

PragmaDev to present the results of its 2012 on-line survey on software modeling technologies and their usage.

Paris - France - May 9th, 2012 - The survey confirmed last year results showing that UML is mainly used for documentation, Matlab/Simulink for simulation, and SDL for code generation. While MARTE and TTCN-3 are raising a lot of interest, LUSTRE and SystemC are substantially decreasing.

2012 modeling technologies and habits survey

This on-line survey took place in February and March 2012 and gathered 119 participants, most of them out of our existing contacts. The raw results are available [here](#), and the following information is a summary of the survey. Feel free to use this information as long as you quote it is coming from PragmaDev.

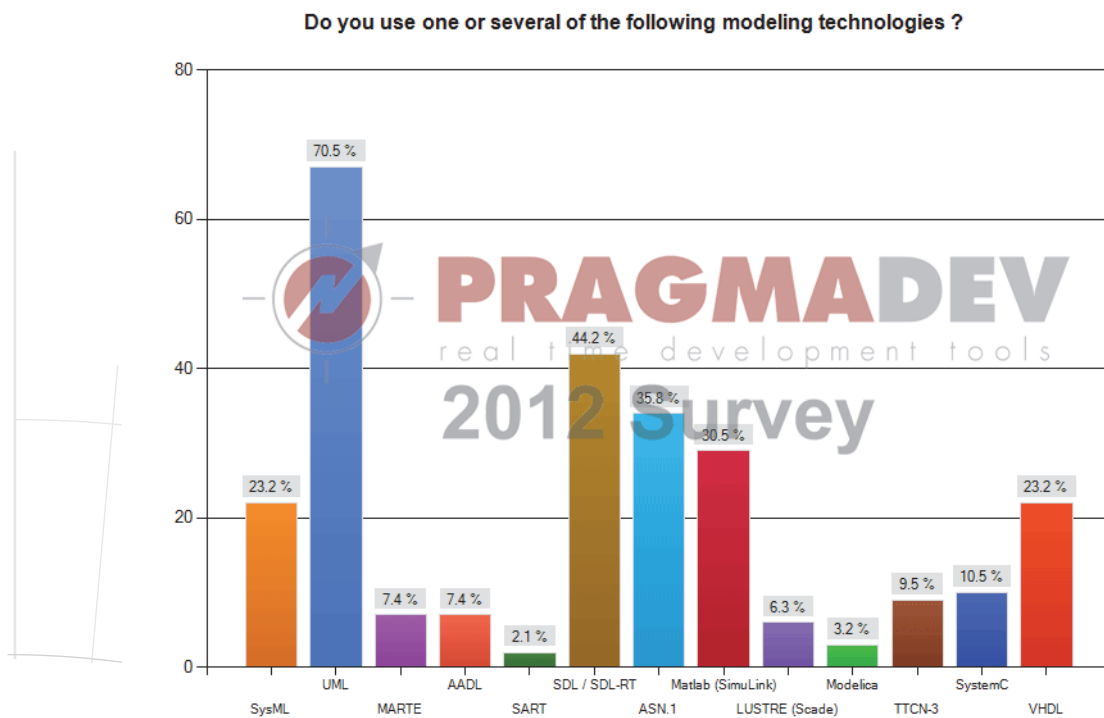
Respondents profile

Respondent average profile is:

- from Europe,
- working in a large telecom company,
- has indifferently between 0 and 30 years of experience,
- the target platform runs an operating system (short majority for Linux),
- the application is written in C or C++,
- it is based on Finite State Machines and is object oriented.

Modeling technologies

The top three modeling technologies are UML, SDL, and Matlab. Even though UML is the first modeling technology to be quoted, it is also interesting to state a strong interest for ASN.1 to model data.



Out of the 13 diagrams in UML the top 3 are:

- **Class diagram,**
- **Sequence diagram,**
- **Use case diagram.**

Modeling usage

The usage of each modeling technology confirms last year's results:

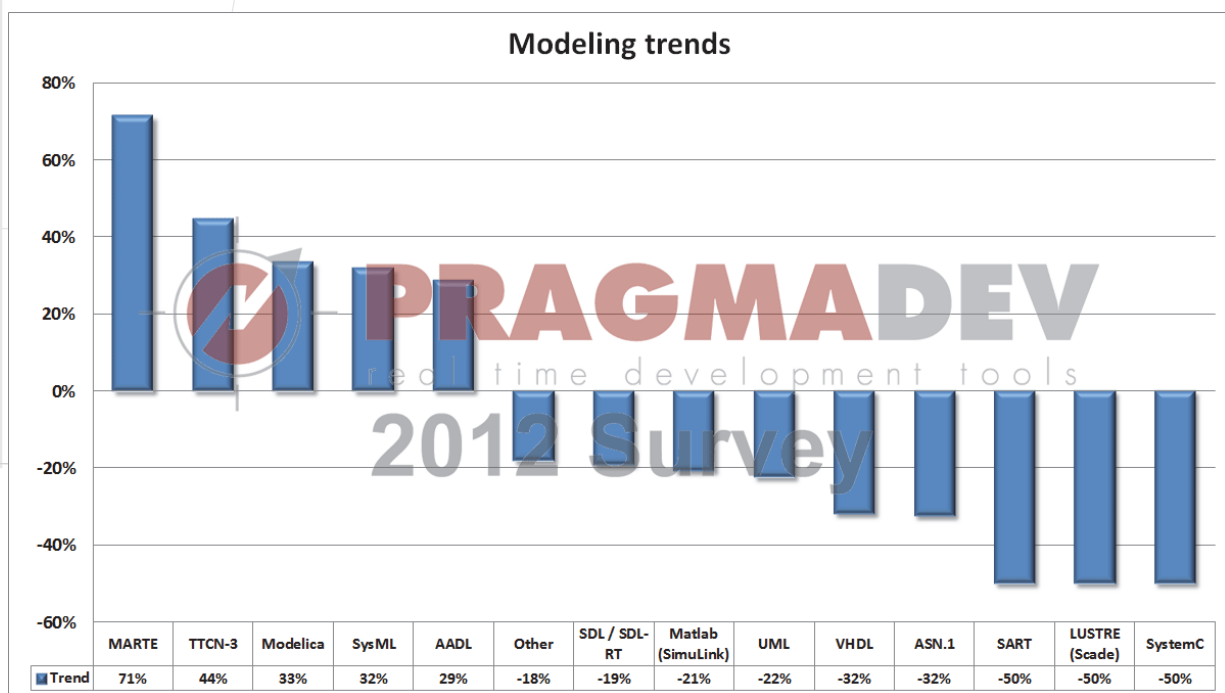
- **SysML and UML users mostly do documentation,**
- **Matlab users mostly do simulation,**
- **SDL users mostly do code generation.**



