



the state of 3D PRINTING

*The data you need to understand the 3D Printing world
and build your 3D Printing strategy*



EDITION 2018

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Foreword

I'm happy to welcome you to the 4th edition of the State of 3D printing, our annual report the goal of which is to give you a complete overview of the additive manufacturing world, in order to help you make the best business choices.

At Sculpeo, the success of our customers is what truly matters to us. We want to give them a hand to deal with the challenges they encounter, in any way that we can, like providing in providing them the best 3D printing materials and technologies, especially the most innovative ones. We even launched a consulting and design activity, called Sculpeo Studio, to guide businesses in their use of this incredible technology. And of course, providing them valuable insights through the State of 3D printing is part of this objective.

But we also put a lot of efforts in shaping the future of additive manufacturing. That's why, for instance, we lead ambitious research projects. That's also why we launched our own 3D printing software, Fabpilot, to share the powerful tools we created in-house to run our factories. We strongly believe that education and information are key in the development of the 3D printing industry. That's why we decided to provide useful data to anyone interested in

additive manufacturing, conducting this study with 1000 respondents.

Who are they ? Professionals from multiple industries, that innovate and produce thanks to 3D printing. They told us how they use additive manufacturing, why they use it, if they're successful or not, and they tried to foresee the future of this technology through their use of it. I personally want to thank all of them for sharing their views with us.

The results of the study make me quite confident about the future of 3D printing. Indeed, companies invest more and more in this technology and the vast majority of them see it as a true competitive advantage. My strong vision that additive manufacturing is a powerful production method is also confirmed by our respondents. All of this really makes me want to see how the whole industry will evolve in the upcoming years. No doubt it will be game-changing.

I wish you an instructive and pleasant reading of this 4th edition !

Clement Moreau
CEO of Sculpeo



CLÉMENT MOREAU CEO & Founder

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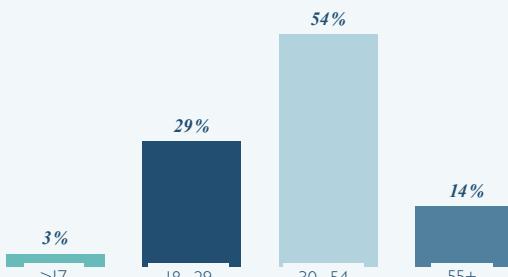
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Survey Demographics

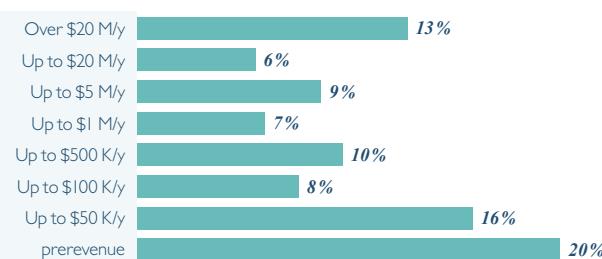
1000+ RESPONDENTS



AGE RANGE



COMPANY REVENUE

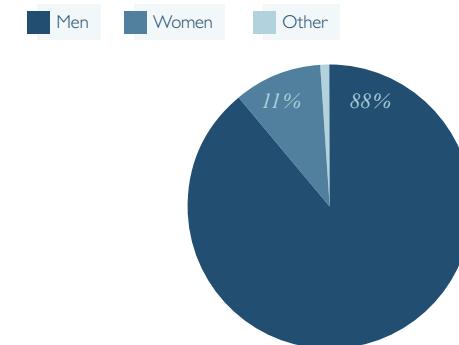


Our annual State of 3D Printing allows for the 3D printing industry to define itself by collecting data. With these findings, you will know what is expected of the future of 3D printing along with knowing the new trends that we saw come into existence during the previous year.

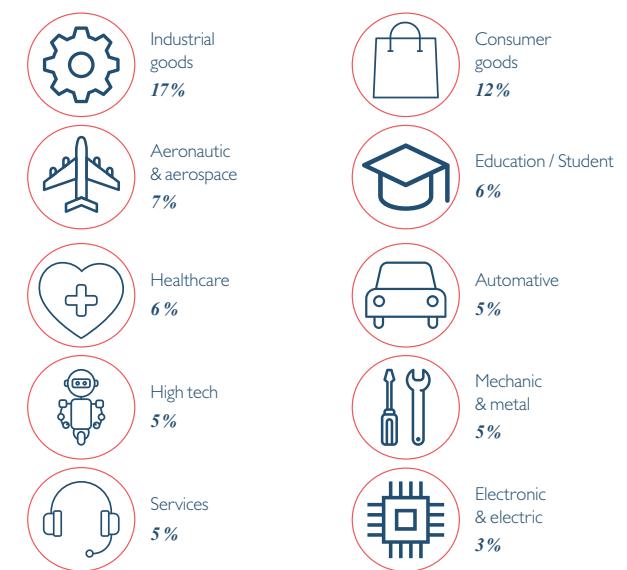
We conducted the survey for one year and we received over a 1,000 respondents. The industry segmentation of the respondents varied a lot but we can see that most are dedicated to Industrial Goods (17%), Consumer Goods (12%), Aeronautical or Aerospace industry (7%) and Healthcare (6%). In last year's study, most respondents identified themselves as the owner/CEO of their organization followed by Engineers. This year, both segments have the same percentage of 29%.

As for age, we can see a bit of decrease of 6% in the 30-54 segment compared to last year, showing that the use of 3D printing is growing in younger age segments. As for the gender of our respondents, compared to last year, there is an increase in women by 4 percent. Geographically, 60% of the respondents came from Europe and 25% came from the United States.

GENDER



SECTORS



Key Takeaways

70 %
OF OUR RESPONDENTS
INCREASED THEIR EXPENSES
IN 3D PRINTING IN 2017

Last year, only 49% indicated that they invested more in additive manufacturing.

74 %
SAY
THEIR COMPETITORS
ALSO USE 3D PRINTING

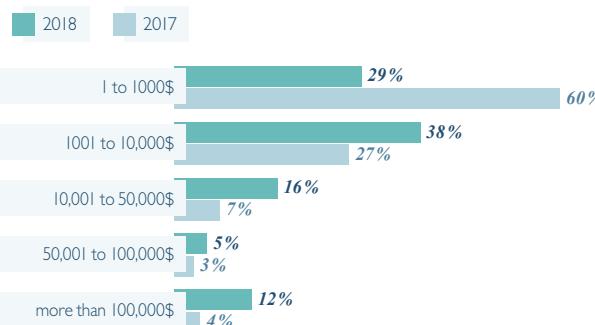
Last year, only 59% said so. Using 3D printing is now essential to be competitive, and it's considered as a competitive advantage by 93%.

**COST
DECREASE**
WILL HAVE
A MAJOR IMPACT
ON 3D PRINTING

Indeed, lower prices of additive manufacturing technologies will make this powerful tool more accessible to several businesses.

Investment in 3D printing exploded

HOW MUCH DID YOU SPEND THIS YEAR ?

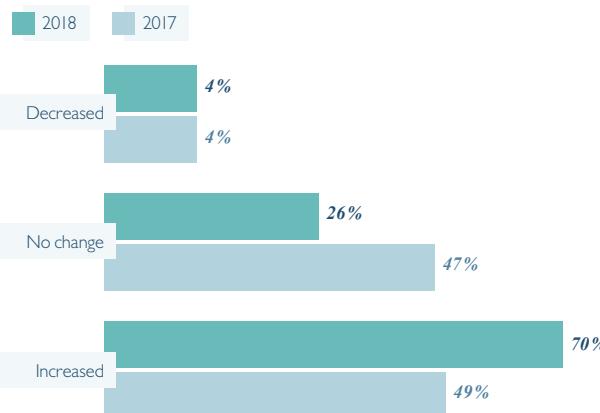


This year, companies have been more confident with their use of 3D printing. They actually dedicated larger budget to their additive manufacturing activities. **38% of our respondents spent between 1001 and 10,000\$ in 3D printing this year.**

This year, we see an 11% increase, showing that companies perfectly integrated this manufacturing technique in their product development process. These companies saw all the benefits of this technology for their industry and are more likely to invest in 3D printing.

In total, 70% of the respondents increased their expenses for 3D printing this year, against 49% last year. 3D printing is a trustworthy manufacturing technique, used by professionals for much more different applications year after year.

HOW DID YOUR EXPENSES FOR 3D PRINTING EVOLVE ?

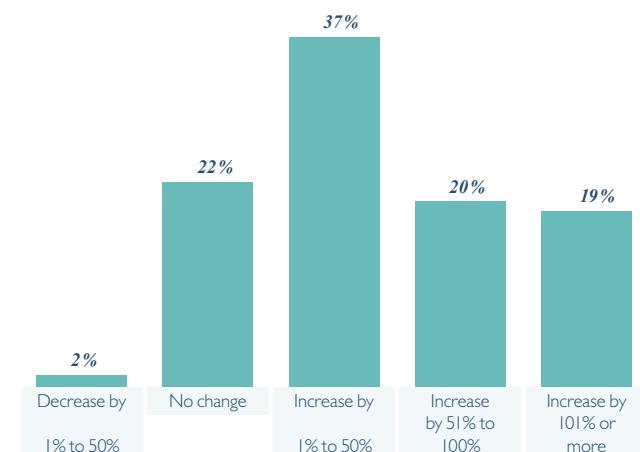


What are the expectations for next year ?

The market is obviously growing, 37% of our respondents are actually expecting to increase their 3D printing expenses of 1 to 50%, and 19% are expecting to increase them of more than 100%.

These results are really encouraging, showing that companies are confident with their 3D printing activities and are planning to keep them growing.

EXPECTED EXPENSES IN 2018



3D printing clearly is a competitive advantage

No matter what industry you are working in, 3D printing is a real competitive advantage. Indeed, 93% of our respondents are seeing 3D printing as a competitive advantage, and this percentage keeps growing year over year !

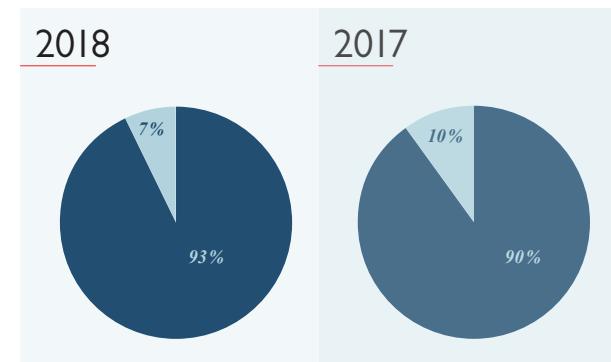
We can also notice that, as 3D printing is now implemented in a lot of different industries, it is becoming essential to keep being competitive. Indeed, a majority of our respondents have competitors using 3D printing as well, they are actually 74% this year against only 59% last year. Once again, it shows that more

and more companies are implementing additive manufacturing in their strategy, it is now a reliable and common production or prototyping process for many businesses.

Regarding the return on investment of companies using 3D printing, 46% of our respondents saw a greater return on investment this year, and 49% got about the same as last year. This is a stable result, professional additive manufacturing users are satisfied with their investments in 3D printing.

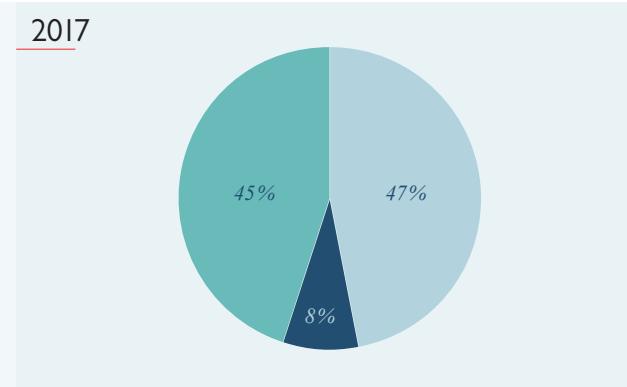
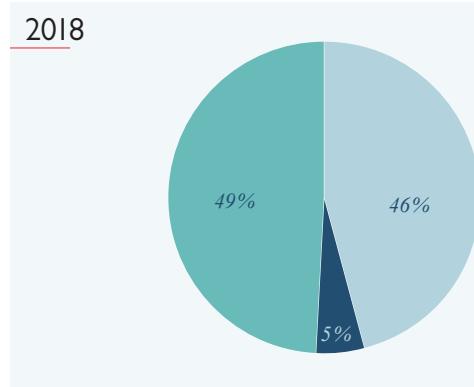
DO YOU CONSIDER 3D PRINTING AS A COMPETITIVE ADVANTAGE ?

