

EMC-Kennismarkt 2014

Research Vision and Collaboration with Industry

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TU / **e** Technische Universiteit
Eindhoven
University of Technology

Where innovation starts

2 'Take-Home Messages'

2 Take-Home Messages

1. Research vision:

A design and designer friendly EMC toolset

2 Take-Home Messages

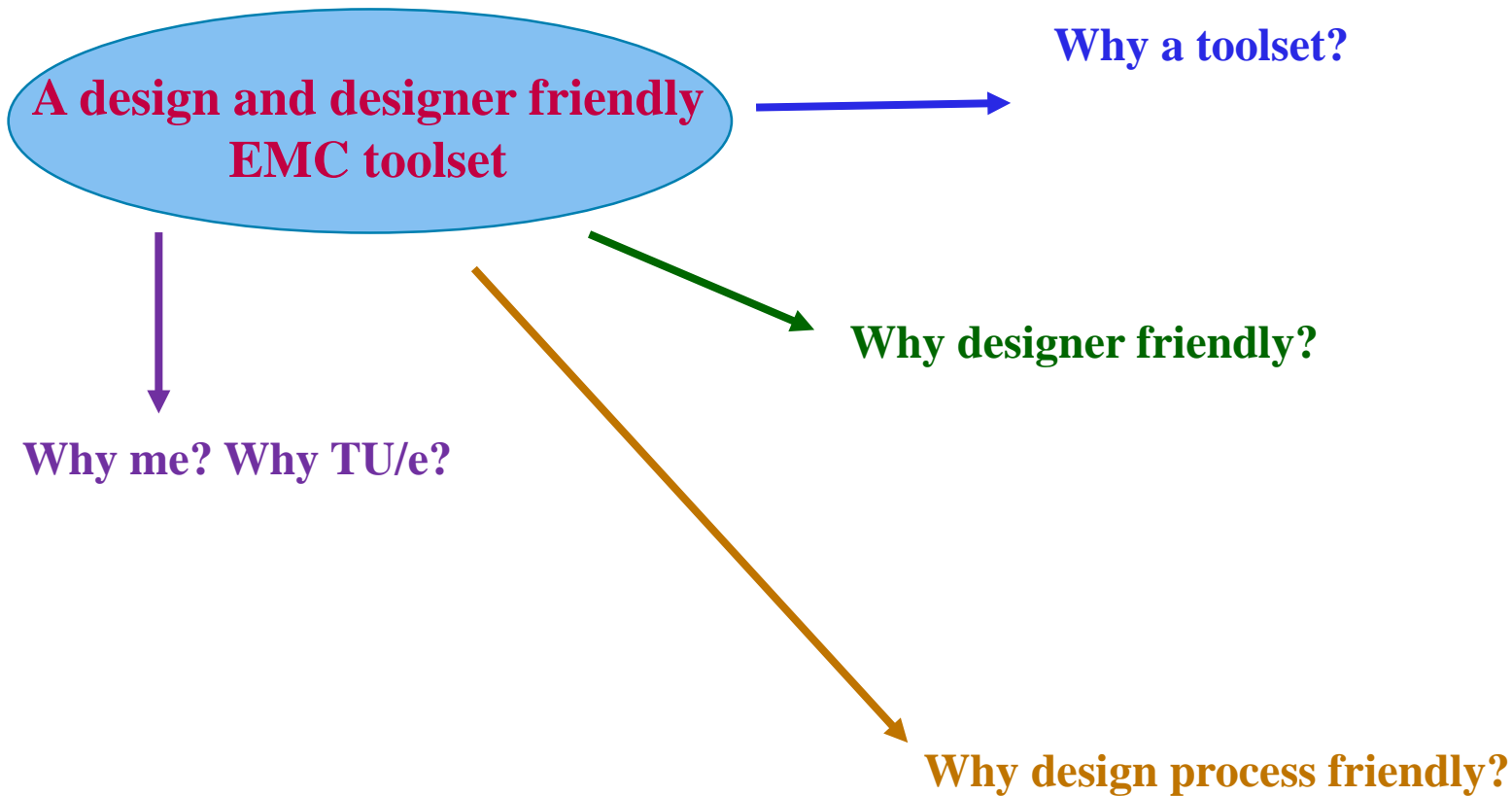
1. Research vision:

