

3D Printing Trends

Q3/2017



3D HUBS

Introduction

3D Hubs 3D Printing Trends is a quarterly update using data from 7,000 active international service providers, who create more than 200,000 3D printed parts each quarter. It's the only industry report based on hard numbers and the most extensive overview of the latest trends in 3D printing.

This quarter changes have been made to the data that is collected and analysed for the 3D Printing Trends. Firstly, Printer Ratings data is no longer historic, it's based only on the previous quarter. The result of this is that the data is more representative of the current state of the 3D printing industry. Secondly, the most used printers are displayed, showcasing the machines that are creating the most prints globally. Thirdly, only online printers are being factored into the data, meaning 3D printing services which have the status online on the platform. Lastly the most used materials, technologies and colors in the industry are broken down.

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Industrial

Highest Rated Industrial Printers

Insights

The Projet 3500 HDMax hits a perfect 5, making it to #1 highest rated industrial 3D printer for a second quarter in a row. The EOSINT P 395 is a newcomer to the list, straight in at #2 with a highly respectable 4.94. The Vanguard, a long time member of the Highest Rated Industrial Machines list takes #3. Interesting to highlight is the first Industrial SLA machine the iSA-650 Pro, making the top 10, with a 4.83.

This quarter SLS technology dominates the list, making up 50%, in part thanks to the success of EOS being the most prolific manufacturer with 4 printer models listed.

#	Printer Model	Technology	Printer Quality Rating
1	Projet 3500 HDMax	Material Jetting	5.00
2	EOSINT P 395	SLS	4.94
3	Vanguard	SLS	4.91
4	Objet Connex500	Material Jetting	4.89
5	EOS P 396	SLS	4.85
6	Objet30 Pro	Material Jetting	4.83
7	iSLA-650 Pro	Industrial SLA	4.83
8	EOSINT P 760	SLS	4.81
9	Formiga P 110	SLS	4.78
10	Objet30 Prime	Material Jetting	4.78

These are the top 10 rated industrial printers out of 200 printer models listed on 3D Hubs, based on print quality ratings from customer review data. Only printers with more than 30 reviews in the quarter are included in these statistics.

Industrial

Most Used Industrial Printers

Insights

The Most Used Industrial Printers data is a good indication of the popularity of a specific industrial technology. SLS continues to be popular making up 50% of the total table, in line with the highest rated industrial machines.

The 3D Systems Vanguard was a workhorse last quarter creating 3,847 prints. The Formiga came a close second with 3,406 prints and the Projet 3000 HD in 3rd, the highest output of all Material Jetting machines. A notable mention goes to the HP Jet Fusion 3D 4200, which was launched 30 days ago and has already created over 400 prints.

#	Printer Model	Technology	Prints
1	Vanguard	SLS	3,847
2	Formiga P 110	SLS	3,406
3	Projet 3000 HD	Material Jetting	2,891
4	Projet 3500 HDMax	Material Jetting	2,022
5	sPro 60	SLS	1,583
6	EOSINT P 760	SLS	1,200
7	EOS P 396	SLS	666
8	Formiga P 100	SLS	601
9	iSLA-650 Pro	Industrial SLA	567
10	Objet350 Connex	PolyJet	472

These are the top 10 most used industrial printers out of 200 printer models listed on 3D Hubs. The data is based on customer prints from the previous quarter.

Desktop

Highest Rated Desktop Printers

Insights

The Highest Rated Desktop Printers, shows the opinions of customers receiving parts from the machines listed and is an indication of how well printers perform in the market.

The Original Prusa i3 MK2 continues to rank #1, with a 4.90 average rating. The Zortrax M200 moves up from #7 to #2, improving from a 4.8 to 4.88 this quarter. In #3 is a familiar sounding printer with a difference, the Original Prusa i3 MK2S. It's new hardware features including a new probe and rails have led it to making the jump straight in at #3.

#	Printer Model	Technology	Reviews	Print Quality Rating
1	Original Prusa i3 MK2	FDM	1447	4.90
2	Zortrax M200	FDM	368	4.88
3	Original Prusa i3 MK2S	FDM	164	4.87
4	FlashForge Creator Pro	FDM	440	4.85
5	LulzBot TAZ 5	FDM	199	4.83
6	Ultimaker 2+	FDM	315	4.83
7	Form 2	SLA	1226	4.82
8	Ultimaker 3	FDM	168	4.79
9	Makerbot Replicator 2	FDM	253	4.78
10	ANET 3D - A8	FDM	243	4.77

These are the top 10 rated printers out of 700 printer models listed on our platform, based on print quality ratings from customer review data. Only printers with more than 150 reviews in the quarter are included in these statistics.

Desktop

Most Used Desktop Printers

Insights

The desktop 3D Printer that created the most prints last quarter is the Form 2 with a staggering 17,292 prints. The only SLA/DLP printer in the top 10 list takes #1. This is due in part thanks to FDM's far wider printer model spread across the platform, meaning there are far more FDM machines currently available on the market.

The ever popular and highly rated Original Prusa i3 MK2 takes #2 with just under 15,000 prints made. Ultimaker's presence is strong, taking #4 with the Ultimaker 2, #5 with the Ultimaker 2+ and the Ultimaker 3 takes #8. That's a combined 11,488 prints delivered.

