PNav: *Process Navigator for the Design of New Business Process Models*

Maya Lincoln

Avigdor Gal

Technion – Israel Institute of Technology

Motivation and Challenges

- Enterprise process repositories contain a large number of activities that can be re-used when redesigning existing processes or whenever the need for new processes arises

- Process modeling is considered a manual, labor intensive task, whose outcome depends on personal domain expertise with errors or inconsistencies that may lead to bad process performance and high process costs

- Hence, reuse of activities can save design time and support non-expert designers in creating new business process models

The *PNav* *Prototype*

- A process navigator that assists designers in designing new process models

- Generates activity suggestions for the newly generated process models

- The business logic for such suggestions is extracted from process repositories through the analysis of existing business process model activities

- Each activity is encoded automatically as a descriptor, using the PDC notation. The collection of all descriptors formulates a descriptor space, and distances between coordinates determine their business process conduct proximity
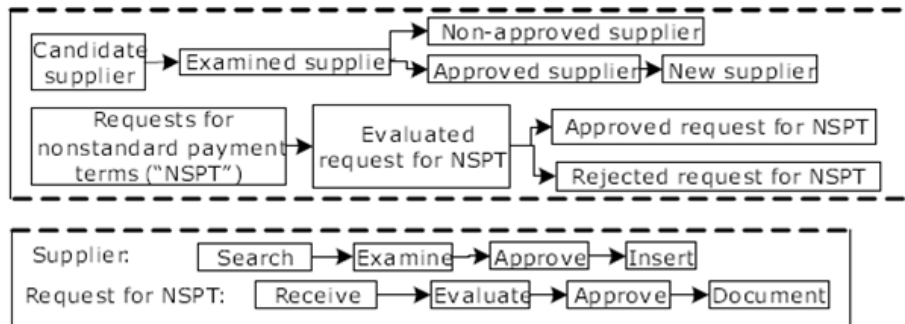
The Process Descriptor Catalog model ("PDC")
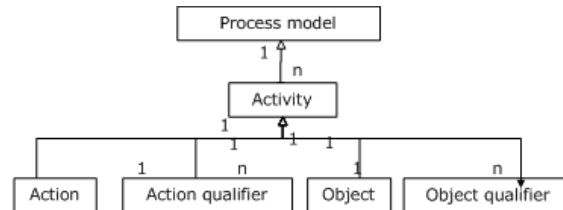

The Process Descriptor Model
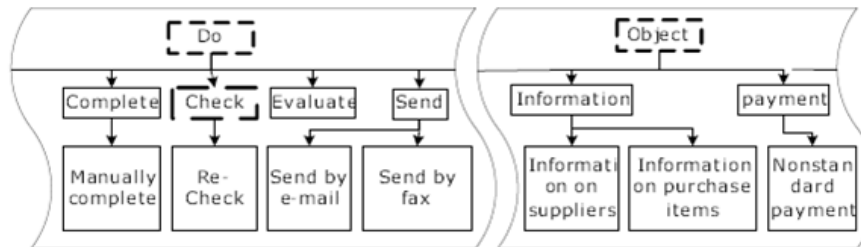
Segments of the action hierarchy model and the object hierarchy model extracted from the OBM for procurement processes

Segments of the action sequence model and the object lifecycle model extracted from the OBM for procurement processes

PNav *Architecture*

- *PNav implements a client-server architecture*
- Server side logic is implemented in PHP using a MySql database; The client runs within an Internet browser and is implemented in HTML and JavaScript, with AJAX calls to the server
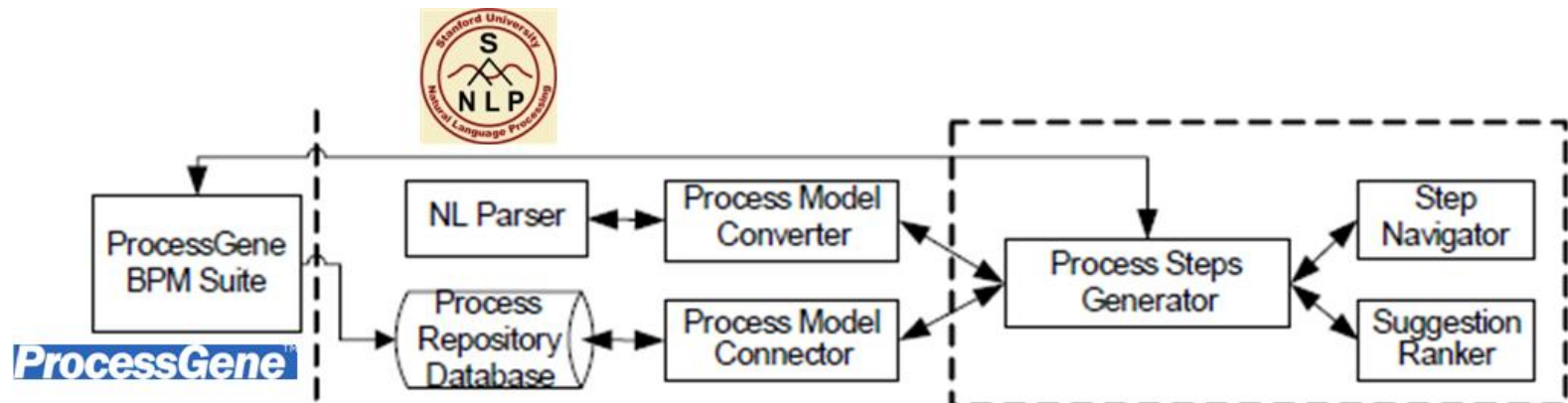
Example for using *PNav* *for Designing a New Process Model /1*