Yes No



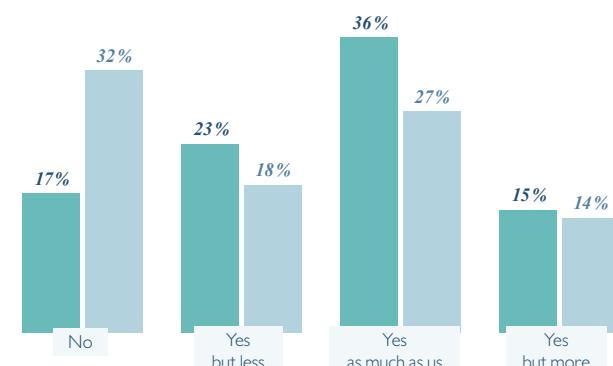
WHAT IS THE ROI OF 3D PRINTING IN YOUR ACTIVITY THIS YEAR ?

Greater ROI No change Lower ROI



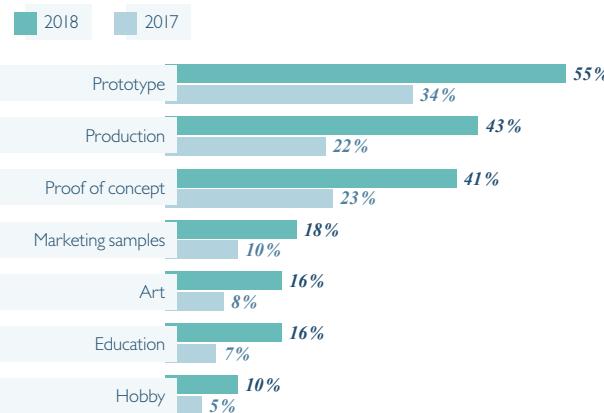
DO YOUR COMPETITORS USE 3D PRINTING ?

2018 2017

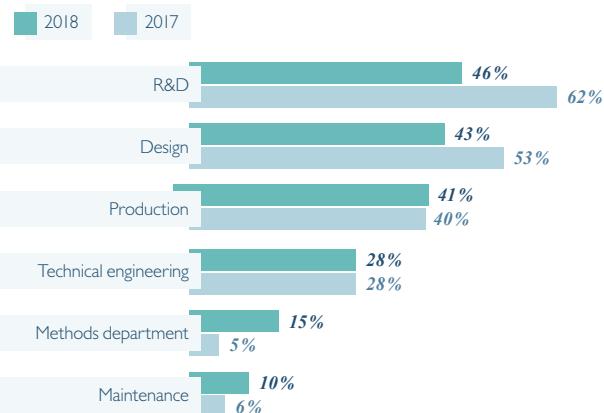


Embracing the full potential of 3D printing for multiple purposes

3D PRINTING APPLICATIONS



3D PRINTING USERS BY DEPARTMENT



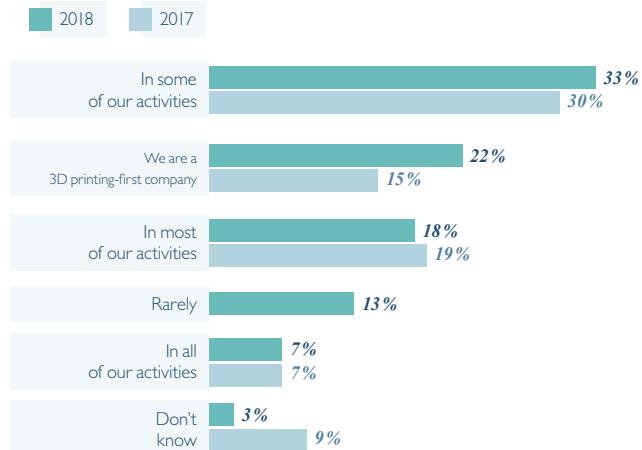
Companies are more likely to invest in 3D printing this year. Professionals are actually using this technology for more purposes than before, implementing additive manufacturing in more of their activities.

Like last year, 3D printing is mostly used for prototyping, production and proof of concept. There is no big change, but globally companies are more likely to use 3D printing for multiple applications. Indeed, we see that 3D printing is now more integrated in companies' activities. Indeed, "3D printing-first company" increased from 15% to 22% ! Companies are embracing all the advantages of this cutting-edge technology and don't hesitate to use it for various applications.

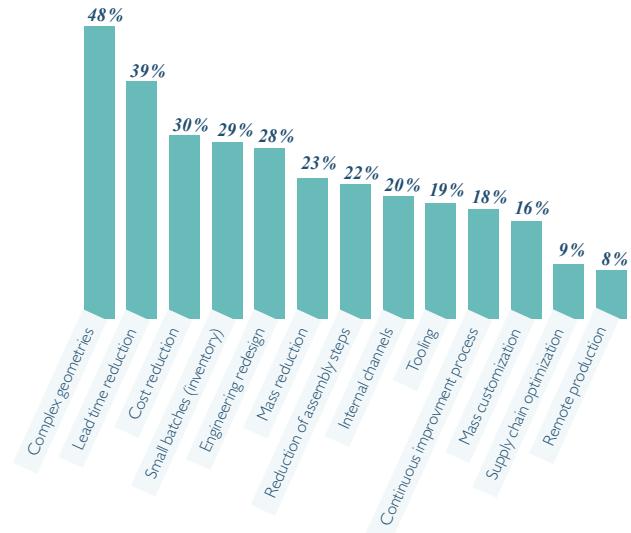
What are the departments making the most of this technology ?

Like last year, 3D printing is mostly used for R&D, design and production. 3D printing is used by R&D departments for 46%, by design departments for 43% and 41% are using this technology directly for production. Regarding the benefits of 3D printing, if our respondents are mainly using additive manufacturing for its lower costs and the short lead time, 48% of them are also using it to conceive complex geometries.

INTEGRATION



BENEFITS



Plastic is still the most used, but metal strongly grows

3D printing users are now more confident with this technology, and we can see that they are using more different technologies than before. We have already spotted it last year, but metals are now some of the most used materials for 3D printing. They are even more used than last year. This year, 36% of our respondents are using metal 3D printing compared to 28% last year. In the same way, the use of the Direct Metal Laser Sintering technology is significantly increasing : 21% of our respondents are using this metal 3D printing technology, and it keeps increasing.

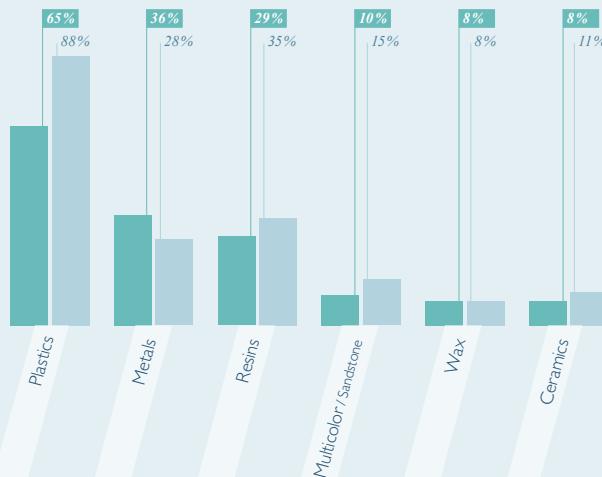
The use of plastic materials is decreasing. They are used by 65% of our respondents compared to 88% last year. These materials have a lot of advantages and they are really convenient both for prototyping and production.

It is still the most used material but users are now more focused on new materials such as metals, offering new possibilities. However, if we take a look at the evolution of the use of the 3D printing technology, we can see that Fused Deposition Modeling is still the first 3D printing technology

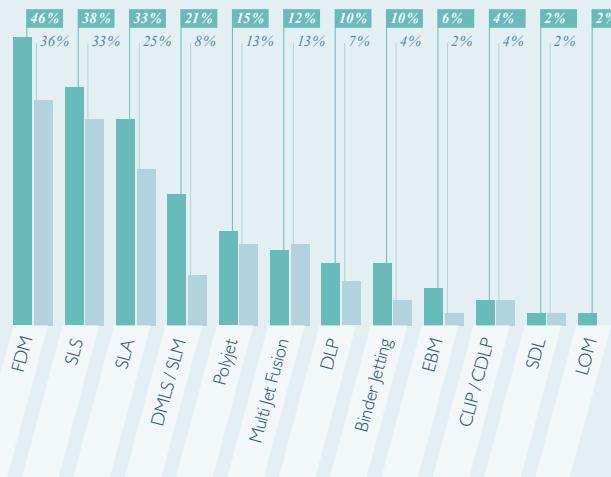
used by our respondents, followed by Selective Laser Sintering. These are the most common technologies used by professionals as they are quite cheap, and able to give life to any project. Regarding the finishings, their use is globally increasing, we can say that in addition to trying new technologies and materials, professionals are also discovering finishing possibilities. However, polishing and painting are always the most used, as they can be applied on almost all of the 3D printing materials.

MOST USED

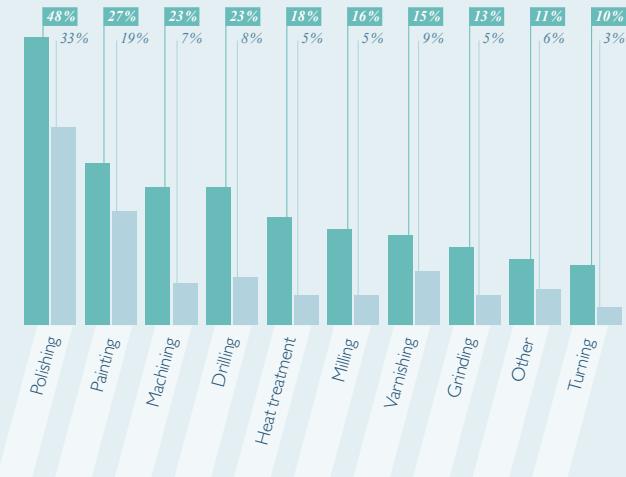
3D PRINTING MATERIALS



3D PRINTING TECHNOLOGIES



3D PRINTING FINISHES



Businesses purchase more 3D printers, but still use 3D printing services

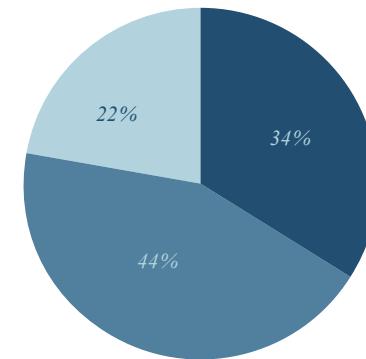
We can clearly see that more and more companies decide to purchase 3D printers. Indeed, the majority of our respondents own a 3D printer (66%), and 44% own more than one. Last year, 53% didn't even own one, and only 28% owned two or more.

Most of our respondents own FDM 3D printers (75% of the ones who own a 3D printer), which makes sense since it's the cheapest type of machines you can purchase. They also are easier to deal with. SLA comes second (29%), but only 15% of our respondents own SLS 3D printers. Thus, we can see that people tend to own less professional 3D printers such as SLS ones, which is a consequence of their higher price and complexity. Still, they are owned by way more businesses than last year (8%), and FDM decreased (85% last year) which confirms the professionalization of the market, even in terms of purchased technologies.

When it comes to metal 3D printing, DMLS 3D printers are the most commonly owned ones (16%). SLM ones are only owned by 4% of our respondents. Compared to last year, a lot more of our respondents own metal 3D printers (1% for DMLS, 2% for SLM).

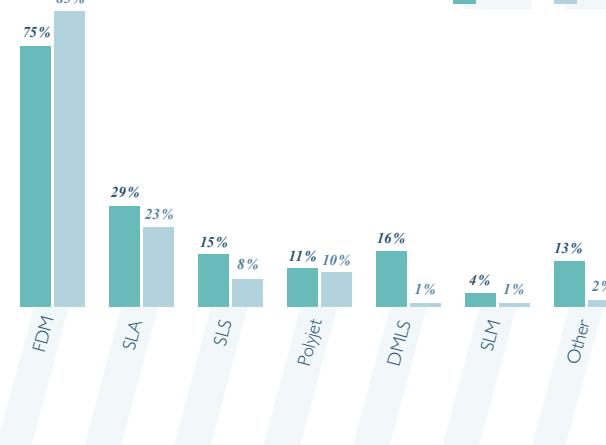
DO YOU OR YOUR COMPANY OWN A 3D PRINTER?

