General Process of Audit Data Services

Auditees

Business system

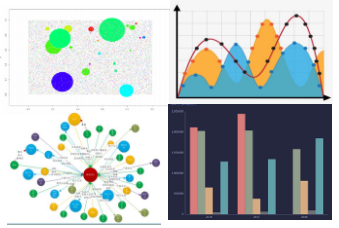
Output from business system

Exchange file

Import data into audit system

Auditors

Audit system



Collection → Pre-processing → Management → Analysis

What's the role of data model in audit data services?

First: What is data model? ISO's view

We have found 57 results about data model by searching in the "terms and definitions" item in the above website.

We sought 7 main definitions listed in the table. The orange are what I think most related with us.

Data Model

1. **Definition:** graphical and/or lexical representation of data, specifying their properties, structure, and inter-relationships
   ISO Standard: ISO/IEC 11179-1:2015；ISO/IEC 20006-1:2014；ISO 26162-1:2019；ISO/IEC 2382-36:2019；ISO/TR 17185-3:2015；ISO/IEC 19778-1:2015；ISO/IEC 16350:2015

2. **Definition:** abstract representation of an XML document defined by this part of ISO/IEC 19757
   ISO Standard: ISO/IEC 19757-2:2008

3. **Definition:** representation of the specific information requirements of a business area
   ISO Standard: ISO 22307:2008

4. **Definition:** set of constructs that provides the definition, structure, and format of data, whether physical or abstract in the sense of being bound to some recording medium
   ISO Standard: ISO/TS 18876-1:2003

5. **Definition:** graphical and textual representation of analysis that identifies the data needed by an organization to achieve its mission, functions, goals, objectives, and strategies and to manage and rate the organization. A data model identifies the entities, domains (attributes), and relationships (associations) with other data and provides the conceptual view of the data and the relationships among data. [key style]
   ISO Standard: ISO/IEC/IEEE 31320-2:2012；ISO/IEC 25024:2015

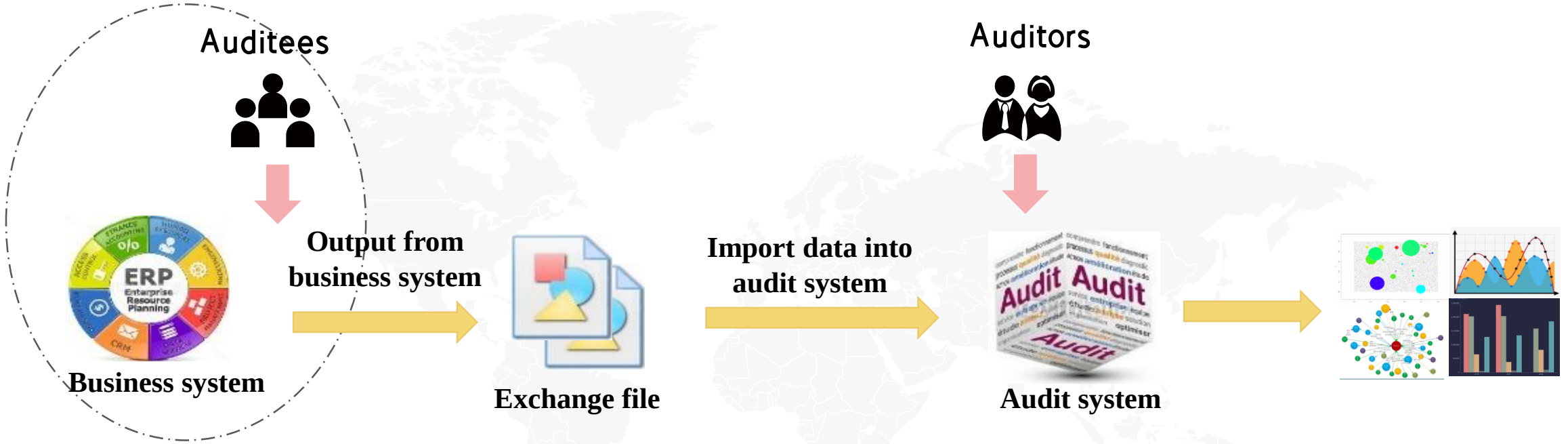
6. **Definition:** pattern of structuring data in a database according to the formal descriptions in its information system and according to the requirements of the database management system to be applied
   ISO Standard: ISO/IEC 2382:2015

