

# PLEASE2013

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## *Knowledge-assisted Product Requirements Configurator*

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# Contact Profile

- **Requirements engineering, Domain knowledge representation, Knowledge engineering applications to SPLE**
- **Objectives / Looking for**
  1. Receive helpful constructive feedback on the proposed solution to take the work forward
  2. Make new connects in the field for future extension of work

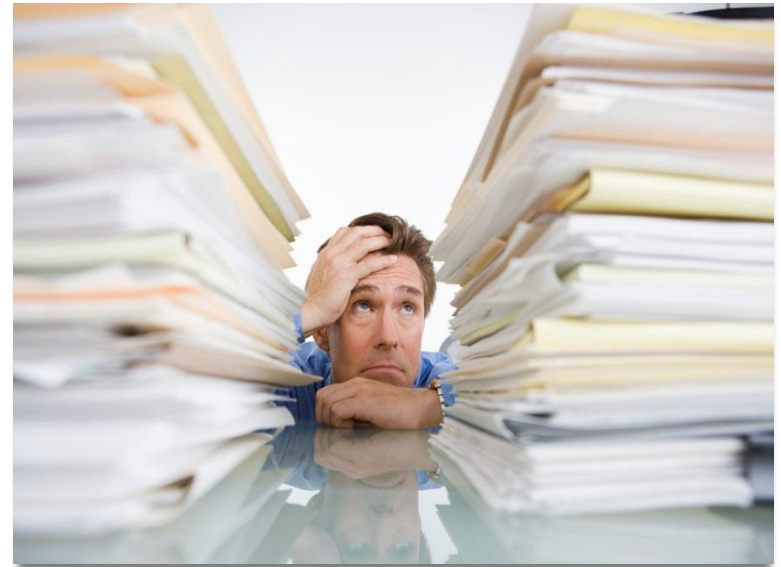
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# Product Line

- Financial products – Insurance
  - TCS Bancs (An umbrella product for BFSI applications introduced by TCS Financial Solutions)

# The Problem

- Large number of Products in Product Suite – too many choices
- Product knowledge not represented in a form that allows easy reuse
- Tacit Knowledge – lack of availability of experts, big loss when people leave organization
  - Rework of features
  - Suboptimal reuse



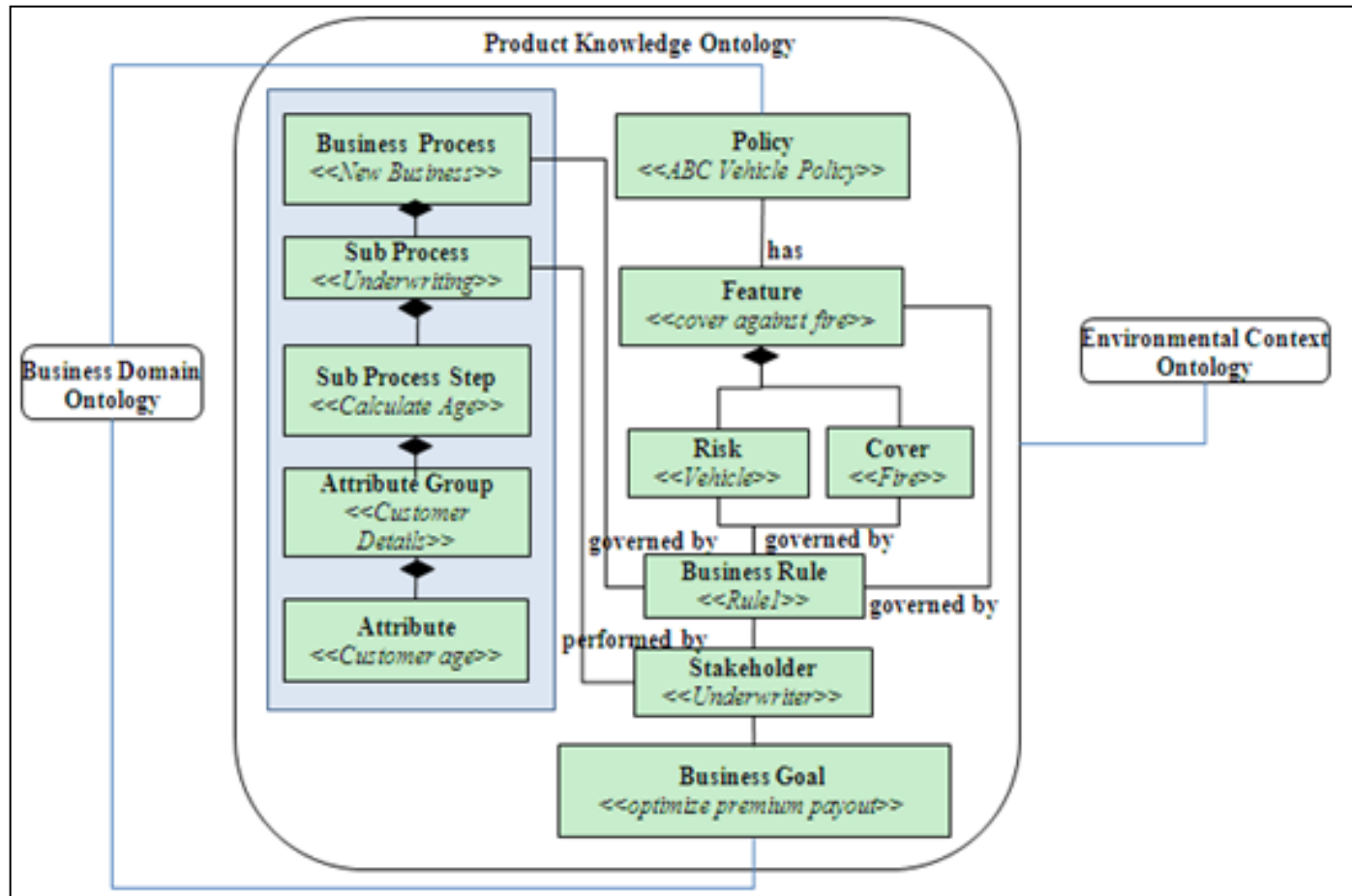
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# Current Solution