No Yes, one Yes, two or more



WHAT TYPE OF 3D PRINTER DO YOU OWN ?

2018 2017

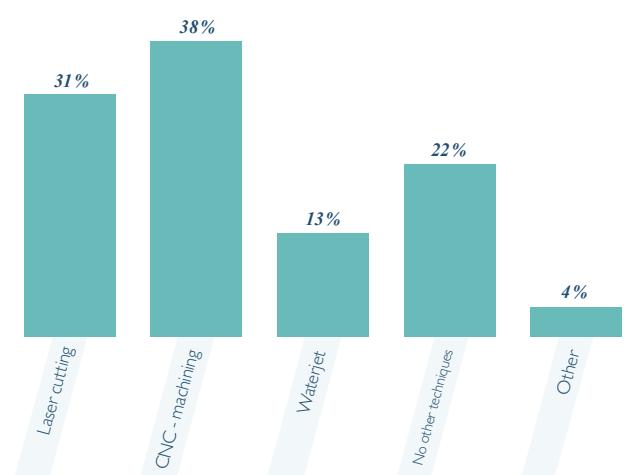


What about 3D printing services ?

We can notice from the previous page that 38% of our respondents actually use the SLS technology, but they're only 15% to own SLS 3D printers...

This shows that professional 3D printing services are commonly used by businesses to get access to other additive manufacturing technologies than the ones they own in-house.

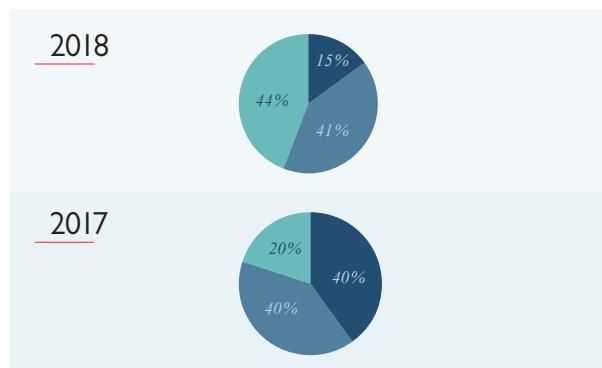
DO YOU USE OTHER DIGITAL MANUFACTURING TECHNIQUES ?



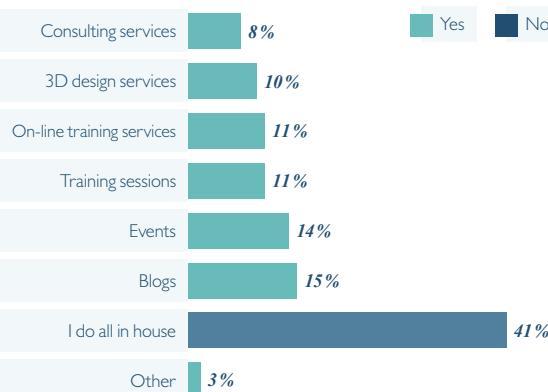
A strong growth of expertise

WHEN IT COMES TO 3D PRINTING, YOU CONSIDER YOURSELF TO BE

Beginner Intermediate Expert



DO YOU USE OTHER EXTERNAL SERVICES TO INCREASE YOUR 3D PRINTING EXPERTISE ?



According to our respondents, their level of expertise has increased strongly compared to last year. While 40% of the respondents labeled themselves as beginners last year, this year only 15% thought that of themselves. 41% of the respondents say they are intermediates. Nearly half of the respondents labeled themselves as experts regarding additive manufacturing.

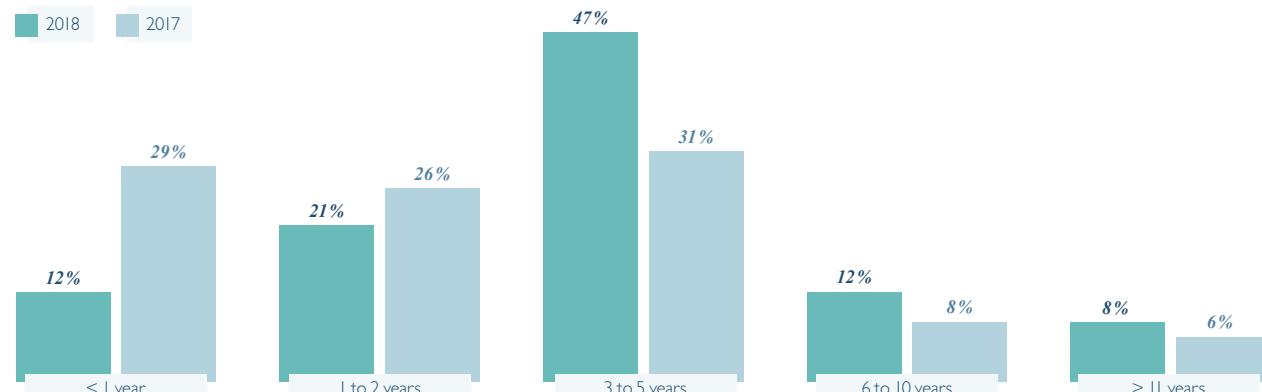
As for the number of years that 3D printing has been used by our respondents, people who have less than 1 year of experience decreased

by 17% meaning that there are fewer people starting out with 3D printing in the past year. The segment 3 to 5 years increased by 16%.

What do our respondents do to increase their level of expertise ?

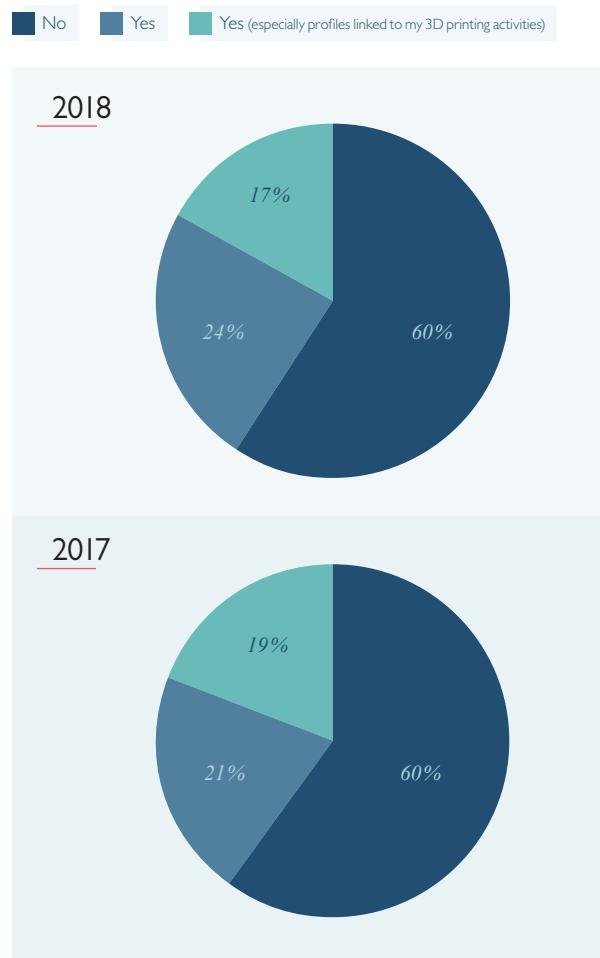
41% do all in house, but for the others, they use various resources. Indeed, 15% read 3D printing blogs, 14% attend events, and 11% attend training sessions, both in real life and online.

HOW LONG HAVE YOU BEEN USING 3D PRINTING ?



Talent management in the 3D printing world

DO YOU PLAN TO HIRE NEW CANDIDATES THIS YEAR?

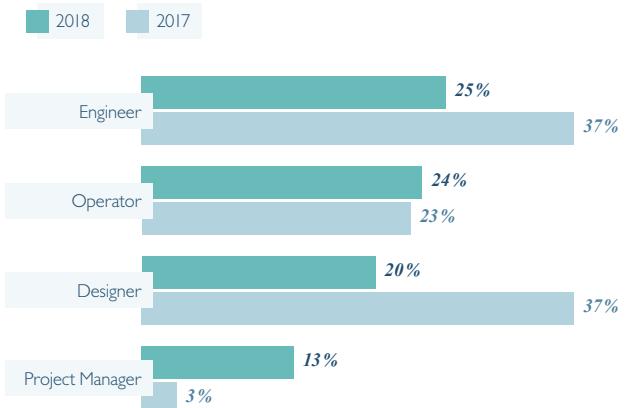


We find that the job market of 3D printing-related companies is not extremely dynamic, with 60% of the respondents saying they don't plan on hiring new candidates the upcoming year. But when we look at the candidates that companies look for, we find that there's a growth in the recruitment of project managers : last year only 3% were planning to hire some, compared to 13% this year.

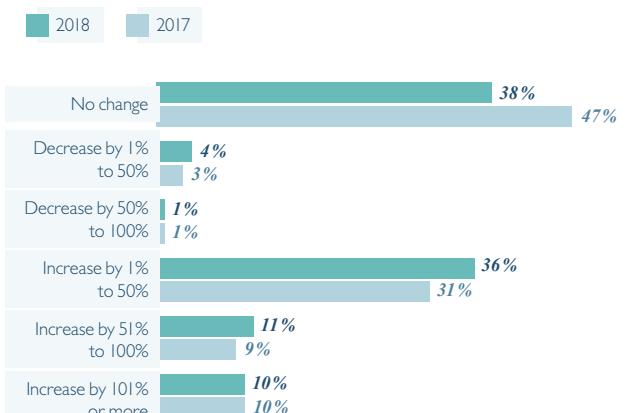
As for our respondents' yearly turnover, we can see that 38% of them said they had no change in turnover.

Last year, 47% saw no change, which is a 9% decrease. **36% increased their turnover by 1% to 50%, compared to 31% last year.**

WHICH CANDIDATES ARE YOU PLANNING TO HIRE?

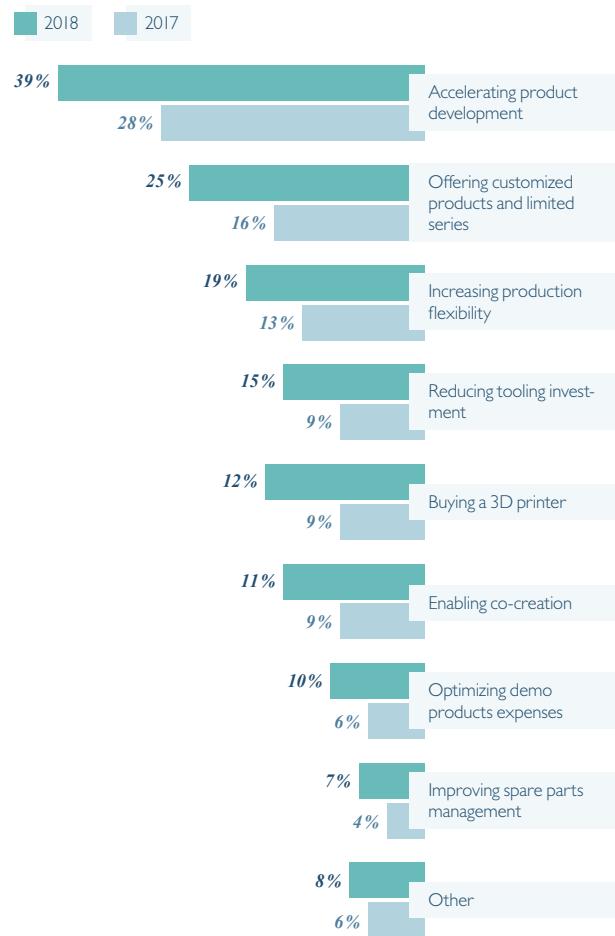


WHAT IS THE EVOLUTION OF YOUR TURNOVER?



Accelerating product development remains the top priority

WHICH 3D PRINTING RELATED AREA IS THE TOP PRIORITY FOR YOUR ORGANIZATION IN 2018 ?