#	Printer Model	Technology	Prints
1	Form 2	SLA	17,292
2	Original Prusa i3 MK2	FDM	14,518
3	FlashForge Creator Pro	FDM	6,729
4	Ultimaker 2	FDM	5,275
5	Ultimaker 2+	FDM	3,957
6	Makerbot Replicator 2	FDM	3,926
7	Zortrax M200	FDM	3,838
8	Ultimaker 3	FDM	2,256
9	Makerbot Replicator 2x	FDM	2,173
10	Makergear M2	FDM	2,079

These are the top 10 most used desktop printers out of 700 printer models listed on 3D Hubs. The data is based on customer prints from the previous quarter.

Desktop

Trending Printers

Insights

Trending Printers gives an insight into the machines that have been sold and listed the most in the past quarter.

The Original Prusa i3 MK2S takes the #1 spot with 1970% growth, a record for 2017, outdoing its predecessor. The Creality CR-10 is in at #2 with an impressive 1011% growth, not surprising when looking at the communities response to it's value for money and size combination. Finishing the top three is the Maker Select V2, the second edition of the entry level FDM desktop 3D printer from Monoprice. The only other new entrant this quarter was the Tevo Tarantula at #7.

#	Printer Model	QoQ Growth	Position Change
1	Original Prusa i3 MK2S	1970%	New
2	Creality CR-10	1011.1%	New
3	Maker Select V2	400.0%	New
4	ANET 3D - A8	78.9%	-2
5	Wanhao Duplicator i3 PLUS	68.8%	-1
6	Folger Tech FT-5	54.8%	+2
7	Tevo Tarantula	54.6%	New
8	Ultimaker 3 Extended	51.8%	-8
9	Monoprice MP Select Mini	48.3%	+4
10	Ultimaker 3	42.7%	-7

Only online printers with a quantity of 50+ on our platform are included in these statistics.