Upcoming technologies

This is probably one of the most interesting result we get out of this survey, and that gives an idea of the current trends on the modeling market. The key trends are:

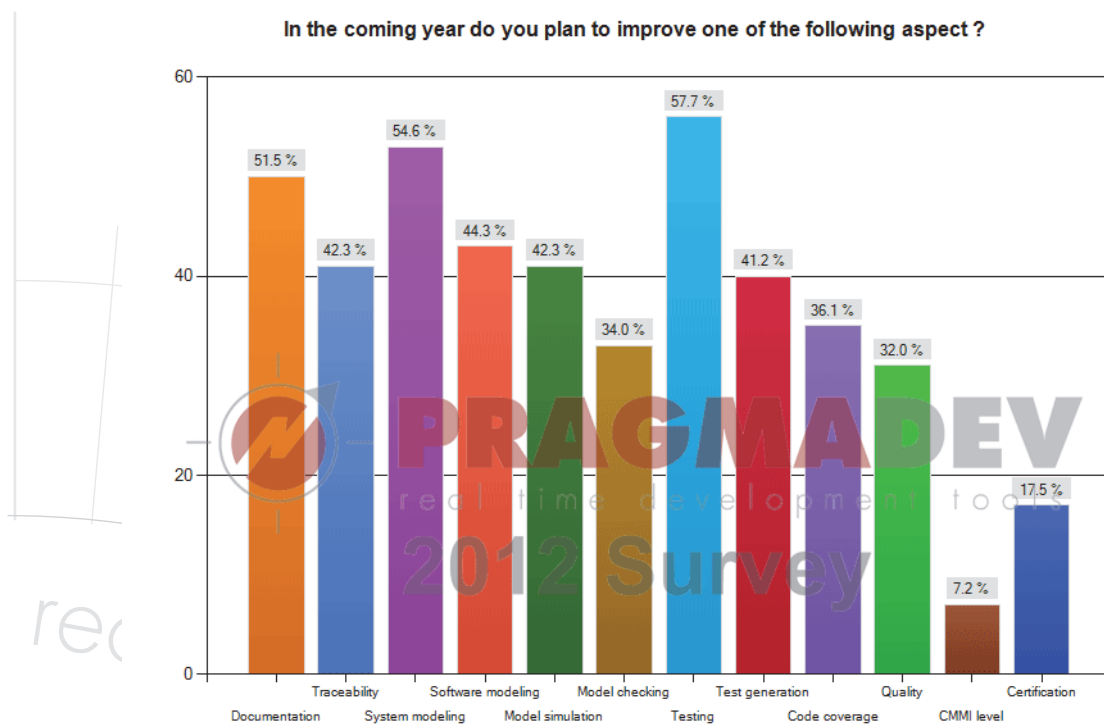
- **MARTE, TTCN-3, Modelica, SysML and AADL are still generating a lot of interest probably because all these technologies are quite recent,**
- **SDL, UML, VHDL, and ASN.1 are slightly decreasing probably because these are mature technologies,**
- **SART, LUSTRE, and SystemC are substantially decreasing.**



Upcoming hot topics

Last question of the survey was about which topic will get the focus in the coming year. Top three answers are:

- **Testing,**
- **System modeling,**
- **Documentation.**



About PragmaDev

PragmaDev is a privately held company based in Paris France that provides a set of modeling tools for the prototyping, the development, and the test of real time and embedded software: "Real Time Developer Studio" and "MSC Tracer". Real Time Developer Studio targets all development teams working on communicating systems with a unique combination of standard languages. The MSC Tracer is an on-line or off-line tracing tool generating live sequence diagrams.

Real Time Developer Studio provides three levels of modeling: informal, semi-formal, and fully formal modeling. While informal modeling is mainly used for documentation, the most advanced level of modeling allows simulation, prototyping, verification, full code generation, debug on target, and test of the model.

PragmaDev has established partnership with key players in the real time domain. Customers include Airbus, Renault, Alcatel, ST-Ericsson, the French Army, Nortel Networks, the European Space Agency, Toshiba, Korean Telecom, and LG Electronics.

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