

We are interested in your **experience** with any flavour of model-driven engineering (MDE); and we use MDE to refer to any principled method of using software and system modeling, including MDA, MDD, MBSE etc.

- This survey assumes that you have some experience of modeling and MDE in the software industry. We are interested in views, judgements and opinions based on that experience.
- It is also entirely **anonymous** unless you choose to give us your contact details at the end.
- We estimate that it should take no more than about 15 minutes to complete - **almost all questions are radio buttons/checkboxes.**
- In all, there are about 35 questions and the progress bar indicates how much has been completed.
- There's a chance to leave any comments you have - e.g. if there's anything we've missed - at the end.

1. Do you consider MDE to be a good thing?

Yes

No

Neutral

Don't know

2. On average, to what extent do you agree with the following statements?

In projects in which I have used MDE, ...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
MDE has increased my personal productivity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MDE has increased the productivity of the development team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MDE has made it easier to maintain software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MDE has made it easier to port software to new platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MDE was a success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MDE can mean different things to different people. These differences can represent flavours of MDE or different levels of adoption of MDE. We would like your opinion on how the use of different MDE activities on projects affects productivity and maintainability. If you do not make use of a particular activity, please indicate by ticking "Don't Use" - this will help us understand different MDE practices.

3. Based on your experience, for each of the following MDE activities, how does the activity affect overall productivity on your projects?

	Improved Productivity	No Difference	Reduced Productivity	Don't Use
Use of models for team communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of models for understanding a problem at an abstract level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of models to capture and document designs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of domain-specific languages (DSLs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of model-to-model transformations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of models in testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code generation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model simulation/Executable models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Based on your experience, for each of the following MDE activities, how does the activity affect the overall maintainability of your projects?

	Improved Maintainability	No Difference	Reduced Maintainability	Don't Use
Use of models for team communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of models for understanding a problem at an abstract level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of models to capture and document designs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of domain-specific languages (DSLs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of model-to-model transformations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of models in testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Code generation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model simulation/Executable models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What seems to be a positive impact from one point of view can sometimes also be seen as a negative impact from another. These questions present both sides of the coin and ask you to judge both positive and negative impacts.

- When answering these questions, please base your answers on your experience rather than intuition or perception.
- If a question refers to a practice you do not use or something you have no experience of, please indicate using the option provided. This is also of interest to us.

5. Training: Does using MDE allow you to employ developers with less software engineering experience (e.g. new graduates)?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- No Experience of This

6. Training: Does using MDE require you to carry out significant extra training in modeling?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- No Experience of This

7. Code Generation: Is your use of code generation an important aspect of your MDE productivity gains?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- Don't Use

8. Code Generation: Is integrating generated code into your existing projects a significant problem?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

Don't Use

9. Agility: Does MDE make you faster at implementing new requirements?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

No Experience of This

10. Agility: Does MDE prevent you from responding to business opportunities?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

No Experience of This

11. Testing: Do models make it easier to develop and execute test cases?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

No Experience of This

12. Testing: Does model-based testing require significant additional time to specify the models at a sufficient level of detail for testing?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

No Experience of This

13. Round-trip Engineering: Do you mainly make updates on the model rather than the code?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

No Experience of This

14. Round-trip Engineering: Do you spend a lot of time synchronizing the model and the code?

Definitely Yes

Probably Yes

Neutral

Probably No

Definitely No

No Experience of This

15. Understandability: Does your use of MDE lead to better understanding between stakeholders?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- No Experience of This

16. Understandability: Does your use of MDE result in unexpected confusion and/or misunderstandings between stakeholders?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- No Experience of This

17. Tool Costs: Are MDE tools too expensive?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- Don't Know

18. Tool Costs: Do organisations attempt to deploy MDE using inappropriate and/or cheap tools?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- Don't Know

19. UML: Is UML too complex?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- Don't Use

20. UML: Is UML powerful enough for your needs?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- Don't Use

21. Reasons to Model: Do organisations adopt MDE for its technical merits?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- No Experience of This

22. Reasons to Model: Do organisations adopt MDE to "jump through hoops" or appear to do so?

- Definitely Yes
- Probably Yes
- Neutral
- Probably No
- Definitely No
- No Experience of This

Here we are interested to know what using or adopting MDE means to you in practice. When you say that you use MDE, what does that mean in practice?

23. Which modeling language(s) do you use for MDE? (please tick all that apply)

- UML
- BPMN
- DSL provided by tool provider
- DSL of our own design
- SysML
- Matlab/Simulink

Others (please specify):

24. When modeling, which diagrams, if any, do you use regularly?

1.
 2.
 3.
 4.
 5.
- Others (please specify):

25. When modeling, which diagrams, if any, do you use sometimes?

1.
 2.
 3.
 4.
 5.
- Others (please specify):

Here, we are interested in hearing about the "tools" you use to implement MDE in your projects. We interpret "tools" in quite a broad way and would like you to include anything you think fits this category.

26. Which tools, if any, have you used to help you apply MDE? (Please list in order of importance.)

1.

2.

3.

Others:

27. Which of these, if any, would you recommend to colleagues? (Please list in order of likelihood.)

1.

2.

3.

Others:

We would like to know a little bit about you. We would also like to know how MDE affects your experience of software development.

28. In general, when you use MDE on a project, how does it affect your:

	Hinders a lot	Hinders	Neutral	Helps	Helps a lot
Enjoyment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creativity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Problem Solving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Productivity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. About how long have you been involved in software development?

- First time
- 1-2 years
- 2-5 years
- 5-10 years
- >10 years

30. What best describes your current role?

- Developer
- Modeler
- Team Leader
- Project Manager
- Domain Expert
- Researcher

Other (please specify)

31. About how long have you been in this role?

- First time
- 1-2 years
- 2-5 years
- 5-10 years
- >10 years

We would like to know a little bit about the type and size of the company or organisation you work for.

**32. How would you describe the domain or sector of your company or organisation?
(For example, financial, automotive, telecommunications, etc.)**

33. Approximately how many employees are there in your company or organisation?

1-10

10-100

100-1000

1000-10000

>10000

Don't know

34. Approximately how many employees in your company or organisation are engaged in software development?

1-10

10-100

100-1000

1000-10000

>10000

Don't know

35. How would you describe your company or organisation's maturity in its use of MDE?

Initial Exploration

Prototyping

First Significant Project

Multiple Projects Completed

Extensive Experience of MDE on Many Projects and/or over Many Years

Do you have other experiences of using models and MDE that you would like to share? This survey is part of a project aiming to identify and understand the factors that affect the success or failure of MDE in practice. If you choose not to provide us with contact information, this survey is entirely anonymous. However, if you are willing to be contacted about further participation in our project, please provide contact details below.

36. If you are willing for us to contact you, please give us your name and an email address.

Name:

Email Address:

37. Finally, is there something you just have to tell us but haven't had the chance? You can do so here:

Thank you for taking the time to complete our survey. When you're finished, please hit the "Done" button.