A design and designer friendly EMC toolset

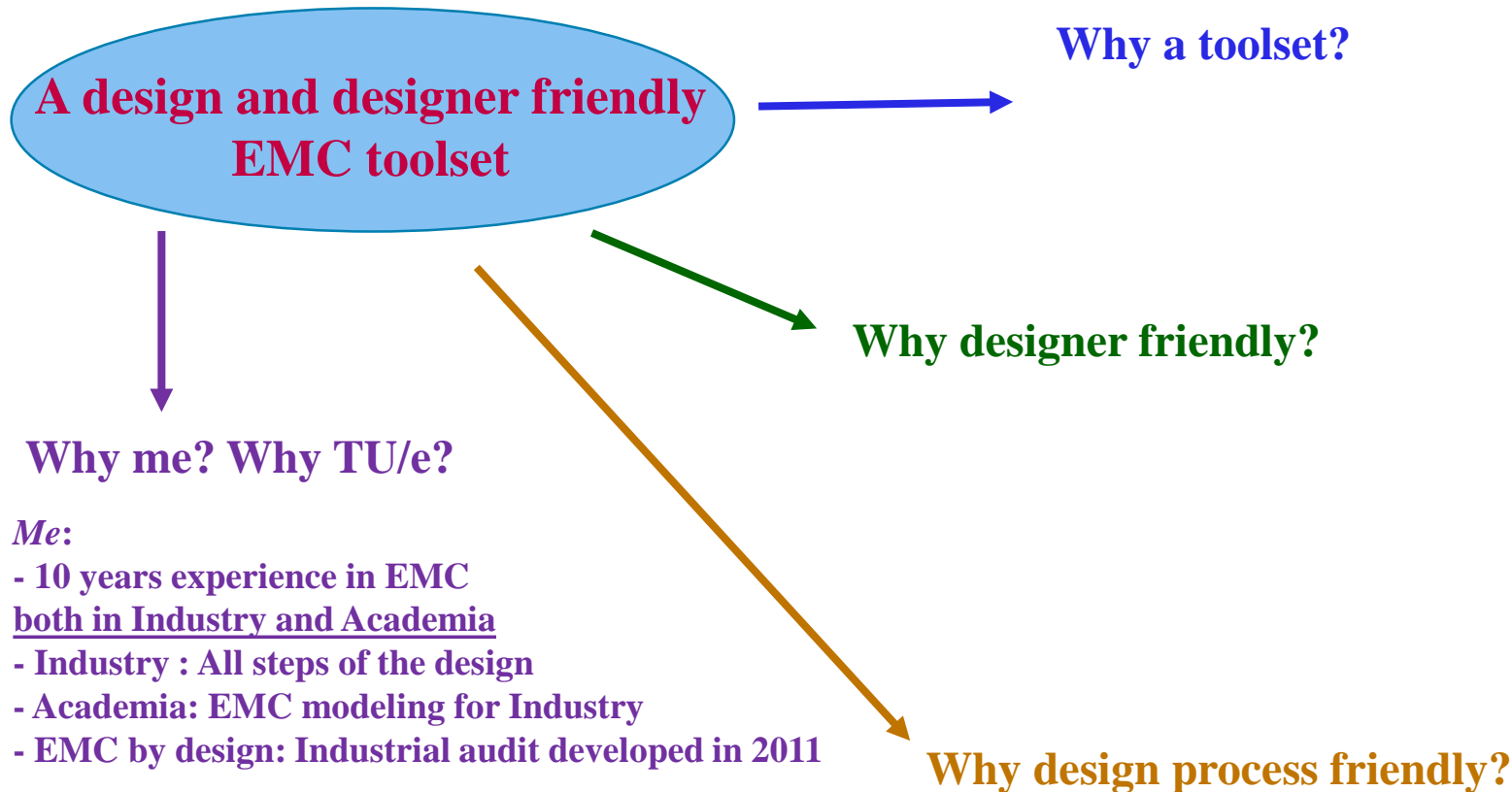
2. Collaborations:

