DENTAL MONITOR

OMNIVISION digital

TECHNICAL - EUROPE 2015

KEY-STONE
Marketing research and consulting

Index

Introduction

Introduction

OMNIVISION digital

The OmniVision Digital Europe 2015 is an Omnibus, multi-client descriptive research, analyzing the performances in Europe of the main international manufacturers both in clinical and technical markets evaluated with regard to the new digital technologies, such as intraoral scanners, chairside milling, table top scanners, in lab milling and 3D printing.

The number of interviews performed for this research is more than 700 dental laboratories; and it is fully representative of the population of the laboratories in the investigated countries.

The interviews were performed between July and September of 2015 through a CATI system made by our team of specialists.

Introduction - Statistical Note

The number of interviews performed for the research is 722 dental laboratories; it results fully representative of the population of the European dental laboratories.

- With a confidence level of 95% the maximum error (confidence interval) is +/- 3,5%.
- The data was processed using EXCEL, SPSS, STATISTICA.
- Due to the objectives of knowledge and the types of questions, the data was processed:
    - Contingency tables
    - Significance test

GLOSSARY

- The confidence level indicates the reliability level of the research. For example, a confidence level equal to 95% means that the phenomenon pointed out by the research is correct for the 95% of the cases.
- The confidence interval indicates how much the research data diverge from reality. As the sample results, even if representative, cannot be perfectly correspondent to those obtainable interviewing the entire population, each research has an approximation degree which represents the maximum error of the research. For example, a confidence interval of ± 3% indicates that if the research phenomenon is equal to 60%, the result can change, in comparison with reality, of an extra 3% or a minus 3% and in this way it is included between 63% (60%+3%) and 57% (60%-3%).

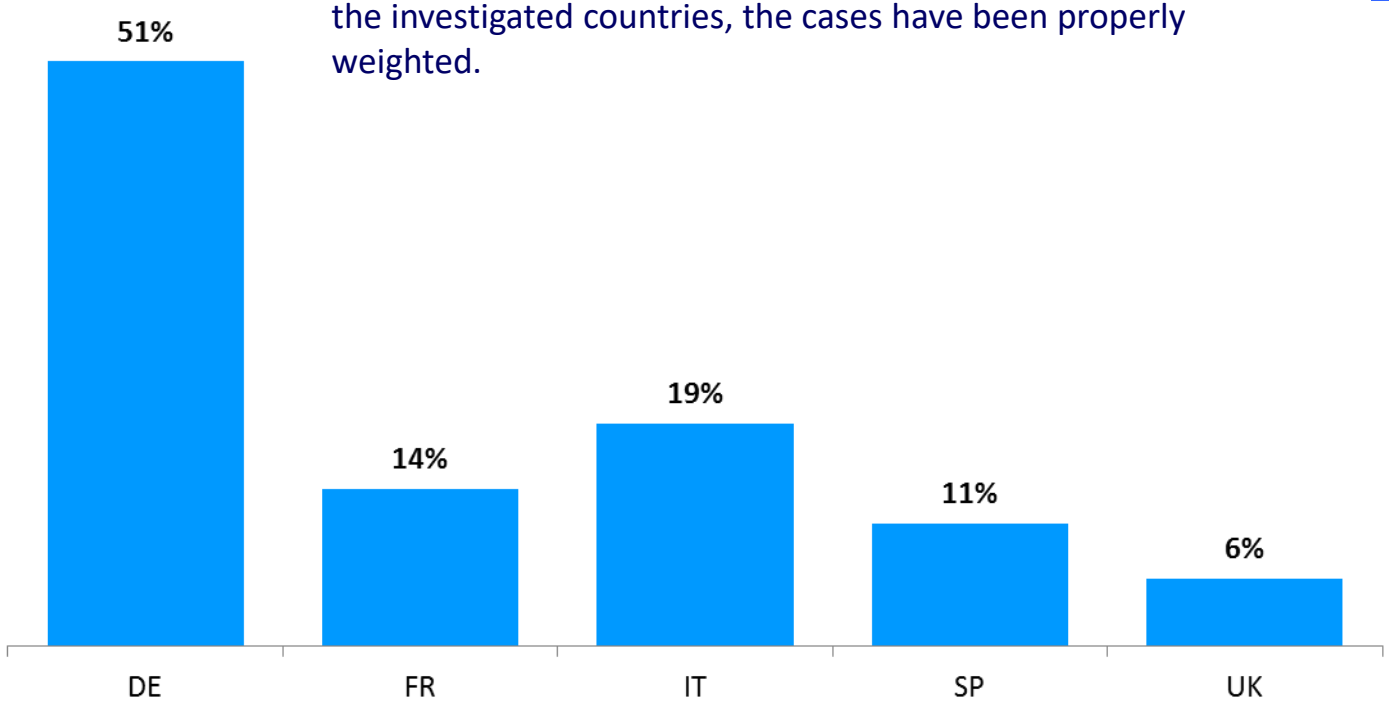
.

Introduction - Sample Composition 1/2

The sample consists of **722** dental laboratories stratified by Nielsen areas.

The number of interviews conducted in each country were about 150 (increased in Germany and slightly lowered in UK), but in order to accurately represent the market made up of the investigated countries, the cases have been properly weighted.

Country	Weighted cases	%
Germany	366	51%
France	98	14%
Italy	139	19%
Spain	77	11%
United Kingdom	42	6%
Total	**722**	**100%**



The weight has been calculated by considering two main parameters.
1. The number of dental laboratories
2. The Fast Track analysis business

It's quite clear how relevant is the weight of Germany in the dental lab market and in this research.

Please, refer to the next slide for the details of the weighting process.

Introduction - Sample Composition 2/2

The number of interviews conducted in each country were about 150 as shown here on the right (A).

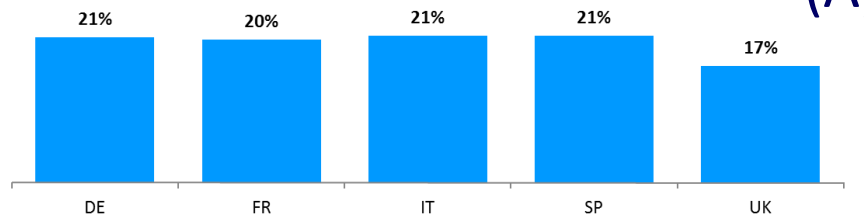
The average weight of the surveyed countries regarding 2 parameters: number of dental laboratories and business collected from a panel of major manufacturers in Europe for the consumable market (the Fast Track analysis Europe) is shown at (B).

The overall results (only the overall ones) must be representative of the total universe (all countries investigated) which the sample refers to, as if we were to interview the whole universe. If we assume that the parameters considered (number of laboratories and Fast Track business) are a reliable indication of the weight of a given country, we need to make sure that each country's sample weights as much as the parameters indicated for that country, out of the total (number of laboratories and Fast Track business) evaluated countries.
In this case, since the natural weight of the interviews in each country is different from the weight of the parameters considered, we have to apply a multiplying factor (it can be more or less than 1) to the number of performed interviews in each country, so that, only for the overall results, the weighted interviews are consistent with the parameters used.
The resulting number of weighted interviews is then shown at (C).

It is important to underline that the weights are applied only when the overall results are considered.
The charts showing the data of the single countries, are always referred to the actual interviews performed (A).

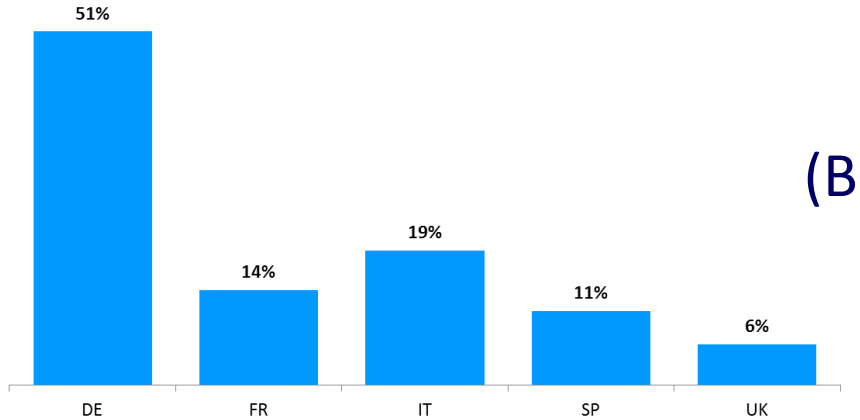
Country	Cases	%
Germany	150	21%
France	148	20%
Italy	152	21%
Spain	152	21%
United Kingdom	120	17%
Total	**722**	**100%**

(A)



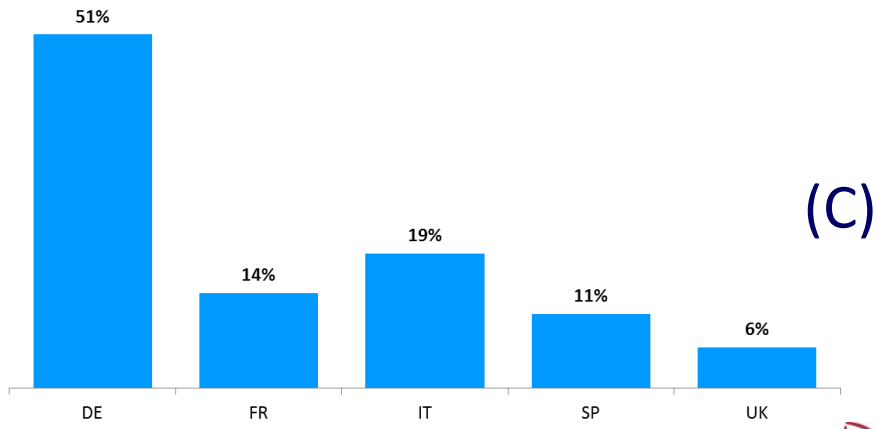
Country	Laboratories	Fast Track	% (Avg)
Germany	18.300	51%	51%
France	3.800	17%	14%
Italy	7.680	17%	19%
Spain	4.200	10%	11%
United Kingdom	2.100	6%	6%
Total	**36.080**	**100%**	**100%**

(B)

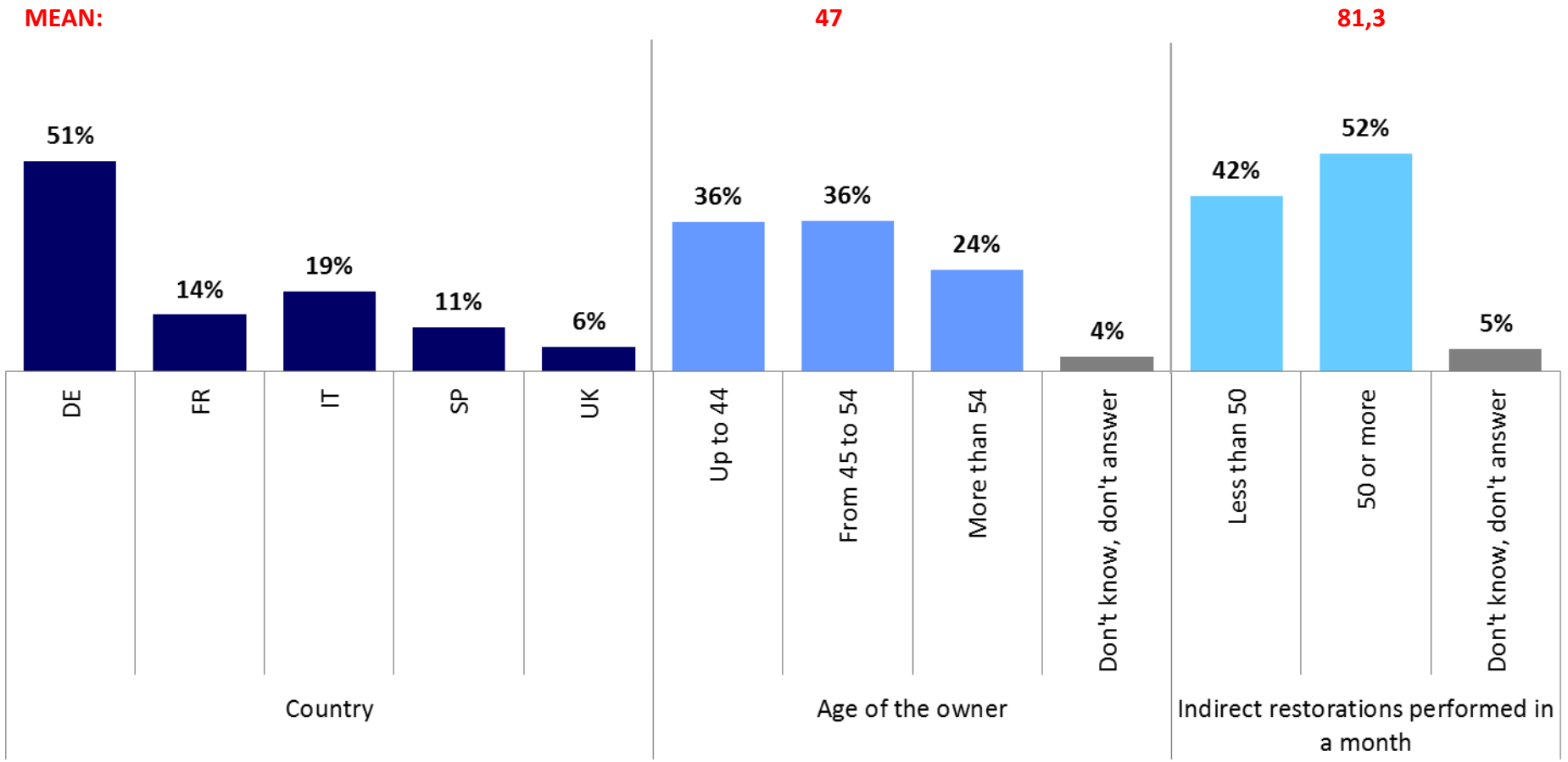


Country	Weighted Cases	%
Germany	366	51%
France	98	14%
Italy	139	19%
Spain	77	11%
United Kingdom	42	6%
Total	**722**	**100%**

(C)



Introduction - Breakdown By Socio Demographic Clusters



Base: 722 cases

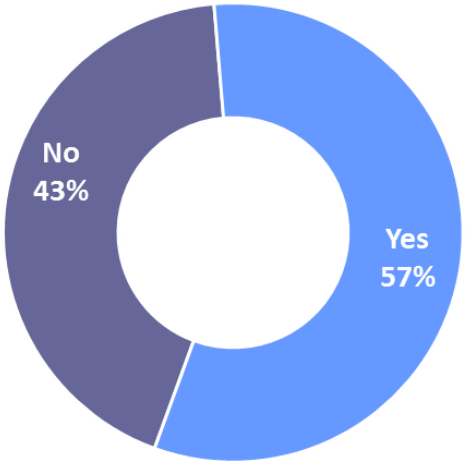
NOTE
The scenario analysis will be carried out considering the overall sample and some clusters.
COUNTRY: the data are split by each investigated country.
DIGITAL RESTORATION PROVIDER: the data are split by different profiles, as follows.
- **Digital restorations provider**: Yes / No. Yes: all respondents stating to use digital technologies to provide restorations to their clients (even in full outsourcing).
- **TECHNOLOGY**: In-lab milling (respondents stating to use an in-lab milling unit at their lab); Scanner (respondents stating to use a scanner to send scan files outside for milling); Full outsourcing (respondents stating to send outside models for milling).
- **CHANNEL**: Manufacturer (respondents stating to send models and or scan files to a manufacturer/milling center); Partner lab (respondents stating to send models and or scan files to a partner lab).

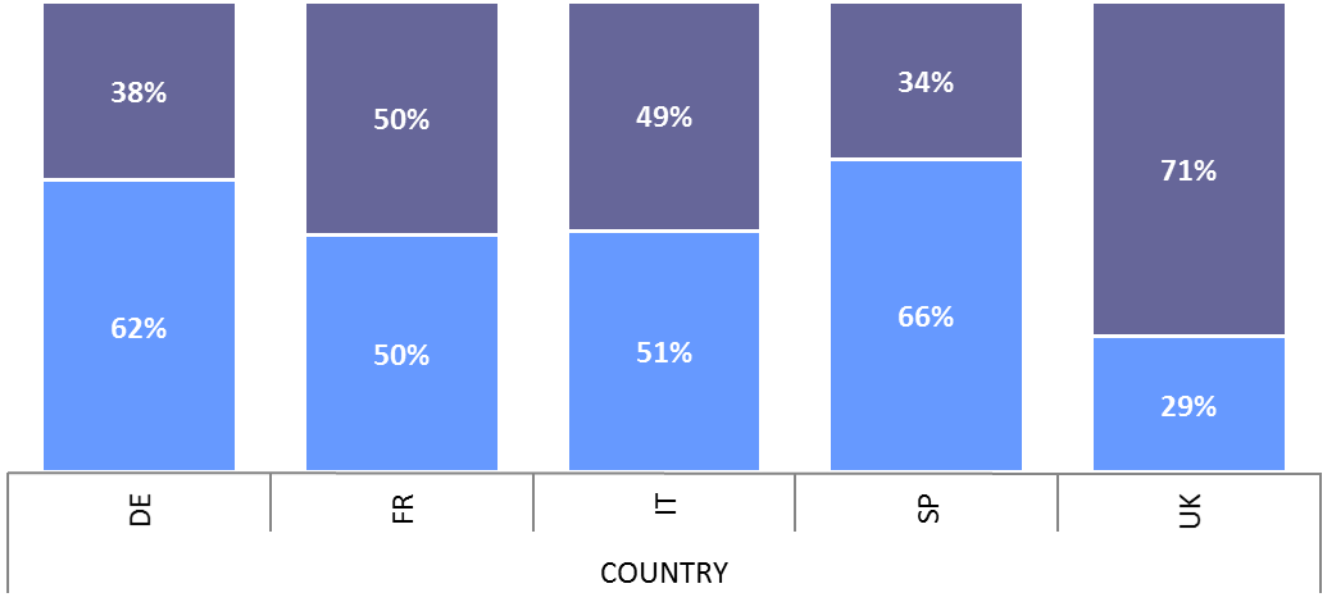
Scenario

Scenario: Use of Digital technologies in dental laboratories

Do you provide your customers with indirect restorations performed with digital technologies?

More than half of the sample provide digital restorations. The highest percentage is in Spain, while, as it happens among dental practices, the lowest penetration of the digital technologies is in UK.



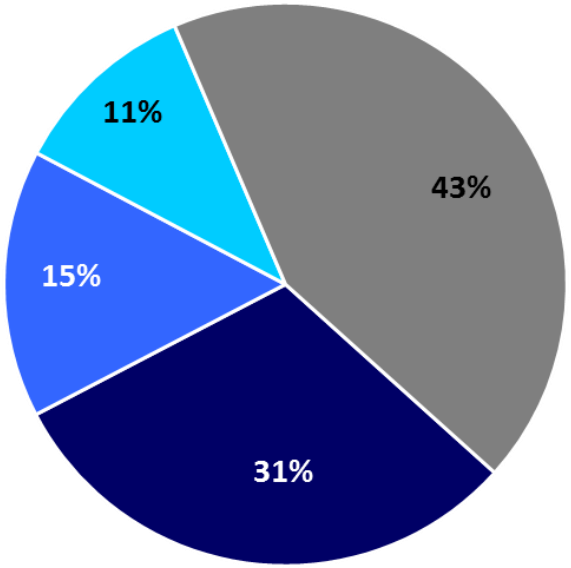


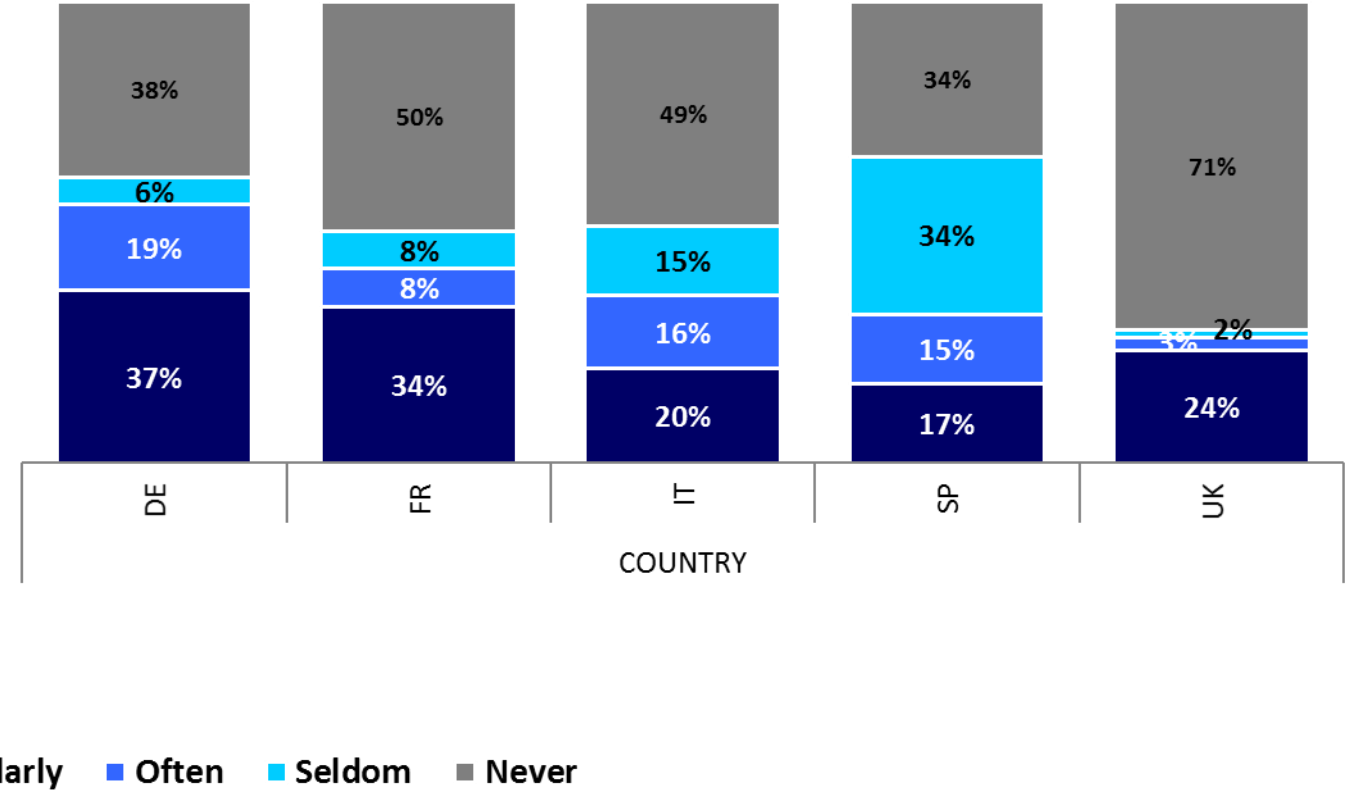
Base: 722 cases

Scenario: Use of Digital technologies in dental laboratories

Do you provide your customers with indirect restorations performed with digital technologies?

