JEITA EDA Model Specialty Committee Report

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DesignCon IBIS Summit
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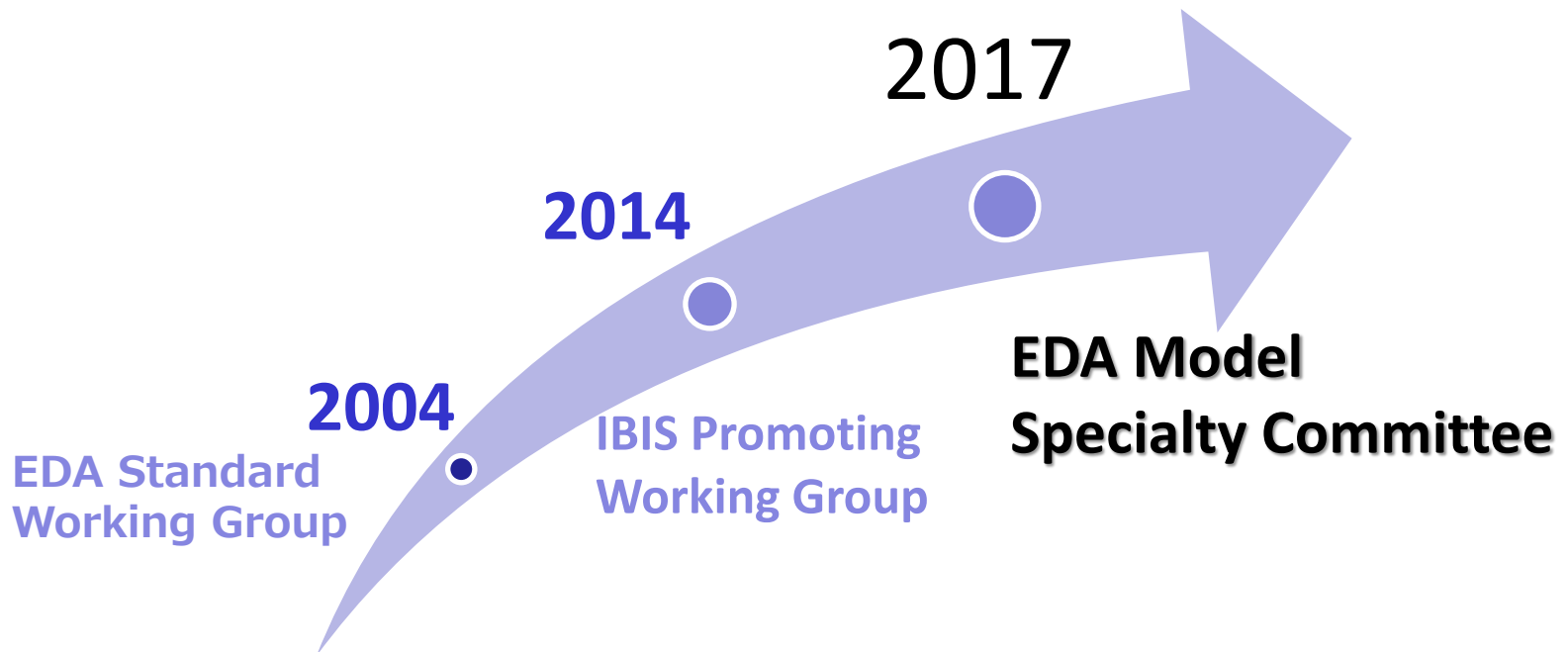**EDA Model Specialty Committee,   EC Center / JEITA**