Accelerating product development clearly is the top priority of our respondents (39%). Then, they want to offer customized products and limited series (25%), and to increase production flexibility (19%). Last year, accelerating product development was already the most important one (28%), but it's a growing priority, which makes sense with competition between companies being always more and more intense. Offering customized products and limited series also grew (was 16%), and so did increasing production flexibility (was 13%).

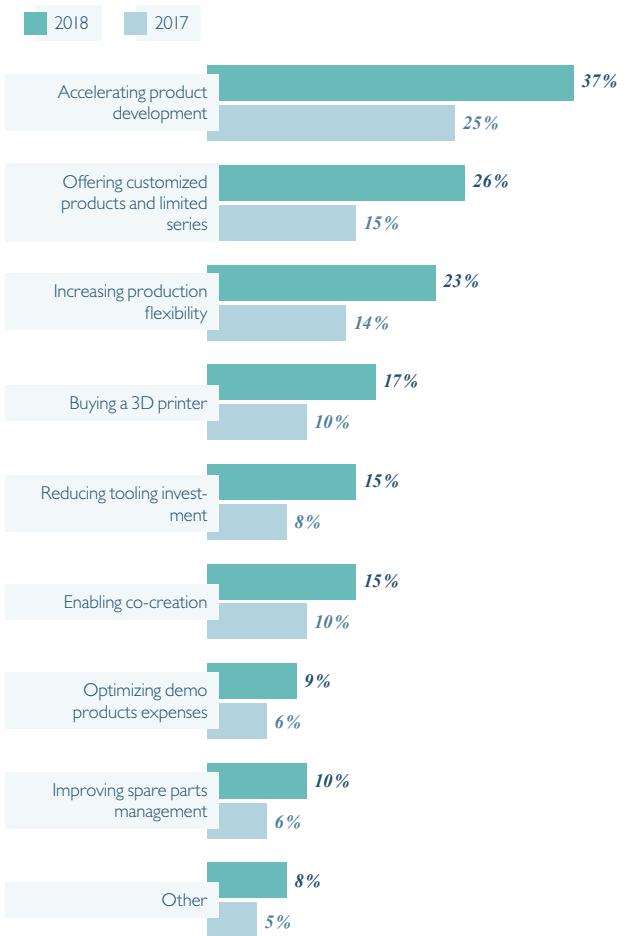
The majority of our respondents quoted more than one priority, showing that 3D printing can have multiple key benefits for businesses. Additive manufacturing becomes more central in business strategies.

And in 5 years ?

Accelerating product development is a very stable top priority over time: it's still the most quoted one, even over the next 5 years (37%). Offering customized products and limited series is also stable over time (26%), but increasing production flexibility becomes more important, showing that it's more of a long term priority (23%).

Buying a 3D printer is also more of a long term priority (17% versus 10%).

IN WHICH AREA COULD YOUR ORGANIZATION IMPROVE THE MOST OVER THE NEXT 5 YEARS ?



Top 8 changes organizations think they should make in order to fully capitalize on 3D printing

In order to fully capitalize on 3D printing, our respondents think they should first increase expertise and education of their collaborators. Indeed, the lack of education in additive manufacturing technologies is often what blocks companies in their use of 3D printing. Changing the company's culture and organization is also quoted.

Many other changes that need to be made are related to marketing, sales and revenue. Investing more in the marketing efforts linked to the 3D printing activities of our respondents appears to be quite important to make the most of this technology, as well as finding more ways to get revenue, both by increasing sales or raising funds.

 1. INCREASE EXPERTISE AND EDUCATION OF COLLABORATORS

 2. MARKETING AND COMMUNICATIONS

 3. INVEST IN 3D PRINTERS

 4. LOWER 3D PRINTING COSTS

 5. INCREASE SALES

 6. INTEGRATE BETTER 3D PRINTING INTO THEIR ACTIVITIES

 7. RAISE FUNDS

 8. IMPROVE COMPANY CULTURE AND ORGANIZATION

More and more innovations to come, both in terms of products and of 3D printing technologies

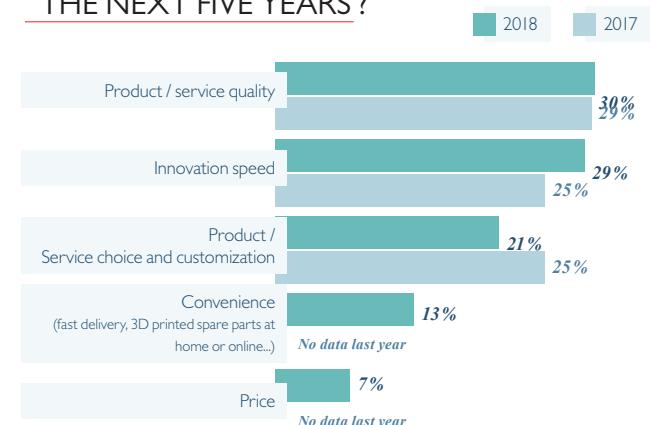
According to our respondents, there are three main ways to differentiate yourself in the long term : product or service quality (30%), innovation speed (29%), and product/ service choice and customization (21%). These three options are totally compatible with 3D printing, a technology which helps build better products, innovate faster, and enables mass-customization.

Last year, product or service quality was also the best way to differentiate yourself (29%), but innovation speed becomes a more important concern (25%), and customization decreases (25%). Thus, companies tend to focus more on innovating faster than on offering a wider range of products.

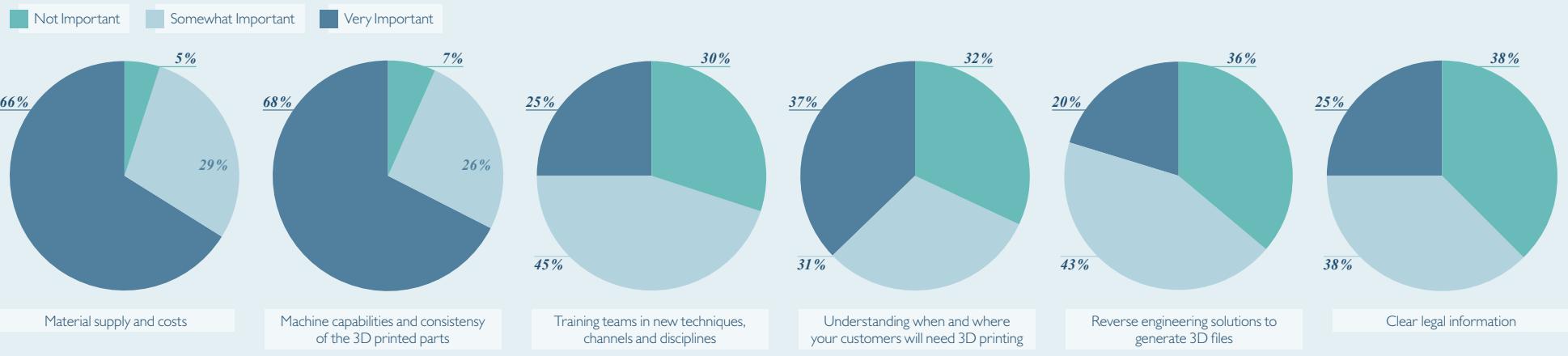
When it comes to 3D printing activities themselves, machine capabilities (68%) and material supply and cost (66%) appear to be the most important factors, showing the importance of innovation in 3D printing technologies and materials. Team training is considered as somewhat important by the major part of our respondents (45%), confirming the need for a better education in additive manufacturing described on the previous page.

Last year, machine capabilities was by far the most quoted as “very important” (70%), followed by material supply and cost (52%). This shows the growing importance of material supply and cost, and the demand for innovation in terms of materials and technologies.

HOW WILL YOUR ORGANIZATION DIFFERENTIATE ITSELF OVER THE NEXT FIVE YEARS ?



HOW IMPORTANT ARE THE FOLLOWING FACTORS INTO YOUR 3D PRINTING ACTIVITY OVER THE NEXT FEW YEARS ?



Top 7 trends that will have a major impact on 3D printing



Cost decrease remains by far the most quoted trend, year over year. This makes sense since a lower cost of 3D printing means easier use of this technology. Moreover, metal 3D printing keeps appearing as one of the trends with the biggest impact.

The strongest growth compared to last year's answers was the demand for innovation in materials specifically. It confirms the Trends we saw in the previous pages of this report: there's a growing interest for innovations related to materials, that goes with the growing importance of material supply and cost.

Mass-manufacturing is also more quoted, as 3D printing is becoming more and more a true production process, used for the creation of end-use products. That's also why speed and quality also become more and more important. The strong decrease of the importance of personal use also makes sense, confirming the professionalization of the market.

1. COST DECREASE

2. INNOVATION IN MATERIALS

3. METAL 3D PRINTING

4. SPEED

5. MEDICAL 3D PRINTING AND BIOPRINTING

6. QUALITY AND ACCURACY

7. 3D PRINTING FOR MASS-MANUFACTURING

EXECUTING A 3D PRINTING STRATEGY

Now that you know what the Trends of the 3D printing industry are, you might wonder how you can succeed with this powerful technology. To help you with that, every year we identify one special part of our sample : **the Power Users.**

We compare their answers to the ones of our regular sample to see what is different in their use of additive manufacturing, in order to help you execute a successful 3D printing strategy.

Who are these Power Users ?

Additive manufacturing users who invest more in this technology, with better results and advanced performance.

Discover what makes them successful now.



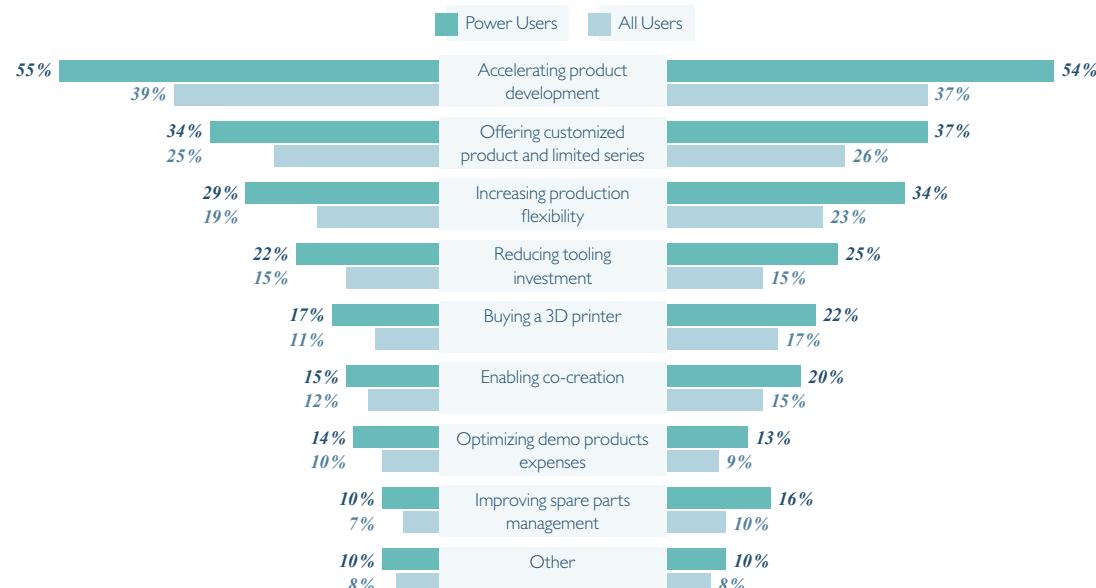
3D printing is at the heart of Power Users' business priorities

98% of Power Users see 3D printing as a competitive advantage, whereas only 90% of regular 3D printing users see it that way.