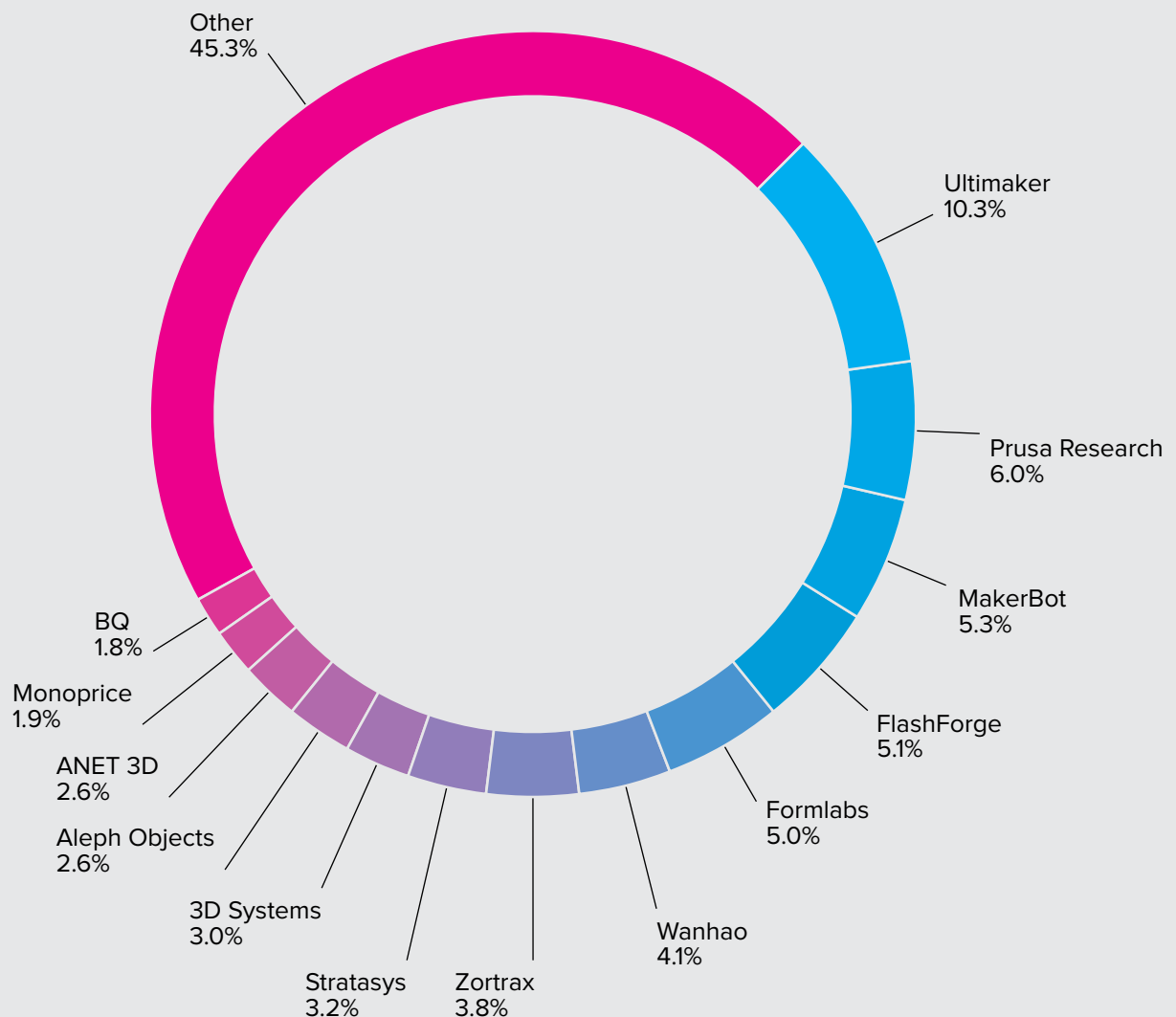
Models & Manufacturers

Printer Manufacturer Distribution

Insights

Moving from historic to online printer data has caused a dramatic change in Manufacturer Distribution. Previously all printers were taken into account for the data, now only online service providers are taken into account.

Ultimaker comes in at #1 increasing its lead from just under a 2% difference with Makerbot to now a 4% difference with newcomer Prusa Research. Makerbot maintains its place in the top three regardless of not having a machine in the trending printers section; this is thanks to an already present and large printer base. Most manufacturers have seen a drop from the previous trend report in total numbers due to inactive, older machines that are no longer operational.



Only online printers are included in these statistics.

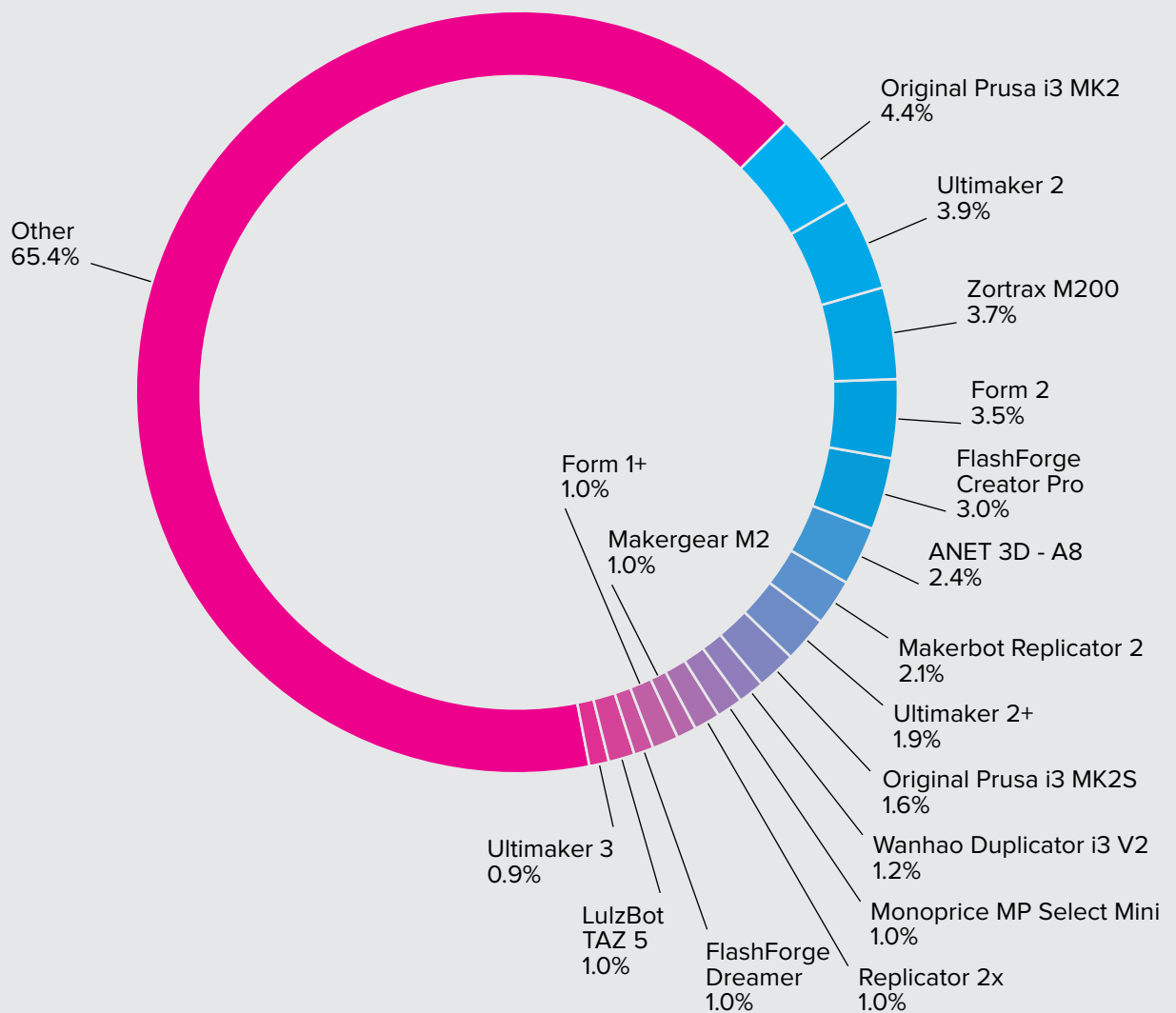
Models & Manufacturers

Printer Model Distribution

Insights

More dramatic changes have been seen in the Printer Model Distribution landscape. The Original Prusa i3 MK2 has become the #1 most adopted machine, with 443 online printers, taking the Ultimaker 2's long standing place at the top.