We can already make it a Win-Win

1. A design and designer friendly EMC toolset



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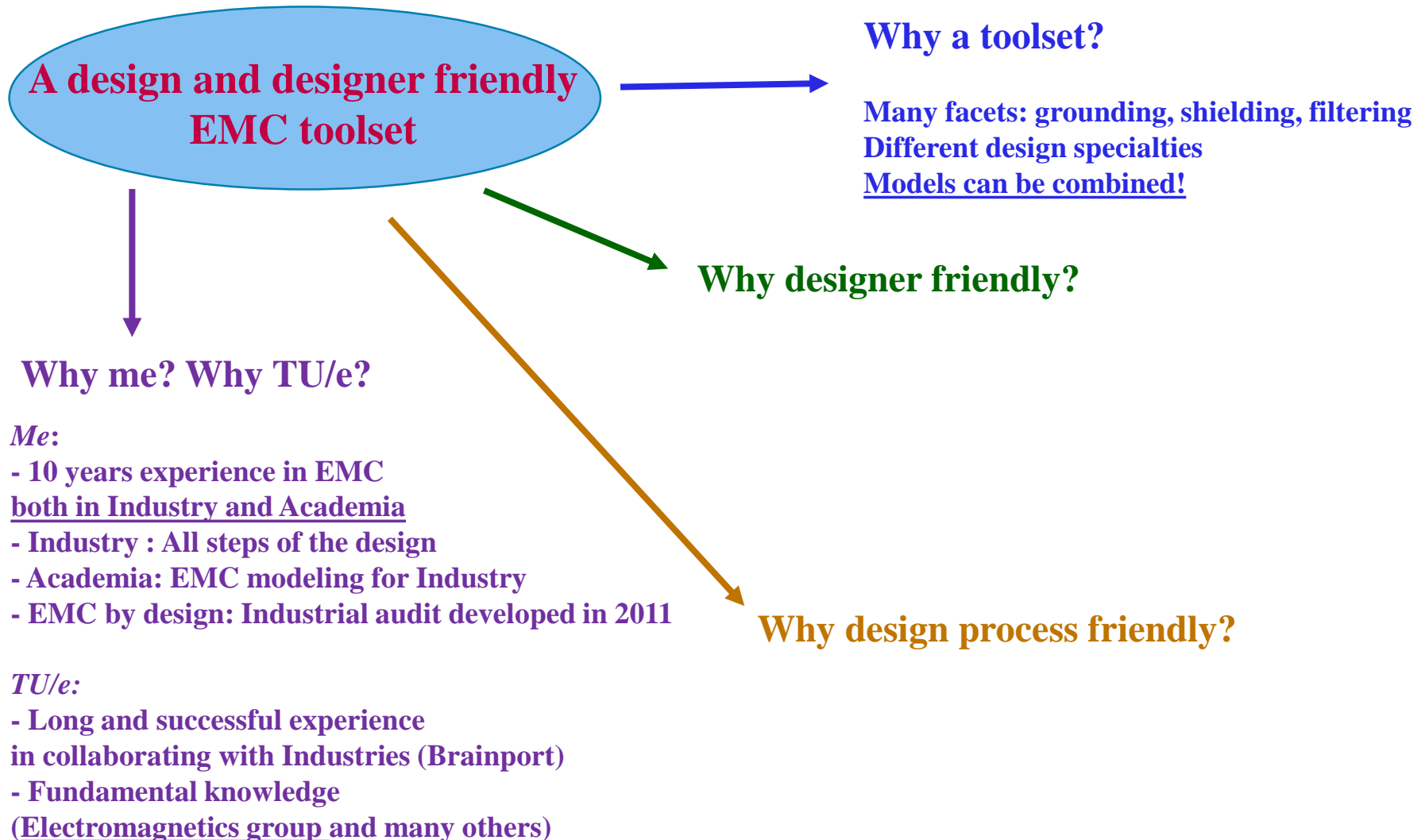
Me:

- 10 years experience in EMC both in Industry and Academia
- Industry : All steps of the design
- Academia: EMC modeling for Industry
- EMC by design: Industrial audit developed in 2011