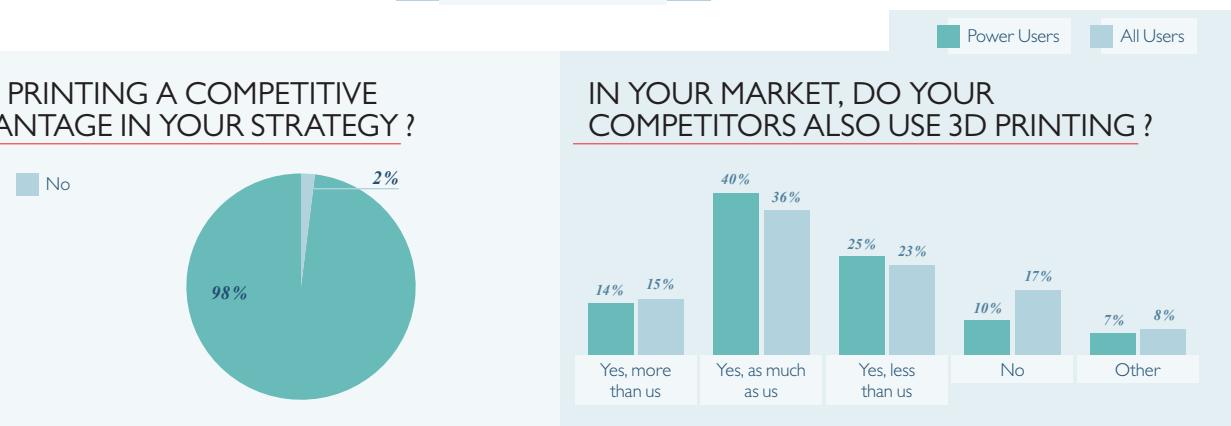
Power Users are more focussed on 3D printing ; most importantly their priorities are in accelerating their product development, offering customized and limited products, more production flexibility and buying a 3D printer.

The same priorities are set in the future by Power Users and they can all be supported by implementing additive manufacturing - making it essential to their businesses.

WHICH 3D PRINTING RELATED AREA IS THE TOP PRIORITY FOR YOUR ORGANIZATION IN 2018 ?

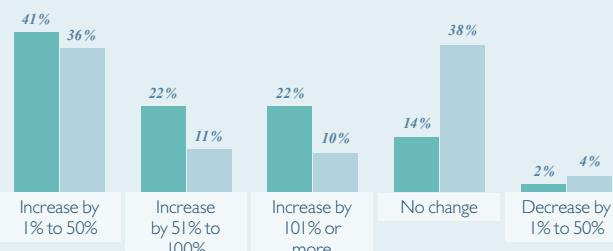


IN WHICH AREA COULD YOUR ORGANIZATION IMPROVE THE MOST OVER THE NEXT 5 YEARS ?



■ Power Users ■ All Users

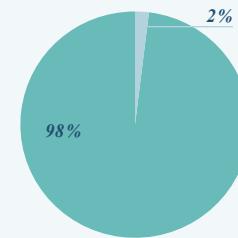
HOW DID YOUR 2017 EXPENSES FOR 3D PRINTING EVOLVE COMPARED TO 2016 ?



IS 3D PRINTING A COMPETITIVE ADVANTAGE IN YOUR STRATEGY ?

■ Yes

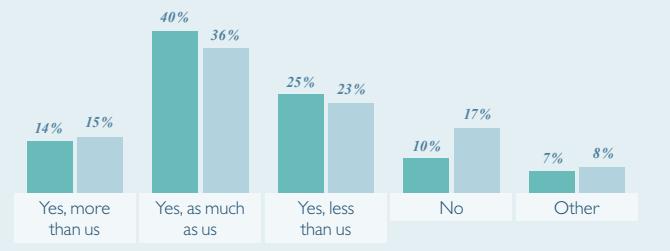
■ No



IN YOUR MARKET, DO YOUR COMPETITORS ALSO USE 3D PRINTING ?

■ Power Users

■ All Users



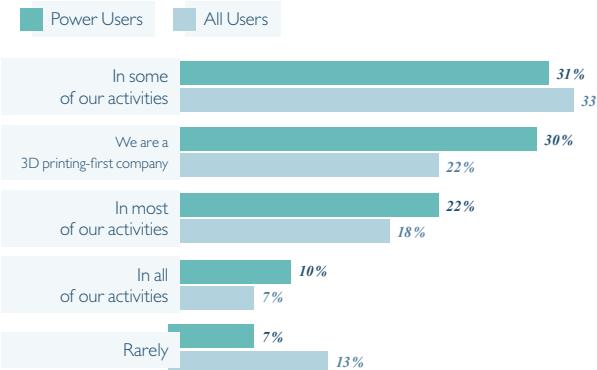
Additive manufacturing is more integrated into their companies

Additive manufacturing is more integrated into the activities of the companies of the Power Users who answered to this survey. For example, we can notice that 30% of Power Users are in a 3D printing-first company, compared to 22% of the General Users.

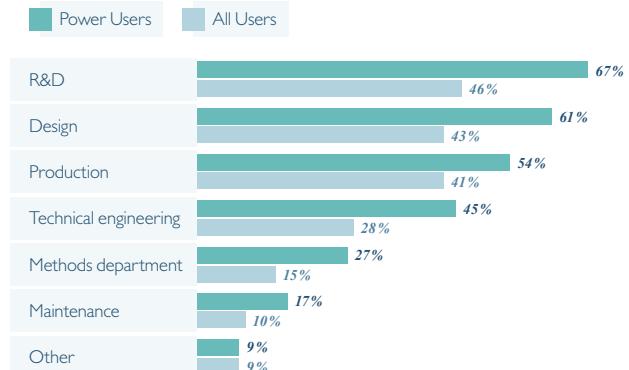
They are actually more confident with this technology and are more likely to use it for several applications inside their company. In which departments of their companies are these Power Users actually using 3D printing the most ? Like the General Users, this technology appears to be really helpful for R&D, design and production, but Power Users actually use it for more applications, meaning that 3D printing is more integrated at different levels inside their companies.

Their great use of additive manufacturing leads to another interesting phenomenon : more and more of the Power Users are now using their own 3D printers. Power Users now tend to own more 3D printers than the average. Indeed, 80% own one compared to 77% of the General Users. Actually, 66% own FDM printers, but it's less common than among the total of our respondents. FDM are not as accurate as professional 3D printers, that is certainly why it is less common for them to own this kind of 3D printer.

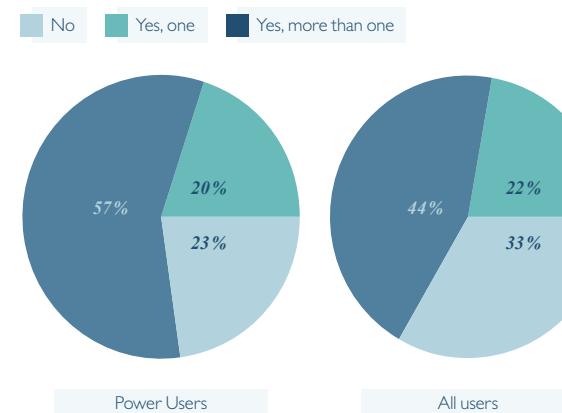
TO WHAT EXTENT IS 3D PRINTING INTEGRATED IN YOUR ORGANIZATION'S ACTIVITIES ?



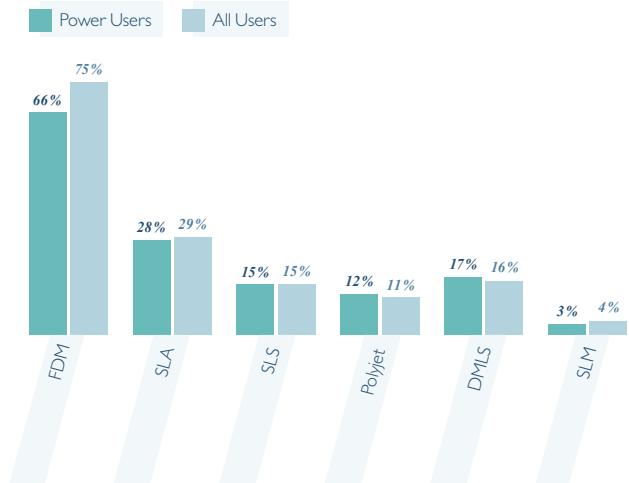
WHICH DEPARTMENT IS USING 3D PRINTING IN YOUR COMPANY ?



DO YOU OR YOUR COMPANY OWN A 3D PRINTER ?



IF YOU DO, WHAT TYPE OF 3D PRINTER DO YOU OWN ?



Power Users embrace the full potential of 3D printing in all aspects

Power Users embrace the full potential of 3D printing. We can see that they are using it for more different applications than other users, but they are also using more different technologies and materials. Globally, they are really making the most of all the benefits and possibilities offered by this cutting-edge technology.

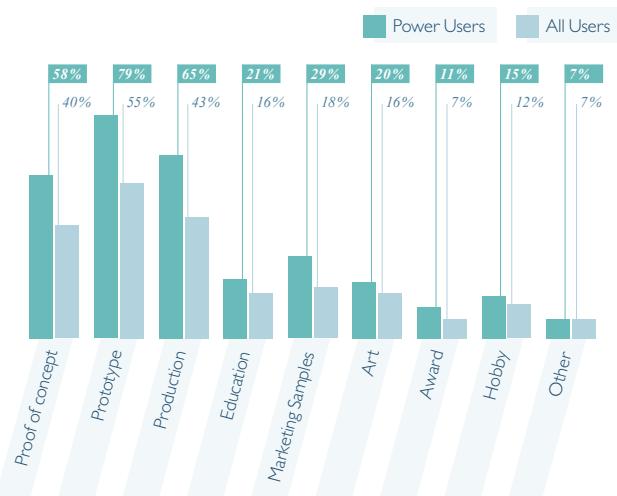
65% of Power Users are using 3D printing directly for production, compared to 43% for the General Users who responded to our survey. Power Users are more likely to use it for final products. This use is actually more and more widespread, showing that it is a really promising manufacturing method.

Regarding the perception of the benefits of 3D printing by the users, we notice that Power Users are seeing

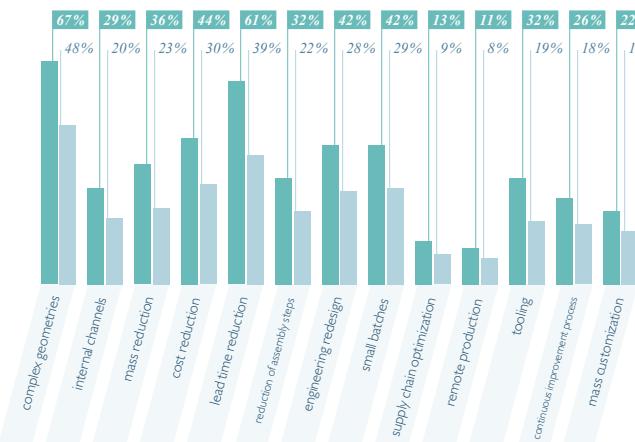
more benefits in this manufacturing method than regular users. 67% of the Power Users are using 3D printing to make complex geometries, and 61% use it to reduce their costs, that is more than all the General 3D printing Users. As they see more benefits in 3D printing, it follows that they are spending more money in 3D printing and using it for more different activities.

Plastics, metals and resins are the most used materials by Power Users, with higher percentages for all, meaning that they are using more different materials, adapted to their different use of 3D printing. The numbers also confirm that metal 3D printing is becoming a common manufacturing technique, more and more used both by Power Users and General Users.

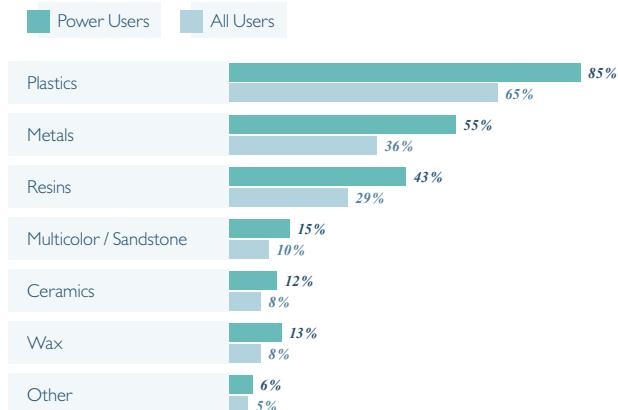
WHAT'S THE PURPOSE OF YOUR 3D PRINTS ?