The Zortrax M200 stands its ground at #3, with the Form 2 jumping 5 places to #4. The market is squeezing, with the majority of printer models losing some market share. Lots of the manufacturers listed have now released new machines so this is in some part to be expected. Ultimaker released their Ultimaker 3 series, Makerbot's new Replicator+, and Zortrax with the M300.



Prusa i3 and RepRap have been excluded from this list as they refer to multiple printers and not one specific printer model. Only online printers are included in these statistics.

Models & Manufacturers

Popular Printers by Region (1/2)

Insights

The Popular Printers by Region gives an idea of the global breakdown of market share from manufacturer to manufacturer.

This quarter the 3D Printing Trends is featuring more regions of the world, as 3D Hubs currently provide 3D printing in over 140 countries. The regional data has also been affected by our data update, for only presenting online service providers. The Original Prusa i3 MK2 features in 6 of the 7 top 5's, with South America being the only region not to feature the machine. Ultimaker 2 holds onto it's #1 position in Europe with a 6.5% market share. The Zortrax M200 proves popular in Africa and Central America at #1, two new regions featured.

Africa

#	Printer Model	Share
1	Zortax M200	6.2%
2	Formiga P 110	6.2%
3	Projet 3000 HD	5.2%
4	Projet 3500 HDMax	4.1%
5	sPro 60	4.1%

Asia-Pacific

#	Printer Model	Share
1	FlashForge Creator Pro	6.2%
2	Ultimaker 2	4.6%
3	Original Prusa i3 MK2	4.2%
4	Zortrax M200	4.0%
5	FlashForge Dreamer	3.2%

Caribbean

#	Printer Model	Share
1	Original Prusa i3 MK2	16.2%
2	Solidoodle 3	8.3%
3	Replicator 5th Gen	8.3%
4	Rostock MAX	8.3%
5	Airwolf V5	8.3%

Central America

#	Printer Model	Share
1	Zortax M200	8.8%
2	Robo 3D R1	6.6%
3	Original Prusa i3 MK2	6.6%
4	Form 2	3.3%
5	LulzBot TAZ 6	3.3%

Prusa i3 and RepRap have been excluded from this list as they refer to multiple printers and not one specific printer model. The data displayed shows the current number of online 3D printing services on 3D Hubs that operate in a specific region.

Models & Manufacturers

Popular Printers by Region (2/2)

Europe

#	Printer Model	Share
1	Ultimaker 2	6.5%
2	Zortrax M200	6.0%
3	Original Prusa i3 MK2	4.9%
4	Form 2	4.0%
5	Ultimaker 2+	3.0%

North America

#	Printer Model	Share
1	Original Prusa i3 MK2	4.7%
2	FlashForge Creator Pro	4.5%
3	Form 2	4.1%
4	Makerbot Replicator 2	3.1%
5	ANET 3D - A8	2.6%

South America

#	Printer Model	Share
1	FlashForge Creator Pro	8.8%
2	Zortrax M200	5.3%
3	Sethi3D	5.3%
4	Ultimaker 2	5.3%
5	Sethi3D S3	3.5%