- Capture and organize existing generic product knowledge
  - Product Knowledge Ontology
    - Product Primitives
    - Relationships
  - Environmental Context Ontology
    - Domain (Insurance), Business (Non-life), Line of Business (Auto), Product Line (Personal), Country (India) and Company (ABC Inc.).
  - Business Domain Ontology
    - Business Event, Party, Business Action etc.

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# Current Solution



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# Current Solution

- Product Requirements Configurator features
  - Guidance to take informed decisions
  - Gap Analysis

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# Current Solution

**Generic Product Specification (Partial)**

**Covers**  
Bodily injury/ Property Damage Liability

**Attributes**  
For Fire claim registration sub process

1. **Vehicle Colour**
2. Claim Details
3. Damage details
4. Injury Details

Attribute Format for Policy Number: free text

**Process**

**Premium Collection**

1. Accepts premium in local currency.
2. The premium depends on the following factors of the vehicle: the make, model, year of manufacture, cubic capacity

**Policy Transfer**  
Policy transfer can be done only in case of

1. Death of the insured

**Payment:**

- a. Payment mode can be through:
  1. Check
  2. Cash



**India Specific Variant of Product Specification (Partial)**

**Covers**

1. Bodily injury/ Property Damage Liability
2. **Third Party Liability**

**Attributes**  
For Fire claim registration sub process

- ~~1. Vehicle Colour~~
2. Claim Details
3. Damage details
4. Injury Details

Attribute Format for Policy Number: **Office Code (6 digit) + Dept Code (2 digit) + Year (2 digit) + 8 digit Sequence No.**

**Process**

**Premium Collection**

1. **Accepts premium in local currency of India - Rupees.**
2. **The premium depends on the following factors of the vehicle : IDV, GVW/Cubic Capacity as applicable**

**Policy Transfer**  
Policy transfer can be done in case of

1. Death of the insured.
2. **Vehicle sale**

**Payment**

- a. Payment mode can be through:
  1. Check
  2. Cash
  3. **Bank transfer**

■ Deletion   ■ New Addition   ■ Modification

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# Why is it

- Challenging?
  - Abstraction of generic product knowledge (domain specific) in terms of concepts and their associations
  - Context–specific inferences for product configuration
- Interesting?
  - Generic Product Ontology (domain agnostic)
  - Treating product knowledge as a domain in itself

# Discussion

- **What is keeping you from solving the problem that you face?**
  - Upfront investment in manually creating the repository. In the absence of content, this is not likely to succeed
- **What one has to do to in order to use your solution?**
  - Organize domain knowledge along product primitives
- **How difficult is it to use the solution?**
  - Easy to learn and use after initial creating of the repository
- **Under which conditions can the solution be applied?**
  - Currently, solution is applicable for products under BFSI domain



# Thank you!