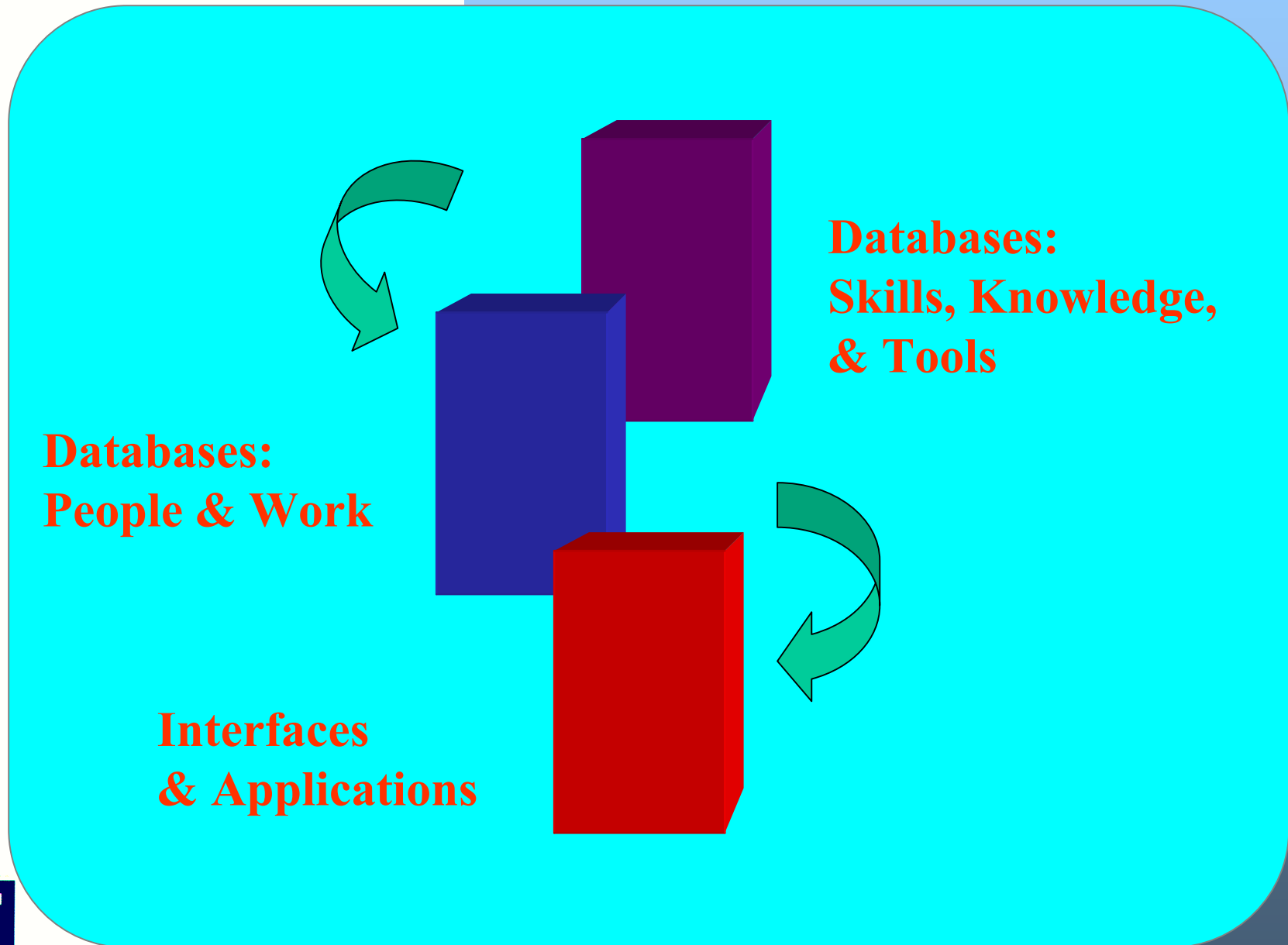


Data Model Basics

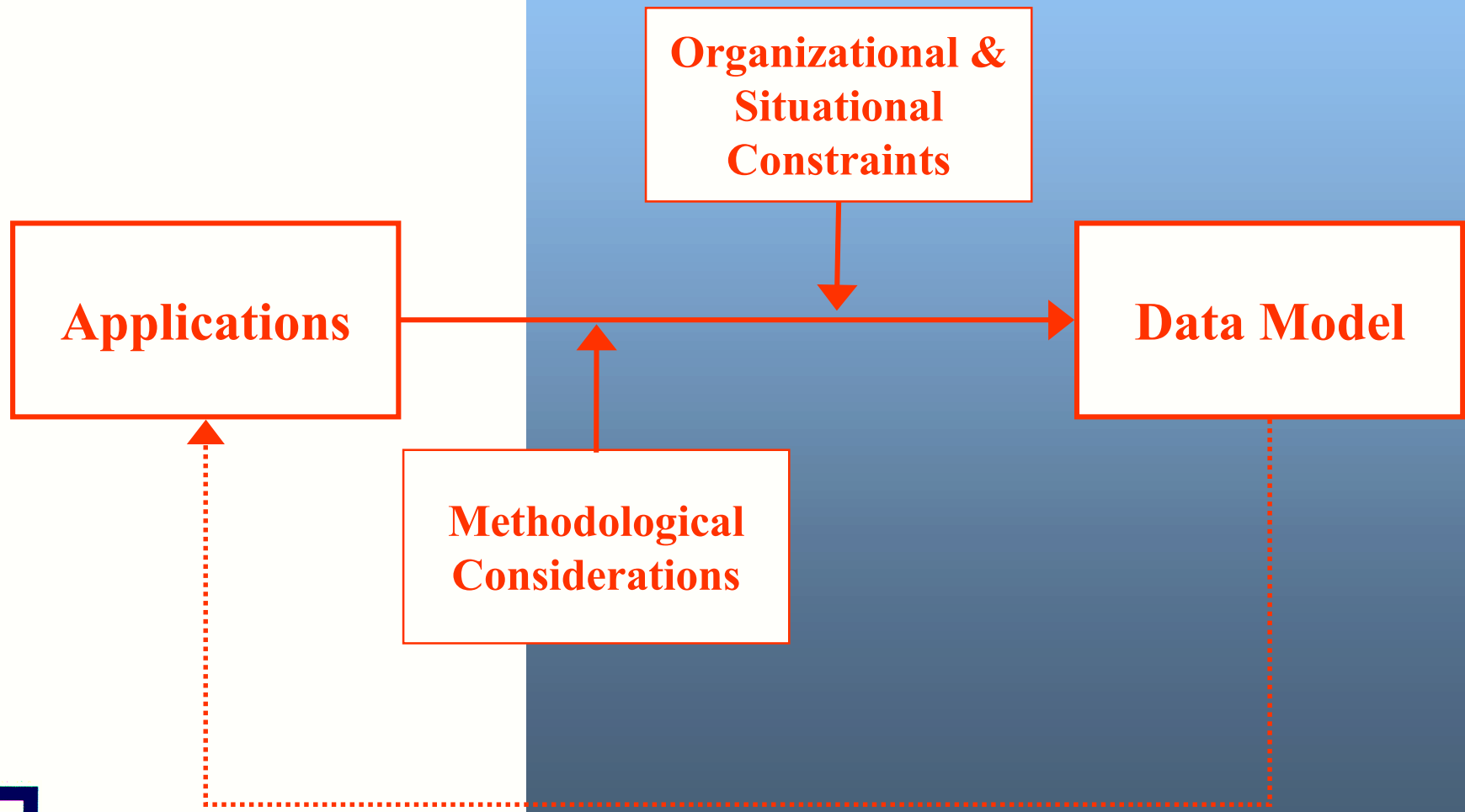
- Jobs can be described *quantitatively* using descriptors that generalize across jobs
- The “world of work” can be legitimately viewed from different perspectives depending on user or functional requirements
- Any given type of work element (e.g., basic abilities, personality, occupational interests) can be organized hierarchically