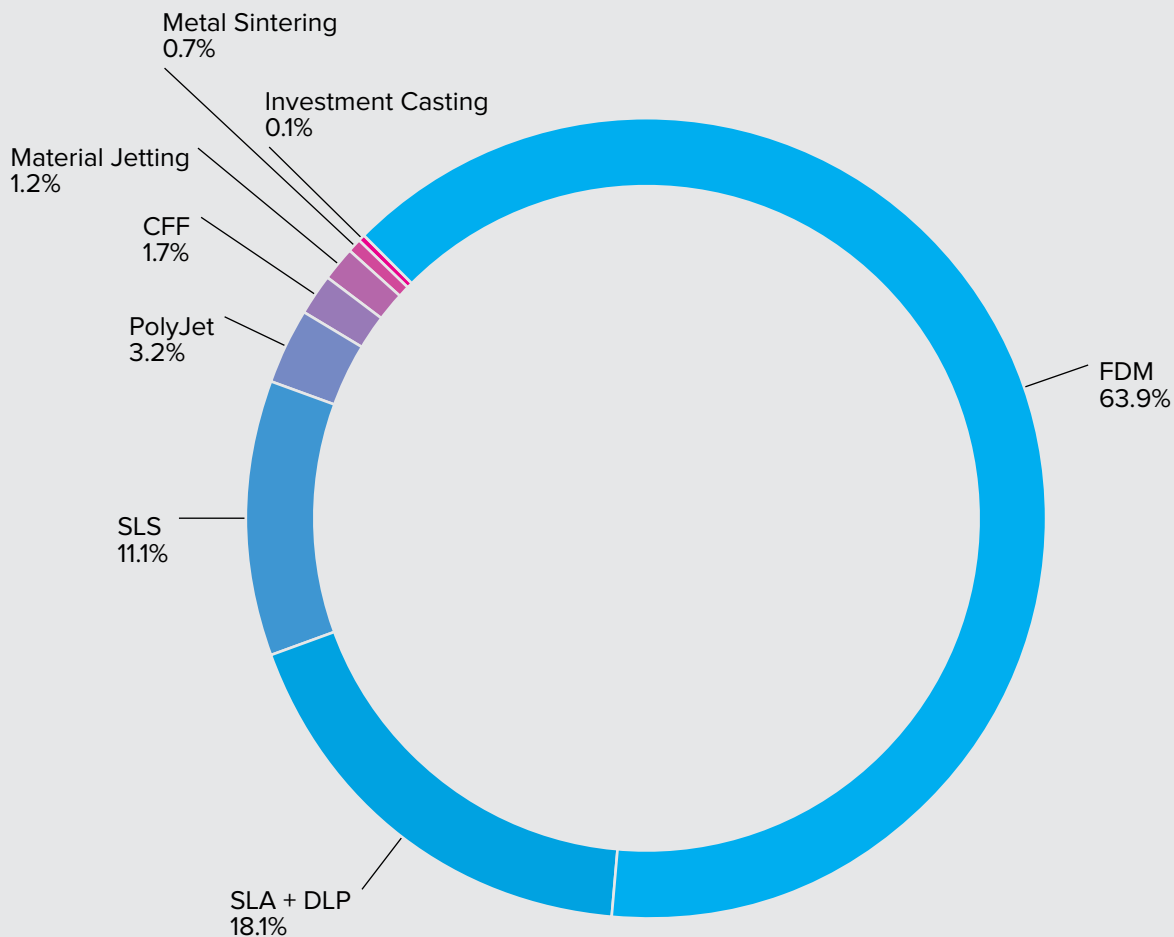
Prusa i3 and RepRap have been excluded from this list as they refer to multiple printers and not one specific printer model. The data displayed shows the current number of online 3D printing services on 3D Hubs that operate in a specific region.

Tech & Materials

Most Used Technologies

Insights

The most popular technology is FDM making up 63.9% of total revenue on the platform. SLA + DLP arrives in #2 with 18.1%, which is likely to grow based on the data provided highlighting the Form 2 creating the most prints this past quarter and the growth of Industrial SLA. SLS technology finishes out the top three, with 11.1%. Both SLA+DLP and SLS continue to gain traction thanks to professionals using the two technologies to iterate, during various stages of their prototyping cycle. The benefits of high accuracy that SLA offers and the geometric freedom of SLS mean they play vital roles alongside FDM in the prototyping process.



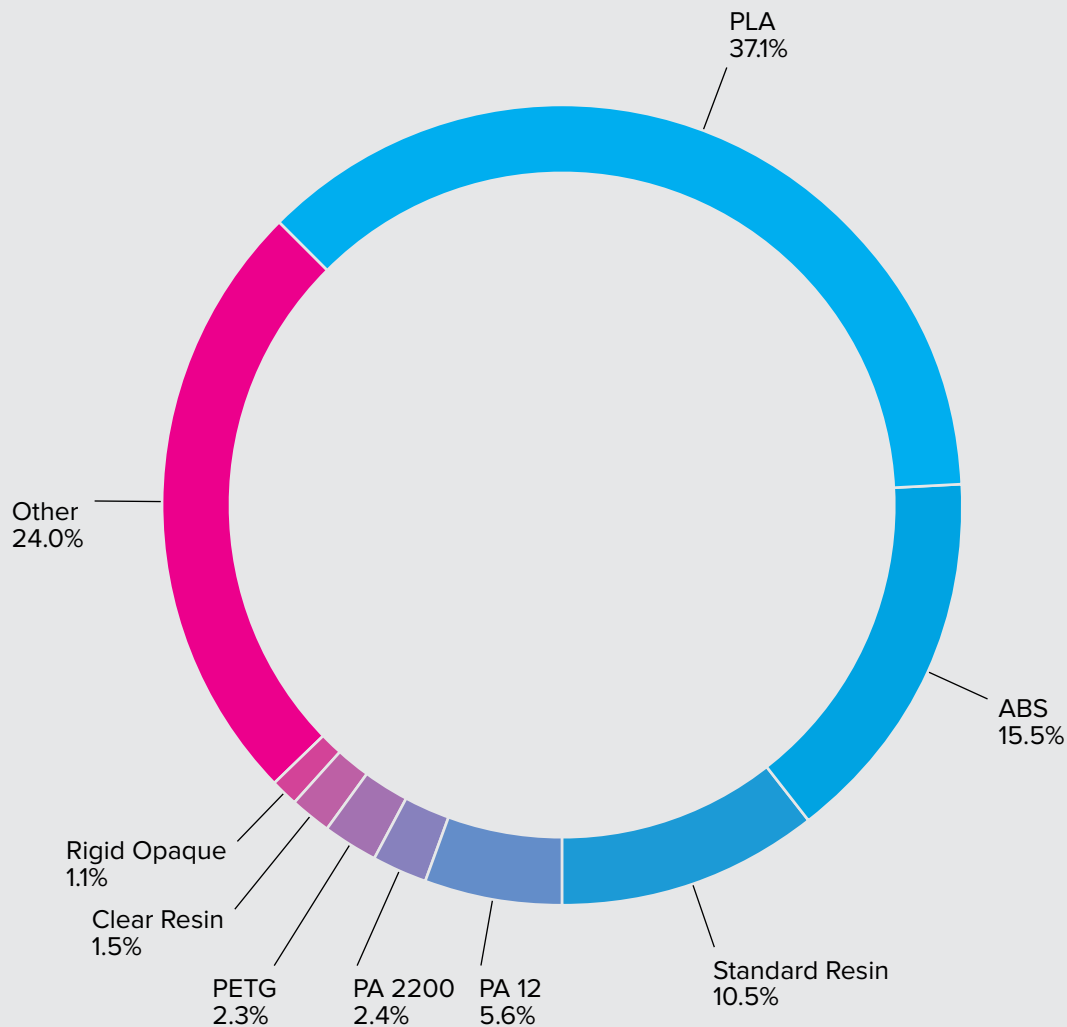
The data displayed shows the breakdown in revenue as a percentage for each technology.