Agenda

- About JEITA EDA Model Specialty Committee

- Our Activities Introduction

- Attendees Profiles of Asian IBIS Summit, Tokyo

- 2019 Action Plan
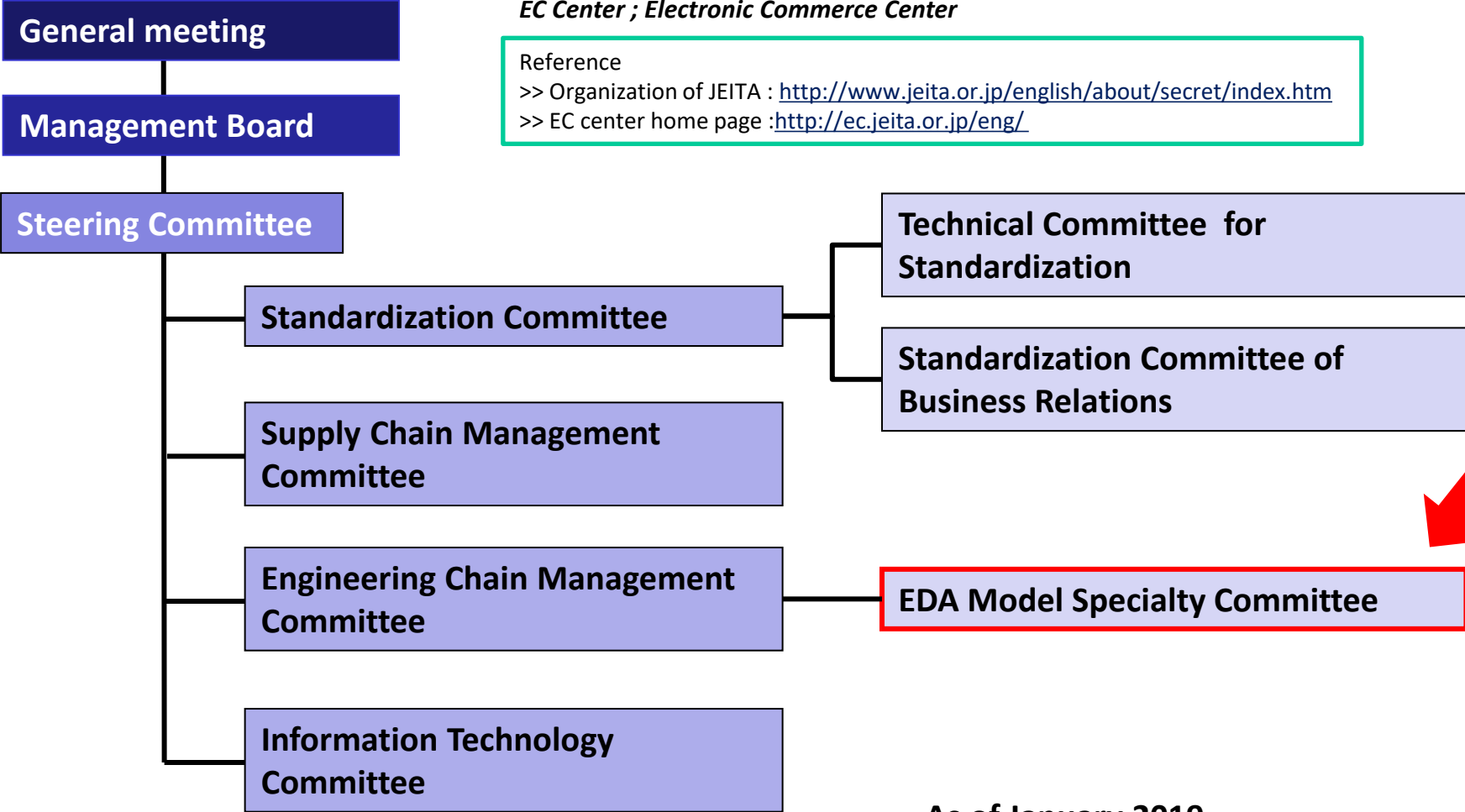
About JEITA EDA Model Specialty Committee

- EDA Model Specialty Committee started in May 2017
- We promote the use of EDA model (including IBIS model) and share information about these models.

