Synthesizing on, and Introducing to Reference Ontologies for, Measurement.

In order to both improve our communication, provide knowledge and promote common understanding, and to make the best possible description of the measurement domain in reality, with regard to a certain level of granularity and view point:

- Let us synthesize what we have been saying up to now about measurement and eventually expand on
- Let us introduce to some reference ontologies.

Sw. Measurement Roles and Ontologies

Depending on its maturity level, a software organization can perform measurement in different ways.
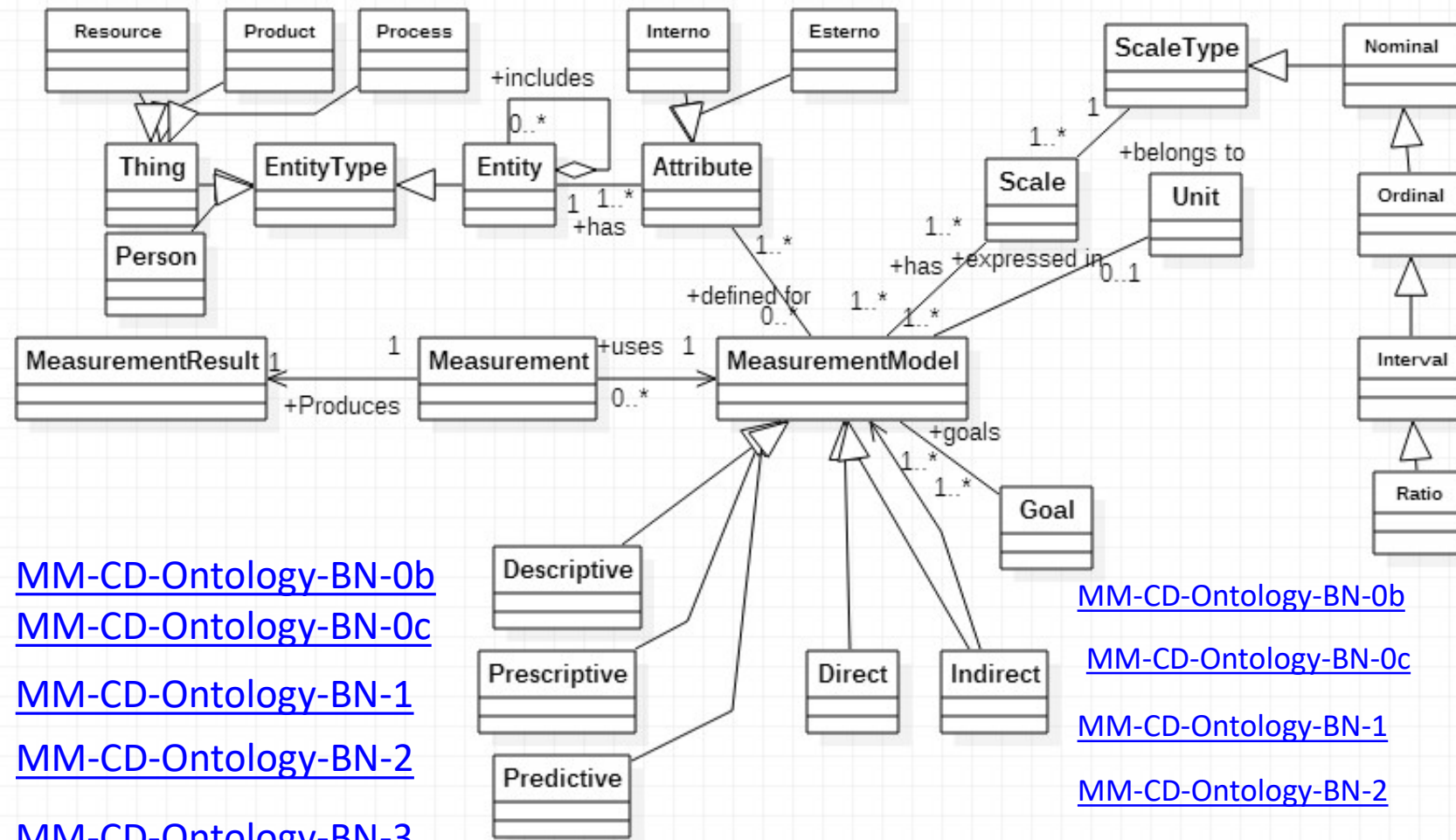
- At low – medium maturity levels, e. g., the Capability Maturity Model Integration (CMMI)'s levels *Initial*, *Managed* or *Defined*, the focus is on supporting *Management information needs*.

- At higher maturity levels, i.e., the CMMI levels *Quantitatively Managed* or *Optimizing*, measurement should be performed for the purpose of *Statistical process control* (SPC), in order to *Understand the process behavior* and to support *Process improvement efforts*.

Measurement Model Ontologies (MMO)

Introducing to:

- **bMMO**: the "basic MMO" & Related Evolutions.

- **SMMO**: the "Software MMO".

- **sMMO**: the "simplified MMO".

- **RSO**: A Reference Software Ontology & related Subontologies and Integrated Ontologies.

Basic MMO ('90s) & Related Evolutions

MM-CD-Ontology-BN-0b
MM-CD-Ontology-BN-0c
MM-CD-Ontology-BN-1
MM-CD-Ontology-BN-2
MM-CD-Ontology-BN-3

MM-CD-Ontology-BN-0b
MM-CD-Ontology-BN-0c
MM-CD-Ontology-BN-1
MM-CD-Ontology-BN-2
MM-CD-Ontology-BN-3

Based on Cantone-Donzelli 1996, ISERN TR
Cantone, Donzelli & Pesce, 2000, F: Angeli

SMMO (2006)

Based on Garsia, Piattini et al., 2006