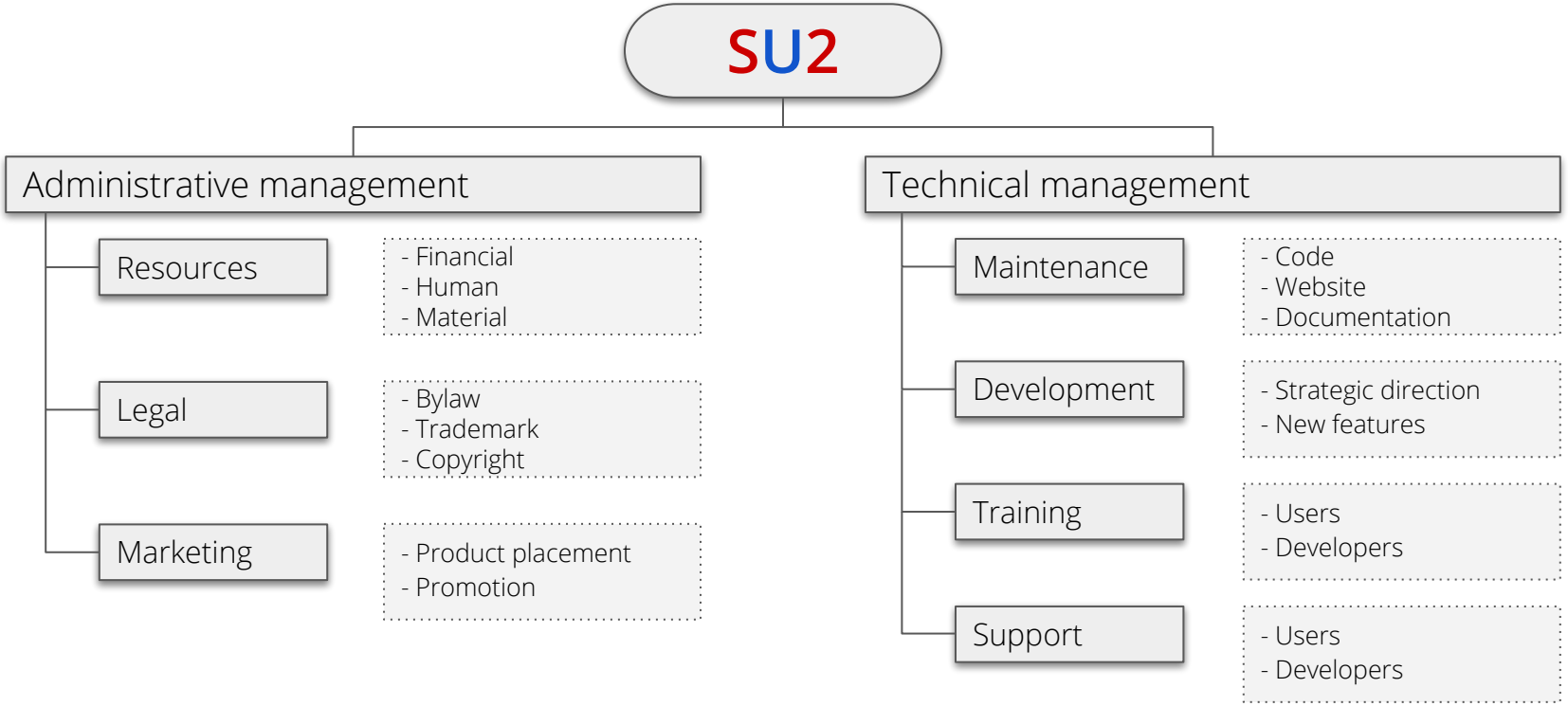
SU2 Foundation

User Perspective

Ruben Sanchez

SU2

From last year's IDS presentation...