2017

2014

2004

EDA Standard Working Group

IBIS Promoting Working Group

EDA Model Specialty Committee

ECALGA

JEITA/EC Center Committee Organization

JEITA ; Japan Electronics and Information Technology Industries Association
IBIS; I/O Buffer Information Specification
EC Center ; Electronic Commerce Center

Reference
>> Organization of JEITA : http://www.jeita.or.jp/english/about/secret/index.htm
>> EC center home page :http://ec.jeita.or.jp/eng/

General meeting

Management Board

Steering Committee

Standardization Committee

Technical Committee for Standardization

Standardization Committee of Business Relations

Supply Chain Management Committee

Engineering Chain Management Committee

EDA Model Specialty Committee

Information Technology Committee

As of January 2019

ECALGA

Our Activities

- EDA model (including IBIS model) promotion of utilization and technology exchange
  - Provide IBIS related informational in IBIS Seminar
  - Define IBIS simulation procedure guideline
    - Simulation Guideline for target topologies
    - Maintain IBIS Quality WG results
      » IBIS Quality Framework Home Page
      » JEITA Book: "SI Simulation Model Handbook"

- Asian IBIS Summit, Japan
  - Support IBIS Open Forum for all logistics

- Advanced IBIS technology guidance
  - Attending Design Con to obtain new info and seeing IBIS Open Forum Members
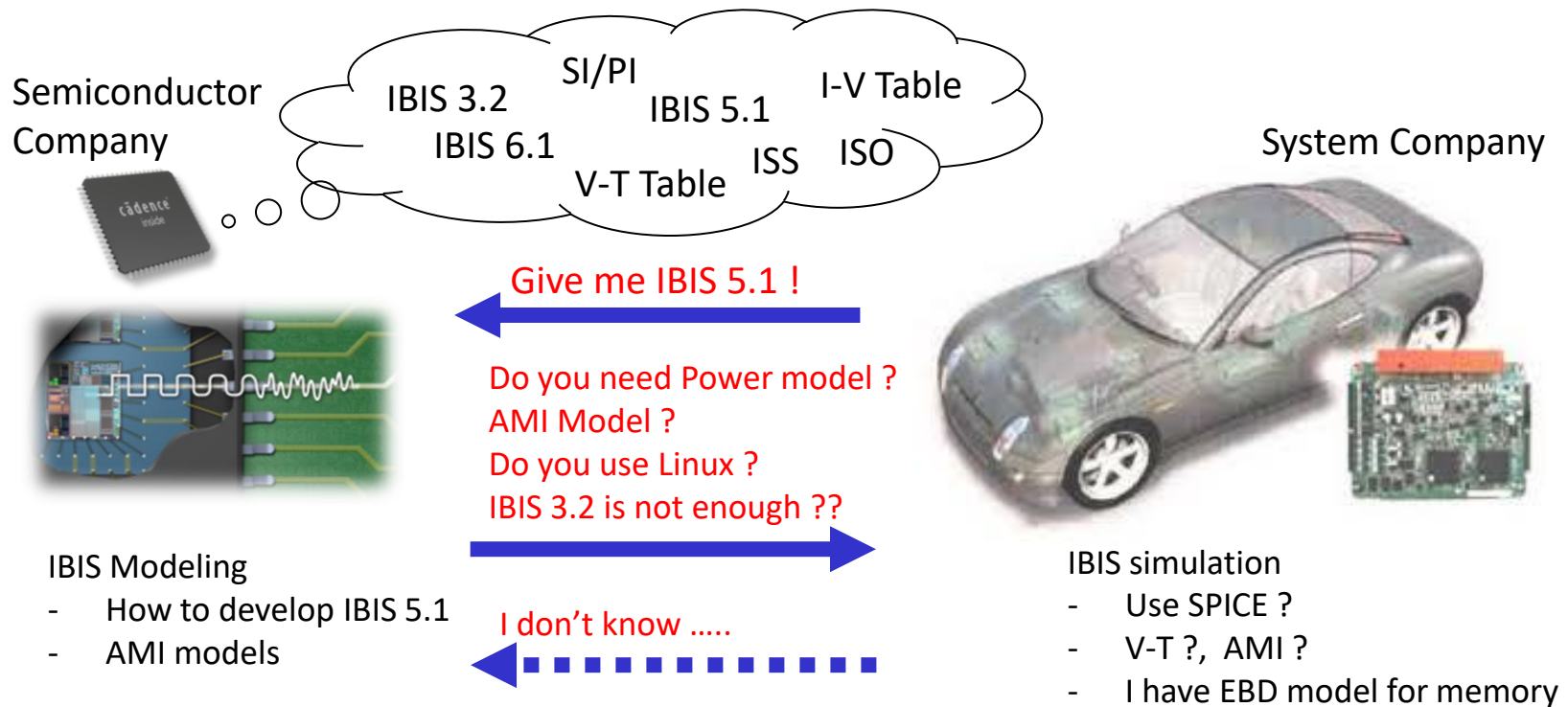
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Our New Activity