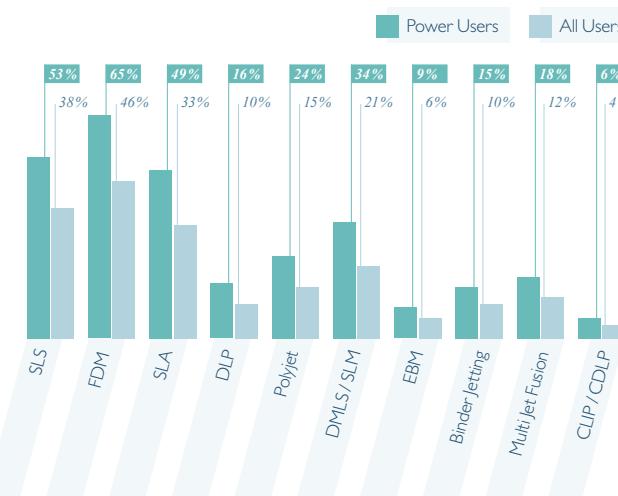
WHICH OF THESE 3D PRINTING BENEFITS DO YOU TAKE ADVANTAGE OF TODAY IN YOUR COMPANY ?



WHICH MATERIALS DO YOU USE FOR 3D PRINTING ?



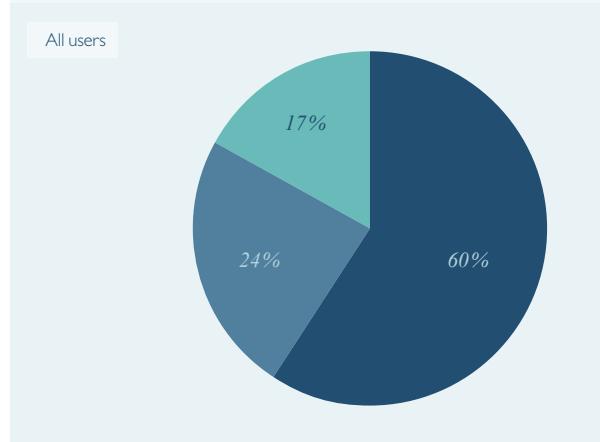
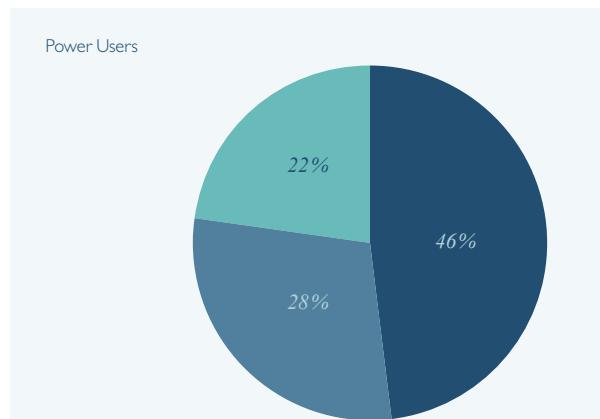
WHICH KIND OF 3D PRINTING TECHNOLOGY DO YOU USE ?



A more dynamic job market

DO YOU PLAN TO HIRE NEW CANDIDATES THIS YEAR?

No Yes Yes (especially profiles linked to my 3D printing activities)



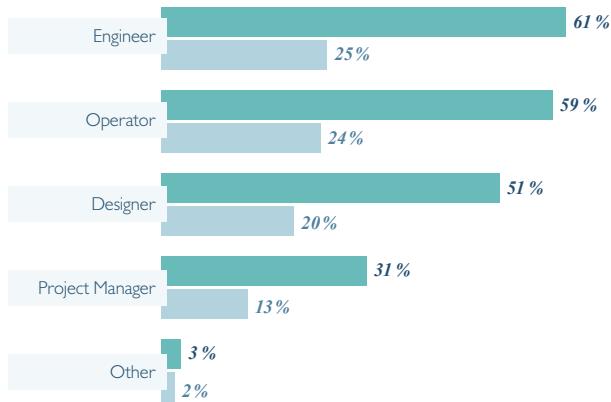
Nearly 75% of our Power Users have stated a positive evolution of their turnover in 2018 compared to 2017. Half of them said that their turnover increased between 1 to 50% this year.

For any profile hiring, again nearly half of the Power Users wish to hire new people in the near future. 22% of them even want to hire profiles related solely to 3D printing. If we look at the types of profiles that are considered, Power Users wish to hire multiple profiles namely engineers, operators and designers.

Overall, we can see those Power Users are really invested in the job market related to additive manufacturing.

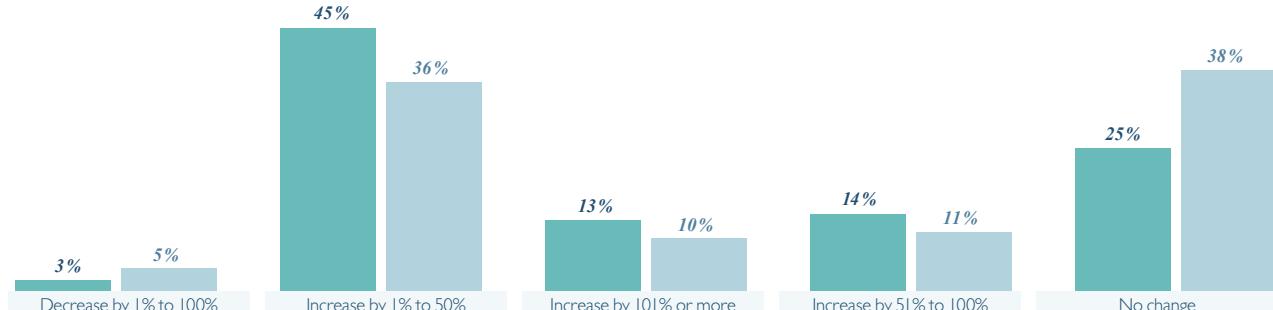
WHICH CANDIDATES ARE YOU PLANNING TO HIRE?

Power Users All Users



WHAT IS THE EVOLUTION OF YOUR TURNOVER ?

Power Users All Users



SECTORIAL INSIGHTS

To help you take the best business decisions, we also think that it's important to show you how the most represented sectors in our study use 3D printing.

Using these insights, you can compare your own use of this technology, and see how you can improve your whole strategy.

This year, the three most represented sectors in the study are industrial goods, consumer goods, and aeronautics. We can clearly see that they don't use 3D printing the same way. **Discover the differences now !**



Industrial goods

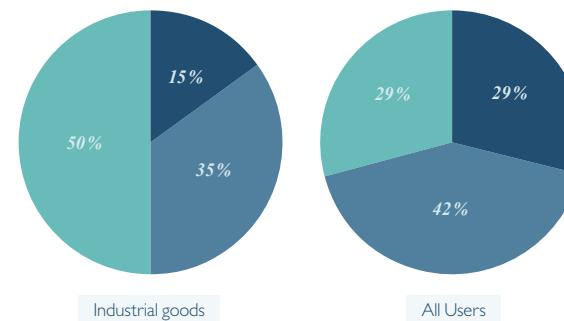
Companies from the industrial goods sector have a very interesting use of 3D printing. In terms of expenses, they are a larger amount to only want to increase them of 1 to 50% (41% vs 37%).

They use additive manufacturing both as a prototyping and production method, but they use it more for production than our regular sample (50% vs 43%). Moreover, many of the 3D printing benefits they quote are related to production issues: they quote lead-time reduction and mass-reduction significantly more than the regular sample. This shows that 3D printing is seen as a key manufacturing method for the industrial goods sector. In terms of materials, they use less plastics (56% vs 65%), but more metals (46% vs 36%).

There are way more 3D printing first companies in the industrial goods sector (30% vs 22%), showing that additive manufacturing is better integrated in this field. There are more experts in this industry (50% vs 42%), but they started to use 3D printing later on average. Could it be that they have a more intensive use of additive manufacturing? It makes sense if there are more 3D printing first companies in this field.

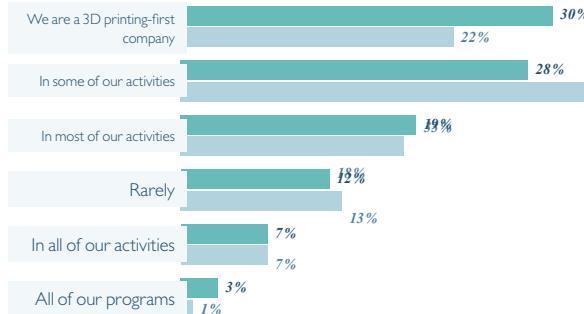
WHEN IT COMES TO 3D PRINTING, YOU CONSIDER YOURSELF TO BE

Beginner Intermediate Expert



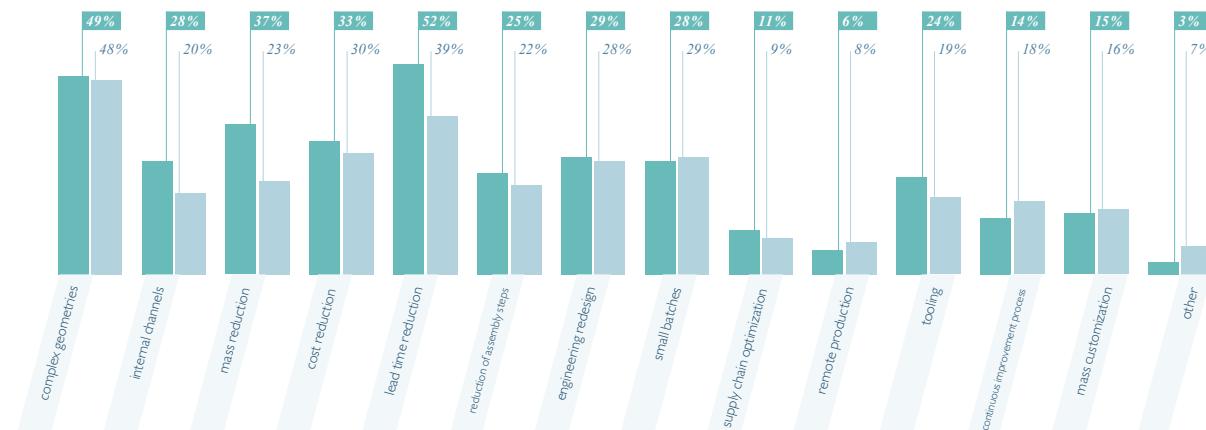
TO WHAT EXTENT IS 3D PRINTING INTEGRATED IN YOUR ORGANIZATION'S ACTIVITIES ?

Industrial goods All Users



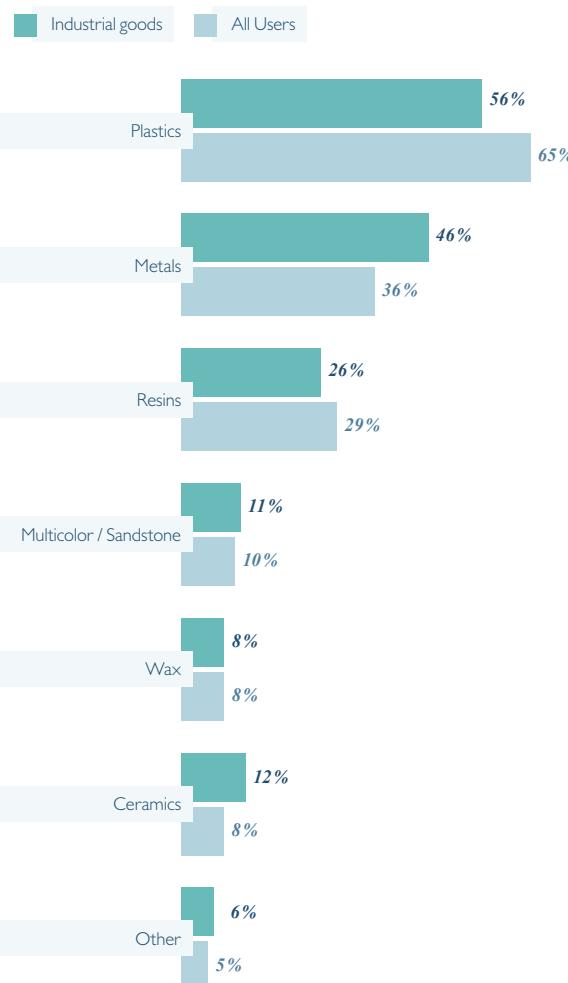
WHICH OF THESE 3D PRINTING BENEFITS DO YOU TAKE ADVANTAGE OF TODAY IN YOUR COMPANY ?