Tech & Materials

Most Used Materials

Insights

With FDM being the Most Used Technology this is represented in the most used materials. PLA and ABS dominate the top two, with PLA used twice as often when compared to second place ABS. This difference is likely caused by the ease of printing with PLA, with the lower printing temperatures and less strict ventilation requirements. Standard SLA/DLP resin comes in at #3, perfect for creating highly detailed prototypes. PA 12 and PA 2200 finish the top 5, at #4 and #5 respectively, the two most popular SLS materials.



The data displayed shows the breakdown in revenue as a percentage for each material.

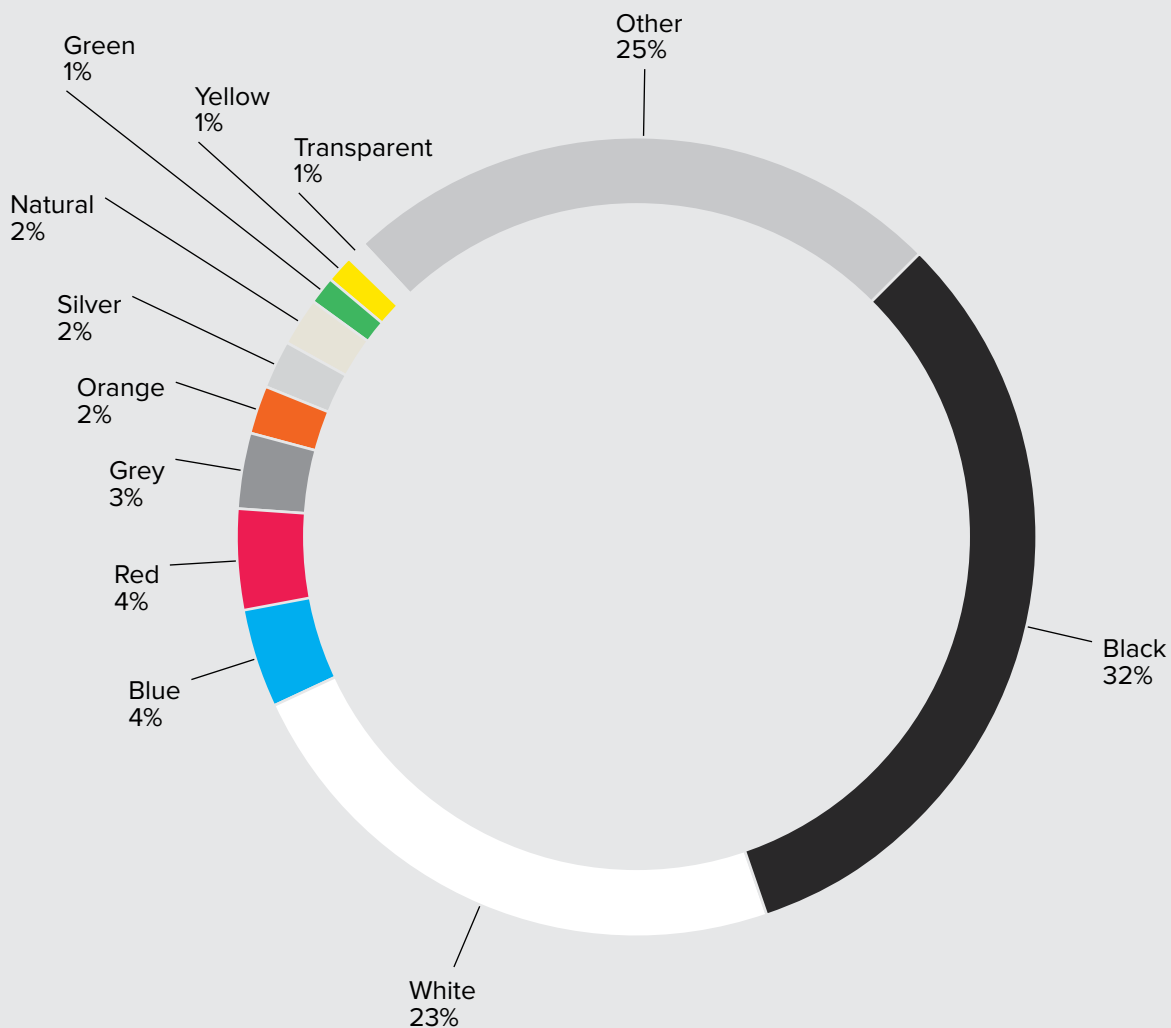
Tech & Materials

FDM Color Distribution

Insights

The top colors most used probably won't come as a surprise, but it's interesting to see since the last time we covered it (October-2016) black has finally taken over white. The plausible reason for this is that most prototypes built tend to be in neutral colors. The two most often purchased by a 3D printing service tend to be black and white due to this, making it a self sustaining cycle.