- Focus on EDA model in addition to IBIS model
  - 6th JEITA IBIS free seminar (June 2018)
    - Invited lecture by passive component vendor
      - Overview and Application of Passive Component Dynamic Model (Murata Manufacturing Co., Ltd.)
  - 7th JEITA IBIS free seminar (November 2018)
    - Basic Seminar focused on S-parameter
      - IBIS and Transmission line model
      - S-parameter and Signal Integrity
      - S-parameter treatment in simulation
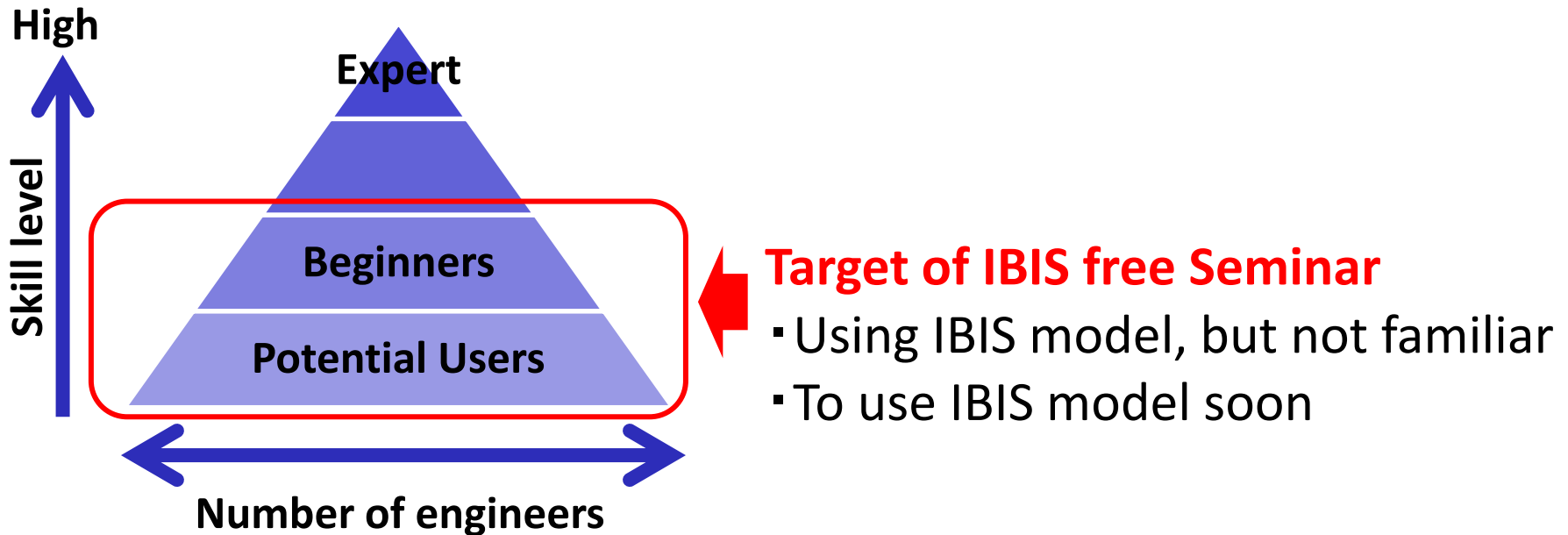
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Objective: Let's Use IBIS Simulation