Industrial goods All Users

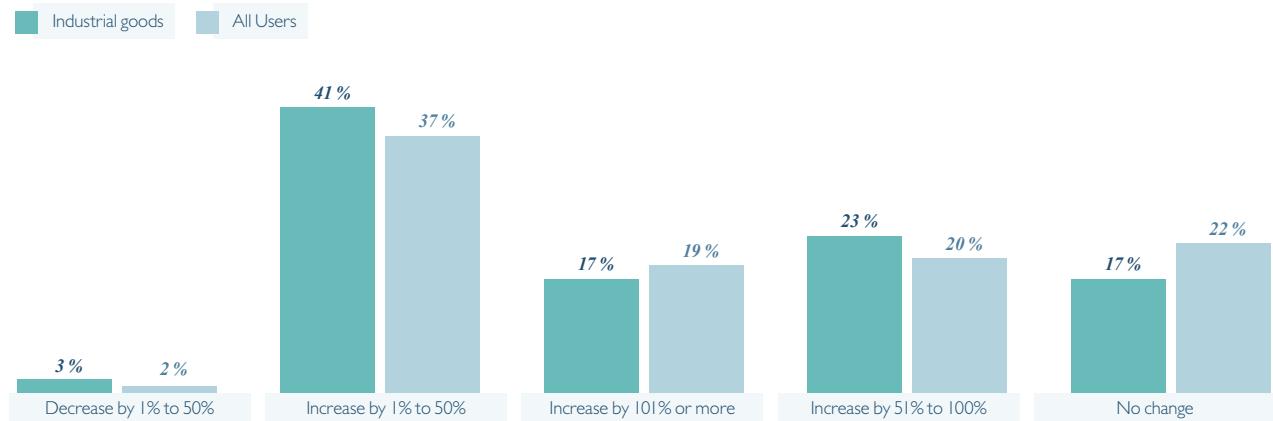


Industrial goods

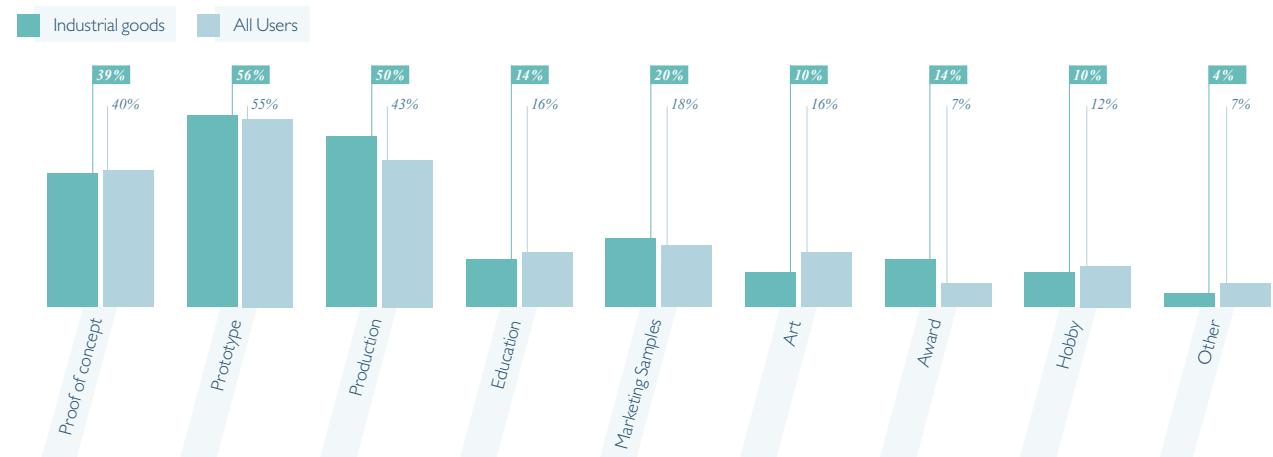
WHICH MATERIALS DO YOU USE FOR 3D PRINTING ?



HOW DID YOUR 3D PRINTING EXPENSES EVOLVE COMPARED TO LAST YEAR ?



WHAT'S THE PURPOSE OF YOUR 3D PRINTS ?



Consumer goods

If we look at the consumer goods industry and how they have implemented 3D printing differently compared to other industries, we can see that there are more beginners, about 16%. This industry makes more use of additive manufacturing for the whole lifecycle of a product than the regular sample: 7% more for prototyping, 9% more for proof of concept, and 7% for production.

The benefits this industry finds are in small batch production due to their priority being more focused on offering customized products and small series.

Moreover, we can see that there are more people working on 3D modeling themselves, and that there are more people working on design and less in engineering.

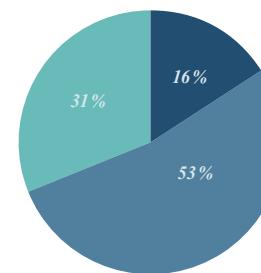
This industry uses more plastics, multicolor, resins, and metals.

Their priority for the next 5 years is focusing more on customized products and on spare part management.

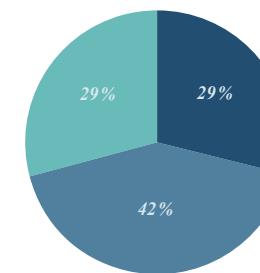
Last but not least, 57% of our respondents from this industry saw a greater ROI than the previous year.

WHEN IT COMES TO 3D PRINTING, YOU CONSIDER YOURSELF TO BE

Beginner Intermediate Expert



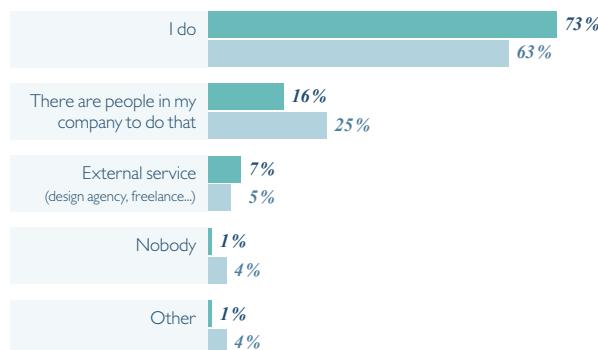
Consumer goods



All Users

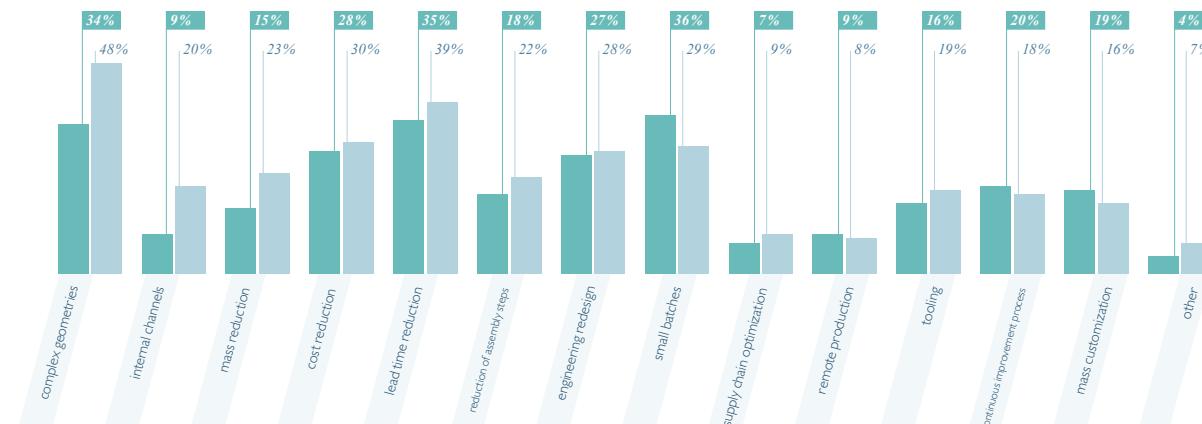
WHO IS WORKING ON 3D MODELING ?

Consumer goods All Users



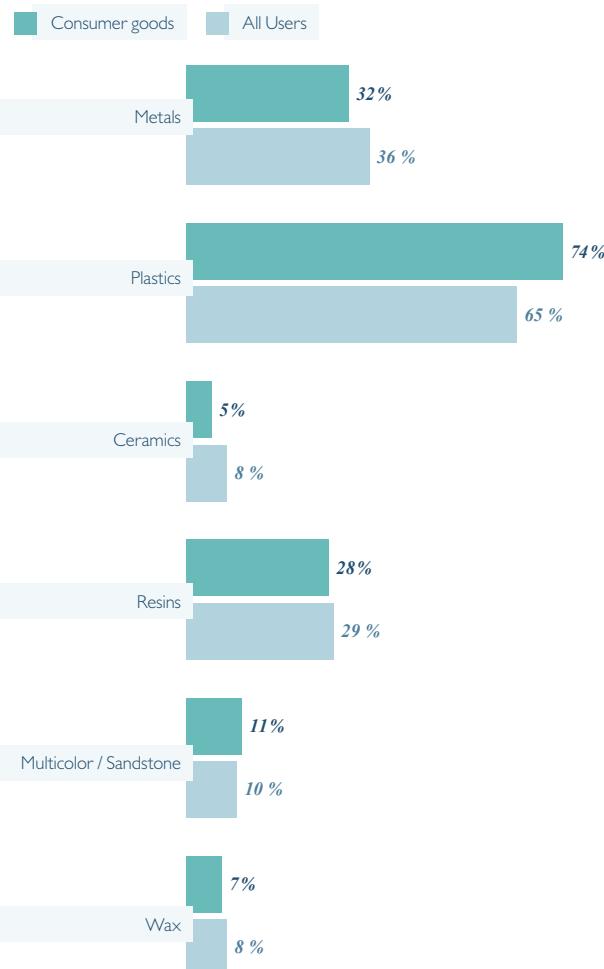
WHICH OF THESE 3D PRINTING BENEFITS DO YOU TAKE ADVANTAGE OF TODAY IN YOUR COMPANY ?

Consumer goods All Users

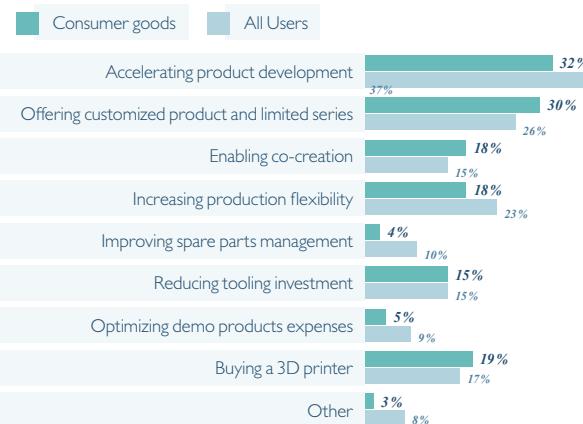


Consumer goods

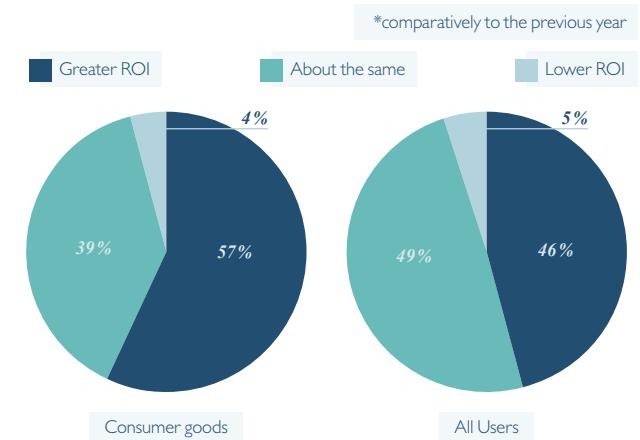
WHICH MATERIALS DO YOU USE FOR 3D PRINTING ?



