

MEDIA RELEASE

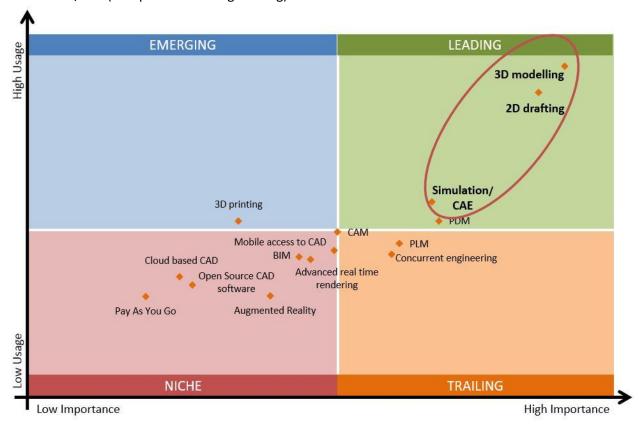
May 10th, 2016

For immediate release:

The Business Advantage Group's Worldwide CAD Trends 2016 Results 3D Modelling, 2D Drafting and Simulation/CAE Trends

3D Modelling and Simulation/CAE Use Trends Higher but 2D Drafting Retains Importance

The IT, software and telecom industry research specialist, The <u>Business Advantage Group</u> recently announced the <u>results of its annual Worldwide CAD (Computer Aided Design) Trends 2016 Survey</u>, and this week released more details specific to three of the top trends, 3D Modelling, 2D Drafting and Simulation/CAE (Computer Aided Engineering).



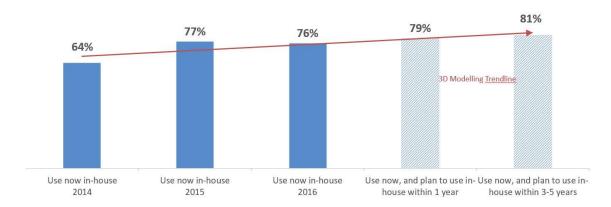
"Of all the CAD trends studied 3D Modelling, 2D Drafting and Simulation/CAE are the most important and the most used. Users rate the Importance of these trends as 8.4, 8.1 and 6.8 (mean scores out of 10) respectively. Awareness of these trends is respectively 87%, 75% and 55% and current Usage is 76%, 68% and 34%. Importance, Awareness and Usage are high across all industry sectors, regions and size of



companies. Future predicted growth potential is limited because the majority of relevant professionals are already using these capabilities but we'll explore them individually below. However it's notable that all these trends continue to grow including the use of 2D Drafting" said Chris Turner, CEO/Managing Director of Business Advantage.

3D Modelling Usage







3D modelling is a core and slow growth area in today's market. Usage is expected to grow from 76% last in 2015 to 79% this year and to 81% over the next 3-5 years. There is high current usage in manufacturing (81%) and other (85%) sectors (including government (79%) and education (100%)) and significantly lower usage in AEC (65%). There is also significantly lower current usage in APAC (60%) than in EMEA (79%) or the Americas (80%) but propensity for growth is not higher in APAC. Large companies are more likely to be current users (85%), although 7 in 10 use in small (70%) and medium companies (73%). The AEC sector is closing the 3D Modelling usage gap on the Manufacturing sector with predicted growth up to 4 times higher than Manufacturing, over the next year and 3-5

2D Drafting is a core and stable area in today's market. There are similar levels of current usage across industry sectors but significantly lower current usage in APAC (42%) than in EMEA (71%) or the Americas (77%). Usage is expected to grow slightly from 68% last year to 69% this year and to 70% over the next 3-5 years. Predicted growth is very limited in part due to high current usage, but also due to users shifting to 3D modelling. On average 39% of design work produces 2D drawings, 34% both 2D and 3D and 27% 3D. Three-quarters (77%) feel 2D drawings automatically generated from 3D CAD or BIM to be important to their business — and a similar proportion feel that the same or more effort should be put into improving 2D drafting capabilities by CAD software suppliers (*based on those using or planning to use 2D drafting* — *420*). This demonstrates the continuing importance of 2D Drafting in a 3D CAD world.



Simulation/CAE - Usage is expected to grow from 34% in 2015 to 38% this year and to 43% over the next 3-5 years. Simulation/CAE saw a dip in stated usage from 2015 to 2016, although this is still higher than average — and is still seen as an important area in today's market. Despite the decline in predicted usage in 2016, there is some potential for future growth, although at lower levels than some other trends. It is more likely to be used currently in large companies (45%) than small (28%) or medium (30%) companies. As expected, there is significantly lower current usage in AEC (15%) than any other industry sector. Usage of Simulation/CAE is seen mostly for design optimisation (79%), design validation (73%) or prediction of product performance (67%) (based on those using or planning to use simulation — 270). The leading drivers for greater use of Simulation software are:

- Ease of use for less experienced designers (46%)
- A 50% cost reduction (34%)
- Short term rental of licenses available on an as needed basis (24%)
- Availability of expert support (23%)
- Powerful hardware available on demand in the cloud (20%)

Some level of expert support for usage guidance is generally expected as part of the package (39% expect all support to be free, 28% expect some support to be free).

Conclusions and recommendations for software vendors:

- 1. 3D Modelling remains the most important trend in the CAD Trends Survey, but even in 5 years' time 19% of CAD users don't anticipate using it. Almost two fifths (39%) of design work produces 2D drawings, 34% both 2D and 3D and 27% 3D. This may be a testament to the longevity of 2D Drafting and point to the need for CAD software suppliers to continue to improve their 2D tools for a sizable portion of users who use both 2D Drafting and 3D Modelling or don't plan to use 3D Modelling at all.
- 2. For Simulation, even in 3-5 years, only about 43% of CAD users expect to be using it. If CAE Simulation vendors want to increase usage of these tools, improved ease of use, lower cost, flexible licensing and Cloud based access are key to greater growth. Comparing Manufacturing and AEC, even in 5 years' time, Manufacturing leads AEC by a wide margin which may indicate that there is opportunity for more applicable simulation tools in the AEC space.

The annually published Worldwide CAD Trends Survey report is a high level summary of insights gained from the data gathered in the annual CAD Trends survey. If you are interested in more detailed analyses or insights, such as information on a specific trend by region, industry or software vendor, please contact us.

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Notes for Editors

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Business Advantage: Formed in 1992, **Business Advantage** is a B2B market research, business development and marketing consulting practice operating in the global IT, Digital Communication and Telecommunications sectors. Their team of specialist researchers has undertaken B2B market research on a worldwide basis and has completed assignments for information and communications technology clients in over 100 countries, spanning five continents.

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