- Promoting IBIS simulation, for High-quality, Low cost and Fast delivery electronics product design
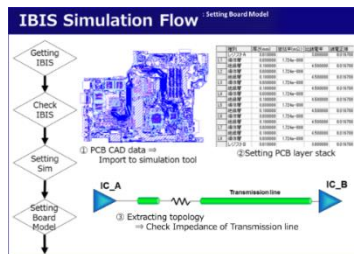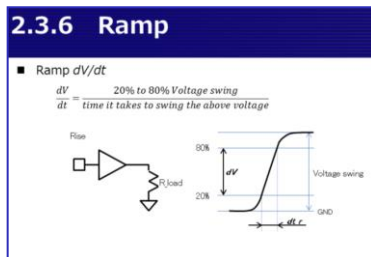
Example of IBIS issue

Semiconductor Company

SI/PI
IBIS 3.2
IBIS 6.1
IBIS 5.1
I-V Table
V-T Table
ISS
ISO

System Company

Give me IBIS 5.1 !

Do you need Power model ?
AMI Model ?
Do you use Linux ?
IBIS 3.2 is not enough ??

I don't know …..

IBIS Modeling
- How to develop IBIS 5.1
- AMI models

IBIS simulation
- Use SPICE ?
- V-T ?, AMI ?
- I have EBD model for memory

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- IBIS free seminar is for Beginners and Potential Users

High

Skill level

Expert

Beginners

Potential Users

Number of engineers

Target of IBIS free Seminar
- Using IBIS model, but not familiar
- To use IBIS model soon
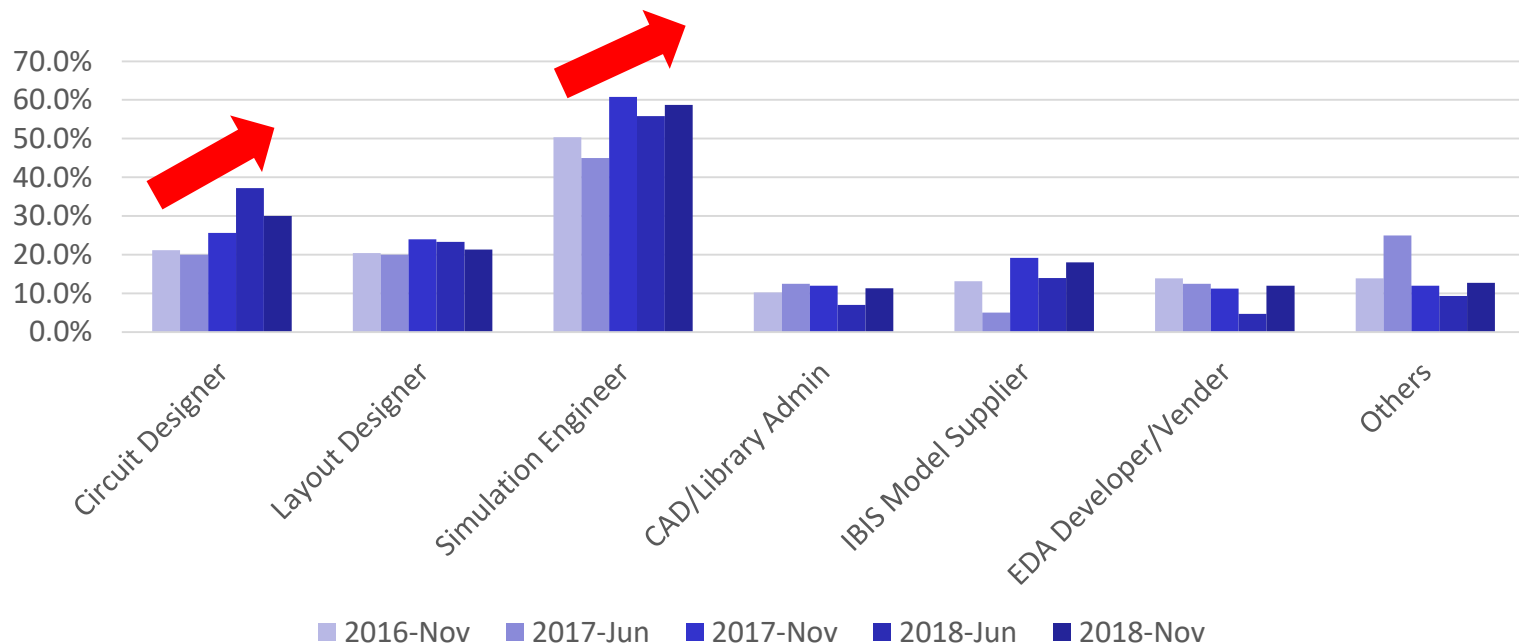
About IBIS Seminar