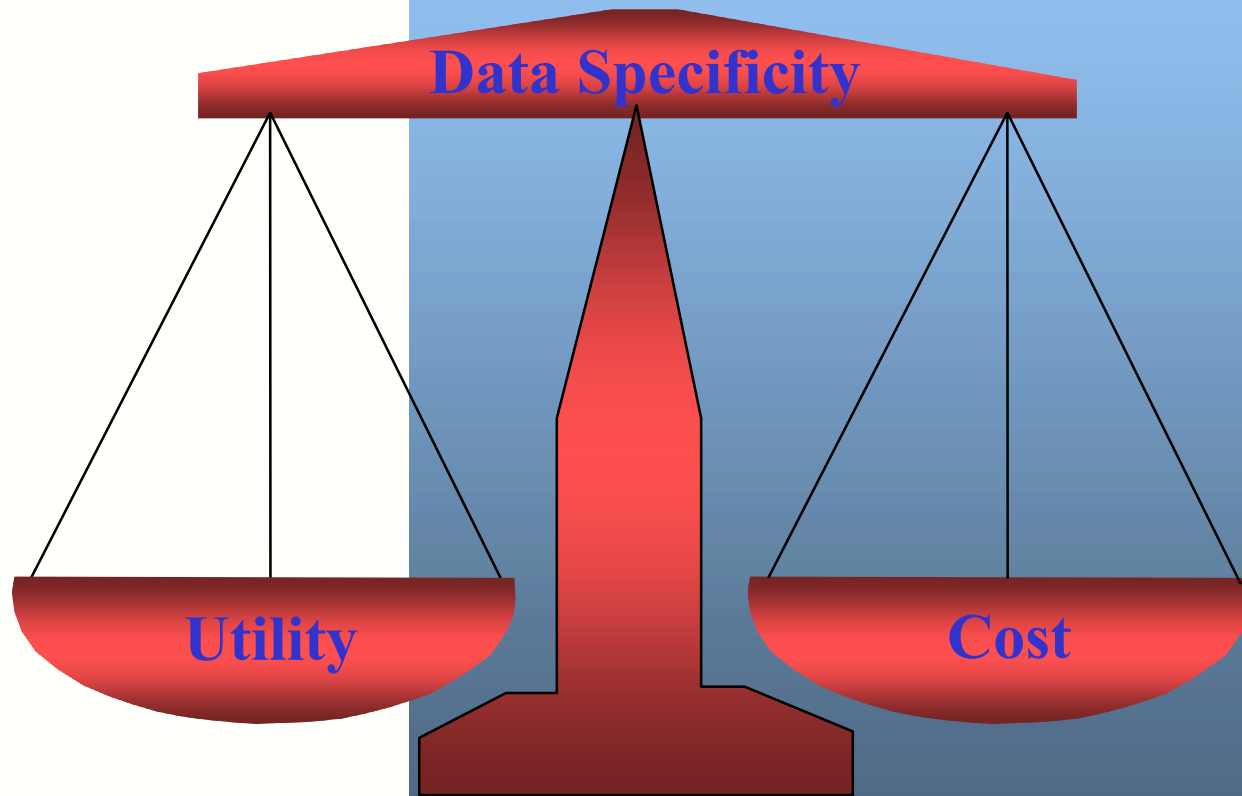
Data Model Components



Choosing a Data Model



The Data Model Problem



Key Questions

- **What applications will the HRIS encompass?**
- **What methodological considerations must be considered?**
- **How will the characteristics of the organization impact on HRIS utility?**
- **What situational constraints can constrain the system?**



Critical Data Model Question

- **Will any of the methodological considerations, organizational characteristics, or situational constraints limit the capacity of the HRIS to satisfy the requirements of its applications?**



Gaining & Sustaining Organizational Support

- **Securing support for change:**
 - **Employee participation**
 - **High-level advisorship and involvement**
 - **Town meetings and briefings**
 - **Use of internal SMEs**