It's interesting to note that although UK is the country showing the lowest penetration of the digital restorations, among the users, it shows among the highest percentages of regular use of it.



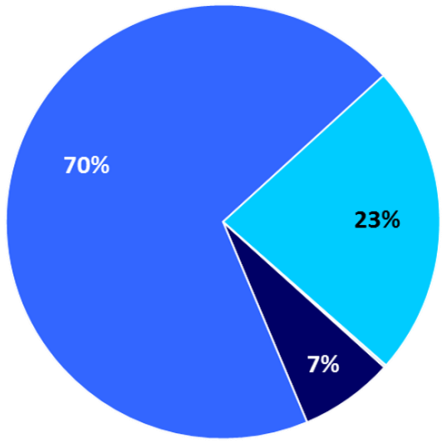


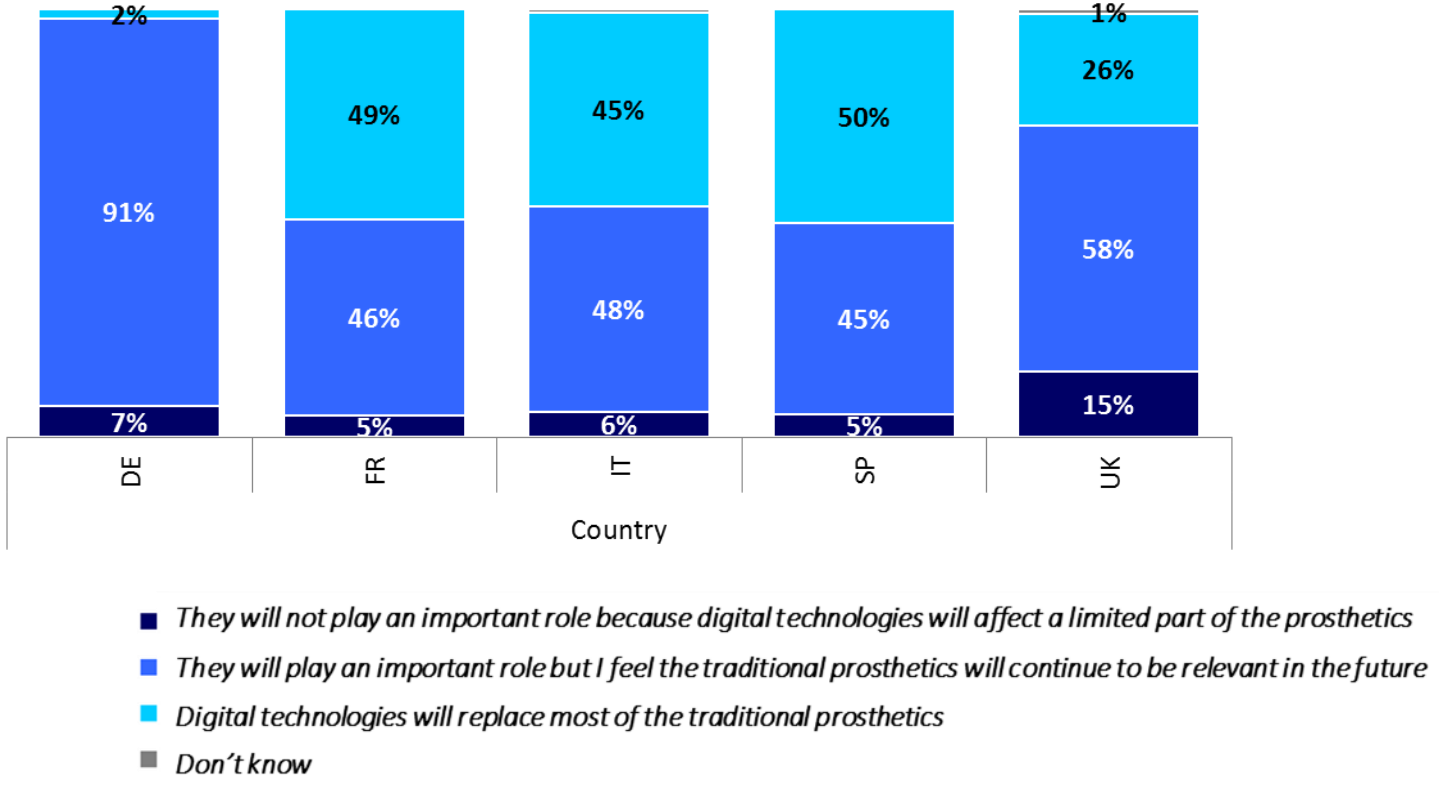
Base: 722 cases

Scenario: Role of digital technologies on prosthetics in the future

How do you feel the new digital technologies (CAD-CAM and 3D printing) will affect the way the prosthetics is carried out in your country?

The approach of the laboratories is not very different from that of dental practices, as the majority of the respondents state to believe the digital prosthetics will have a relevant role but the traditional prosthetics will be relevant in the future, too. In specific regard to this statement, the percentage (70%) is higher than dental practices (54%). Interesting the position of UK, different from the other countries, where a more relevant part of respondents believe that digital technologies will not have a relevant role.





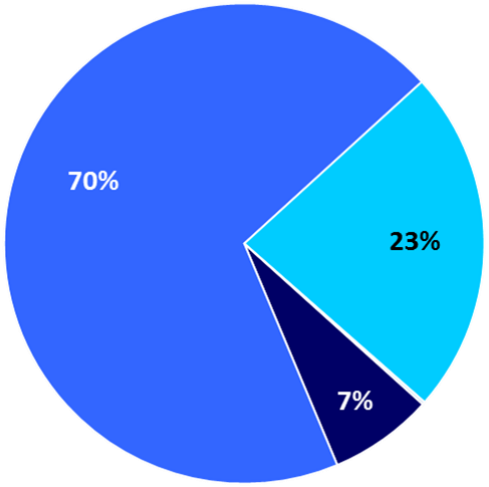
Clearly the German market, given its weight, influences the overall results, but it's interesting to note how the most mature market regarding digital technologies, the German one, believes the new technologies will have a relevant role, nevertheless, the traditional prosthetics will be relevant in the future anyway.

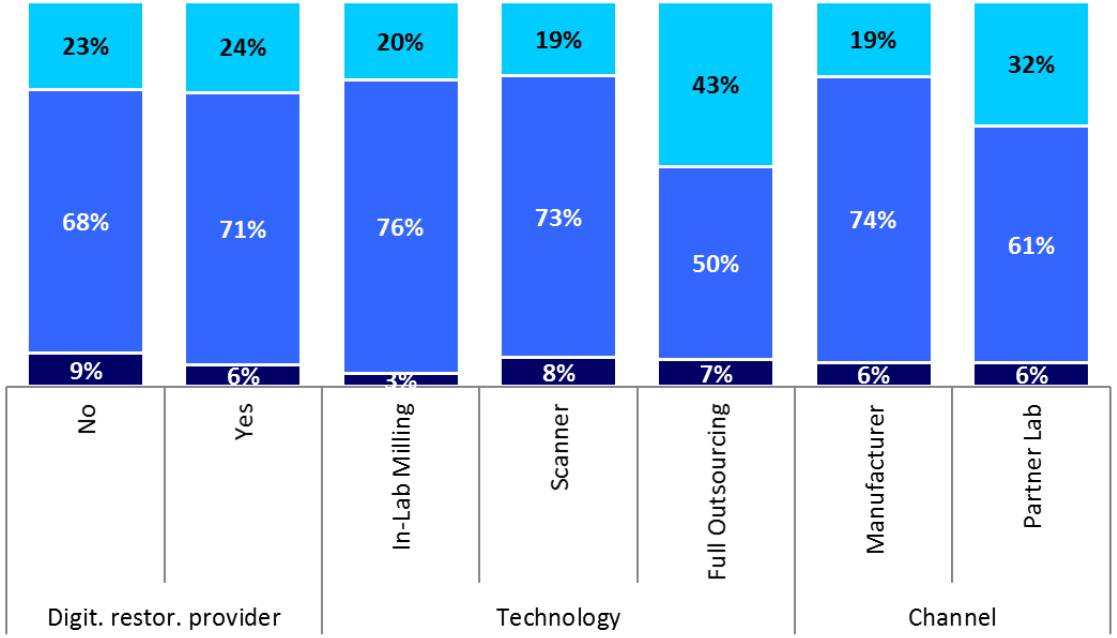
Base: 722 cases

Scenario: Role of digital technologies on prosthetics in the future

How do you feel the new digital technologies (CAD-CAM and 3D printing) will affect the way the prosthetics is carried out in your country?

There is no difference between digital technologies users and traditional prosthetics providers, while it's interesting to note the high percentage, among full outsourcing users, and among Partner lab users, regarding the statement that digital technologies will replace most of the traditional prosthetics.





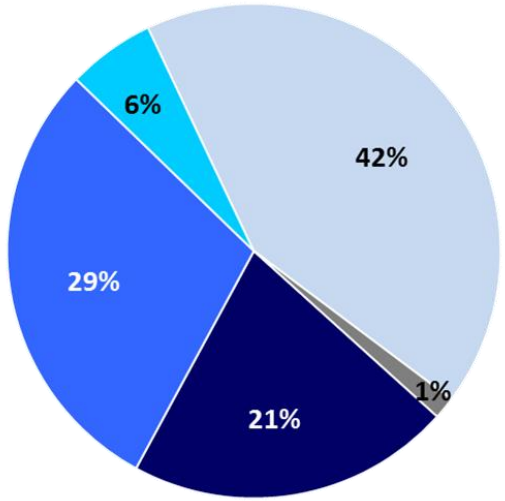
- *They will not play an important role because digital technologies will affect a limited part of the prosthetics*
- *They will play an important role but I feel the traditional prosthetics will continue to be relevant in the future*
- *Digital technologies will replace most of the traditional prosthetics*
- *Don't know*

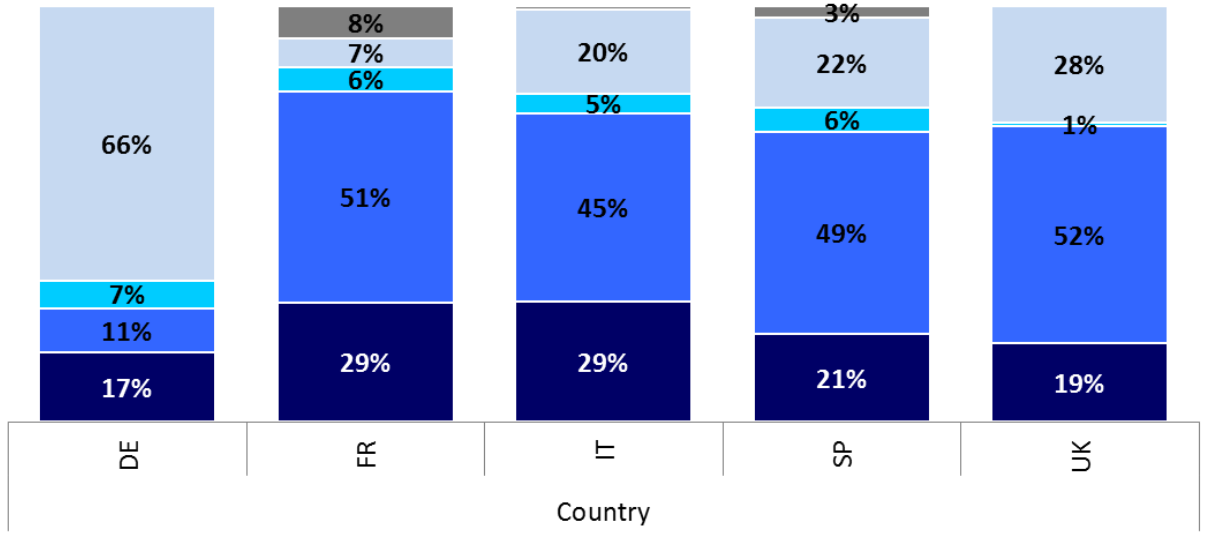
Base: 722 cases

Scenario: Stance versus digital technologies

What is your stance versus the digital technologies?

There is a relevant difference between dentists and technicians, as the former mostly think that it's necessary to get closer to digital technologies because they are the future, while the latter clearly state to be comfortable in using it. Much lower the percentage of those feeling uncomfortable with digital technologies. Germany stands out with its positive stance versus the digital technologies. The majority of French respondents is getting closer to the digital technologies, typical of the development phase of a new market.





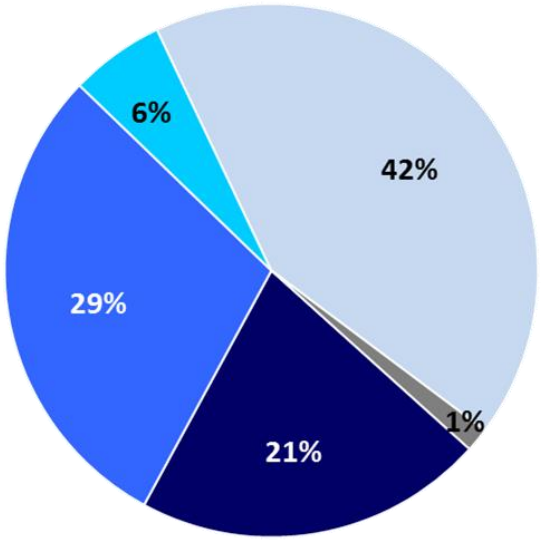
It looks like an area of resistance is present, made up of those using the digital technologies because they need, but feeling uncomfortable about that. It is the minority, but it must be added to the more relevant share of those clearly feeling uncomfortable with digital technologies.

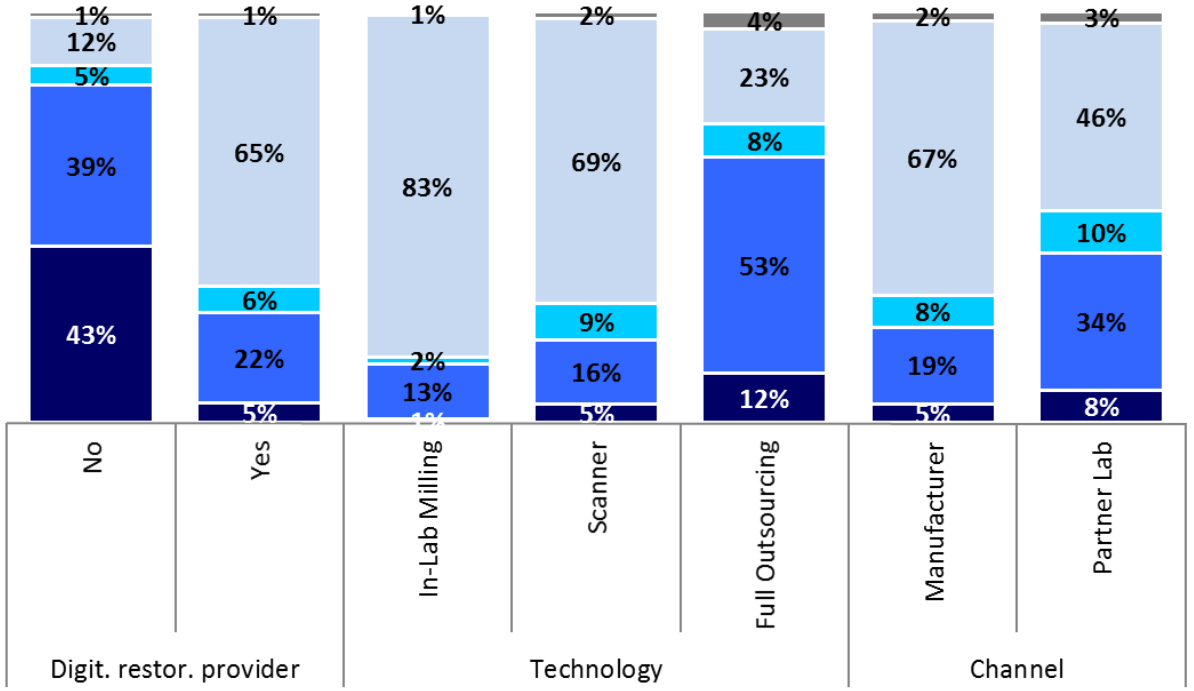
Base: 722 cases

Scenario: Stance versus digital technologies

What is your stance versus the digital technologies?

Among laboratories is more evident the difference in the stance versus digital technologies, between those using it already and the rest of the sample, not providing digital technologies at all. The difference is more evident when considering the comparison between full outsourcing users and other digital restorations providers.





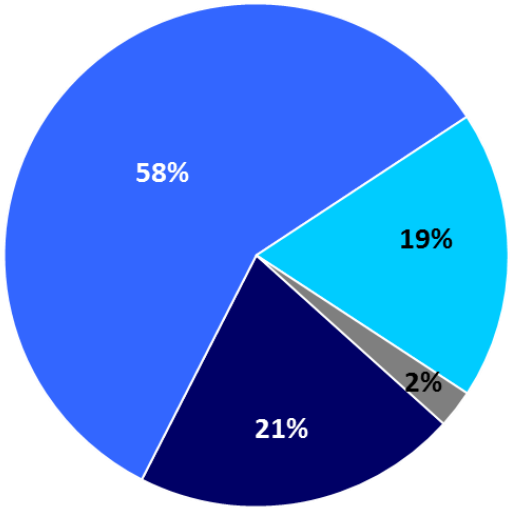
- *I feel uncomfortable and rather far from them*
- *I am getting closer to them because I think they are the future of prosthetics*
- *I am using digital technologies because I need, but I am not comfortable with it*
- *I am using digital technologies and I am comfortable with it*
- *Don't know*

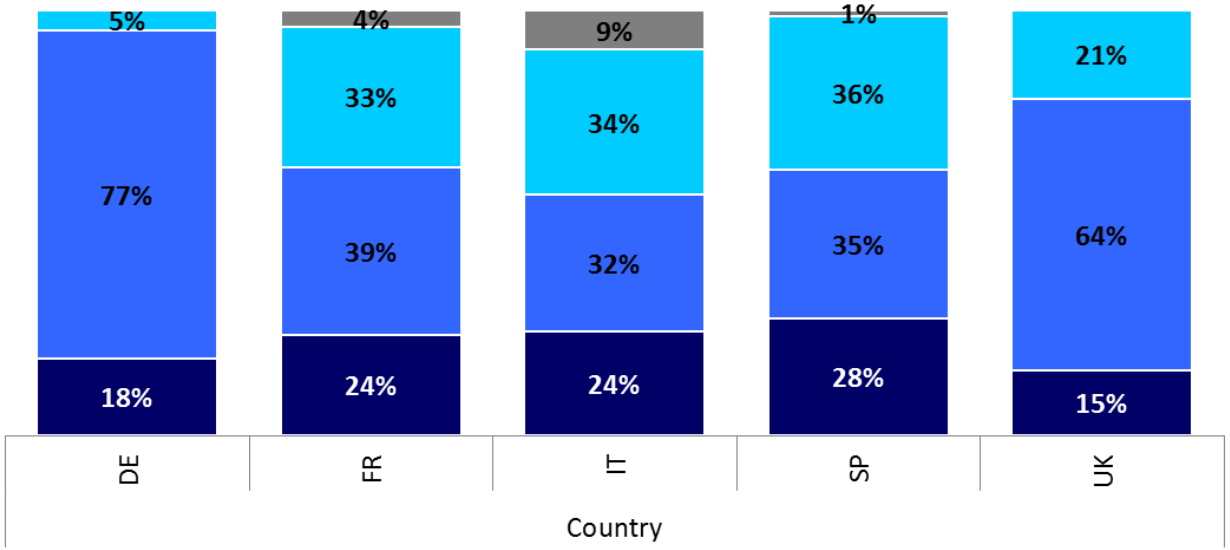
Base: 722 cases

Scenario: Role of dentists and technicians in the future

How do you think dentists and technicians role will change with the new digital technologies?

In overall, the majority of respondents think that - as it happens among dentists - that the cooperation will get tighter, due to the expertise of the technicians. Slightly higher than the sample of dental practices is the percentage of respondents stating there will not be any change at all: the higher one is from Spain, Italy and France. Again, the stance of German respondents is quite different from the other countries, where a higher share of respondents believe that the dentists will need to get more expert about prosthetics.