- IBIS free seminar is held from 2014
  - 7 seminars
    - 5 seminars in Tokyo / 2 seminars in Osaka
  - 646 attendees
  - Past Theme
    - 2016 : IBIS-AMI First Step
    - 2017 : Power-Aware IBIS Basic
    - 2018 : S-parameter

Attendees Profiles of Asian IBIS Summit, Tokyo

- Survey to understand needs of local IBIS users (in web entry)
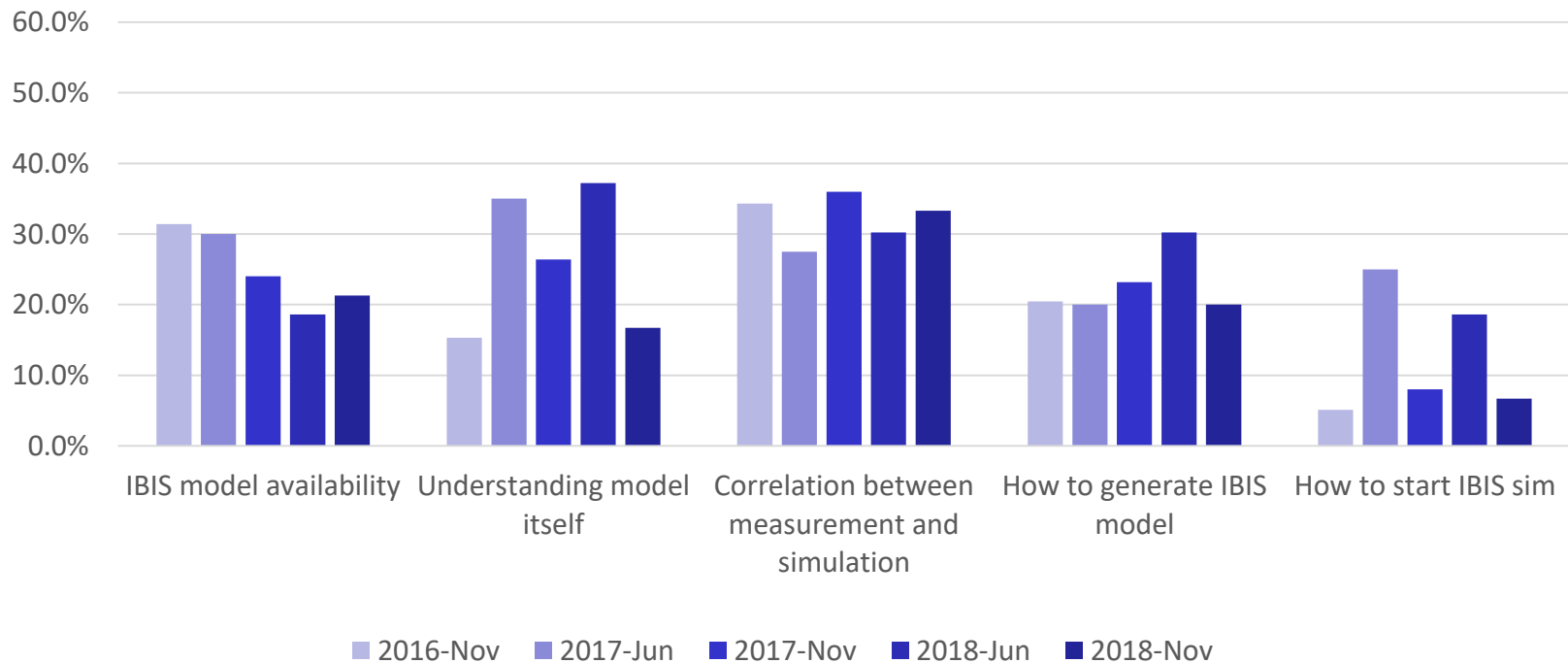
Job (Marked all that apply)