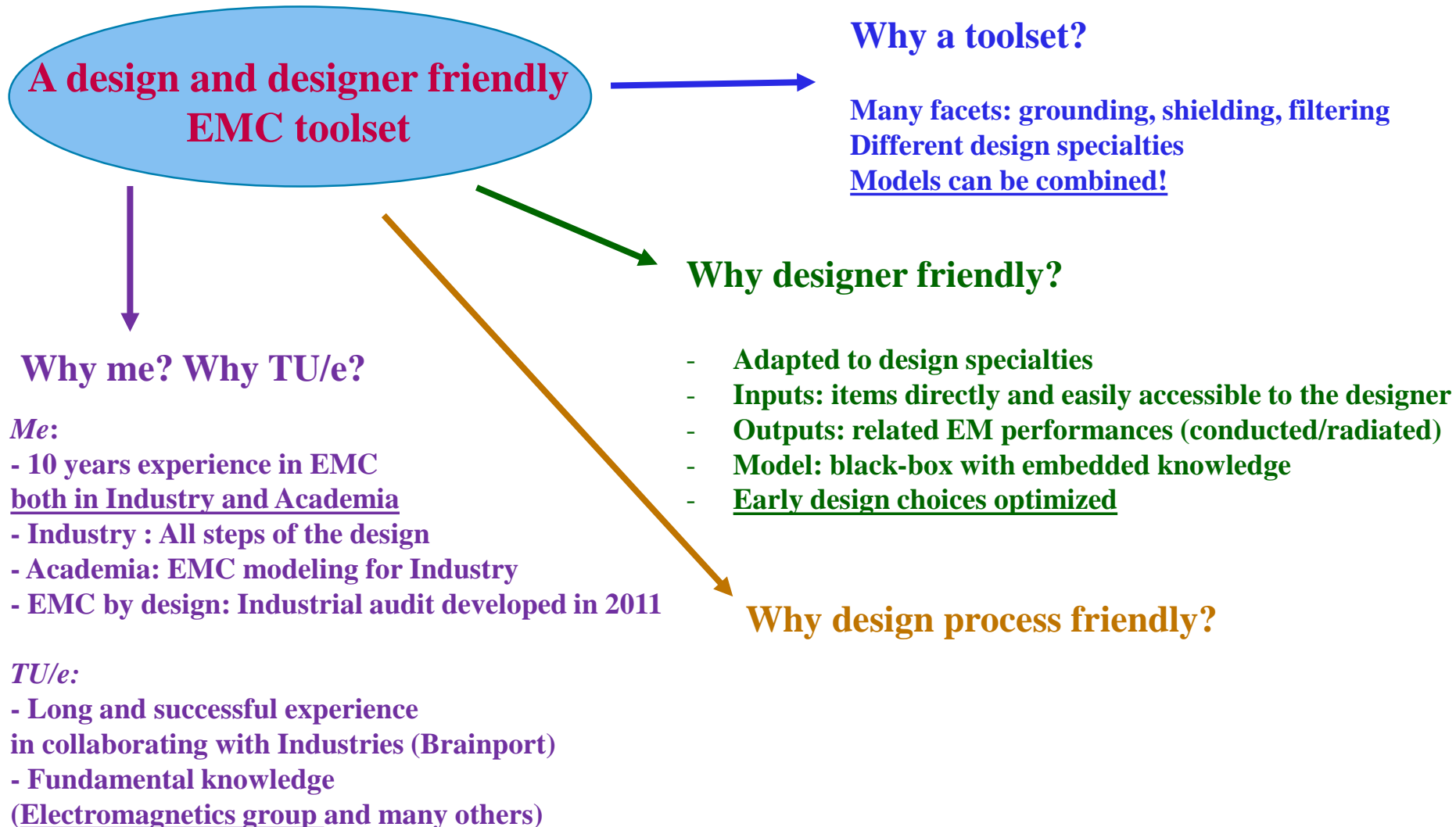
TU/e:

- Long and successful experience in collaborating with Industries (Brainport)
- Fundamental knowledge (Electromagnetics group and many others)