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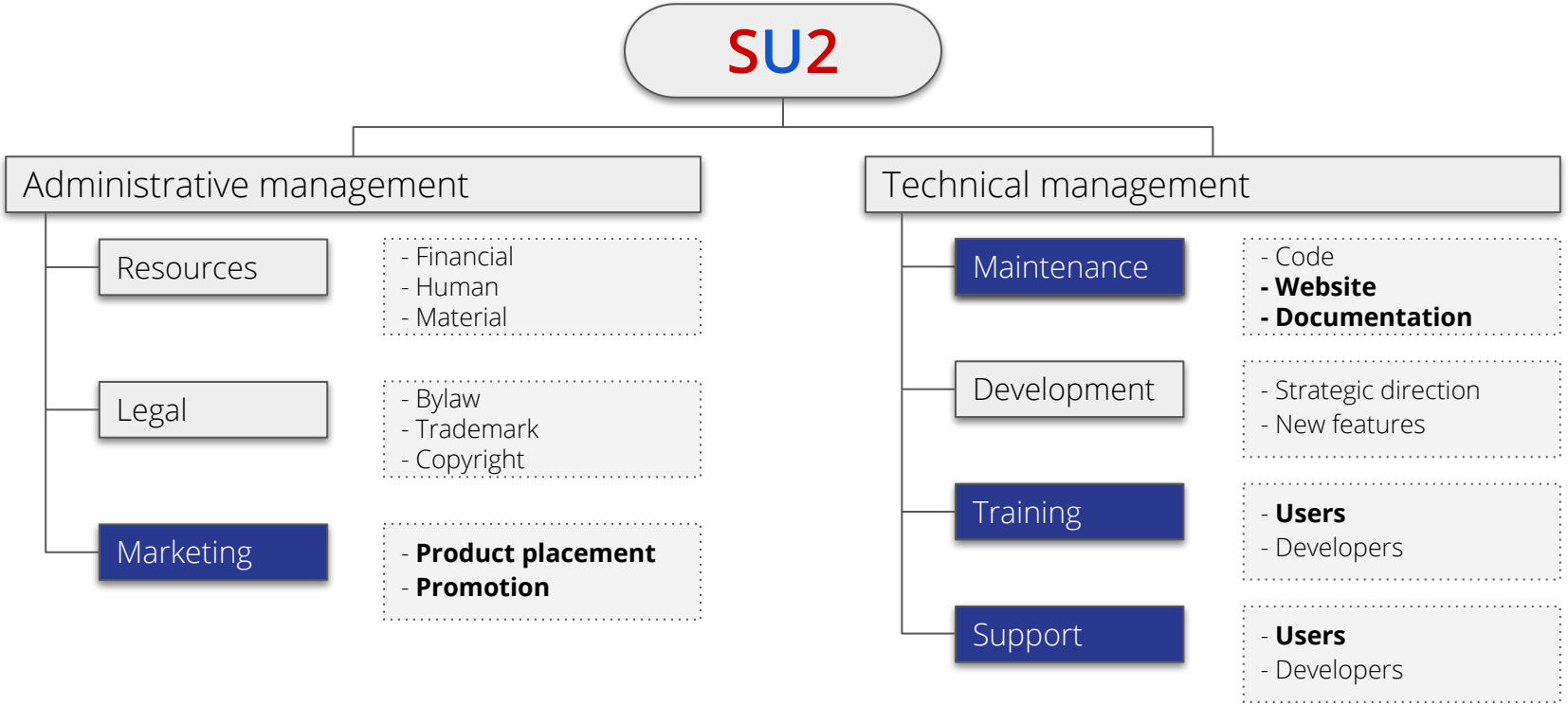

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SU2 Foundation: Mission

1. ***Promote*** *global software development and* ***education*** *to increase the pace of* ***innovation*** *in the engineering sciences for the* ***public benefit of all society****;*

2. *provide a trusted, neutral forum for* ***community collaboration*** *by offering an efficient, compliant collaboration infrastructure and transparent, community-driven technical governance;*

3. ***undertake such other activities*** *as may from time to time be appropriate to further the purposes and* ***achieve the goals*** *set forth above.*

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User: Member Definition

Defining our **current SU2 user community** is not a trivial task...