Legend: 2016-Nov, 2017-Jun, 2017-Nov, 2018-Jun, 2018-Nov

The percentages of Circuit Designers & Simulation Engineers tend to increase year by year.

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- Survey to understand needs of local IBIS users (in web entry)

What are your issues about IBIS? (Marked all that apply)

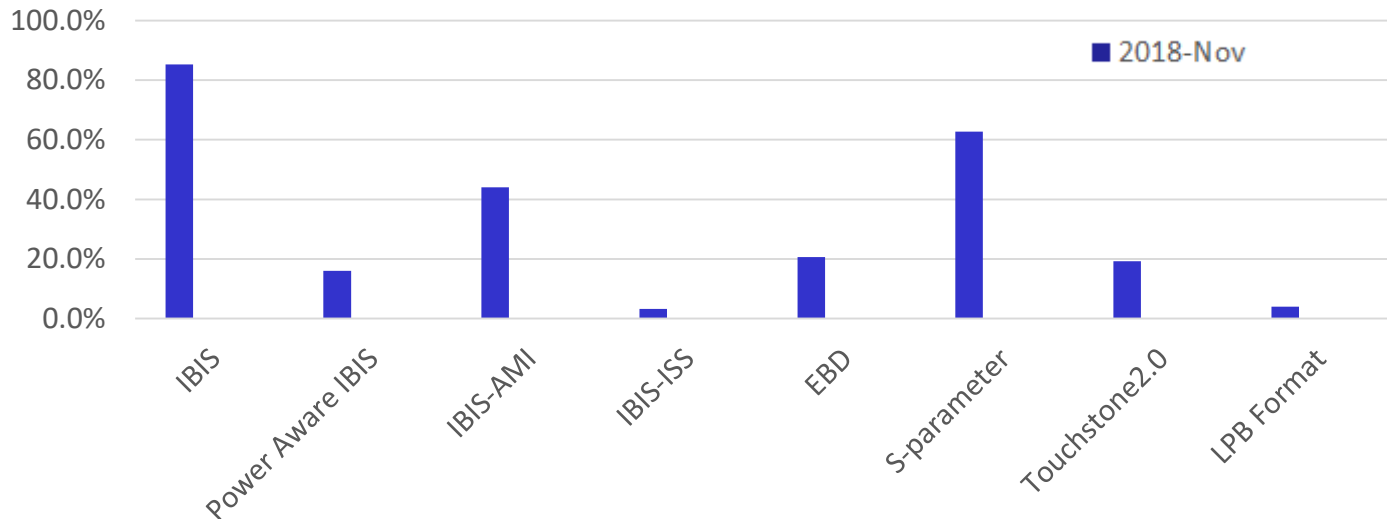Legend: 2016-Nov | 2017-Jun | 2017-Nov | 2018-Jun | 2018-Nov

Model availability is still a major problem.

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- Survey to understand needs of local IBIS users (in web entry)

<u>Model experience in the past 3 years (Marked all that apply)</u>

Not only IBIS but also S-parameters are used during a simulation.

2019 Action Plan

- Asian IBIS Summit, Japan 2019
  - Support IBIS Open Forum continuously

- 8th JEITA free seminar
  - Hold free seminar continuously

- New Activity
  - Collect requests for IBIS specification from Japan IBIS users
  - Investigate activity items on EDA model other than IBIS