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## Data Management Program: Database Interface Architectures

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## 1.0 Introduction

The three data architectures for exchanging data illustrated in Figure 1 are:

- Point to point interfaces
- Integrated data environments, and
- Infosphere data environments based on ISO 11179 based shared data elements and segments

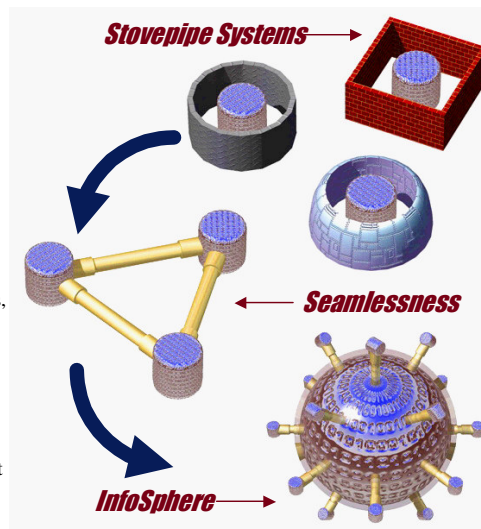
The data management program's data interface strategy is to proceed from the point-to-point environments to integrated data environments and possibly to "infosphere" data environments that are based on ISO 11179 based shared data elements and shared data segments. This gradual migration is also depicted in Figure 1.

## 2.0 Point-to-Point Interfaces

The myriad of existing legacy "stovepipe" information application systems are generally based on database designs of tables and columns, which, for the most part, are intended to characterize common data distilled from the data requirements derived from common, or similar processes. It

### Future Vision of Joint Interoperability: Beyond Seamlessness

- **Today (Baseline)**
  - we still rely on stovepipe systems
  - many data ownership issues
  - interoperability through "gadgets"
  - technological fixes of limited useful lifespans
- **Near-term: Seamlessness**
  - integrated (but still separate) systems
  - common message sets, operating systems, and hardware
- **Far-term (Target): InfoSphere**
  - single, virtual database
  - platform independent
  - ownership of data elements, data may not reside on system you own



**Figure 1.** Three forms of Data Interchange.