Multi-Dimensional Issue

- **Technical**
 - **Measurement**
 - **Technology**
- **Social**
 - **Perceptions**
 - **Expectations**
 - **Uses of the system**



Example - Self Report Ratings

Technical

- Types of validity & reliability of self-ratings

Social

- Employee participation assumptions & self-ratings
- Varying uses for proficiency data. Stakeholder expectations not clarified.
- Mid-stream expectations for use of proficiency data re-negotiated.
- Unforeseen work & funding



Before You Start

- **Conduct assessment for change.**
 - **type of organizational change**
 - **role of culture in planned project**
 - **organizational readiness/resilience**



At the Beginning

- **Focus on relationship to mission**
- **Build alliances with core units & Management**
- **Be aware of political shifts and anticipate possible necessary actions.**
- **Staff project team with roles and skills in mind.**
 - **Consultant (language translation; relationship & trust-building; situation assessment; negotiation)**
 - **Internal participants (network, reputation, knowledge of organizational system; problem solving skills)**



Throughout

- **Control key components of the project.**
 - Know your dependencies
 - Control quality of project supports
- **Provide regular feedback to client**
 - (quick hits) to sustain support & demonstrate added value.
- **Define teams' contributions regularly:**
 - Build project on functional priorities
 - Remember : Building trust and acceptance never ends
- **Define resource allocations.**



Developing the System

- **Two (potentially three) independent stages involved in developing an organization-wide HRIS:**
 - **Building the descriptor catalog**
 - **Assessing employee proficiencies**