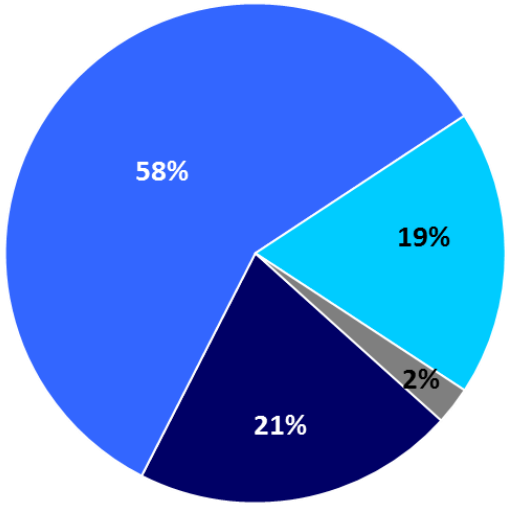
- *There will not be any change at all, because everyone will always have its own distinct role*
- *The cooperation between dentists and technicians will increase because the knowledge of the technician in prosthetics materials, esthetics and digital processing are important*
- *The dentists will need to get more expertise about prosthetics, because they will be required to perform part of the work in charge of technicians*
- *Don't know*

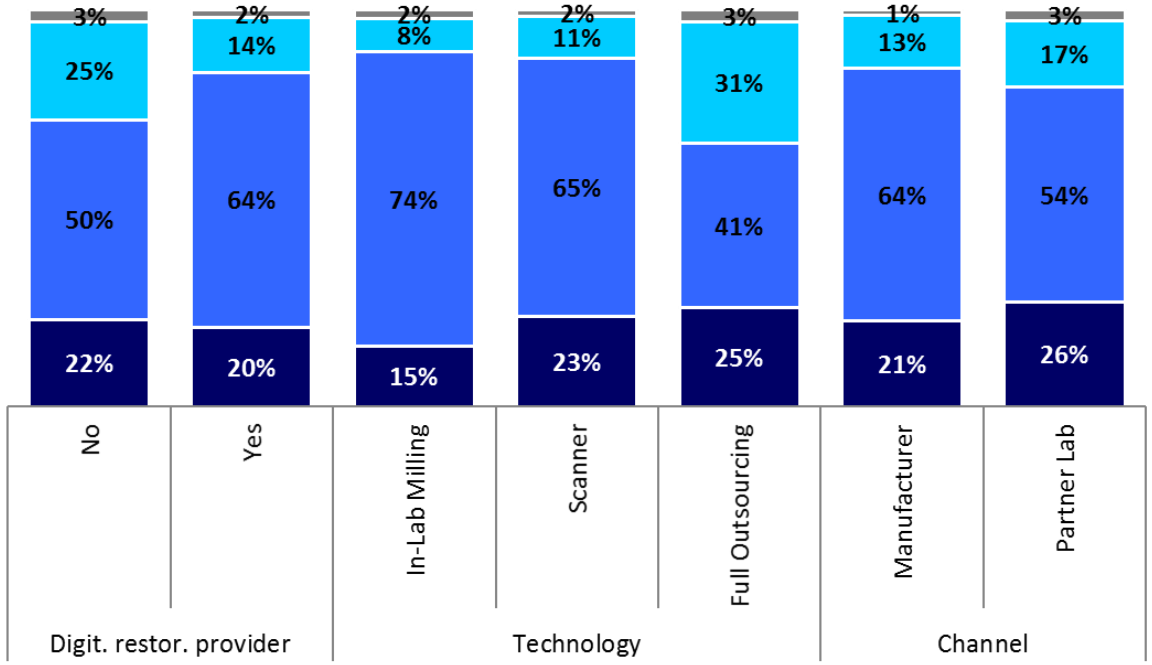
Base: 722 cases

Scenario: Role of dentists and technicians in the future

How do you think dentists and technicians role will change with the new digital technologies?

Interestingly, the highest percentage of statements about the fact that the dentists will replace part of the technicians activity, come from those not involved in digital prosthetics and, among those providing digital restorations, from those doing this in full outsourcing.





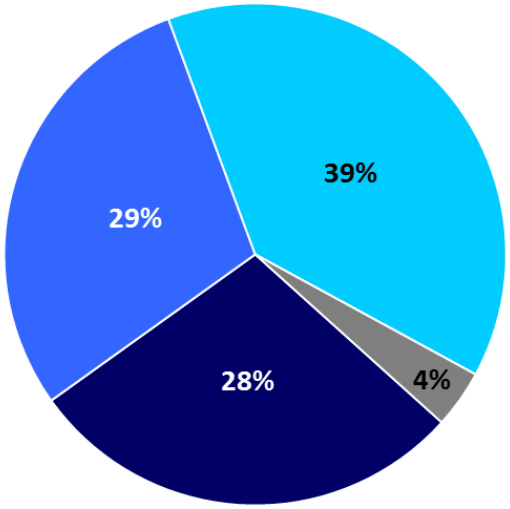
- *There will not be any change at all, because everyone will always have its own distinct role*
- *The cooperation between dentists and technicians will increase because the knowledge of the technician in prosthetics materials, esthetics and digital processing are important*
- *The dentists will need to get more expertise about prosthetics, because they will be required to perform part of the work in charge of technicians*
- *Don't know*

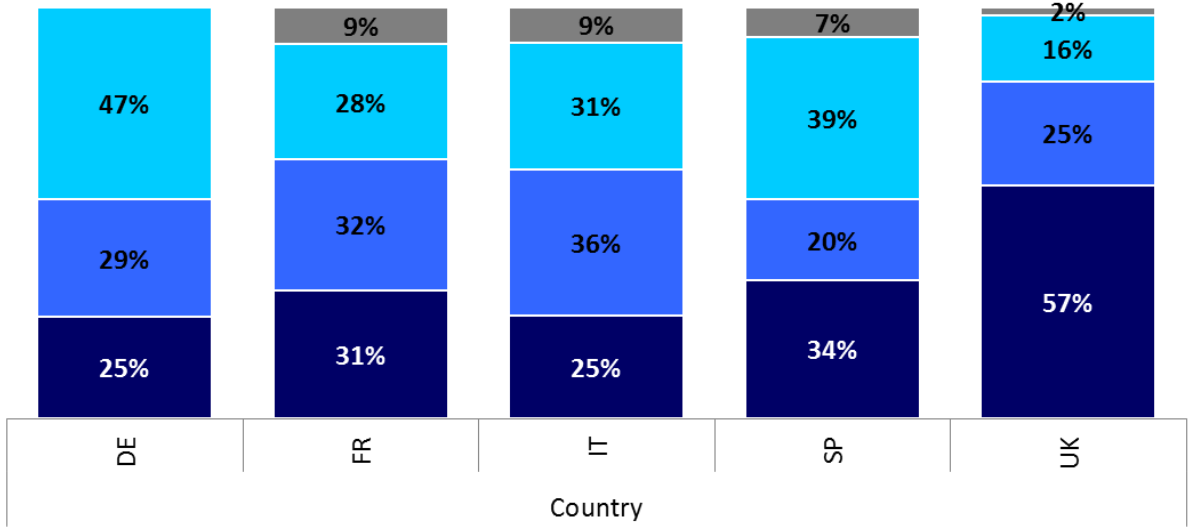
Base: 722 cases

Scenario: Change in the relationship among dentists, technicians, industry

How do you think the relationship between dentists and technicians and the industry will change with the new digital technologies?

Just like it happened with the dentists sample, the majority of respondents think that most of all the relationship with the industry will become tighter, due to the increased demand for case specific products and services. This is mostly true for Germany and Spain. UK is different from the other countries, as the most quoted answer is the relationship between dentists and technicians will become tighter.





- *The relationship will become tighter because of the high specialization of technicians on prosthetics and CAD processing*
- *The relationship will become blander because the CAD processing will be even easier and it does not require specific expertise from the dentists*
- *The relationship with the industry will become tighter because of the need for case specific manufactured products and services*
- *Don't know*

OMNIVISION digital

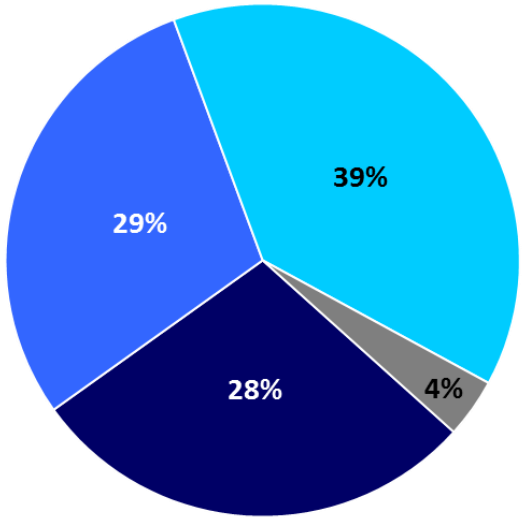
Base: 722 cases

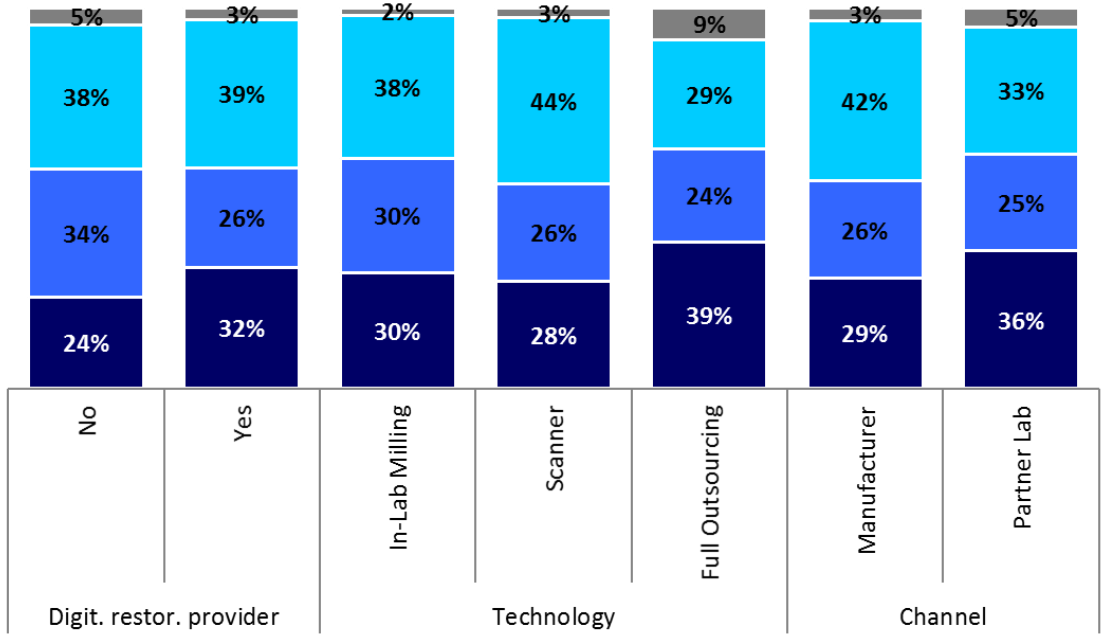
KEY-STONE

Scenario: Change in the relationship among dentists, technicians, industry

How do you think the relationship between dentists and technicians and the industry will change with the new digital technologies?

There is no relevant difference in the answers of the different profiles, safe for full outsourcing providers, whose feeling about an increased cooperation between dentists and technicians is higher.



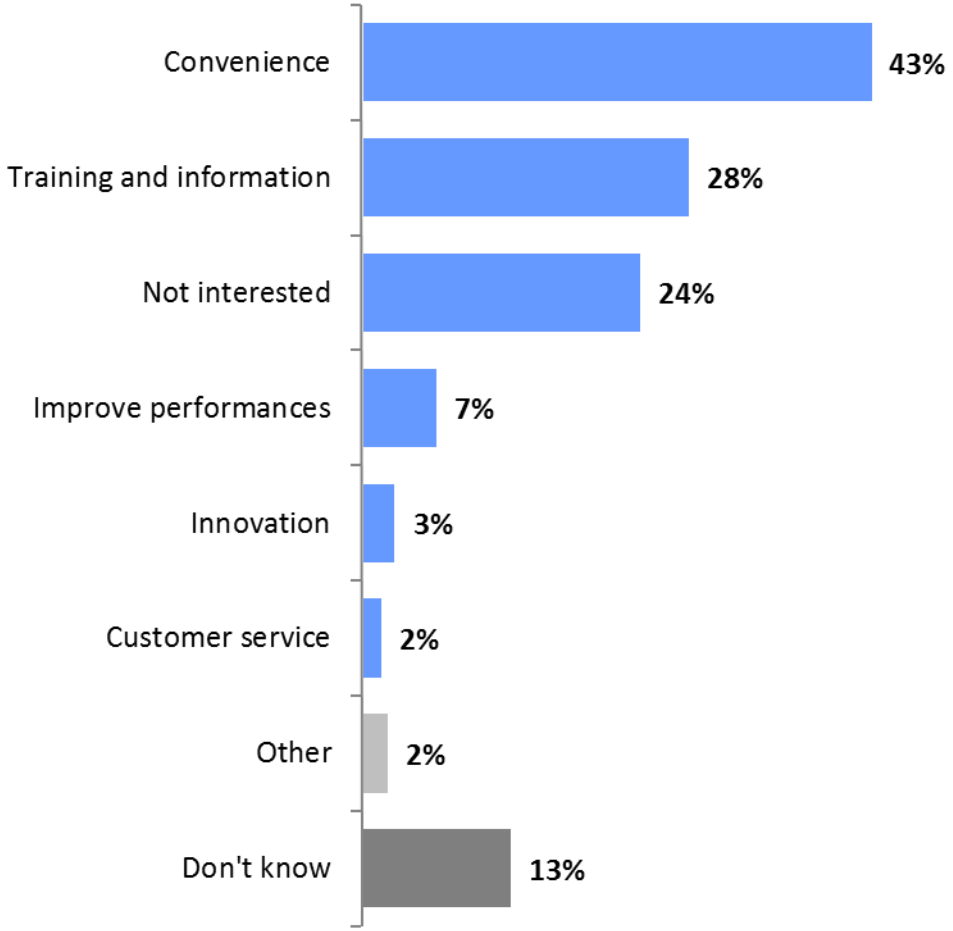


- *The relationship will become tighter because of the high specialization of technicians on prosthetics and CAD processing*
- *The relationship will become blander because the CAD processing will be even easier and it does not require specific expertise from the dentists*
- *The relationship with the industry will become tighter because of the need for case specific manufactured products and services*
- *Don't know*

Base: 722 cases

Scenario: Required features from digital technology providers

What should your digital technology provider offer you, to improve and enhance the way you perform restorations and prosthetics in your laboratory?



A provider will clearly need to give support to the users of the digital technology, in terms of training and information, and Convenience.

About 7% of respondents look for improved performances and another small portion of respondents quoted “Customer service” which is again related to the support that should be provided by the manufacturers.

Base: 722 cases

Scenario: Required features from digital technology providers

What should your digital technology provider offer you, to improve and enhance the way you perform restorations and prosthetics in your laboratory?

Training and information is the most quoted answer in UK and Spain, while Convenience is the first one in all other countries.

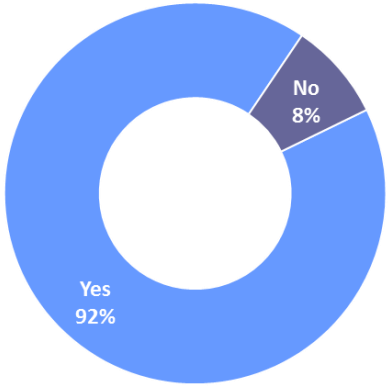
TOTAL		DE		FR		IT	
Convenience	43%	Convenience	49%	Convenience	33%	Convenience	34%
Training and information	28%	Training and information	27%	Not interested	26%	Not interested	26%
Not interested	24%	Not interested	26%	Improve performances	19%	Training and information	25%
Improve performances	7%	Innovation	2%	Training and information	14%	Improve performances	11%
Innovation	3%	Improve performances	1%	Innovation	6%	Innovation	3%
Customer service	2%	Customer service	1%	Customer service	5%	Customer service	3%
Other	2%	Other	2%	Other	5%	Other	1%
Don't know	13%	Don't know	0%	Don't know	29%	Don't know	35%
Total	**722**	**Total**	**366**	**Total**	**98**	**Total**	**139**

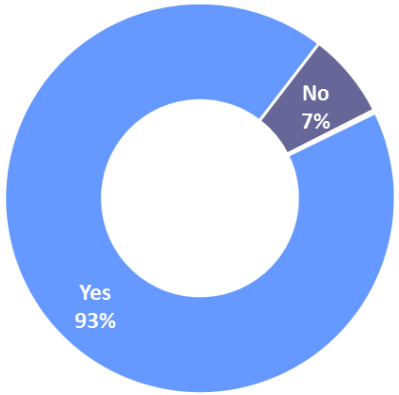
TOTAL		SP		UK	
Convenience	43%	Training and information	38%	Training and information	48%
Training and information	28%	Convenience	35%	Convenience	39%
Not interested	24%	Not interested	16%	Improve performances	25%
Improve performances	7%	Improve performances	5%	Not interested	1%
Innovation	3%	Innovation	1%	Innovation	9%
Customer service	2%	Customer service	1%	Customer service	0%
Other	2%	Other	5%	Other	0%
Don't know	13%	Don't know	14%	Don't know	10%
Total	**722**	**Total**	**77**	**Total**	**42**

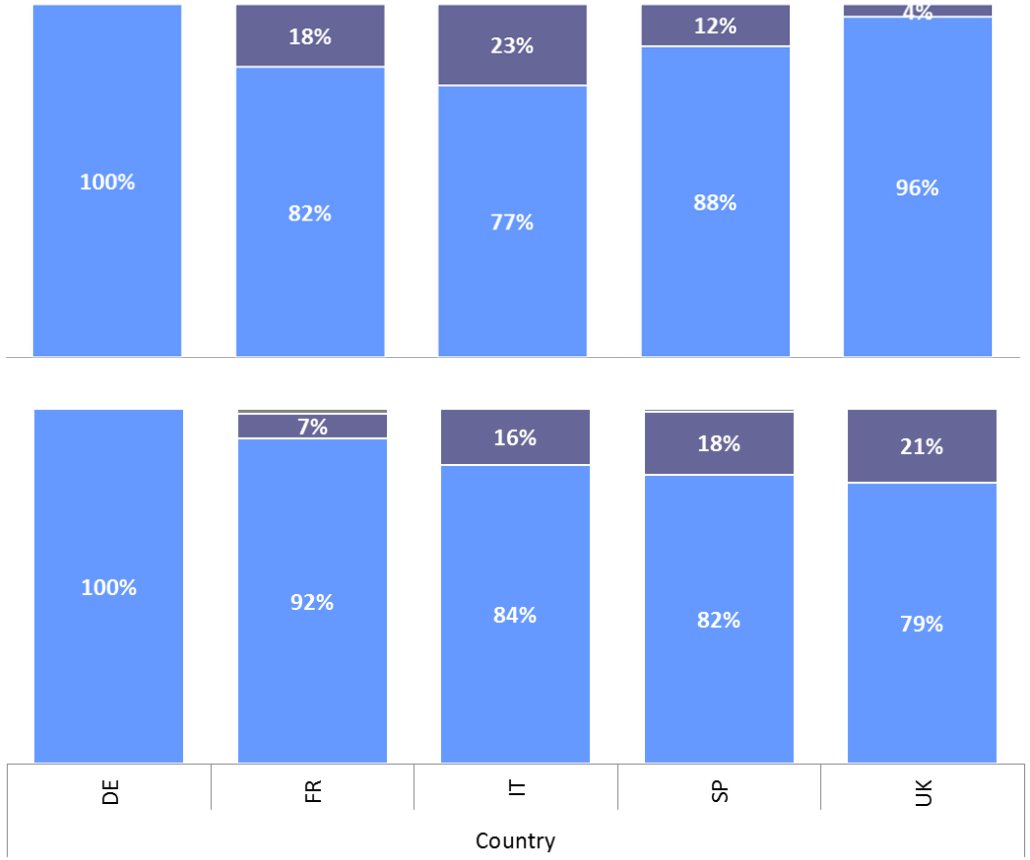
Scenario: 3D printing awareness

Are you aware of the 3D printing technology?

Are you aware of the availability of 3D printing technology in dentistry as well?







3D printing in general

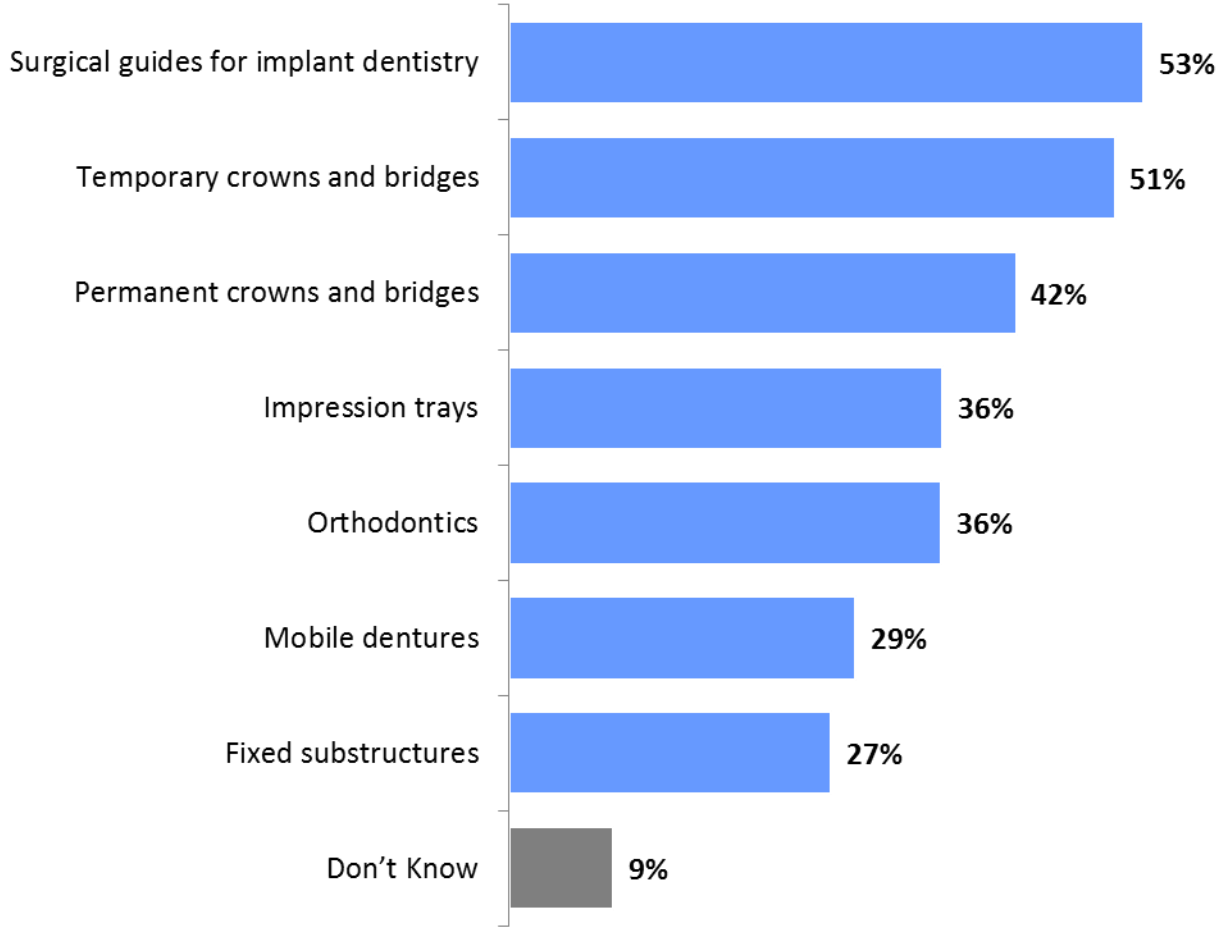
3D printing in dentistry

Base: 722 cases

3D printing awareness generally is higher among technicians than among dentists, and again the lowest grade of awareness about the availability of 3D printing in dentistry is from UK, like it happened in the sample of dentists.