7. **Definition:** description of the organization of data (3.1.1.15) in a manner that reflects an information (3.1.1.16) structure
   ISO Standard: ISO 5127:2017；ISO 28258:2013

Source: https://www.iso.org/obp/ui/#home

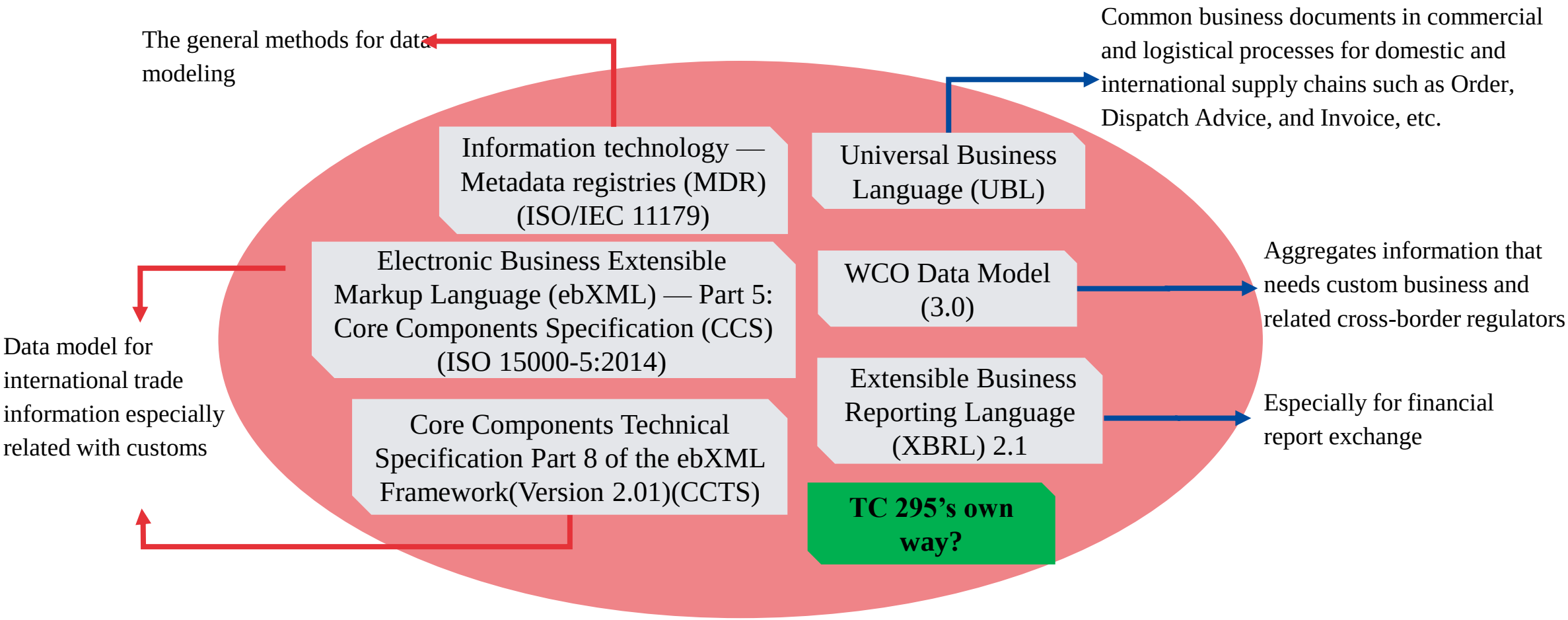
The potential role of data model

- **Benefits VS Costs： the more we want the more be pay**



Collection → Pre-processing → Management → Analysis

Collection	Pre-processing	Management	Analysis
interoperability	Verification	System development	knowledge reasoning
flexibility			
data eliminating duplication and redundancy			
exchange and sharing of information	restructuring of existing business vocabularies		

Different ways of data model

- **Different ways even for same goal**