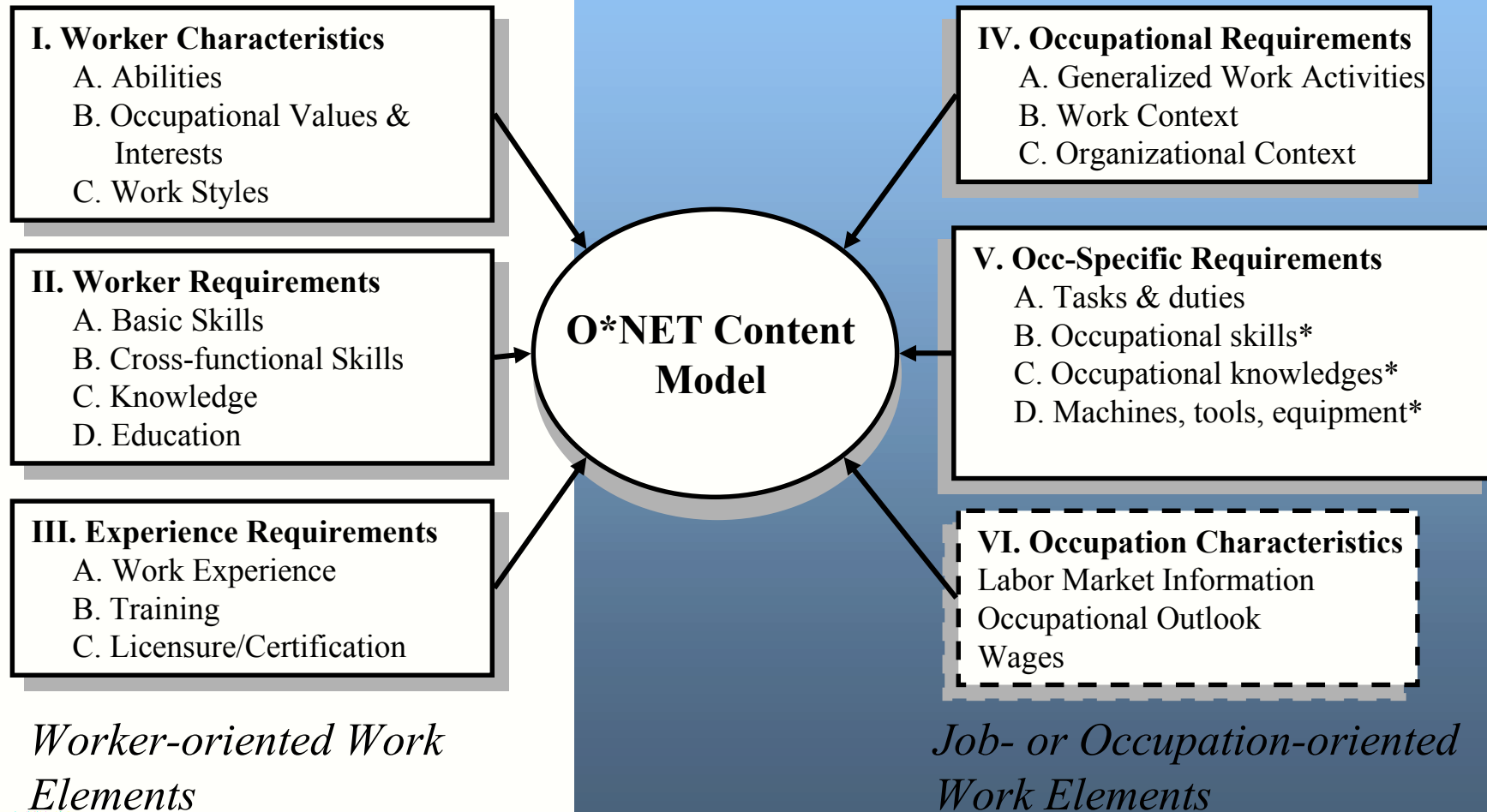


Key Issues in Building the Descriptor Catalog

- **Choice of descriptors**
- **Data collection structure and strategy**
- **Measurement demands**



Building the Descriptor Catalog - Choice of Descriptors



Building the Descriptor Catalog - Choice of Descriptors (cont.)

- **Comprehensive set of occupational skills covering all work performed in the organization**
- **Each skill consisted of**
 - **Skill name**
 - **Exemplar tasks**
 - **Tools**
 - **Knowledges**



Building the Descriptor Catalog - Data Collection

- **Data collection structure**
 - Must be in line with the data model
 - May require an independent data collection stage
- **Data collection strategy**
 - Use of technology
 - Process of identifying appropriate descriptors



Building the Descriptor Catalog - Measurement Demands

- **Descriptors must be developed in line with the intended applications of the system**
- **For our purposes, the data had to be:**
 - **general enough to permit meaningful summarization across the organization, yet specific enough to identify employees with highly targeted capabilities (e.g., proficiency with Cobol)**
 - **standardized across occupational units**
 - **parsimonious**



Key Issues in Assessing Employee Proficiencies

- **Assessment “objects”**
- **Assessment method**
- **Data collection medium**
- **Assessor motivation**
- **Assessor frame of reference**



Assessing Employee Proficiencies - Assessment “Objects” and Method

- **What objects (in your model) to assess should be driven by the intended applications**
- **Assessment method also must be driven by intended applications and will inevitably be shaped by practical concerns**



Assessing Employee Proficiencies - Data Collection Medium

- **Use of technology**
- **Tie-in to other databases**
- **Accessibility to users**
 - **Connectivity**
 - **Security access structures**
 - **User-friendly interfaces and applications**



Assessing Employee Proficiencies - Assessor Motivation and Frame of Reference

- **Assessor motivation (“Why should I take the time to do this?”)**
 - **Assessors must see the personal value in the system**
 - **Data entry process must be easy and user-friendly**
- **Assessor frame of reference**
 - **Instructions must be clear**
 - **Potentially problematic for some descriptors**



Validating the HRIS

- **Establishing “validity” of the system**
 - **Validity of the model**
 - **Validity of the ratings**
 - **Utility of the system**



Key HRIS Maintenance Issues

- **Maintaining the currency of the system**
 - Keeping the data model current
 - Keeping employee ratings current
- **Availability of knowledgeable staff**
 - Maintenance, updating of data
 - Analytical capability to use data
 - Life-cycle maintenance of software