Scenario: Most suitable indications for 3D printing

Which of the following indications do you think that 3D printing will be best suitable for?



Differently from what seen in the investigation among dental practices, the most quoted procedure is Surgical guides, then, Crown & Bridges and Impression trays.

Base: 722 cases

Scenario: Most suitable indications for 3D printing

Which of the following indications do you think that 3D printing will be best suitable for?

Surgical guides is the first quoted indication in almost all countries but Spain and UK, where the most quoted one is Temporary crown & bridges.

TOTAL		DE		FR		IT	
Surgical guides for implant dentistry	53%	Surgical guides for implant dentistry	43%	Surgical guides for implant dentistry	73%	Surgical guides for implant dentistry	66%
Temporary crowns and bridges	51%	Temporary crowns and bridges	43%	Temporary crowns and bridges	62%	Temporary crowns and bridges	50%
Permanent crowns and bridges	42%	Permanent crowns and bridges	41%	Impression trays	54%	Impression trays	44%
Impression trays	36%	Orthodontics	33%	Permanent crowns and bridges	45%	Orthodontics	41%
Orthodontics	36%	Impression trays	29%	Mobile dentures	45%	Fixed substructures	36%
Mobile dentures	29%	Mobile dentures	27%	Fixed substructures	44%	Permanent crowns and bridges	29%
Fixed substructures	27%	Fixed substructures	11%	Orthodontics	36%	Mobile dentures	20%
Don't Know	9%	Don't Know	7%	Don't Know	8%	Don't Know	11%
Total	**722**	**Total**	**366**	**Total**	**98**	**Total**	**139**

TOTAL		SP		UK	
Surgical guides for implant dentistry	53%	Temporary crowns and bridges	63%	Temporary crowns and bridges	66%
Temporary crowns and bridges	51%	Surgical guides for implant dentistry	63%	Permanent crowns and bridges	66%
Permanent crowns and bridges	42%	Fixed substructures	60%	Orthodontics	45%
Impression trays	36%	Permanent crowns and bridges	55%	Impression trays	43%
Orthodontics	36%	Orthodontics	38%	Mobile dentures	42%
Mobile dentures	29%	Impression trays	28%	Fixed substructures	41%
Fixed substructures	27%	Mobile dentures	25%	Surgical guides for implant dentistry	32%
Don't Know	9%	Don't Know	15%	Don't Know	3%
Total	**722**	**Total**	**77**	**Total**	**42**

Scenario: Main consequences in dentistry brought by 3D printing

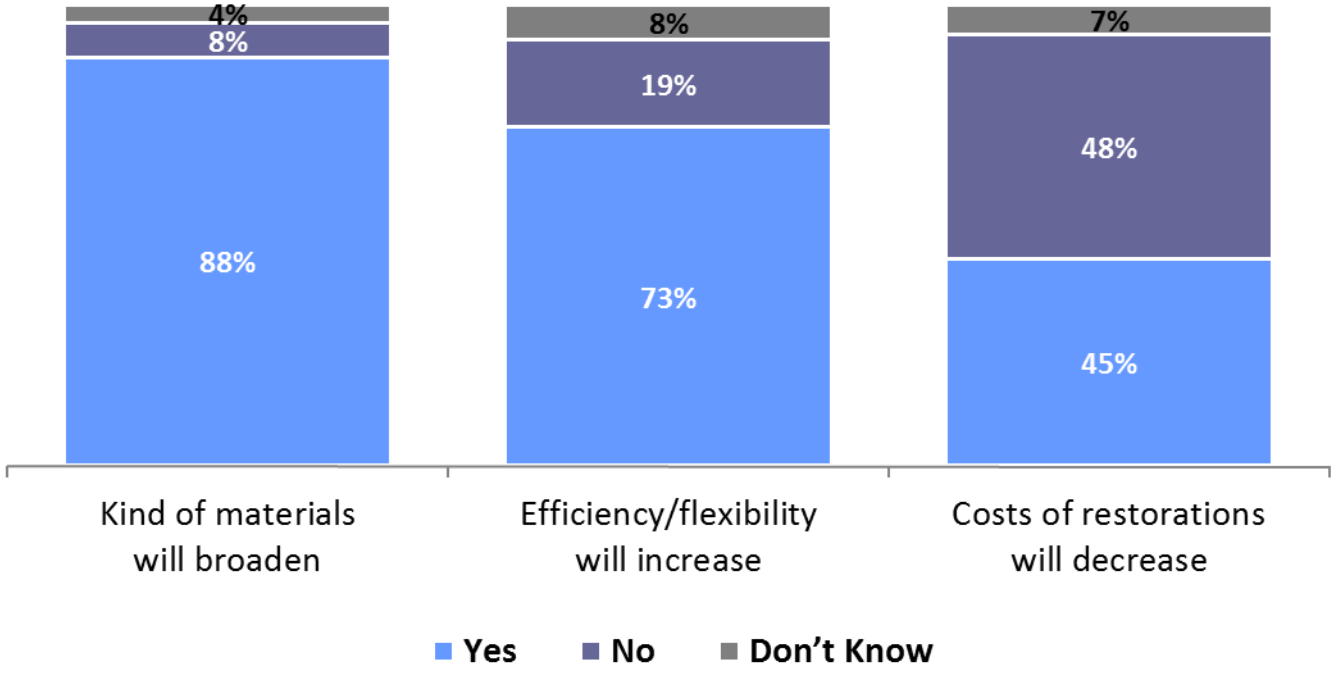
Which of the following statements do you agree on, with regard to the main consequences that 3D printing will bring to the dentistry? (Multiple answer)

According to the opinion of the respondents the main consequence brought by 3D printing is related to the wider range of materials available. This is by far the most quoted one with 88% of "Yes", higher than the sample of dental practices. The least mentioned possible consequence brought by 3D printing is a reduction in the costs of the restorations, which received only 45% of positive responses, not so far from the results of the clinical sample (40%). It will be interesting to evaluate in the following slides, option by option, the different behaviour in the evaluated countries.

A) The kind of materials and procedures produced digitally will broaden (Kind of materials will broaden)

B) The efficiency and flexibility of the workflow will increase (Efficiency/Flexibility will increase)

C) The costs of the restorations will decrease because of the lower price of the materials used compared to the CAD-CAM blocks (Costs of restorations will decrease)

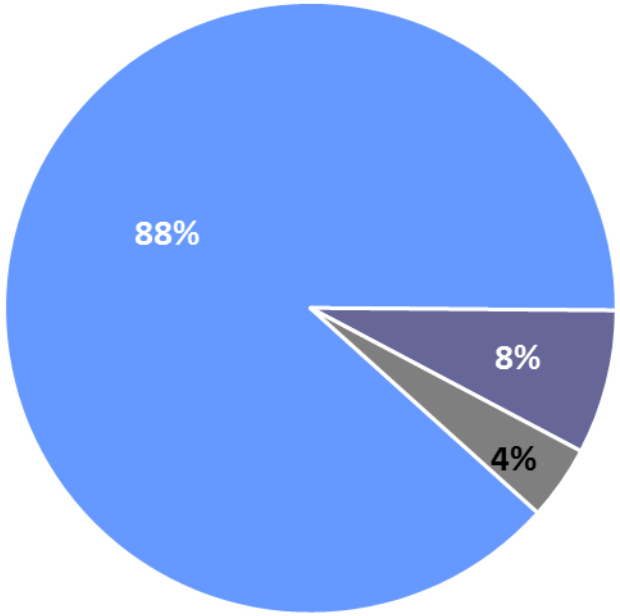


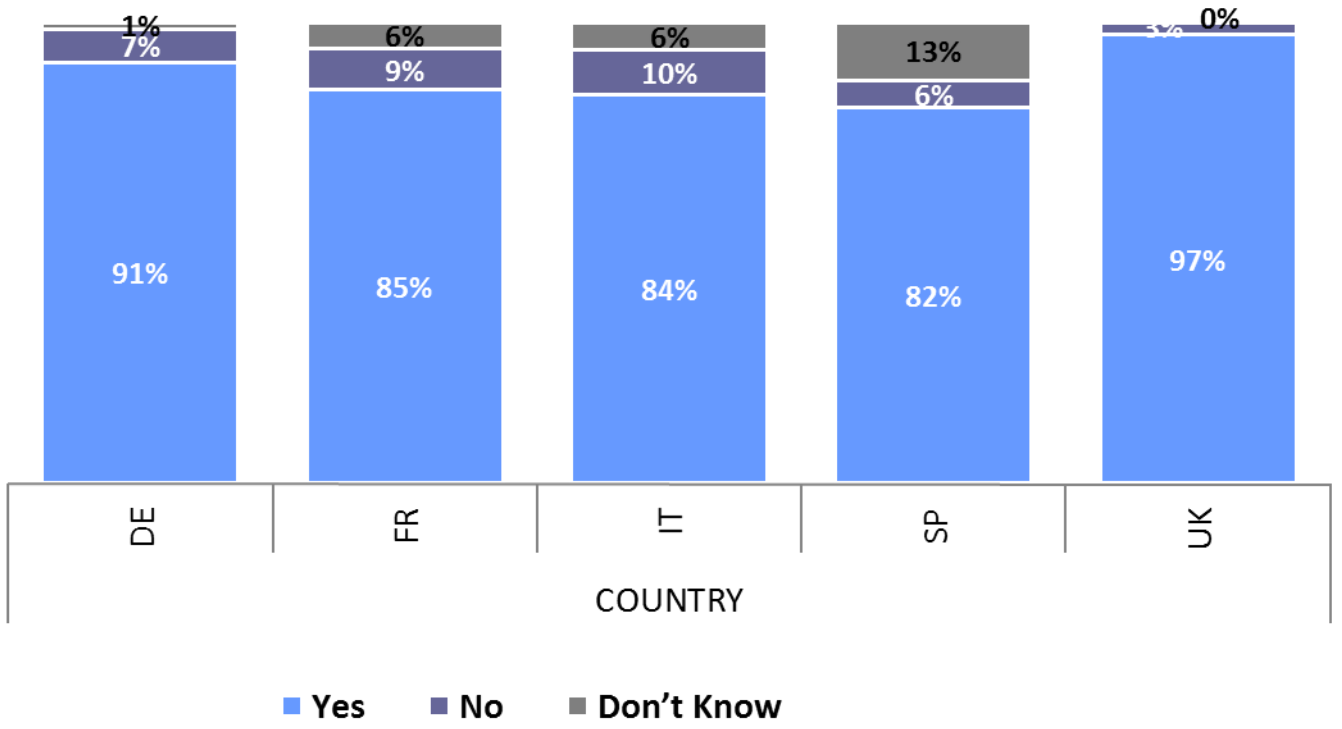
Base: 722 cases

Scenario: Main consequences in dentistry brought by 3D printing

Which of the following statements do you agree on, with regard to the main consequences that 3D printing will bring to the dentistry? (Multiple answer - Analysis on: The kind of materials and procedures produced digitally will broaden)

There is no particular difference in the behaviour by country, with the exception of UK, where almost all respondents agreed on "Yes" regarding the statement under analysis. Spain is the country showing the lowest percentage of "Yes", but also the highest percentage of respondents undecided (13%).



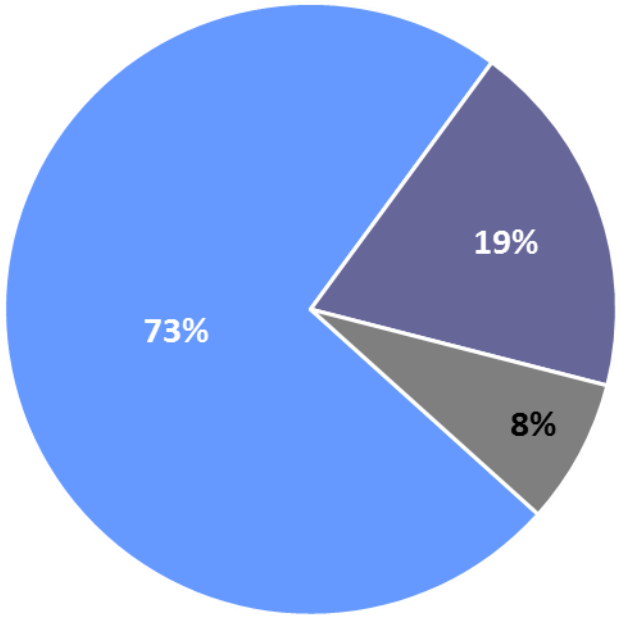


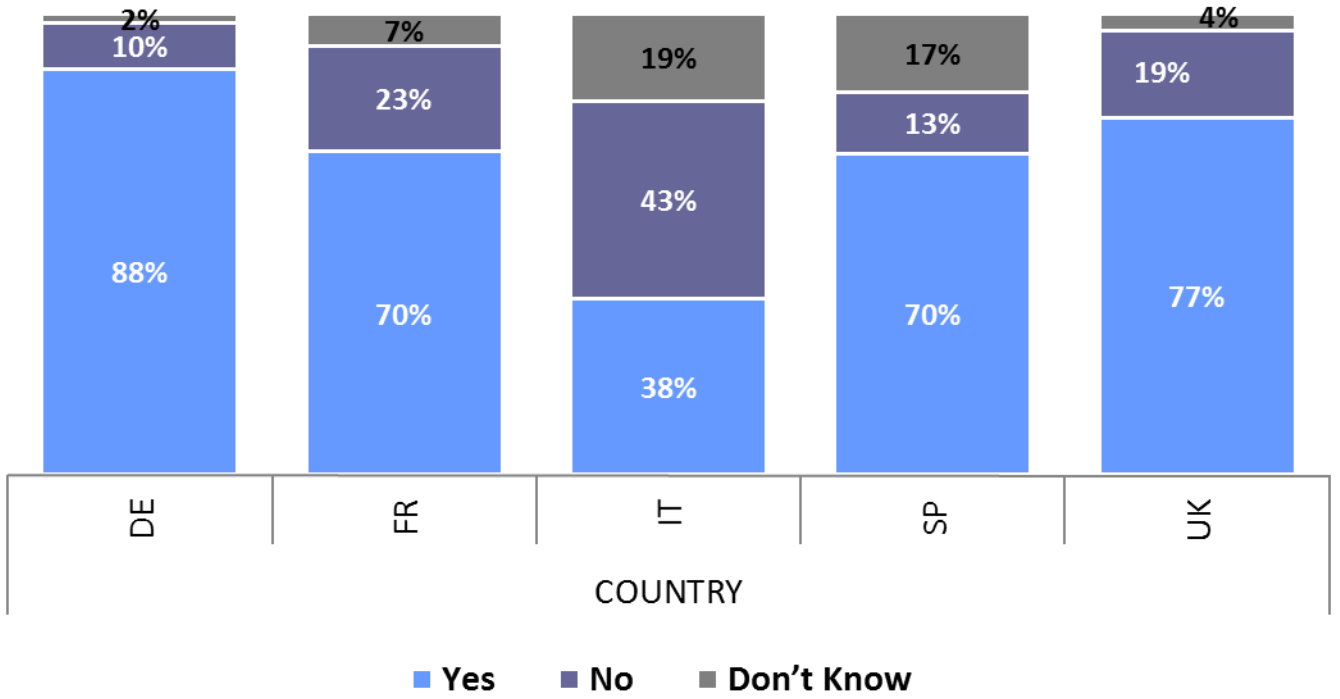
Base: 722 cases

Scenario: Main consequences in dentistry brought by 3D printing

Which of the following statements do you agree on, with regard to the main consequences that 3D printing will bring to the dentistry? (Multiple answer - Analysis on: The efficiency and flexibility of the workflow will increase)

In comparison to the overall mean (73%) believing that 3D printing could bring an increase in the efficiency and flexibility of the workflow, the Italian respondents seem to be the most skeptical ones, with only 38% of positive responses. German respondents look to be the most positive ones about this topic.



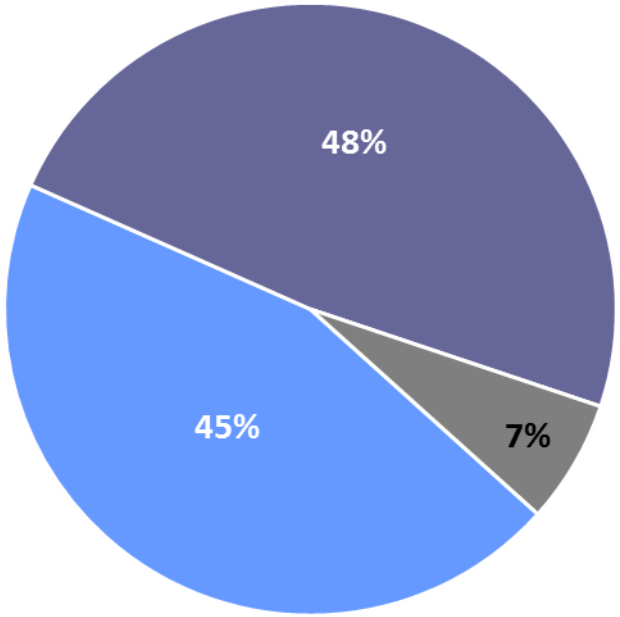


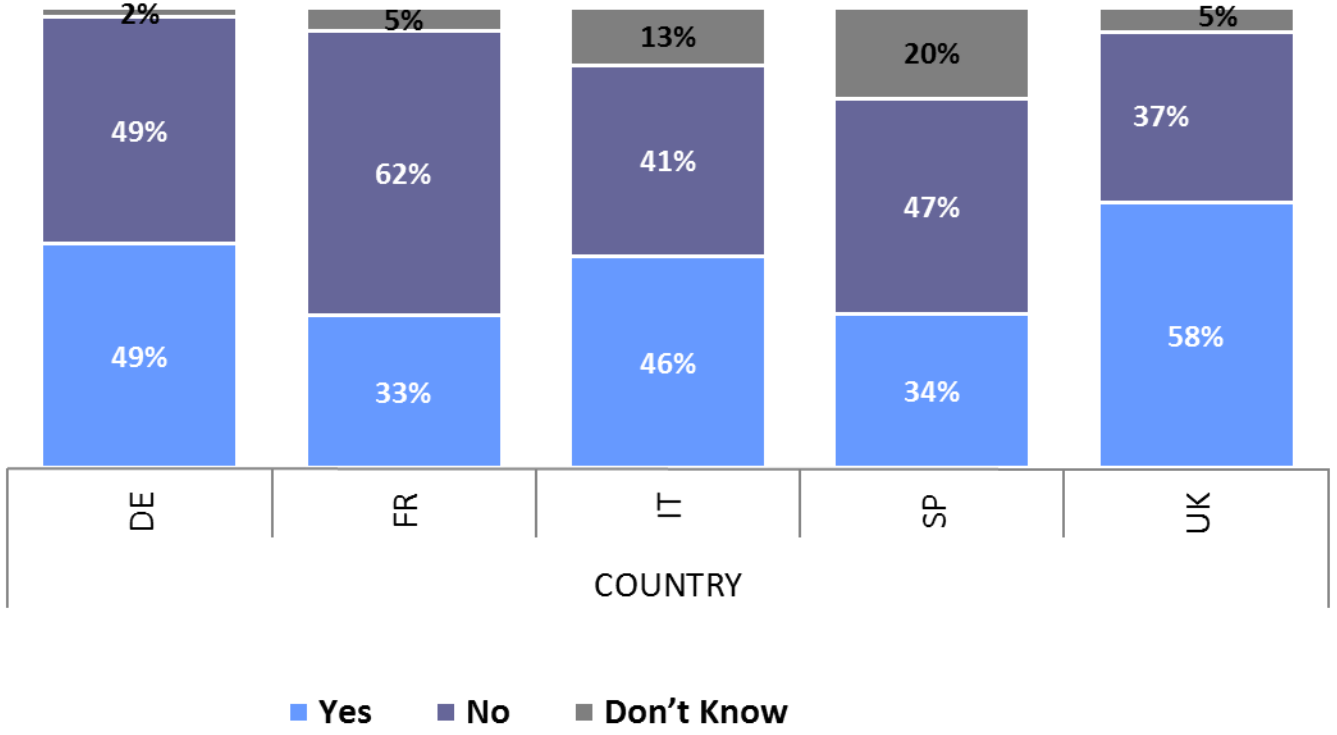
Base: 722 cases

Scenario: Main consequences in dentistry brought by 3D printing

Which of the following statements do you agree on, with regard to the main consequences that 3D printing will bring to the dentistry? (Multiple answer - Analysis on: The costs of the restorations will decrease because of the lower price of the materials used compared to the CAD-CAM blocks)

The whole sample seems to be not particularly convinced that 3D printing will bring a reduction in the costs of the consumable materials, as the overall average of positive responses is 45% only. UK looks to be the most positive country, with 58% of "Yes", while the least positive one looks to be France, with 33%. Spain is very close to France, with 34% of "Yes".