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Some attempts:

- *“Anyone who has ever downloaded SU2”* … too broad?

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- *“Anyone who has published a paper using SU2”* … too narrow!

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User: Member Definition

Defining our **current SU2 user community** is not a trivial task...

Some attempts:

- *“Anyone who has ever downloaded SU2”* … too broad?
- *“Anyone who has published a paper using SU2”* … too narrow!
- *“Anyone who uses SU2 on a regular basis”* … how do we know?

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Let’s try with our **potential** user base:

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User: Member Definition

Defining our **current SU2 user community** is not a trivial task...

Let's try with our **potential** user base:

- Bachelor's and Master's **students** in the engineering sciences, **globally**
- PhD candidates, interested in **innovative applications of CFD**
- Researchers, interested in **using** cutting-edge software
- SME, for whom it is of benefit to have **accessible** simulation tools
- Large enterprises, with challenging problems requiring **forefront technologies**
- Hobbyists, interested in **technology and innovation**

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*“The user community should be **encouraged to define itself**; as opposed to the developer community, we currently have no clear knowledge of how many people are using SU2, or who they are.”*

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“The SU2 user community may include anyone interested in successfully applying SU2 to fit their purposes, without the need of awareness of implementation details.”

*“The user community should be **encouraged to define itself**; as opposed to the developer community, we currently have no clear knowledge of how many people are using SU2, or who they are.”*

*“Users who wish to engage with the decision-making process (“run for office”) should **demonstrate some form of involvement**. Details on how to do so are **open for discussion**”*

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User: Assessment of the SU2 Project Today

Sweet spots to keep/strengthen:

- Many great features!
- User interface is simple:
  - No programming knowledge to use SU2
  - Unified, readable config file
- Building the code is also quite easy
  - Almost no dependencies
  - A few commands suffice
  - But... Not everyone is a computer scientist!
- Website/documentation framework enabled for collaboration
  - It would be relatively easy for anyone to add/improve tutorials/docs

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Pain points to remove/improve upon:

- **Documentation**
  - **Up-to-date** docs
  - Tutorials for specific features
  - List of available config options
  - More concise error messages
  - Maybe some more simplified instructions for installation and first steps
- Responsiveness
  - Many questions remain unanswered
- Automation
  - Complicated with multiple binaries
  - Python scripts are outdated

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User: Relationship with the Foundation

How the foundation can support users:

- Courses and workshops
  - One of the most common demands from new users
- Encouraging user involvement
  - For this, we need means of recognizement
- Promote feature documentation
  - Currently most features are only documented via academic publications
- User Conference
  - It would be a great way to bring the community together

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How users can support the foundation:

- Providing feedback
  - User surveys
- Adding documentation
  - Things that might seem easy to some might not be so for everyone
  - The community have already added some guides to the website, and we want to encourage that to happen more often
  - Example: cygwin tutorial
- Being proactive!
  - We are only successful if the code is used by the community, and if the community is involved with the code.

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User: Proposal for Action

The following foundation **programs** are recommended for the group of users:

- We propose to organize, in 2020, the first SU2 User Conference(s)
  - Europe? US? Both?
- We propose that the Foundation and the core groups work together to hold workshops (1 or 2 days) at their location, by the start of the academic year
- We propose that the Foundation encourages user involvement by means of a recognizement strategy
  - Awards, rewards, merchandising?

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User: Proposal for Action

The following foundation **subcommittees** are recommended for the group of users:

- Documentation subcommittee
  - In charge of documenting existing features, starting with version 7
  - In charge of updating and improving existing guides and tutorials
- Support subcommittee
  - In charge of replying user questions at cfd-online, github...
- Awareness subcommittee
  - In charge of collaborating with the developers to generate content to increase awareness of the different SU2 features among the community