Black has increased its use by 4% with white dropping from 29.7 % to just 23%. Both blue and red have also dropped in use by nearly half, showing that the variety of materials and colors now available is really creating a dynamic and wide spread.



The data displayed shows the most popular colors this quarter, analysing the colors of submitted prints.

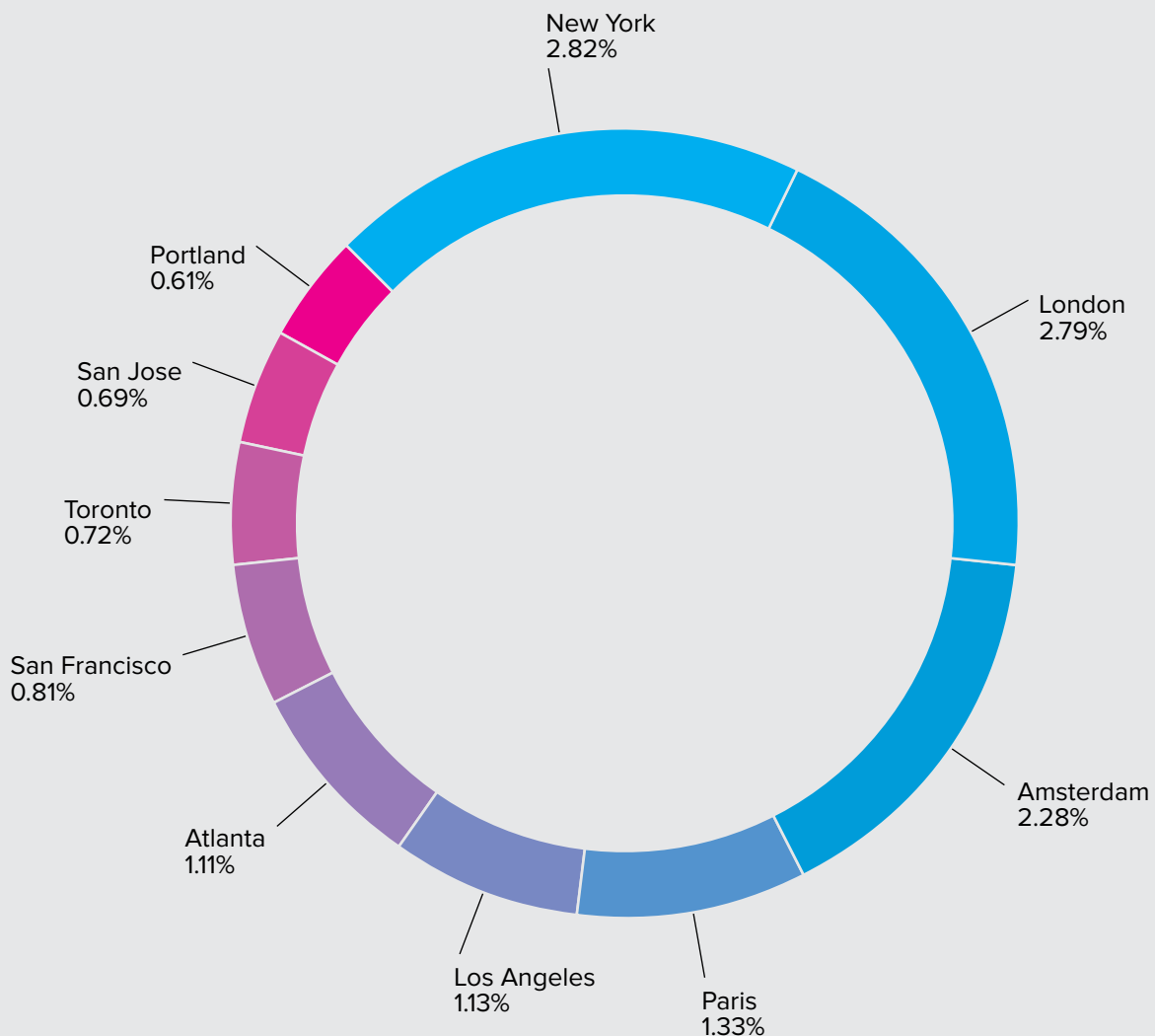
Geography

Top Print Cities

Insights

The Top Print City for Q3, based on the number of prints ordered is New York with 2.82% of the total. London is incredibly close with 2.79% and Amsterdam ranks #3. The West Coast of the U.S is well presented in particular California with Los Angeles, San Francisco and San Jose all in the top 10 cities. The most likely due to the large amount of hardware companies big and small located in San Francisco Bay Area which includes Silicon Valley.