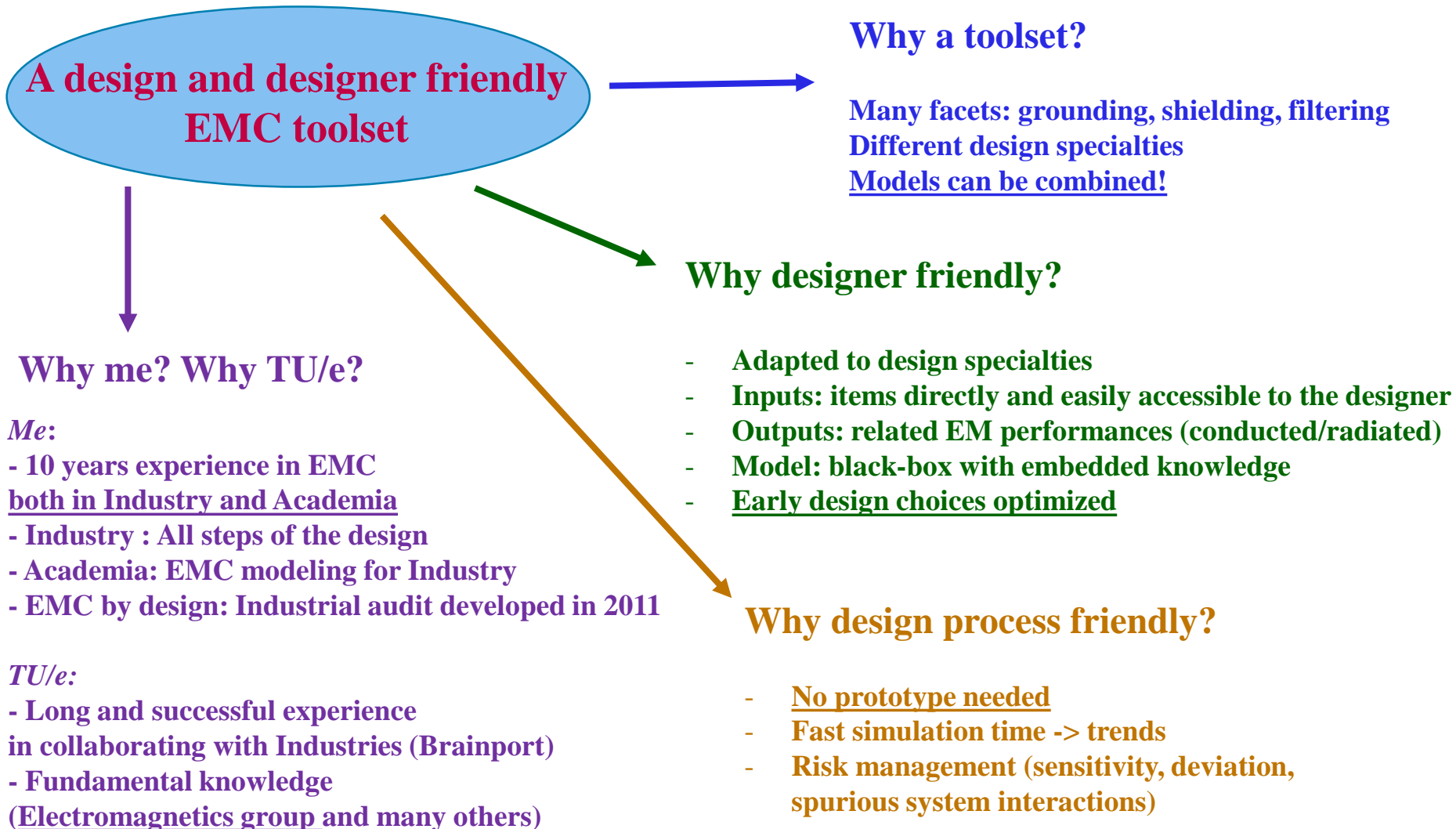
1. A design and designer friendly EMC toolset



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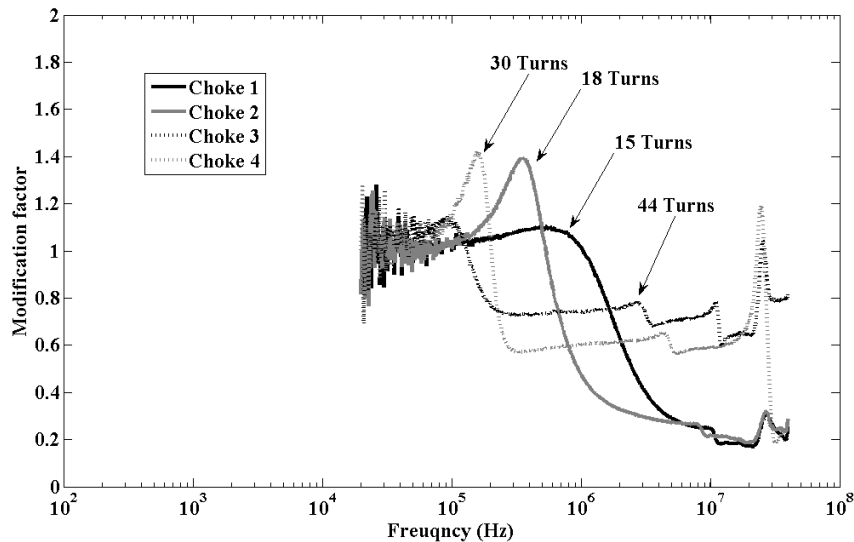