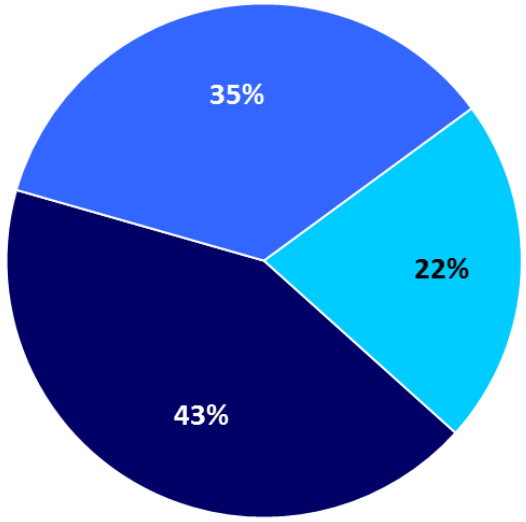


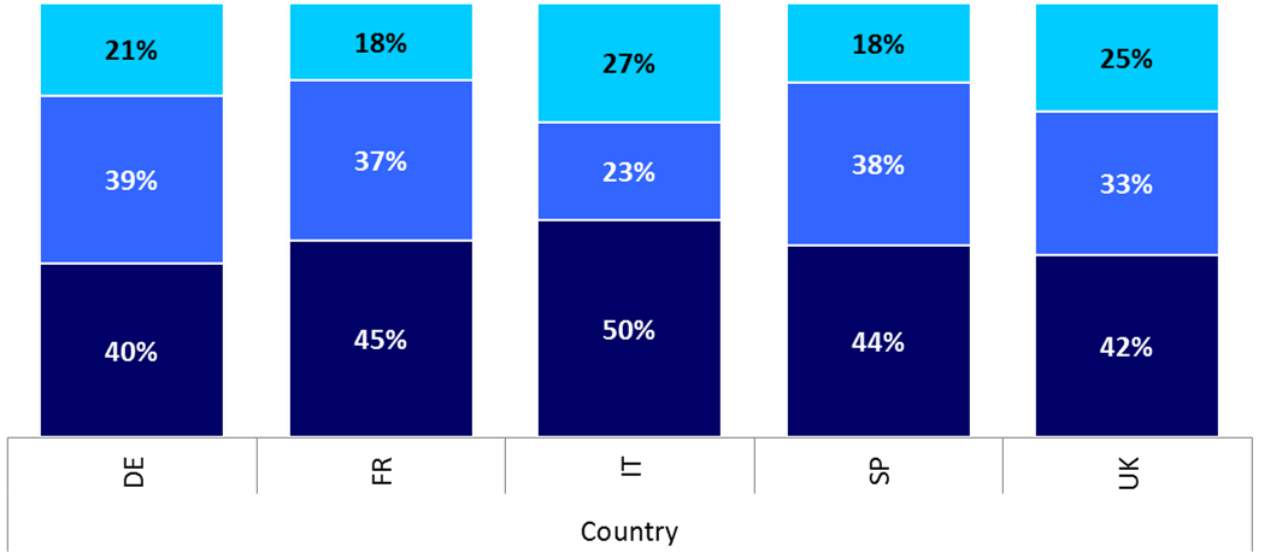
Base: 722 cases

Scenario: Main consequences in dentistry brought by 3D printing

Which of the following statements do you agree on, with regard to the main consequences that 3D printing will bring to the dentistry? FOCUS ON "YES" ANSWERS

The answers "Yes" belonging to all 3 possible options were summed up. The charts shown in this slide resumes the weight that the "Yes" responses of each option has out of the total "Yes" answers from all three options.
The charts highlight that the consequence indicated to be the most probable one is the possibility that the kind of materials and procedures will broaden, with a weight of 43%. The highest weight comes from Italy (50%), while the lowest one is from Germany (40%), which, on the contrary, shows the highest percentage of quotes related to the Increase in the efficiency and flexibility of the workflow (39% vs 35% overall).





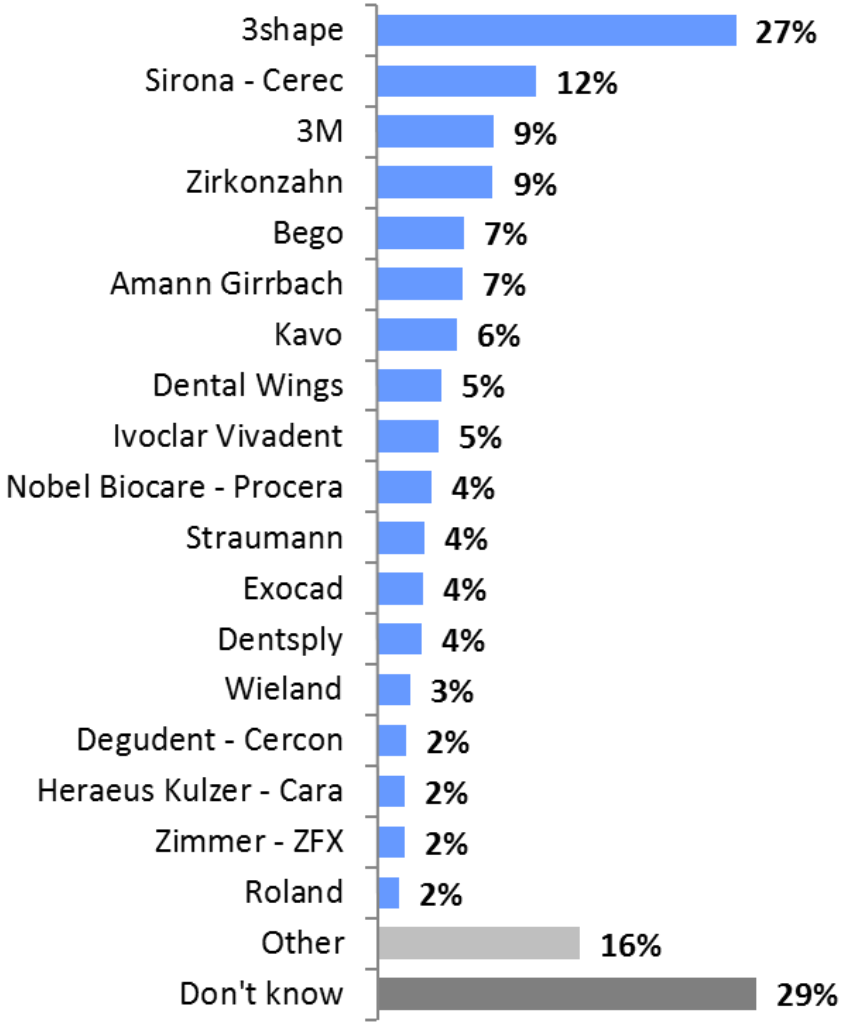
- *The kind of materials and procedures produced digitally will broaden*
- *The efficiency and flexibility of the workflow will increase*
- *The costs of the restorations will decrease because of the lower price of the materials used compared to the CAD-CAM blocks*

Base: 722 cases

Brand awareness

Brand awareness: Unaided

What manufacturers of the new digital technology world (as Scanners, CAD-CAM, 3D Printing, etc.) come to your mind?



Spontaneous Awareness (Unaided):
It represents the entire group of brands of a certain product family, recalled by the interviewed sample. Within the boundaries of spontaneous awareness, the consumer reasonably decides to make a purchase.

Among laboratories 3shape is the leader in awareness, followed by Sirona and 3M.
It is worth to mention the presence of Nobel Biocare as dental implant company but deeply focused on digital restorations, and Ivoclar Vivadent.

Base: 722 cases

Brand awareness: Unaided

What manufacturers of the new digital technology world (as Scanners, CAD-CAM, 3D Printing, etc.) come to your mind?

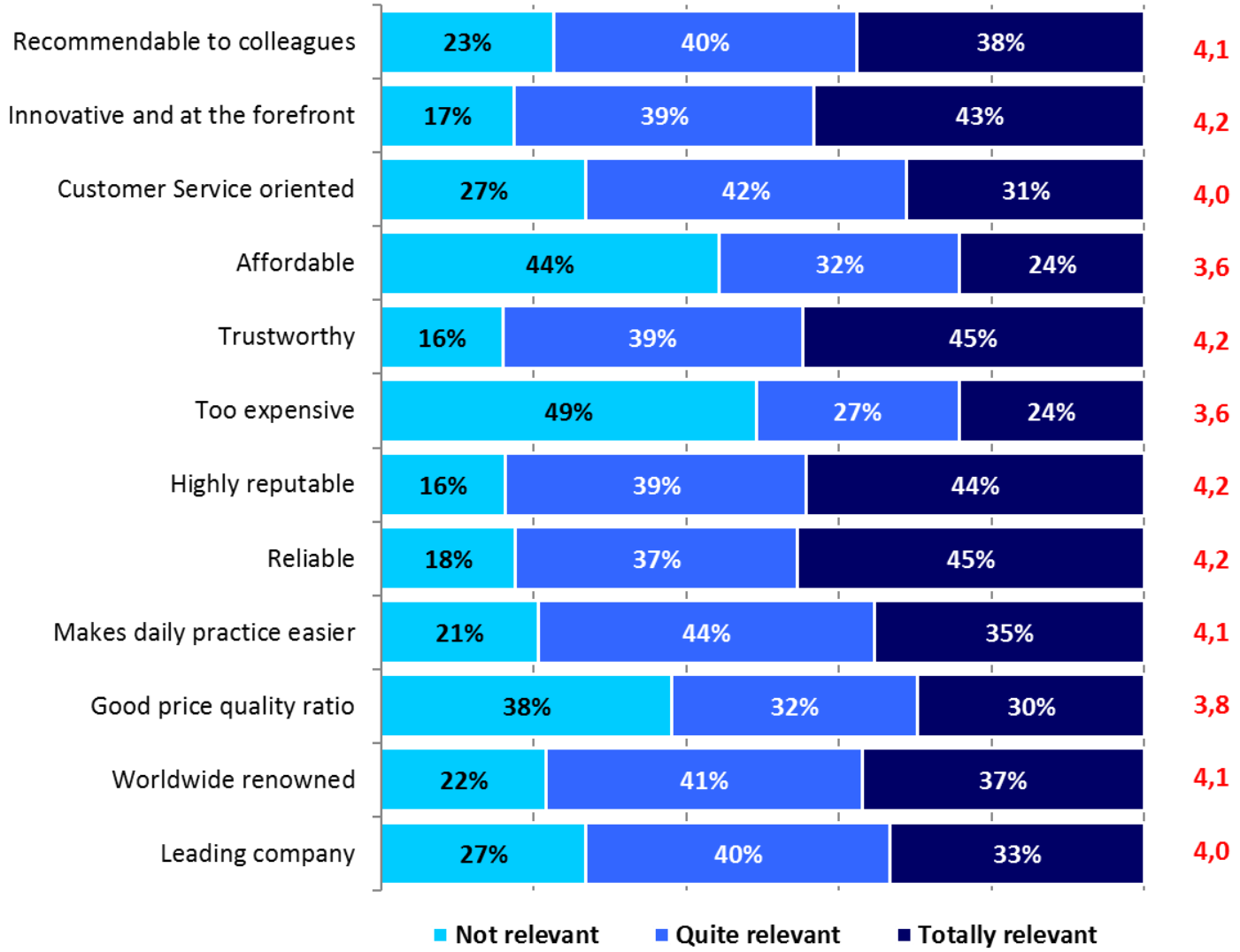
3shape leadership in brand awareness is in all investigated countries with the only exception of UK, where 3M is the first mentioned brand.
It's interesting to note the very good awareness level of Bego in Germany, along with other local brands.

TOTAL		DE		FR		IT		SP		UK	
3shape	27%	3shape	24%	3shape	33%	3shape	35%	3shape	23%	3M	36%
Sirona	12%	Bego	11%	Nobel Biocare - Procera	17%	Sirona	25%	Sirona	13%	3shape	29%
3M	9%	Amann Girrbach	10%	Zirkonzahn	16%	Zirkonzahn	17%	3M	10%	Dentsply	23%
Zirkonzahn	9%	Kavo	8%	Dental Wings	14%	3M	11%	Ivoclar Vivadent	8%	Sirona	10%
Bego	7%	Sirona	8%	Sirona	13%	Dental Wings	11%	Straumann	6%	Kavo	6%
Amann Girrbach	7%	Zirkonzahn	6%	3M	10%	Ivoclar Vivadent	11%	Zirkonzahn	5%	Carestream	5%
Kavo	6%	Exocad	6%	Ivoclar Vivadent	9%	Wieland	9%	Nobel Biocare - Procera	5%	Dental Wings	4%
Dental Wings	5%	3M	4%	Bego	6%	Nobel Biocare - Procera	7%	Phibo	5%	Roland	4%
Ivoclar Vivadent	5%	Straumann	4%	Straumann	6%	Roland	6%	GT medical	5%	Straumann	3%
Nobel Biocare - Procera	4%	Degudent - Cercon	4%	Zimmer - ZFX	5%	Kavo	5%	Amann Girrbach	4%	Degudent - Cercon	2%
Straumann	4%	Heraeus Kulzer - Cara	4%	Henry Schein	5%	Nobil Metal - Sinergia	4%	Dentsply	4%	Bluescan	2%
Exocad	4%	Ivoclar Vivadent	2%	Amann Girrbach	4%	Amann Girrbach	3%	Roland	4%	Bego	1%
Dentsply	4%	Zimmer - ZFX	2%	Kavo	3%	Dentsply	3%	Createch-Medical	4%	Amann Girrbach	1%
Wieland	3%	Schütz Dental	2%	Exocad	3%	New Ancorvis	3%	Biotech	4%	Ivoclar Vivadent	1%
Degudent - Cercon	2%	Dental Wings	1%	Dentsply	3%	Degudent - Cercon	2%	Kavo	3%	Wieland	1%
Heraeus Kulzer - Cara	2%	Dentsply	1%	Wieland	3%	Heraeus Kulzer - Cara	2%	Dental Wings	3%	Createch-Medical	1%
Zimmer - ZFX	2%	Wieland	1%	Euromax	3%	Zimmer - ZFX	2%	Exocad	3%	Renfert	1%
Roland	2%	Henry Schein	1%	Roland	2%	Open Technologies	2%	Vita	3%	Epson	1%
Other	16%	Other	3%	Other	22%	Other	7%	Other	18%	Other	1%
Don't know	29%	Don't know	29%	Don't know	19%	Don't know	32%	Don't know	49%	Don't know	6%
Total	**722**	**Total**	**366**	**Total**	**98**	**Total**	**139**	**Total**	**77**	**Total**	**42**

Brand positioning

Brand positioning: Overall Brands

In your opinion, how do the brands that I am going to read out to you rate in the following areas? Please rate them with totally irrelevant, partially irrelevant, neutral, quite relevant, totally relevant.



NOTE
The 5 possible answers have been further clustered in order to better highlight the differences in the scores among the items and the brands evaluated. The clustering is the following:
Not relevant: the scores grouped in this cluster are "Totally irrelevant", "Partially irrelevant", "Neutral".
The other clusters "**Quite relevant**" and "**Totally relevant**" are related to the original answers without any grouping.

High reputation received, together with other items, the highest average score. Other important items are reliability, Trustworthy and Innovative.
The lowest scores come from Affordable, Too expensive and Good price/quality ratio. As if the image of the brand in the digital world are is not associated with price related topics.

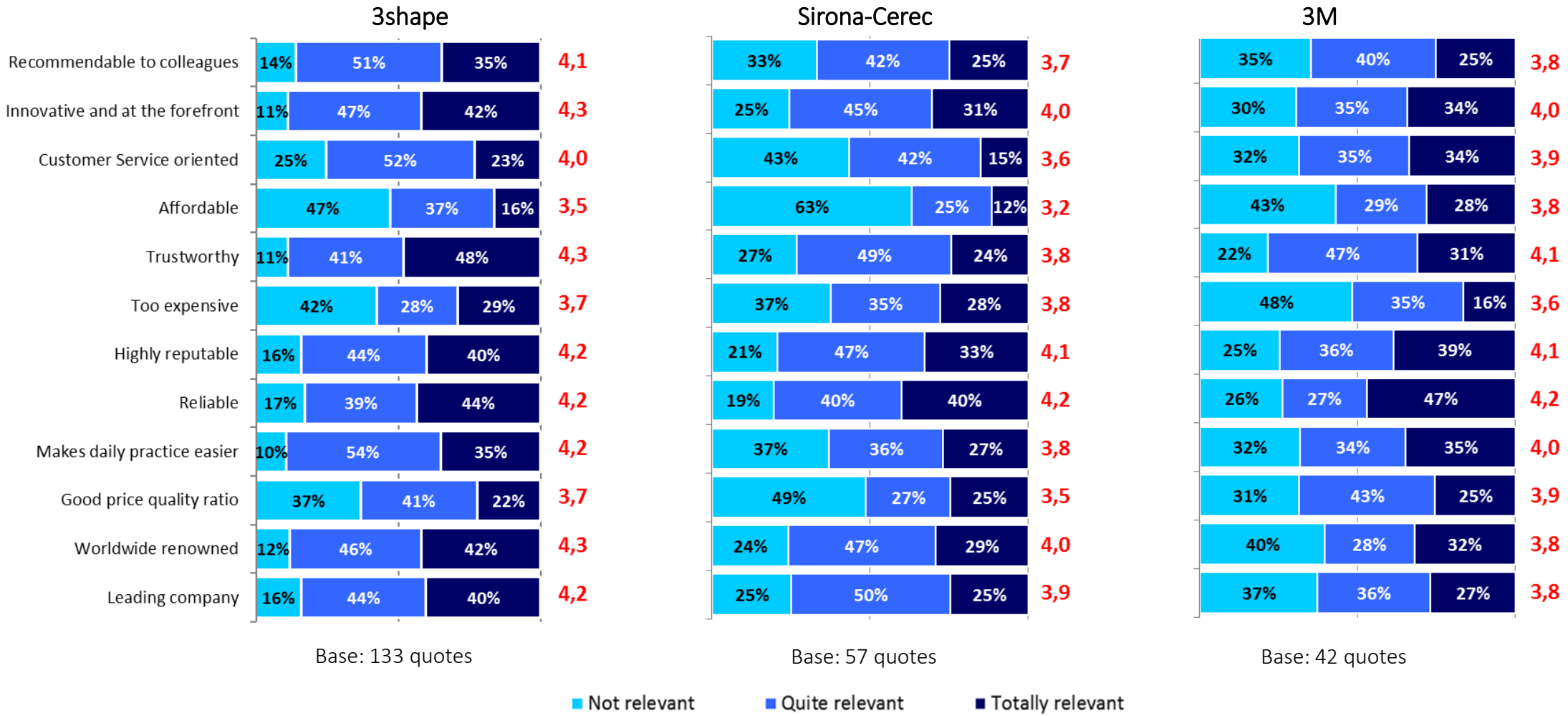
Processing without "don't know"

Base: 617 quotes

Brand positioning: 3Shape, Sirona-Cerec, 3M

In your opinion, how do the brands that I am going to read out to you rate in the following areas? Please rate them with totally irrelevant, partially irrelevant, neutral, quite relevant, totally relevant.

Processing without “don't know”



Base: 133 quotes

Base: 57 quotes

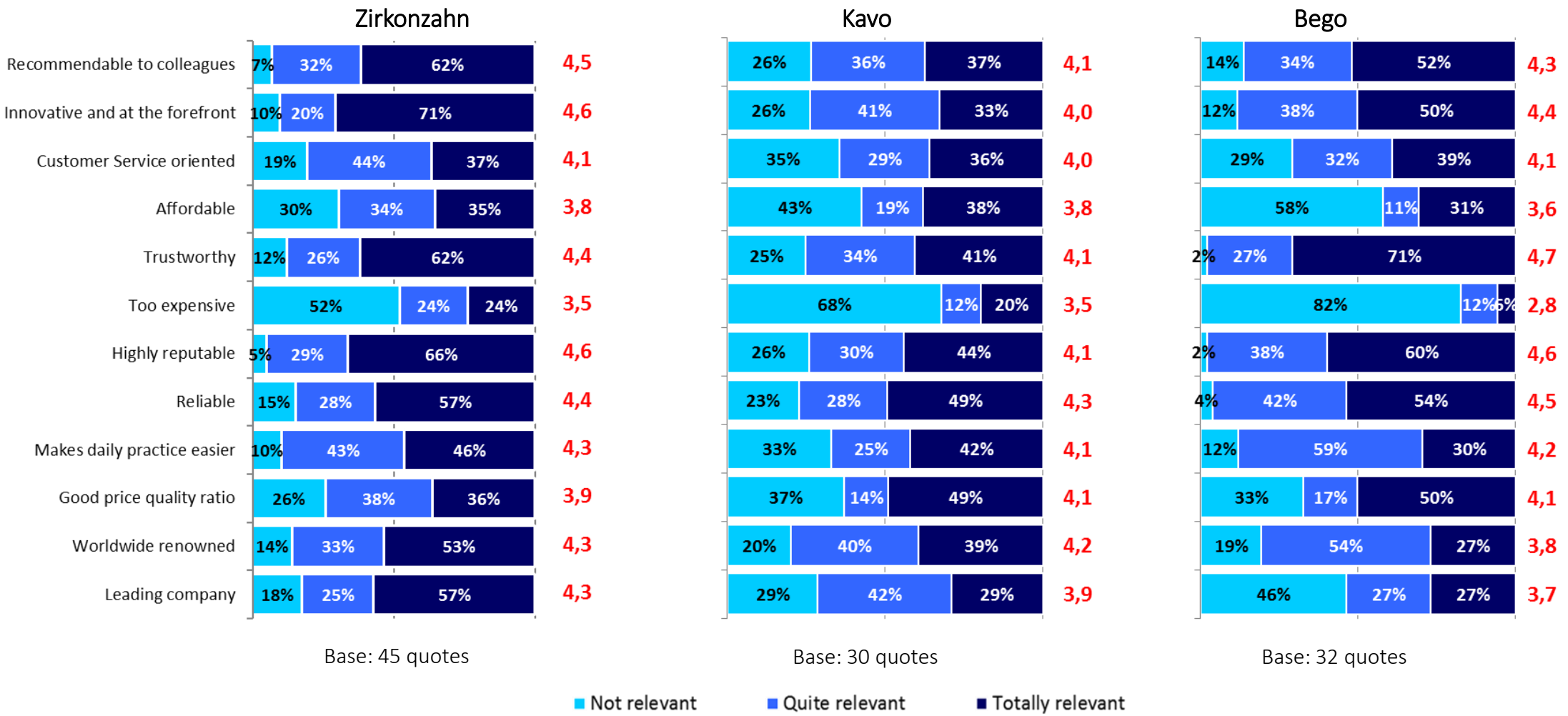
Base: 42 quotes

Not relevant Quite relevant Totally relevant

Brand positioning: Zirkonzahn, Kavo, Bego

In your opinion, how do the brands that I am going to read out to you rate in the following areas? Please rate them with totally irrelevant, partially irrelevant, neutral, quite relevant, totally relevant.