The prevalence of New York at #1 can also be explained due the high density of start-ups, large multinationals and SMB's using 3D printing to prototype their products or to create functional end parts.



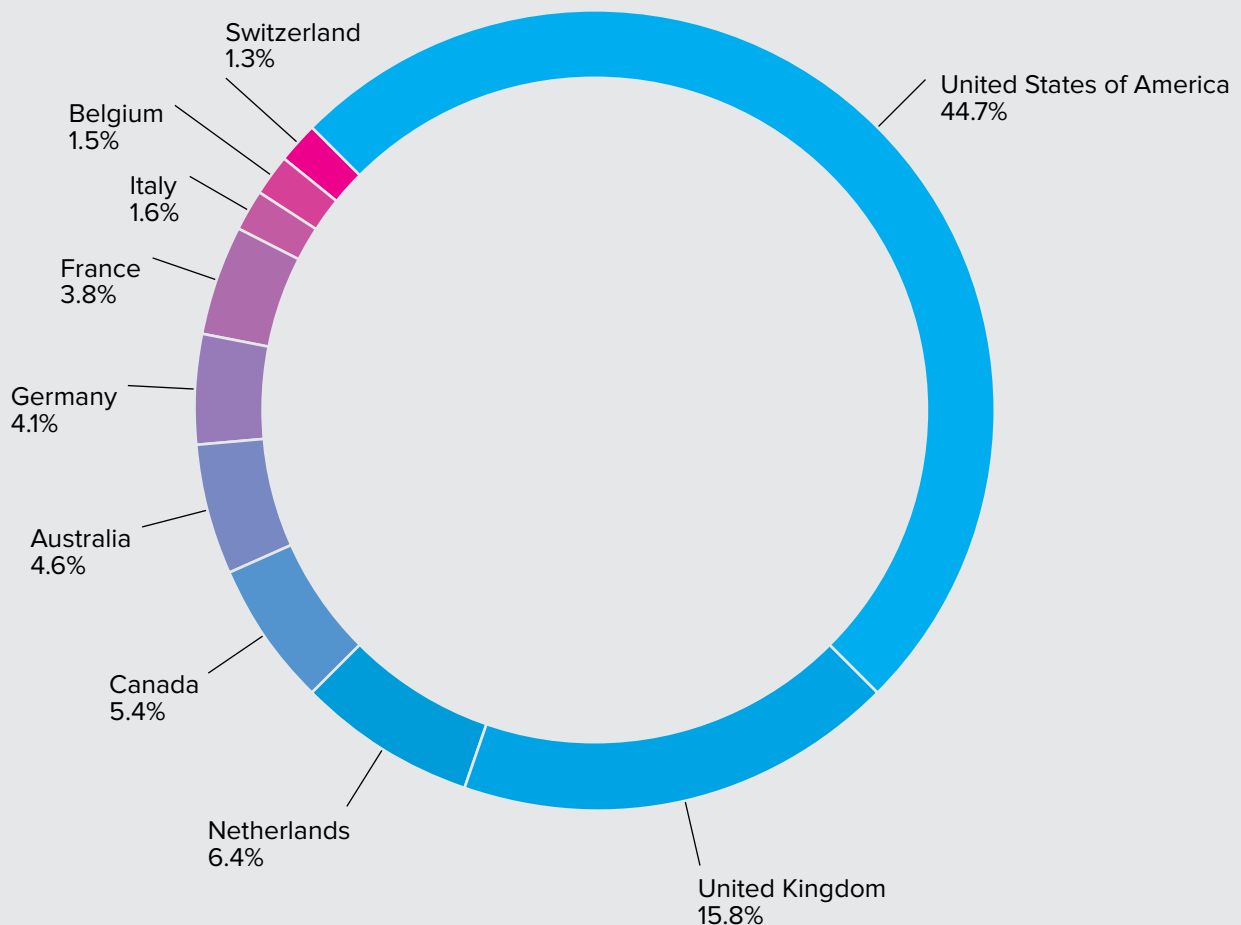
The data displayed shows the number of prints ordered last quarter per city as a percentage of the total. Other has been omitted to emphasise the difference in the top ten cities.

Geography

Top Print Countries

Insights

The Top Print Country is the USA by a large margin with 44.7% of prints ordered. The USA's dominance over the top print cities means this is to be expected. The UK comes in at #2 with 15.8% and The Netherlands at #3 with 6.4%. Surprisingly Canada is at #4 even though only one of its cities is in the top ten showing a broader geographical spread. Australia ranks #5, even though not a single Australian city is ranked in the top ten print cities. This again is down to a wider distribution across the countries cities.



The data displayed shows the number of prints ordered last quarter per country as a percentage of the total. Other has been omitted to emphasise the difference in the top ten countries.

Resources

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