1. A design and designer friendly EMC toolset



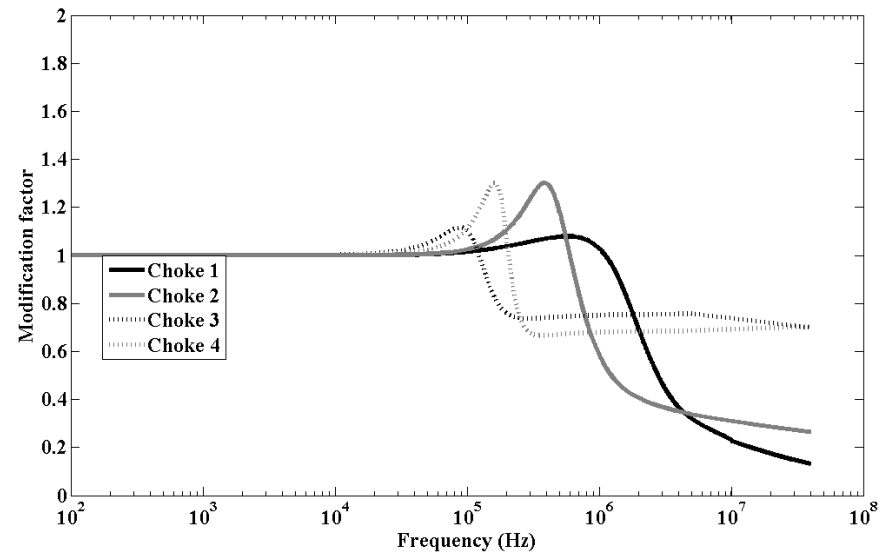
Example: Model for the DC EMI filter design

Typical outputs: IN SITU current attenuation and resonances



Late in the design process

1 AC-DC prototype
4 CMCs
4 measurements
Data treatment



Early in the design process

4 simulations (simulation time < 1 minute)
Fast choice

Example: Model for the DC EMI filter design

Some more models already existing:

- Common mode choke
- DC EMI filter (COTS)
- Cables

To know more about it, please contact me!

(Contact details in the last slide)

2 Take-Home Messages

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2. Collaborations:

We can already make it a Win-Win

2. We can already make it a Win-Win

Type of collaborations: They are different types of projects... Overview:

You can help us with

- Letter of support
- Member of the user committee

- Support in kind
(measurements facilities, industrial cases...)

- Financial support for short/long term projects
(9 months to 4 years, many possibilities...)

We can help you with:

Preferential user

- + You stir the development of the toolbox to your needs
- + You receive prime updates

- + Your case is investigated + complete report
- + Your needs included in the model development
- +... ?

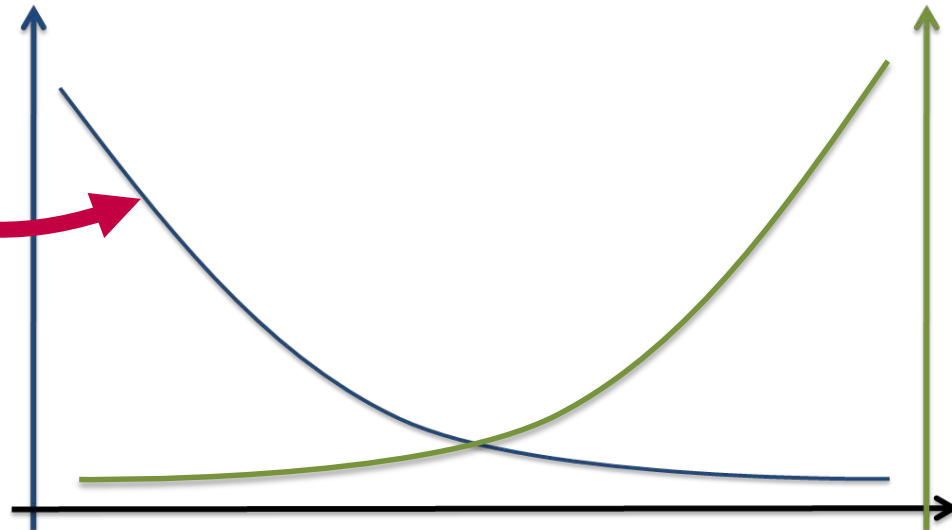
- + Your needs addressed first!
- + Cases investigated (complete report)
- + Specific models
- +... ?

2. We can already make it a Win-Win

Each model developed is a long term benefit

EMC implementation vs. cost

Available means



Time in the development

THANK YOU !!!

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We can already make it a Win-Win

Contact details



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