Processing without “don't know”



Base: 45 quotes

Base: 30 quotes

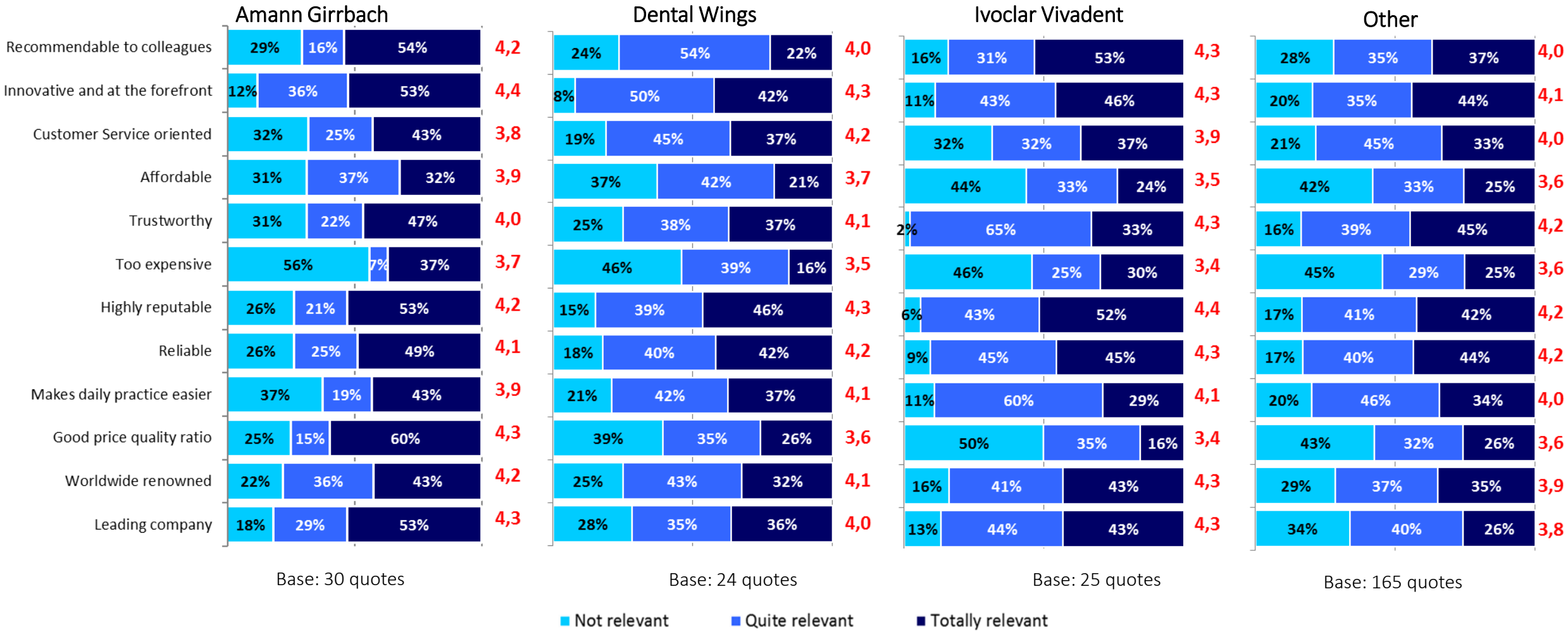
Base: 32 quotes

Not relevant Quite relevant Totally relevant

Brand positioning: Amann Girrbach, Dental Wings, Ivoclar Vivadent

In your opinion, how do the brands that I am going to read out to you rate in the following areas? Please rate them with totally irrelevant, partially irrelevant, neutral, quite relevant, totally relevant.

Processing without “don't know”

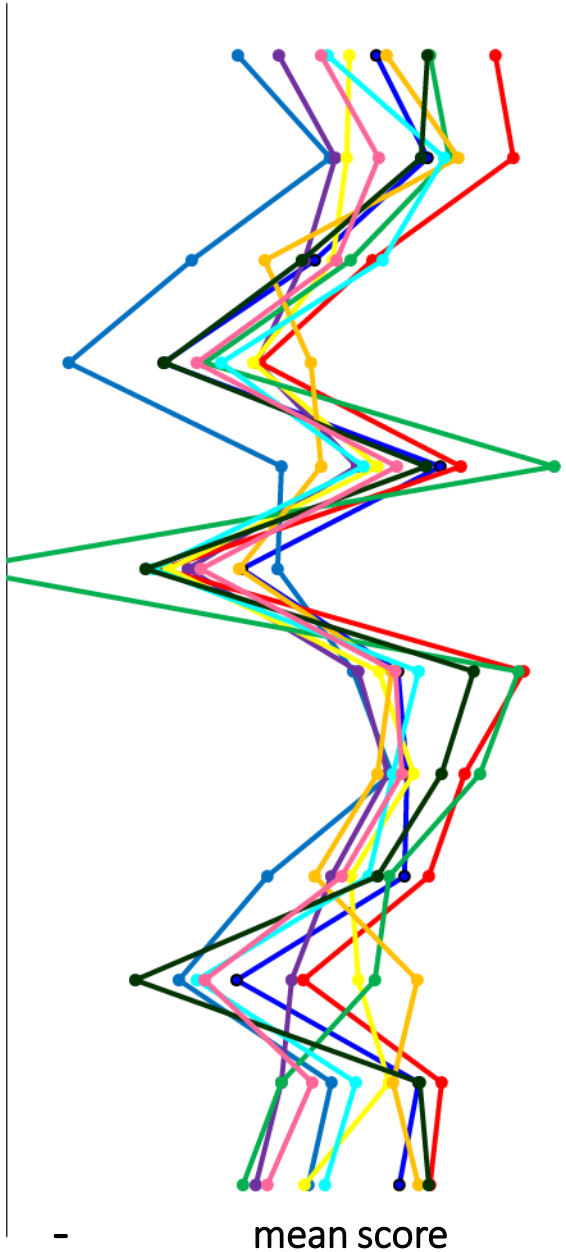


Brand positioning: Overall

In your opinion, how do the brands that I am going to read out to you rate in the following areas?

3shape doesn't show any specific topic different from the rest of investigated companies, mostly because given the high number of quotes received, its performance affect the overall results and is rather close to the mean values.
Other companies worth to be mentioned are Bego, higher than average in Trustworthy, but far below for Too expensive, and Sirona, whose performance with specific regard to Affordability and Customer service oriented, is not on par with the other brands.
Zirkonzahn shows higher scores for Recommendation and Innovation, while Amann Girrbach is higher than average in Good price quality ratio.

In the analysis of the following slides the weight of the single items on the recommendation will be investigated, by mean of the **correlation analysis**.



Base: 133 quotes	3shape
Base: 57 quotes	Sirona - Cerec
Base: 42 quotes	3M
Base: 45 quotes	Zirkonzahn
Base: 30 quotes	Kavo
Base: 32 quotes	Bego
Base: 30 quotes	Amann Girrbach
Base: 24 quotes	Dental Wings
Base: 25 quotes	Ivoclar Vivident
Base: 165 quotes	Other

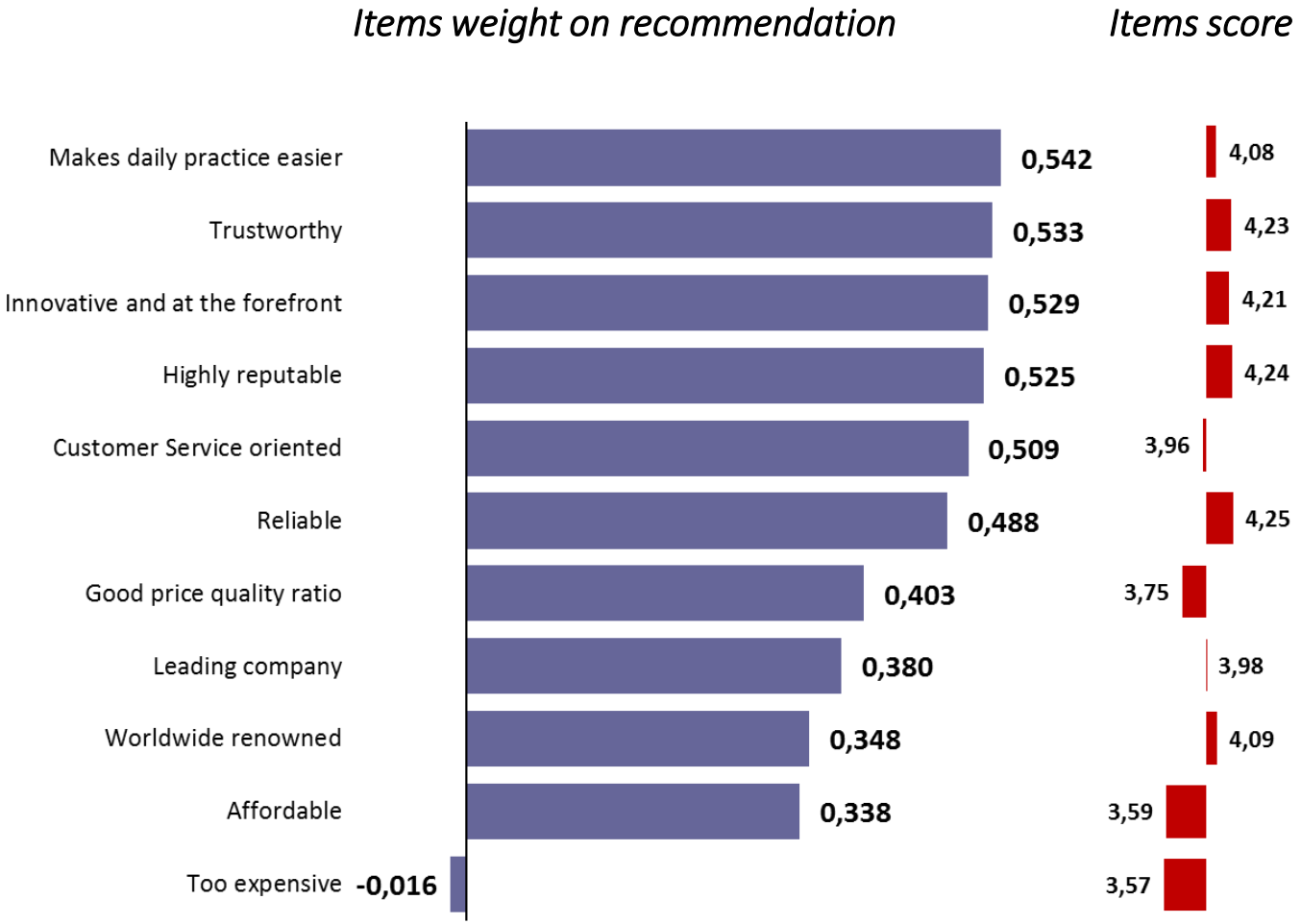
Brand image vs Recommendation - Correlation analysis

How much are worth the single items on the recommendation?

BIVARIATE CORRELATION ANALYSIS

The bivariate correlation analysis is a technique that helps **to identify and measure the influence of the independent variables** (in this case, each brand positioning item) **on the dependent one** (in this case, the **recommendation**). The bivariate correlation analysis has been used to quantify the relation between the score on the single factors and the rating on the recommendation

With the Bivariate Correlation analysis we try to understand **how much the factors seen in the factor analysis influence the recommendation**, by analysing the **different weight that the single items** composing the factors **have on the recommendation**.
In the chart on the left the weight of each item on the recommendation is represented, while in he chart on the right there is the score that each item has achieved in overall.



Brand image vs Recommendation - Correlation analysis ranking

FOCUS ON WEIGHT ON RECOMMENDATION

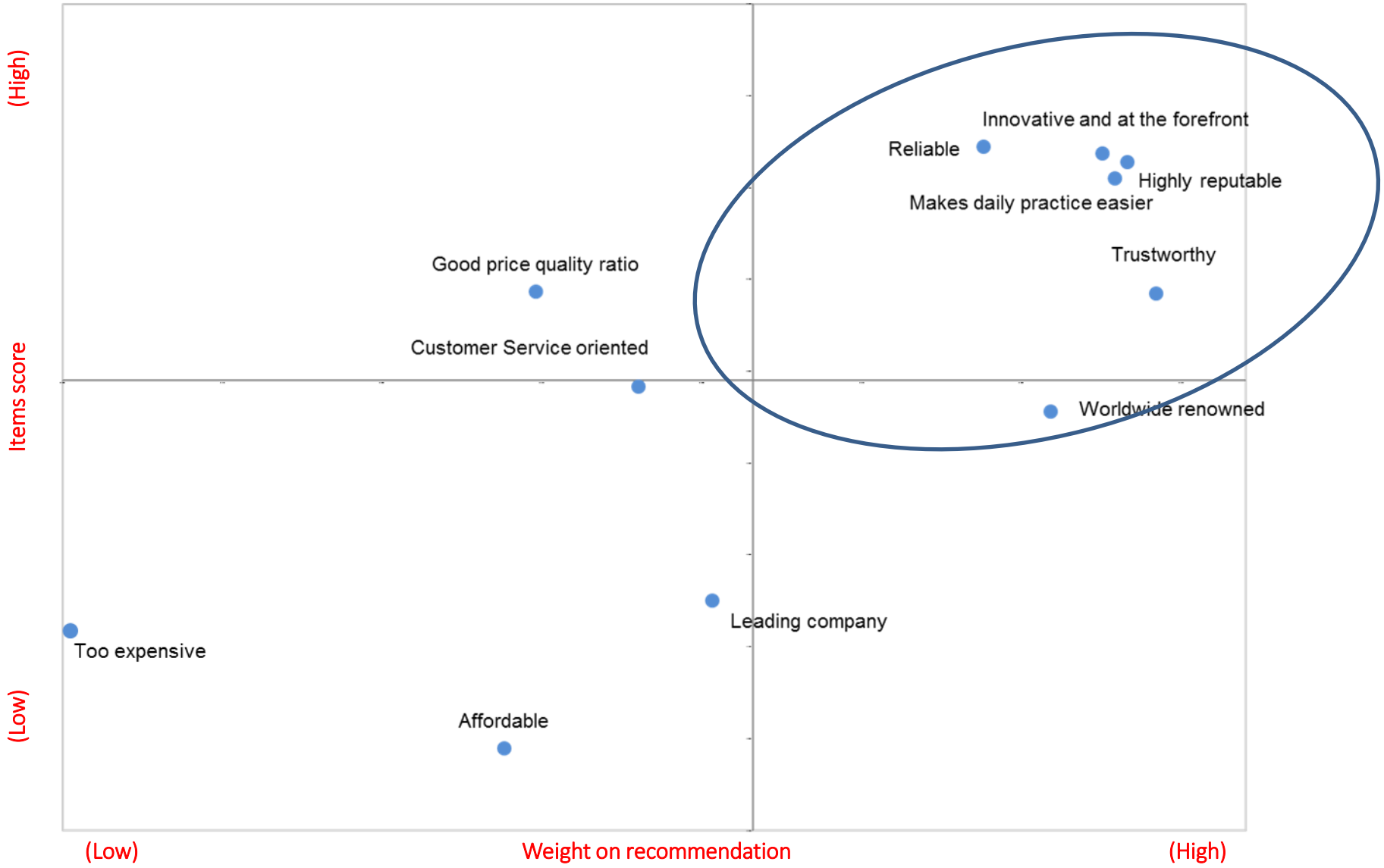
	Overall ranking	3shape	Sirona	3M	Zirkon zahn	Kavo	Bego	Amann Girrbach	Dental Wings	Ivoclar Vivadent	Other
Makes daily practice easier	1°	1°	1°	5°	3°	10°	5°	6°	6°	8°	2°
Trustworthy	2°	4°	2°	9°	2°	1°	1°	3°	9°	7°	4°
Innovative and at the forefront	3°	2°	4°	8°	4°	7°	9°	9°	2°	5°	3°
Highly reputable	4°	3°	3°	2°	1°	2°	2°	4°	1°	3°	7°
Customer Service oriented	5°	7°	8°	6°	7°	3°	6°	2°	3°	2°	1°
Reliable	6°	5°	5°	7°	8°	9°	3°	1°	5°	4°	5°
Good price quality ratio	7°	8°	6°	1°	10°	4°	10°	8°	10°	1°	6°
Leading company	8°	9°	10°	3°	5°	5°	7°	5°	8°	9°	9°
Worldwide renowned	9°	6°	9°	4°	9°	6°	8°	7°	4°	11°	10°
Affordable	10°	10°	7°	10°	6°	8°	4°	10°	7°	6°	8°
Too expensive	11°	11°	11°	11°	11°	11°	11°	11°	11°	10°	11°

When the analysis is performed on the ranking based on the weight that the different items have on the recommendation of the main brands, it's interesting to note how not all items are relevant to all brands.
The "light grey" coloured items are not relevant to the recommendation and it's interesting to see that some brands show some items to be not relevant. This is the case of Zirkonzahn, Dental Wings and Ivoclar Vivadent.
The first four items, generally speaking, are the most important ones, with some brands showing exceptions, like 3M, where among the most important items affecting the recommendation are "Leading company" and "Good price quality ratio"; Kavo where items like "Customer service oriented" and "Good price quality ratio" are important. Amann Girrbach also show some differences: the most relevant items are "Reliable" and "Customer service oriented".

Brand image vs Recommendation - Correlation analysis map

The map is the visual results of the two different charts seen in the previous slide.
On the horizontal axis there is the weight on the recommendation of each item, and on the vertical one there's the rating of each item.
Considering rather new and immature markets, it's not rare to see the items related to the pricing in general not to be relevant in the recommendation process.

The items on the upper right side of the map, very close one to each other, will be further investigated on the factor analysis, which allow an in-depth analysis on a reduced number of variables and a more qualitative interpretation.



Brand positioning: Factor analysis

FACTOR ANALYSIS

Its goal is to reduce the information contained in several variables by synthesizing a few factors. It aims to identify a substructure underlying a group of variables, and resume this substructure with a reduced number of latent variables.

Thanks to the factor analysis, **some positioning drivers can be identified**, that, as a matter of fact, represent the brand image analysed.

The reduction into factors allowed us to obtain 2 main drivers, **"Nearness"** vs. **"Reputation".**

They are very relevant in order to achieve a positioning analysis. This kind of analysis, has a relevant advantage: the here defined set of 2 drivers allows to design a positioning map, explained by the following slide.

Factor 1 (Nearness) it is driven by items like Good price quality ratio, Affordability, Customer service oriented, clearly related to the nearness, whose concept is reinforced by Trustworthy, Makes daily practice easier and Reliable.

Factor 2 (Reputation) it is driven by items clearly related to the reputation, such as Worldwide renowned and Highly reputable on top of all. Too expensive may be part of the Reputation as brand with high reputation are often seen as more expensive than the average, but, although the item belongs to this area, it's not as strong as shown in the analysis on dental practices.

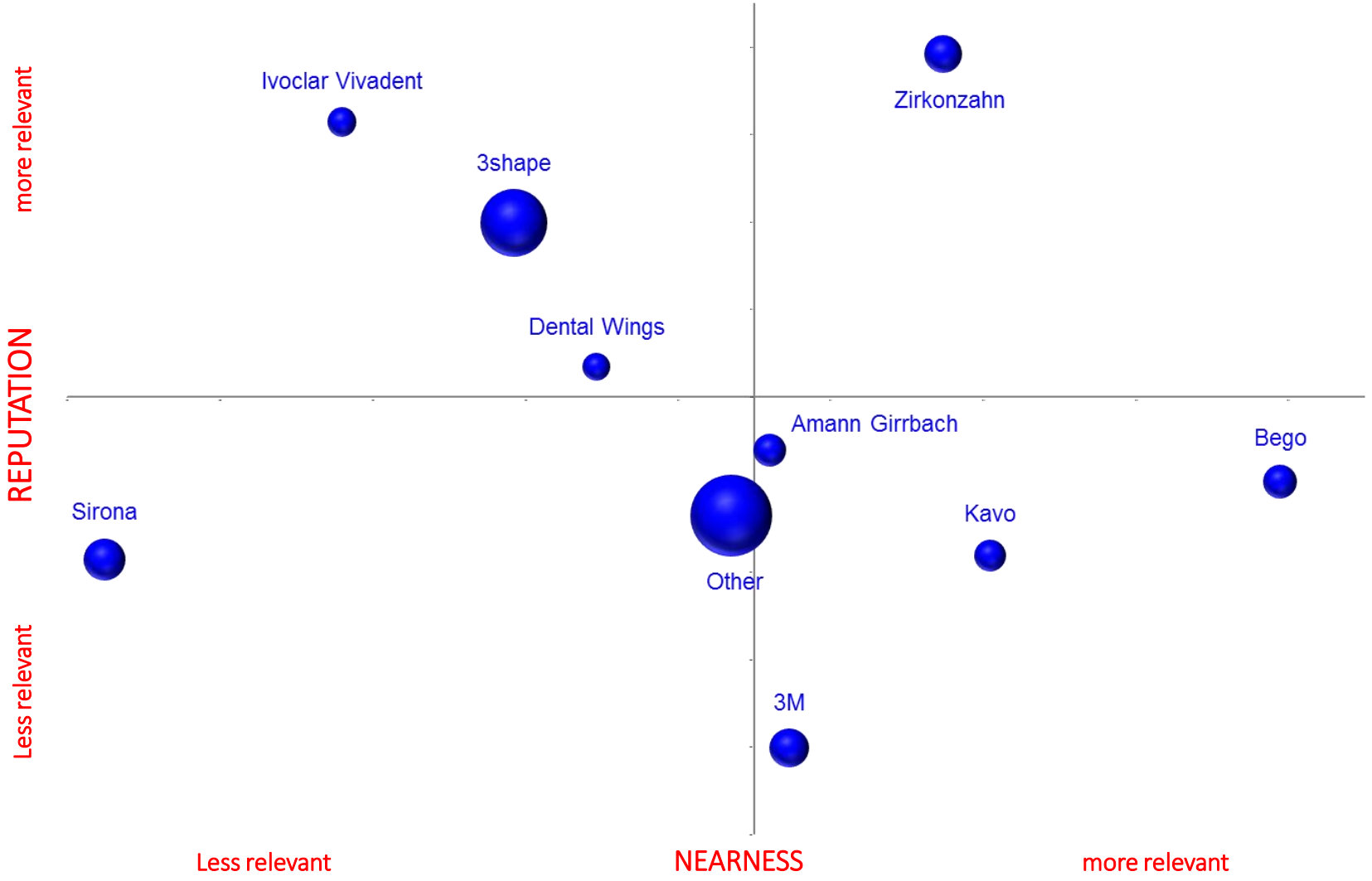
Two Factors	Nearness	Reputation
Good price quality ratio	0,754	
Affordable	0,738	
Customer Service oriented	0,647	
Trustworthy	0,598	
Makes daily practice easier	0,595	
Reliable	0,581	
Worldwide renowned		0,793
Highly reputable		0,707
Leading company		0,698
Innovative and at the forefront		0,653
Too expensive		0,047

The Regression analysis performed on the mentioned factors highlighted an almost equal weight of both factors, with some slight differences as the different brands are considered.