- We demonstrate the applicability of our ideas using processes from the Oracle Business Model

- The example supports the design of a new business process for: "Evaluate supplier performance"
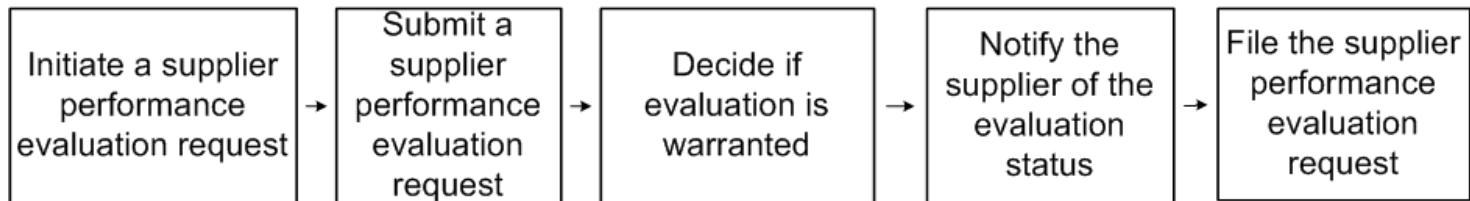
- The demo user shall provide a starting activity and then interact with *PNav* to receive a ranked list of suggested activities, refine the suggestions and move on to the next activity

Example for using *PNav* for *Designing a New Process Model /2*

Example for using *PNav* for *Designing a New Process Model /3*

Example: graphical log of design steps
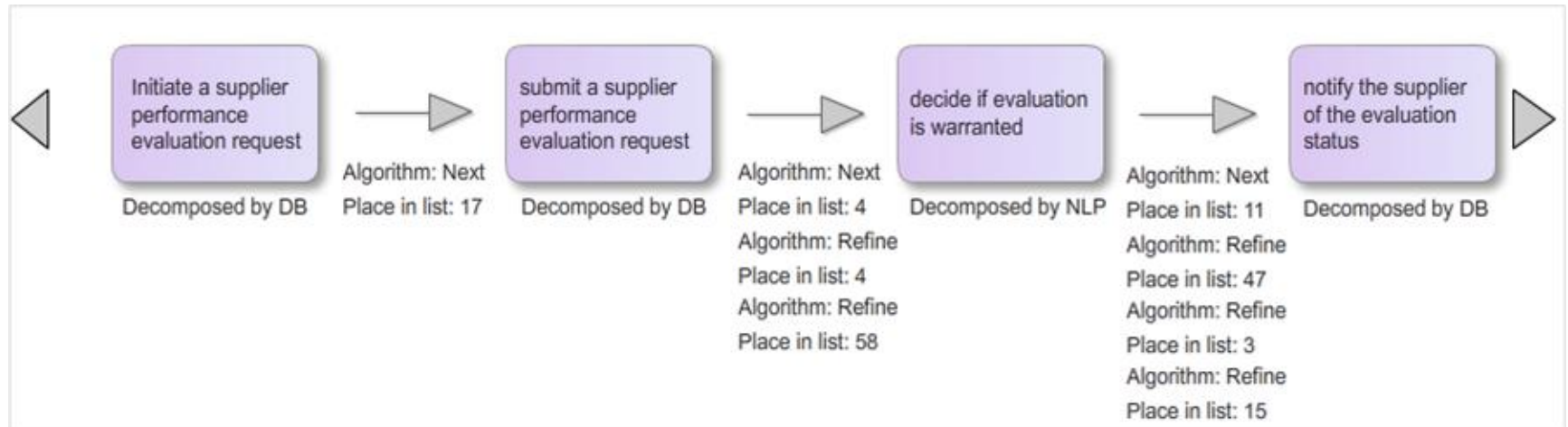
Thank you !

For more details:

avigal@ie.technion.ac.il

maya.lincoln@processgene.com