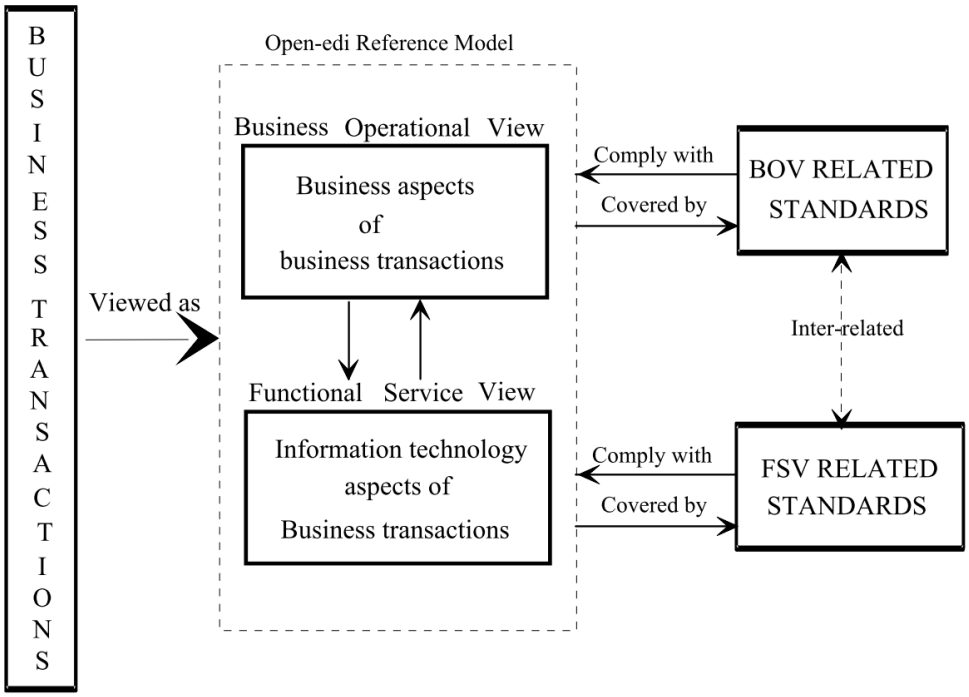
General concepts from the Open-edi reference model (ISO/IEC 14662[1])



The Open-edi Reference Model uses two views to describe the relevant aspects of business transactions:

- the Business Operational View (BOV);
- the Functional Service View (FSV).

The BOV addresses the aspects of:

a) the semantics of business data in business transactions and associated data interchanges;

b) the rules for business transactions, including:

- operational conventions,
- agreements, and
- mutual obligations, which apply to the business needs of Open-edi.

The FSV addresses the supporting services meeting the mechanistic needs of Open-edi. It focuses on the information technology aspects of:

a) functional capabilities;

b) service interfaces;

c) protocols.

Personally, I'm not fond of this metaphor, but I won't insist on its removal.

The concept of coded domain (from ISO/IEC 15944-10[2])

In the context of ISO/IEC 15944 "coded domains" serve as flexible "lego blocks" from which data values can be retrieved and used as unambiguous semantic components.

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[1] ISO/IEC 14662: 2010 is available for download free of charge at https://standards.iso.org/ittf/PubliclyAvailableStandards/index.html

[2] ISO/IEC 15944-10:2013 "Information technology - Business Operational View - Part 10: IT-enabled coded domains as semantic components in business transactions" is available for download free of charge at https://standards.iso.org/ittf/PubliclyAvailableStandards/index.html

unique???

The concept of “coded domain” is unique in the context of an Open- edi approach and has been defined in an ISO/IEC 15944 context. This concept and its definition represents an approach, methodology and tool which is needed to support appropriate level of unambiguity of (electronic) data interchange needed to support. The concept of “coded domain” covers several perspectives;

1) business and information (modelling) perspective, i.e., those of users and the BOVs;
2) IT modelling perspectives such as:
   a) entity-relationship modelling where a coded domain is viewed as an entity type functioning as a “domain”; and,
   b) object-oriented modelling where a coded domain is viewed as an “object class”.
3) an information science (information management, library, records management, etc.) perspective where coded domains are viewed as “schedules”, “authority files”, “tables” (which one at times “attaches” to a concept/term thesauri (or indexing/classification schemes of “instance relationships”;
4) **an electronic data interchange perspective where coded domains are known as “code sets” i.e., a set of codes representing “xyz”. (pop-ups choices in a data entry module); and,**
5) application and implementation perspective (and physical data model) where coded domains are commonly known as (edi) tables (or reference tables).

Valid point, but I don't think it need be in bold.

I'm unclear on the use of this term here.

or "lookup tables"?

The term “coded domain” is introduced in ISO/IEC 15944 to differentiate Open-edi, BOV and e-Business requirements from various other concepts and associated terms such as generic (encodable) value domains, “enumerated domains”, code sets, which appear to be similar in nature similar in nature in ISO standards.

Part 10

ISO/IEC 15944 Annex C gives additional information. The link between “coded domains” and ISO registration schemes and source authorities.

From an Open-edi perspective, in the context of the business transaction model the fundamental key components for: Person (individual, organizations and public administrations), process and data.

A number of standardized “coded domains” is given, for example:

- ISO/IEC 6532 for Identification and registration of organizations and organization parts;
- ISO/IEC 7812 for Identification cards (Persons as individuals, organizations or public administrations);
- ISO/IEC 7501 for Passport & visas – identification of individuals
- ISO 3166 for Country codes and sub-divisions
- ISO 639-2 for Language codes
- ISO 4217 for Codes for currencies and funds

"and, so, is an FSV standard available to realize the BoV concept of code lists. Additionally, it can be used for serializing a sparsely-populated table.

Possible relationship between OASIS Genericode and JTC 1 and other ISO standards

Genericode is a standard designed to support interchange or distribution of machine-readable code list (or enumerated value) information between systems.

Open-edi provides a standard model for business transactions where the concept of “coded domain” includes – at BOV level – the concept of code sets/enumerated values that are surely in scope of Genericode.

"at the FSV level"

Genericode is widely used and can aim to complement the Open-edi standards, especially ISO/IEC 15944-10, and also other ISO/IEC standards in other domains.

any examples?

As a very first analysis Genericode can be easily adapted, for example extending clause 2 “What is a Code List” or adding a clause after clause 2 to link Genericode with Open-edi, but still keeping Genericode as a general purpose tool not limited to the Open-edi context.