Brand positioning: Positioning map 1

The map is an actual brand positioning one, as it shows how the different brands are seen, with regard to the factors identified, by the respondents.

According to the results shown on the map, there are some brands whose image is more related than other to the reputation. This is the case of 3shape, Zirkonzahn and Ivoclar Vivadent, whose position is on the upper side of the map, where the reputation factor is more relevant.
The image of Bego and Kavo is more linked than others to the Nearness.
It is worth to highlight the position of Zirkonzahn as its image seems to be linked to both factors, the Reputation and the Nearness, while Sirona image looks to be not linked to the Nearness.



Brand positioning: Positioning map 2 - Demographic analysis

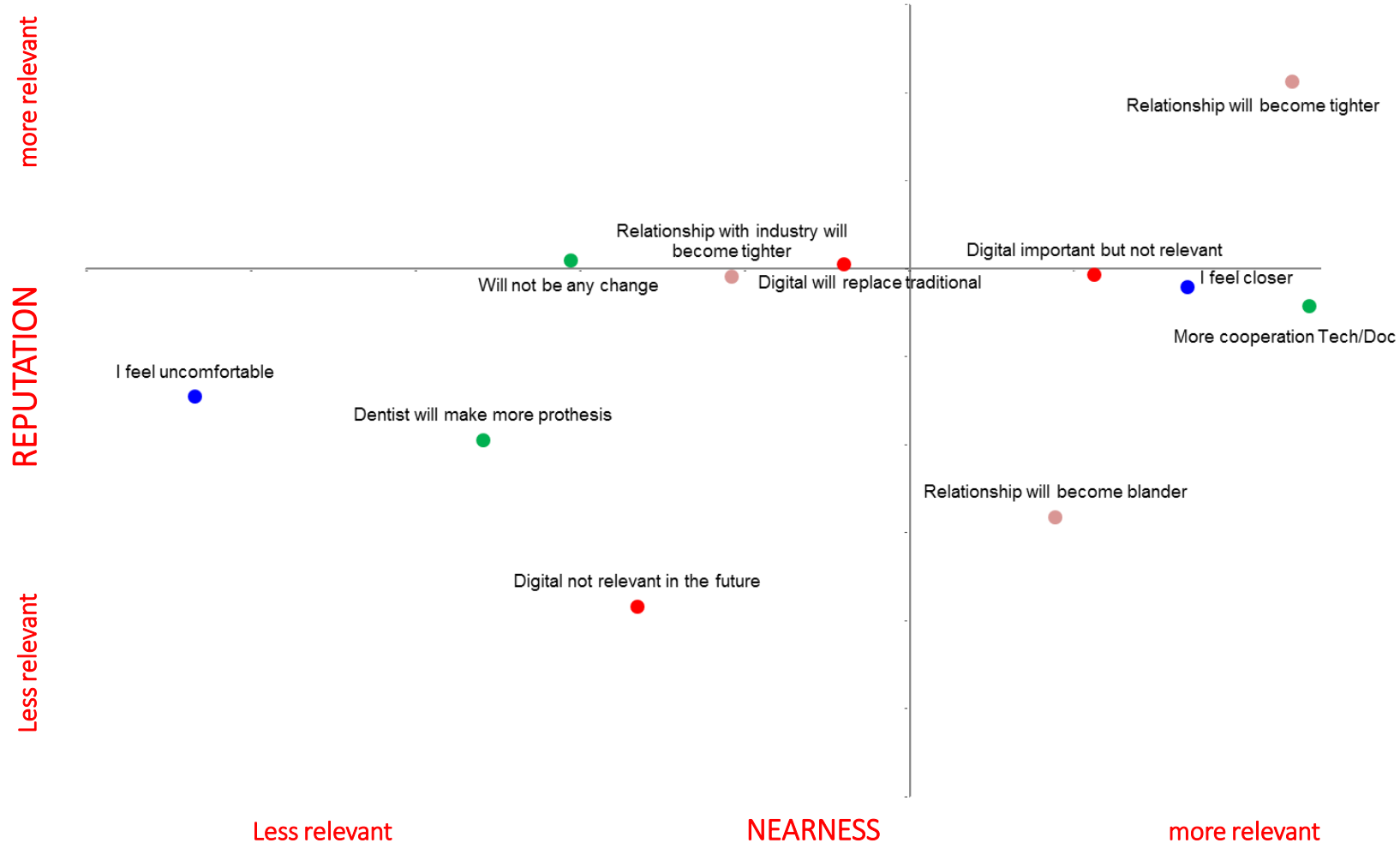
The fact that some different profiles are closer than other (e.g. Germany and 50 restorations or more) doesn't mean that those profiles are related to each other (i.e. it's not said that German respondents produce 50 restorations or more).
Milling unit owners recommendation looks to be more linked to both factors, while Full outsourcing users are more driven by the reputation.
Germany's recommendation is more influenced by the Nearness, while, as it happens for the clinical samples, French respondents have their recommendation more linked to the reputation.
In general, as the age increases, the sensitivity to both factors increases as well.
Digital technology owners' recommendation seem to be more liked to both factors.

This map analyses where some different profiles are positioned, if closer to the nearness concept having an influence on the recommendation, or if the driving factor is the reputation.

Brand positioning: Positioning map 3 - Psychographic analysis

In this map, some psychographic profiles are present.
By analyzing the Nearness factor, it's clear how as the positive attitude and feeling towards the digital technologies increase, also increases the relationship of the recommendation with this item.
Generally speaking, the recommendation seems to be more linked to the "Nearness" concept, while the "Reputation", except for the respondents stating that the relationship will become tighter, seems to have a lower grade of relevance.
The position of "Digital important but not relevant" is affected by Germany, which showed the majority of responses belonging to this item, and whose position in the previous slide is very similar.
It's interesting to note that the difference in the feeling "feel uncomfortable" and "feel closer" is resolved by the nearness, which helps a lot in increasing the comfort towards the new technology.

This map analyses where some different profiles are positioned, if the nearness concept has an impact on the recommendation, or if the driving factor is the reputation.

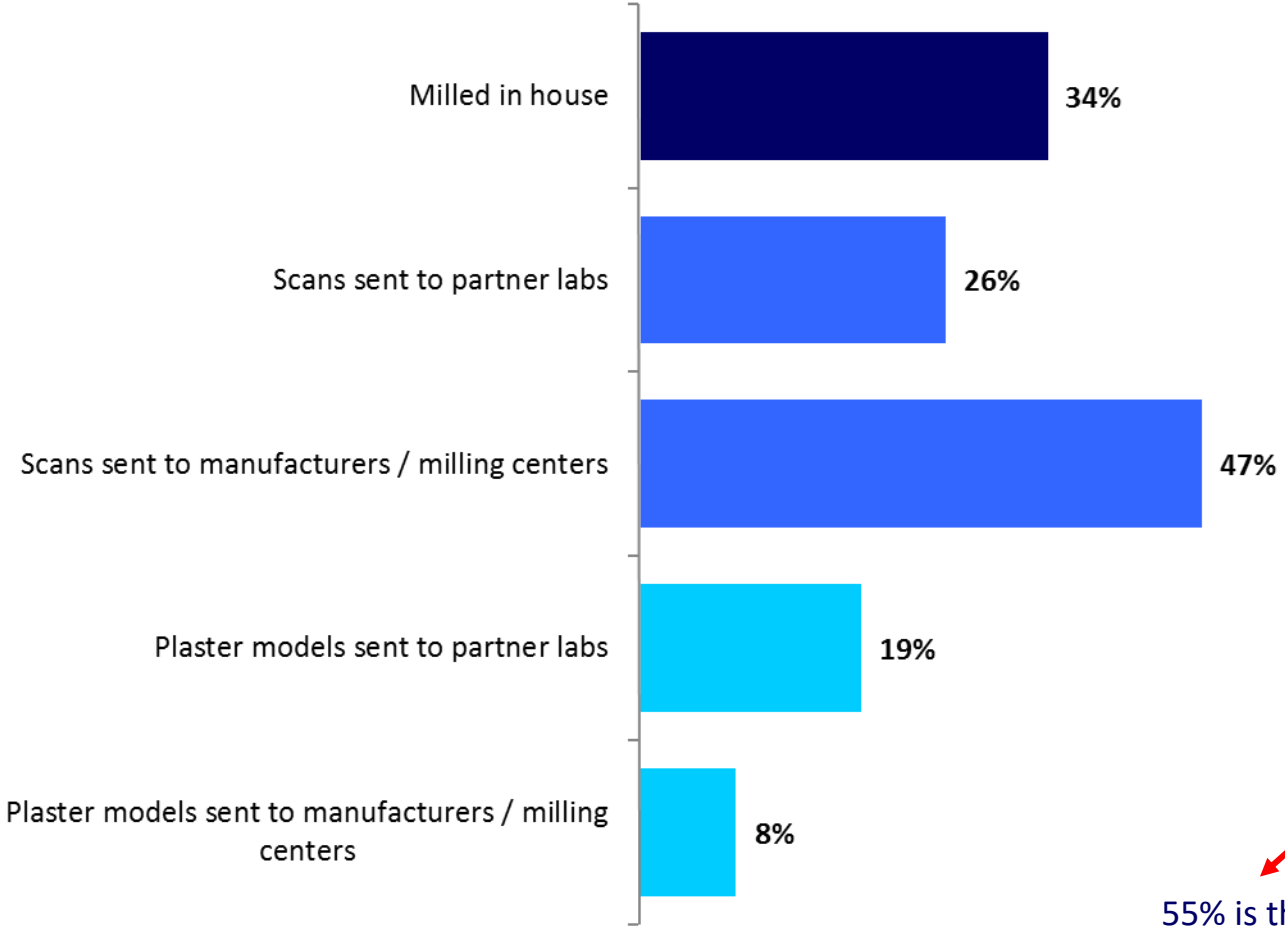


Digital technology penetration

Scenario: Digital technology use - breakdown by technology

How do you provide digital restorations in your laboratory?

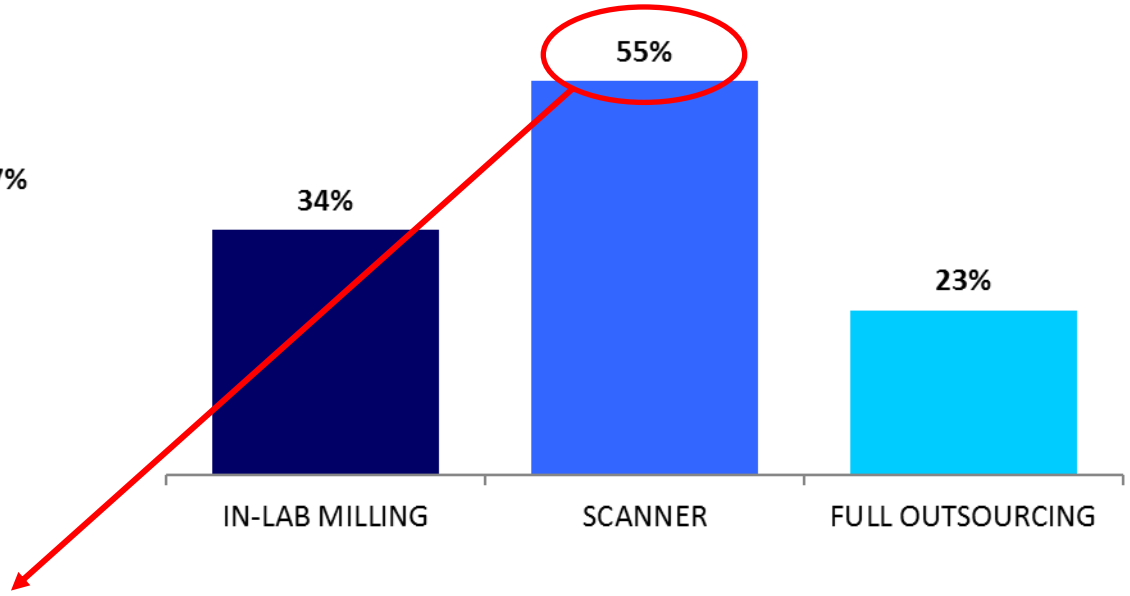
Focus on digital restoration providers



Processing without "don't know"

Base: 411 cases

Among digital technology users, the most used technology is scanner, followed by the in lab milling unit. The most used way to provide digital restorations is to send scans to a manufacturer or milling center.



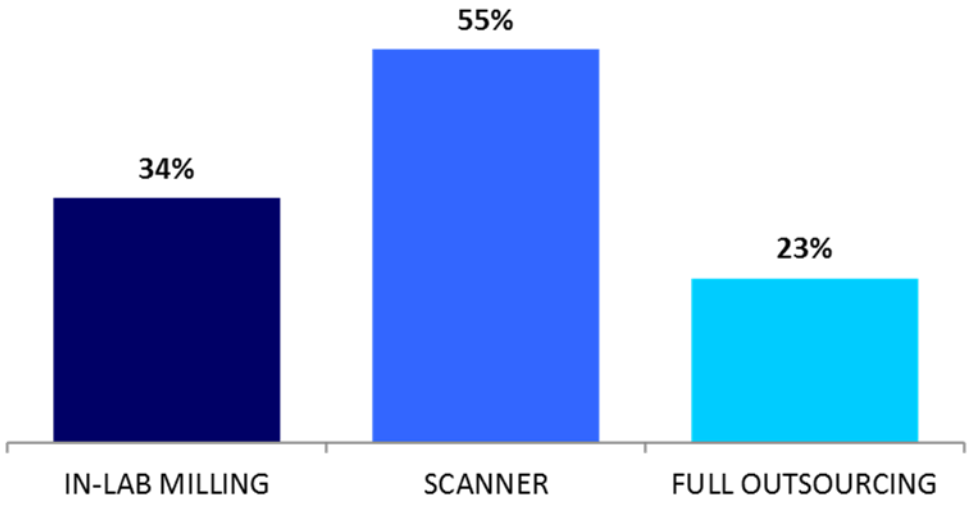
55% is the percent of scanner owners, out of the total digital restorations providers, who use the scanner to send the files outside for milling. The total % of scanner owners, including those used with the in-lab milling units is 84%, as shown in the following slides.

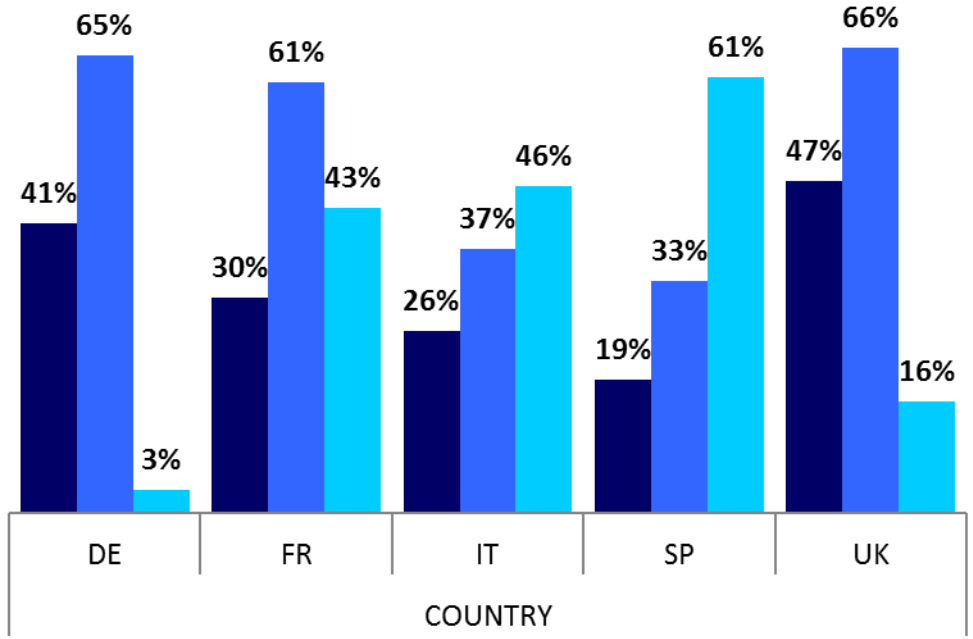
Scenario: Digital technology use - breakdown by technology

How do you provide digital restorations in your laboratory?

Focus on digital restoration providers

The highest percentage of respondents stating to use a scanner is in UK, while the lowest one is Spain, which also shows the highest percentage of full outsourcing users.





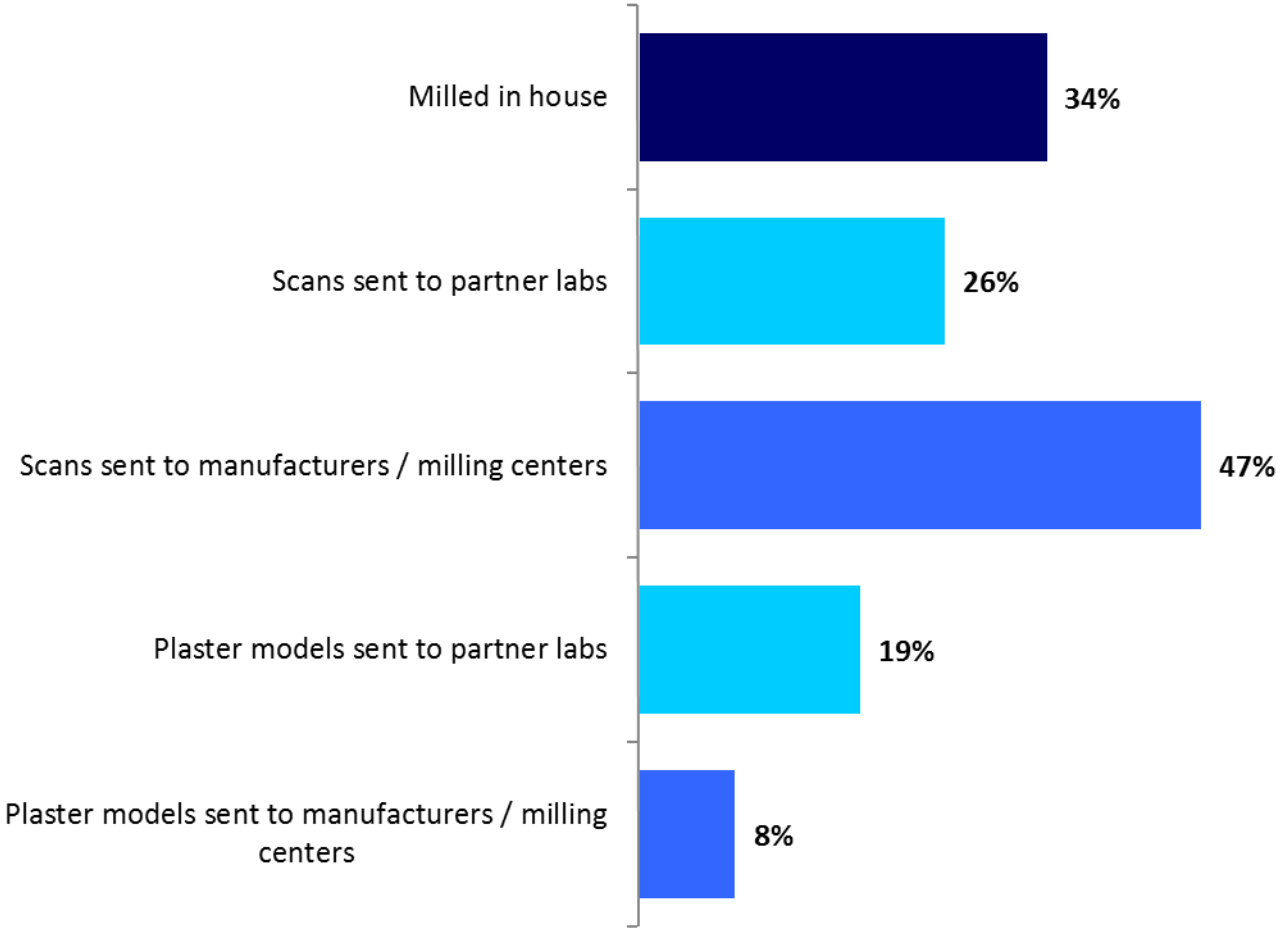
Processing without “don't know”

Base: 411 cases

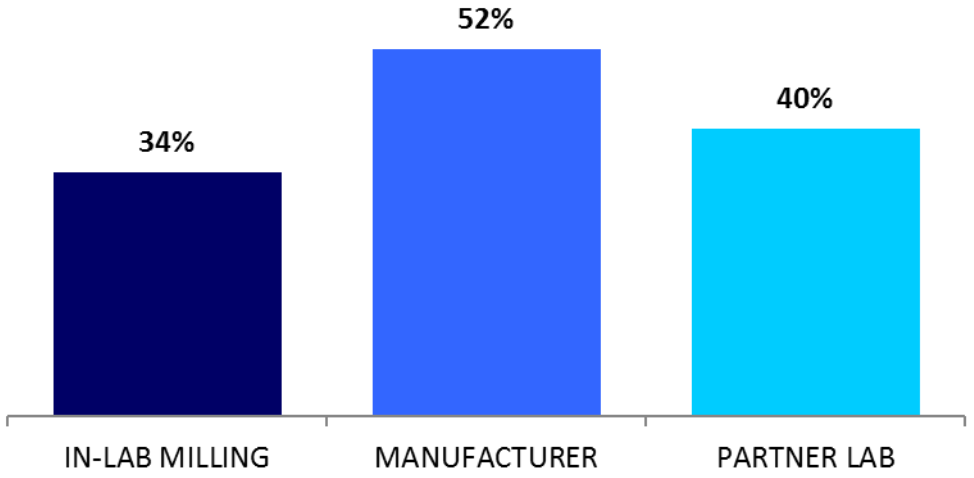
Scenario: Digital technology use - breakdown by channel

How do you provide digital restorations in your laboratory?