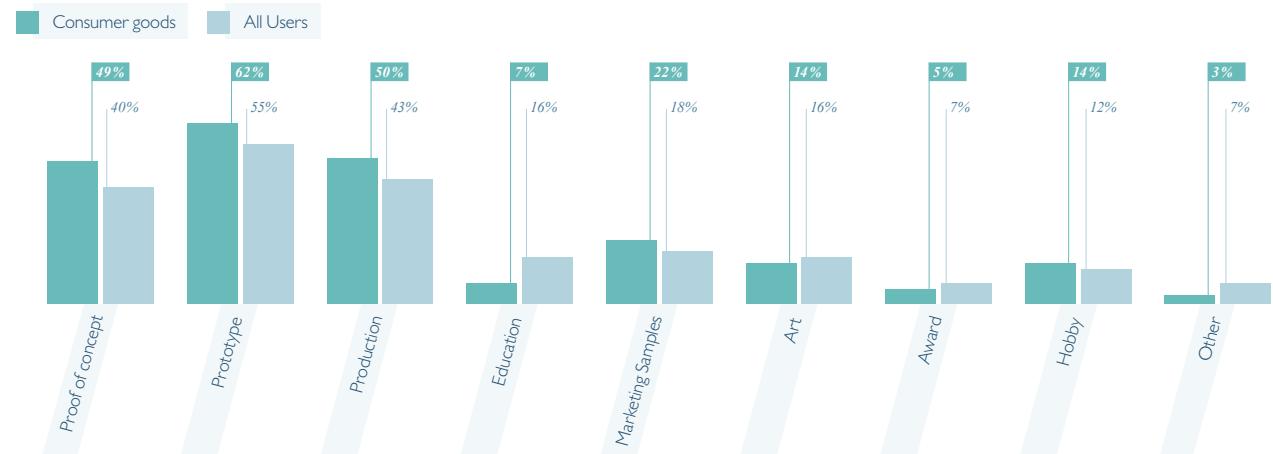
WHAT IS YOUR PRIORITY FOR THE NEXT 5 YEARS ?



WHAT IS THE ROI OF 3D PRINTING IN YOUR ACTIVITY THIS YEAR ?



WHAT'S THE PURPOSE OF YOUR 3D PRINTS ?

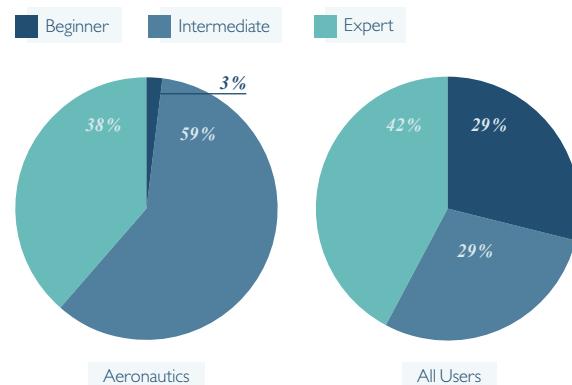


Aeronautics

Contrary to other industries, there are almost no beginners using 3D printing in aeronautics. Indeed, 59% of the respondents working in aeronautics are experts and 38% are intermediates. Obviously, people using 3D printing in aeronautics are quite experienced with this technology and more able to create technical projects in this sector.

Other sectors are more likely to use additive manufacturing for prototypes and proof of concept, while aeronautics is a sector where 3D printing is mainly used for production : 64% of the respondents use it that way, which is a lot more than other sectors.

WHEN IT COMES TO 3D PRINTING, YOU CONSIDER YOURSELF TO BE



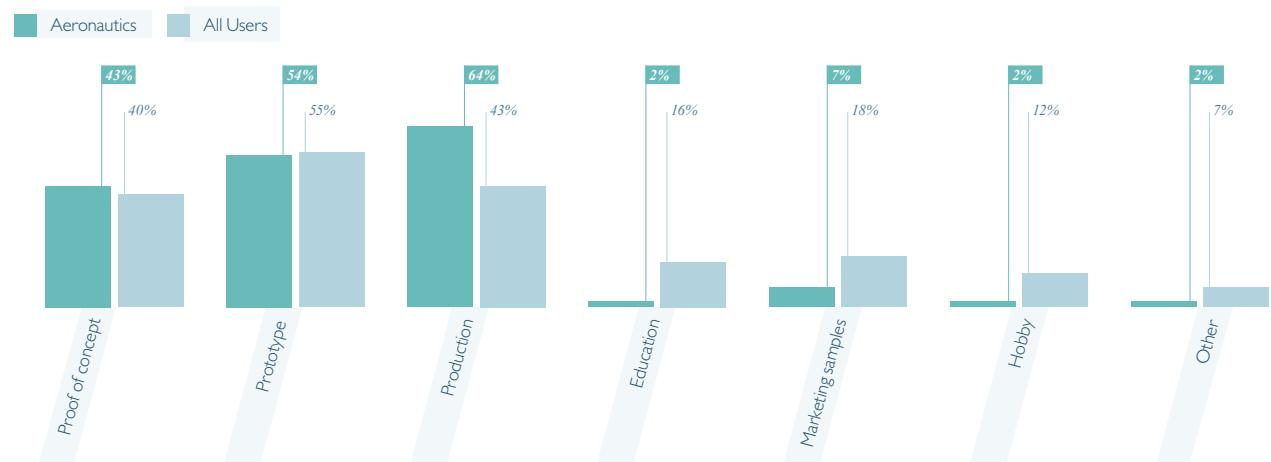
It is showing that the technology is evolving and that it is now possible to create technical parts for this kind of industries.

54% of the respondents working in aeronautics increased their revenue by 1% to 50%, and in total 71% increased their revenue, which is really promising, showing that the financial benefits of 3D printing are real for this kind of companies using 3D printing for production.

37% of the respondents in aeronautics spent more than 100 000\$ in 3D printing this year.

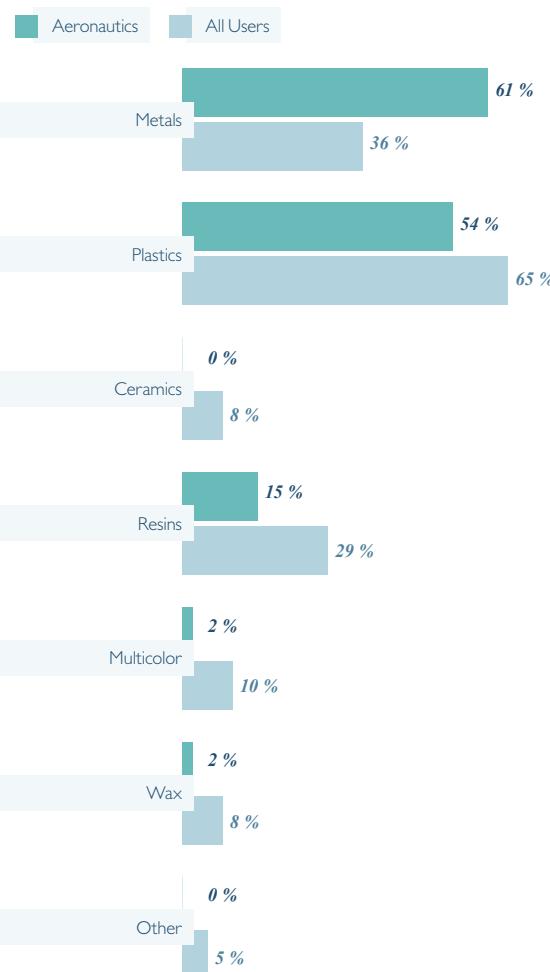
As they are using additive manufacturing for production, we can assume that they are using expensive materials and technologies, that is why they spend so much in additive manufacturing. This is confirmed by the fact that 61% of them use metal 3D printing, compared to 30% of the regular sample. It is also showing that they are confident with this technology and that the companies are not afraid to invest a lot of money into this manufacturing technique. And as we can see that the respondents are saying that they are increasing their revenue, we can say that they are satisfied with their investments.

WHAT'S THE PURPOSE OF YOUR 3D PRINTS ?

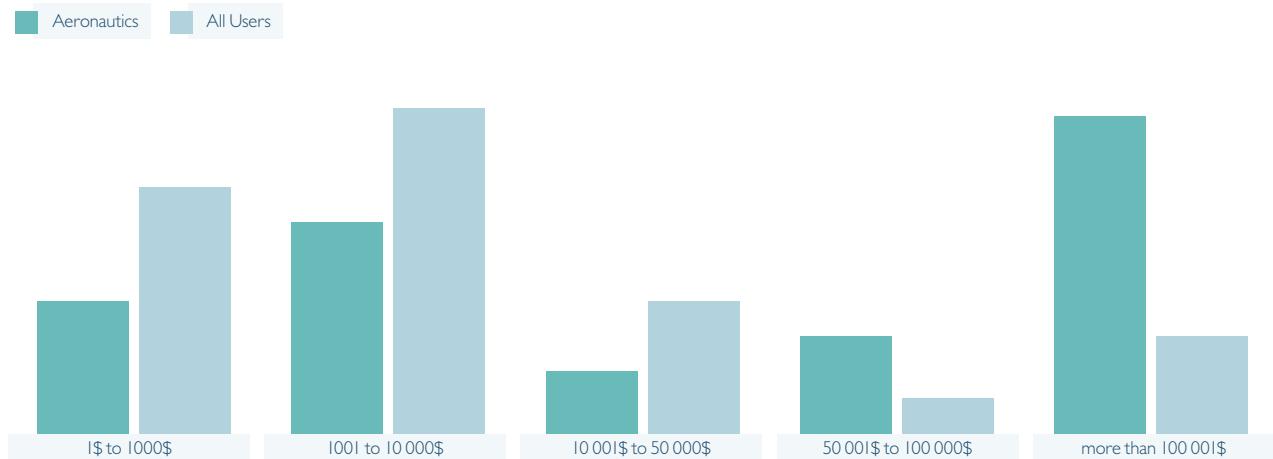


Aeronautics

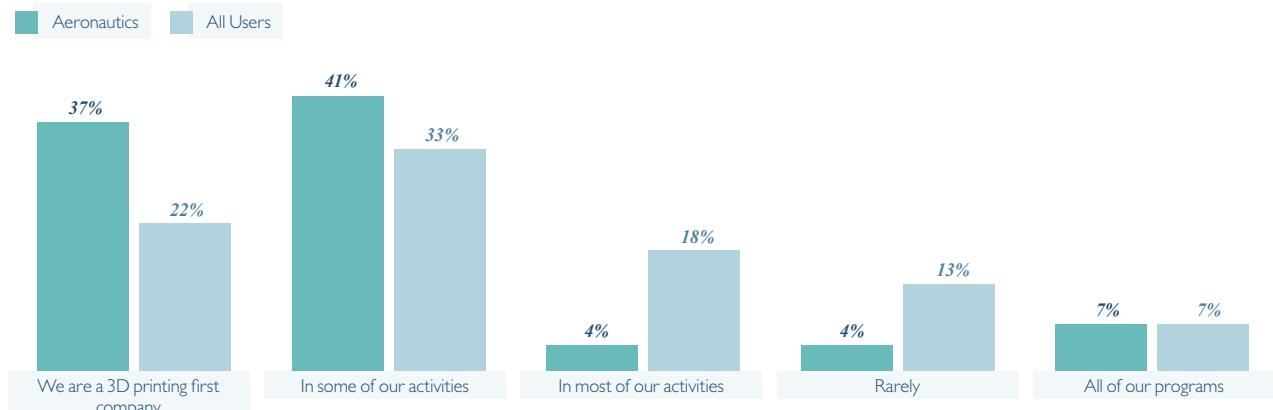
WHICH MATERIALS DO YOU USE FOR 3D PRINTING ?

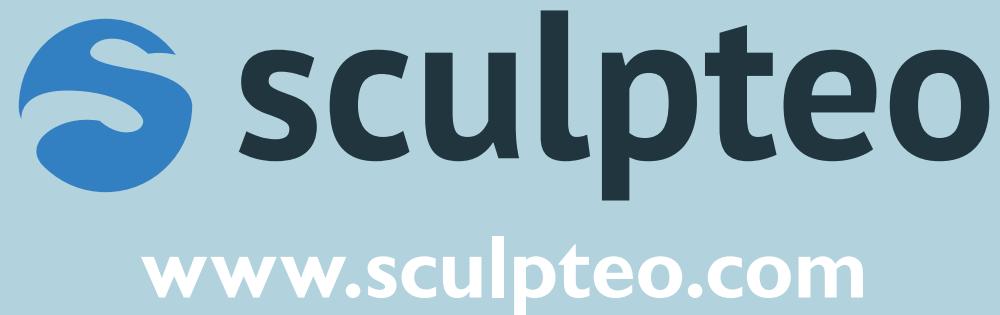


HOW MUCH DID YOU SPEND IN 3D PRINTING ?



TO WHAT EXTENT IS 3D PRINTING INTEGRATED IN YOUR ORGANIZATION'S ACTIVITIES ?



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