Focus on digital restoration providers



With regard to the channels used, the manufacturer/milling center is the most used one, followed by the partner lab.



Base: 411 cases

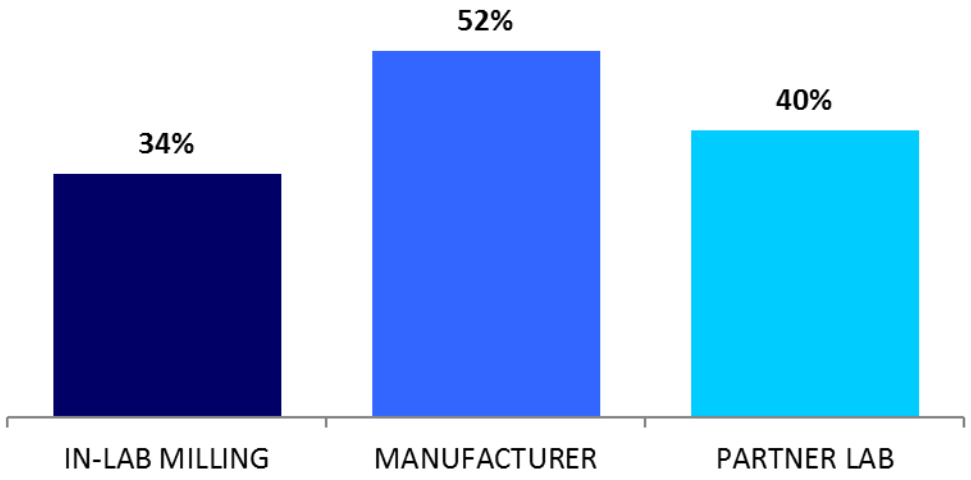
Processing without “don't know”

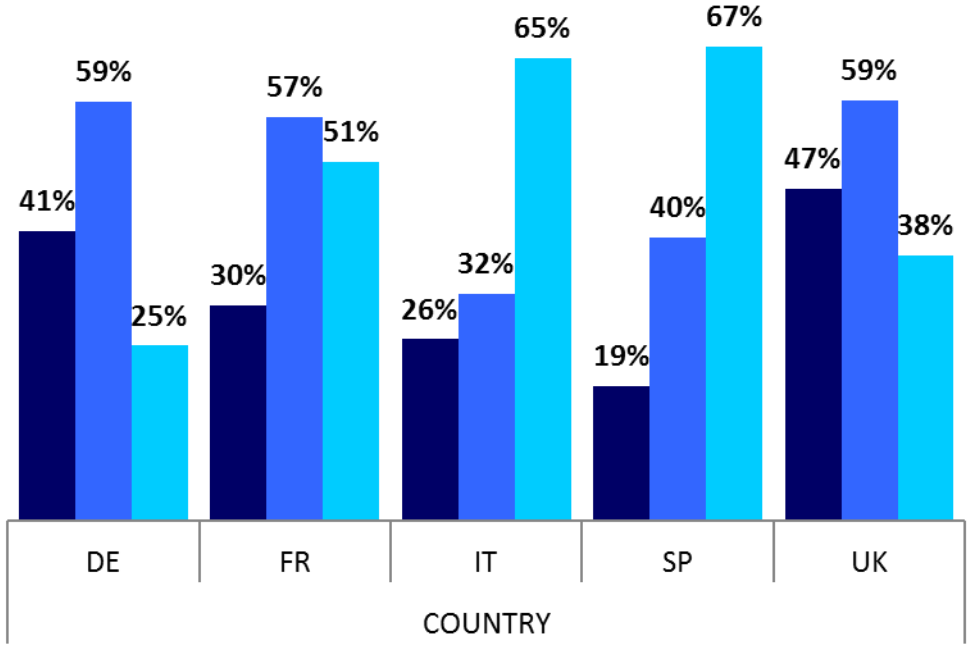
Scenario: Digital technology use - breakdown by channel

How do you provide digital restorations in your laboratory?

Focus on digital restoration providers

Germany, on par with UK, shows the highest percentage of respondents stating to use the manufacturers to produce digital restorations, while Spain shows the highest percentage in the use of a partner lab.





Base: 411 cases

Processing without “don't know”

Scenario: Digital technology use - Technologies and channels

How do you provide digital restorations in your laboratory?

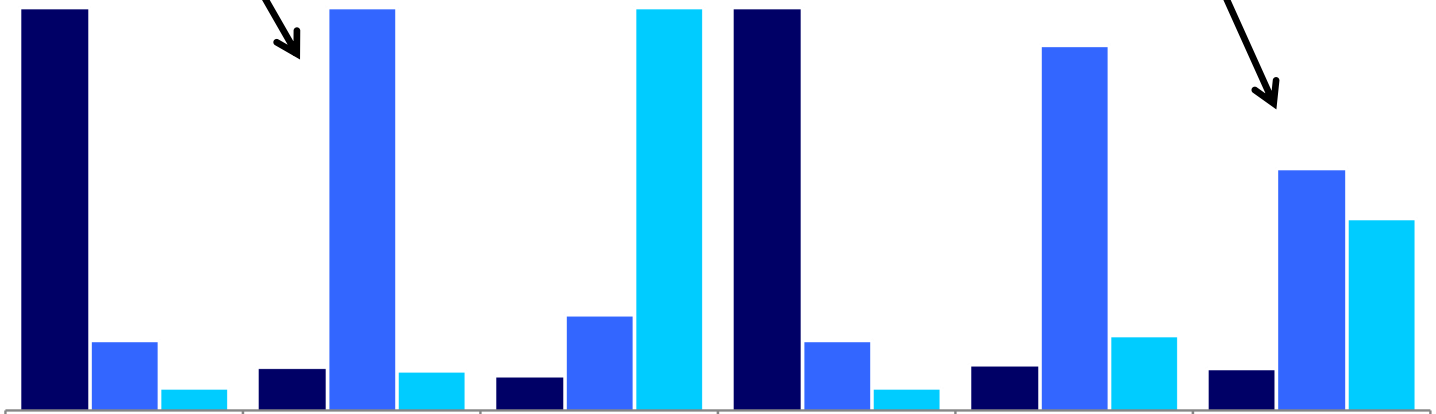
Focus on digital restoration providers

The chart allows to evaluate the percentage of users of different technologies, in comparison with the same technologies and the different channels used.

Please, see the example on the right.

For example, among those using a scanner, 11% of them also have an in-lab milling.

For example, those sending their restorations to a partner lab, 60% of the cases have a scanner for sending scans outside and 11% of the cases also have an in-lab milling.



Processing without “don't know”

TECHNOLOGIES	TECHNOLOGY: IN-LAB MILLING	TECHNOLOGY: SCANNER	TECHNOLOGY: FULL OUTSOURCING	CHANNEL: IN-LAB MILLING	CHANNEL: MANUFACTURER	CHANNEL: PARTNER LAB
IN-LAB MILLING	100%	11%	9%	100%	11%	11%
SCANNER	17%	100%	24%	17%	91%	60%
FULL OUTSOURCING	6%	10%	100%	6%	19%	48%

Base: 411 cases

Scenario: Digital technology use - Channels and technologies

How do you provide digital restorations in your laboratory?

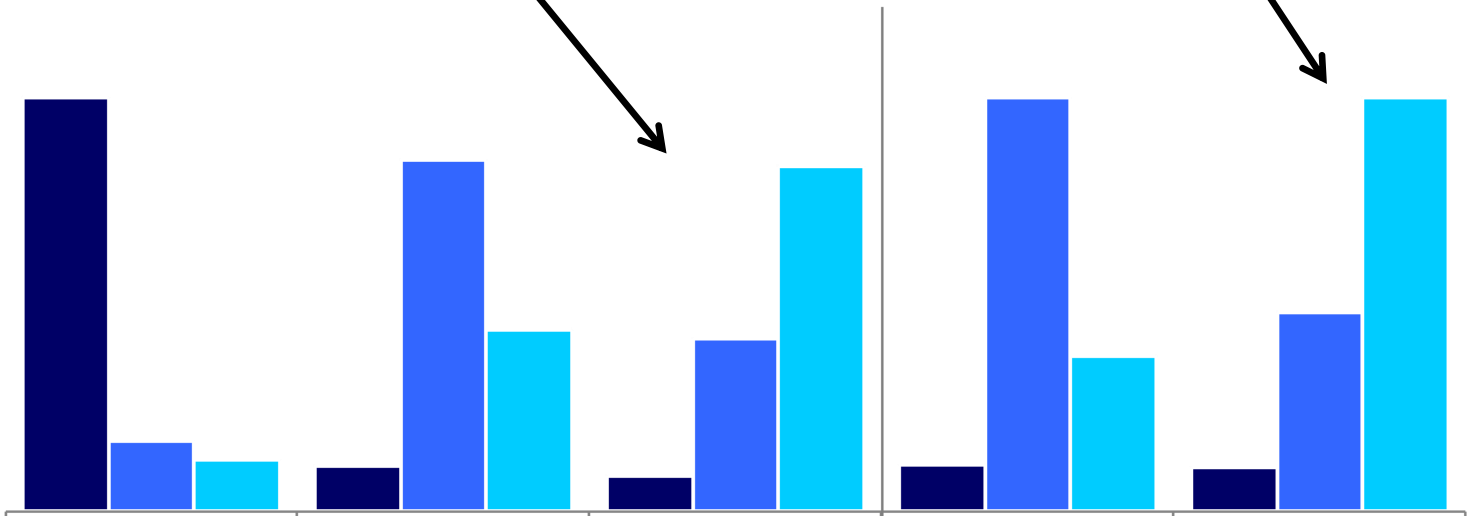
Focus on digital restoration providers

The chart allows to evaluate the percentage of users of different technologies, in comparison with the same technologies and the different channels used.

Please, see the example on the right.

For example, among those performing full outsourcing, 42% of them send the models to a manufacturer and 84% of them send the models to a partner lab.

For example, those sending their restorations to a partner lab in 11% of the cases they also have an in-lab milling and in 48% of the cases they also send the restorations to a manufacturer/milling center.



Processing without "don't know"

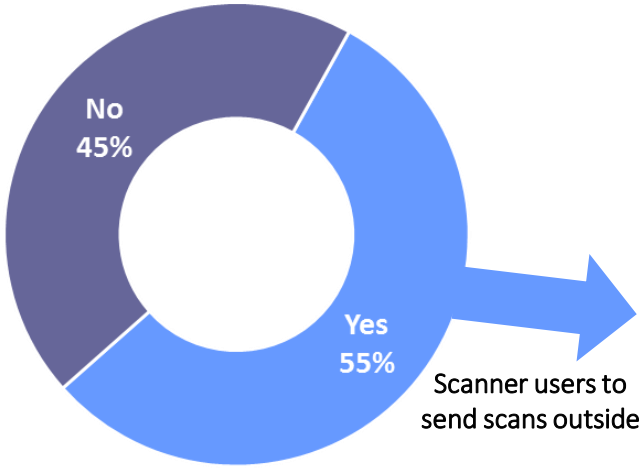
CHANNELS	IN-LAB MILLING	SCANNER	FULL OUTSOURCING	MANUFACTURER	PARTNER LAB
	TECHNOLOGY			CHANNEL	
IN-LAB MILLING	100%	11%	9%	11%	11%
MANUFACTURER	17%	85%	42%	100%	48%
PARTNER LAB	13%	44%	84%	38%	100%

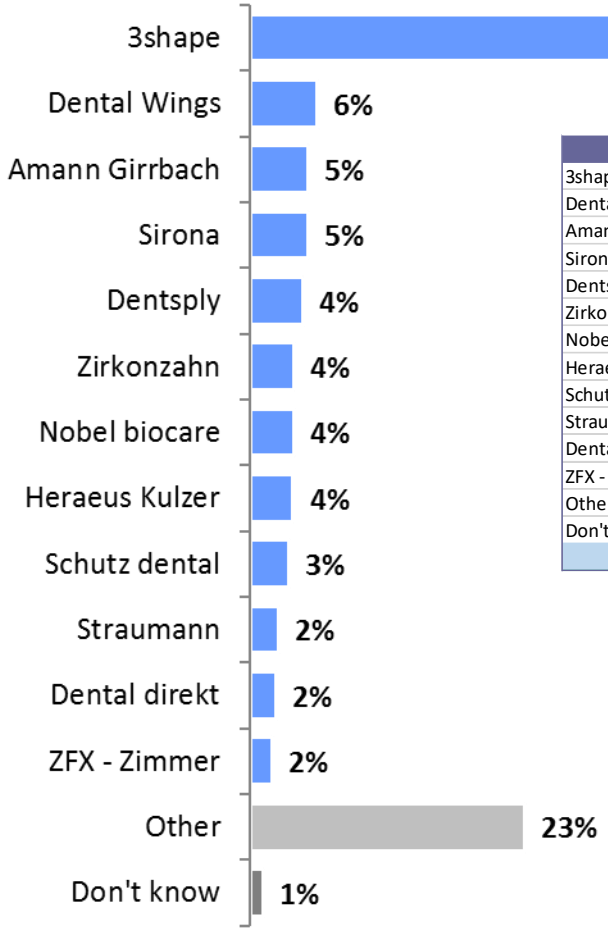
Base: 411 cases

Brand numeric distribution and intention to buy

Brand numeric distribution: Scanners (scans sent outside only)

What is the brand of your scanner?





TOTAL		DE		FR		IT	
3shape	36%	3shape	43%	Nobel biocare	17%	3shape	31%
Dental Wings	6%	Amann Girrbach	7%	3shape	15%	Sirona	17%
Amann Girrbach	5%	Dentsply	5%	Dental Wings	15%	Dentsply	10%
Sirona	5%	Heraeus Kulzer	5%	Dental direkt	8%	Wieland	10%
Dentsply	4%	Schutz dental	5%	Imetric	8%	Dental Wings	7%
Zirkonzahn	4%	Dental Wings	3%	Zirkonzahn	6%	Open Technologies	7%
Nobel biocare	4%	Sirona	3%	Sirona	4%	Zirkonzahn	3%
Heraeus Kulzer	4%	Zirkonzahn	3%	ZFX - Zimmer	4%	Nobel biocare	3%
Schutz dental	3%	Straumann	2%	Kavo	2%	Heraeus Kulzer	3%
Straumann	2%	Dental direkt	2%	GT medical	2%	Nobil metal	3%
Dental direkt	2%	ZFX - Zimmer	2%	Roland	2%	88Dent	3%
ZFX - Zimmer	2%			GC Tech	2%		
Other	23%	Other	18%	Other	15%	Other	3%
Don't know	1%	Don't know	2%	Don't know		Don't know	
Total	**228**	**Total**	**146**	**Total**	**30**	**Total**	**27**

TOTAL		SP		UK	
3shape	36%	3shape	21%	3shape	24%
Dental Wings	6%	Nobel biocare	15%	Straumann	19%
Amann Girrbach	5%	Biotech	12%	Dental Wings	10%
Sirona	5%	Straumann	9%	Zirkonzahn	10%
Dentsply	4%	GT medical	9%	3M Espe Lava	10%
Zirkonzahn	4%	Dental Wings	6%	Carestream	10%
Nobel biocare	4%	Amann Girrbach	6%	Amann Girrbach	5%
Heraeus Kulzer	4%	Open Technologies	6%	Sirona	5%
Schutz dental	3%	3M Espe Lava	6%	Renishaw	5%
Straumann	2%	ZFX - Zimmer	3%		
Dental direkt	2%	Smart Optics	3%		
ZFX - Zimmer	2%	Maestro 3D	3%		
Other	23%	Other		Other	5%
Don't know	1%	Don't know		Don't know	
Total	**228**	**Total**	**17**	**Total**	**8**

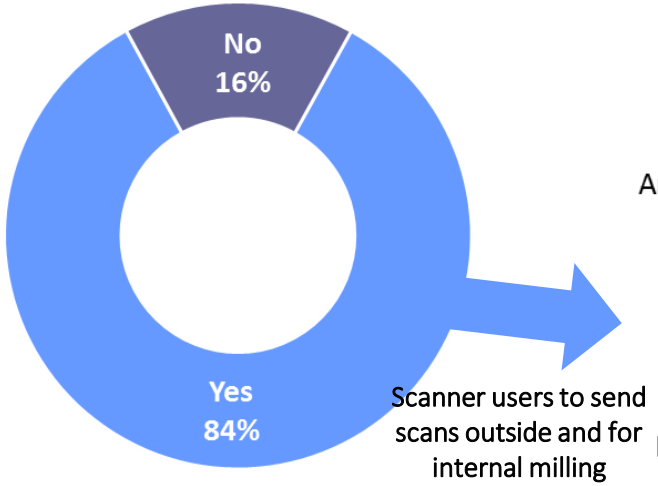
Numeric Distribution

It is the percentage of clients that mentioned to use a certain product / brand, or to get delivered by a certain supplier. That's why it is comparable with the coverage index, it is a subjective value, which is named by the clients as "their" product or "their" supplier.

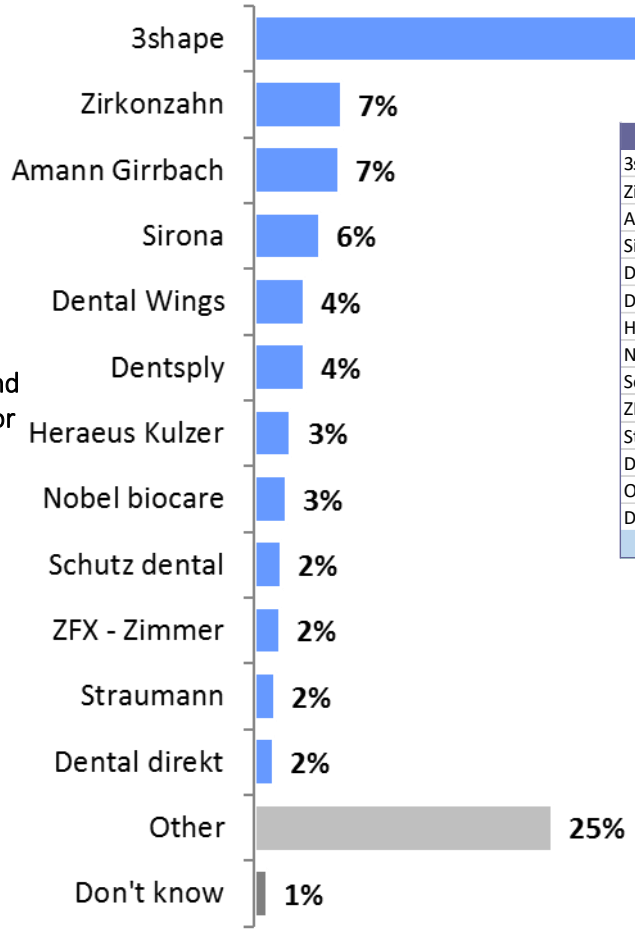
Base: 228 cases

Brand numeric distribution: Total scanners (in-lab and scans sent outside)

What is the brand of your scanner, considering also those used with your in-lab milling unit?



Scanner users to send scans outside and for internal milling



Numeric Distribution

It is the percentage of clients that mentioned to use a certain product / brand, or to get delivered by a certain supplier. That's why it is comparable with the coverage index, it is a subjective value, which is named by the clients as "their" product or "their" supplier.

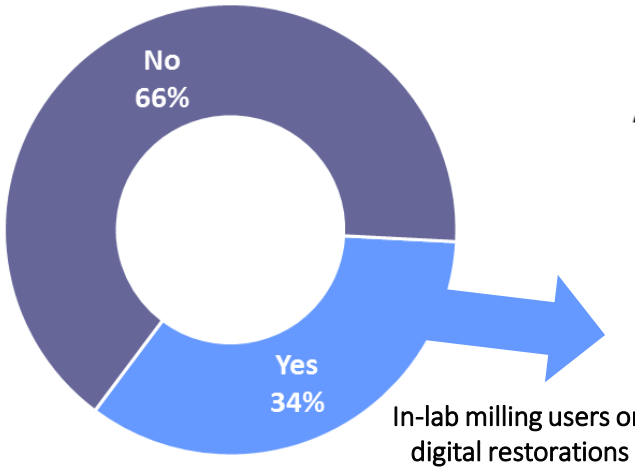
TOTAL		DE		FR		IT	
3shape	32%	3shape	39%	3shape	18%	3shape	23%
Zirkonzahn	7%	Amann Girrbach	10%	Nobel biocare	12%	Sirona	21%
Amann Girrbach	7%	Zirkonzahn	8%	Dental Wings	11%	Zirkonzahn	8%
Sirona	6%	Dentsply	4%	Zirkonzahn	9%	Dental Wings	8%
Dental Wings	4%	Heraeus Kulzer	4%	Dental direkt	8%	Dentsply	8%
Dentsply	4%	Sirona	3%	Imetric	6%	Wieland	8%
Heraeus Kulzer	3%	Schutz dental	3%	Sirona	5%	Open Technologies	4%
Nobel biocare	3%	Dental Wings	2%	ZFX - Zimmer	3%	EGS	4%
Schutz dental	2%	ZFX - Zimmer	2%	Kavo	3%	88Dent	4%
ZFX - Zimmer	2%	Exocad	2%	Bluescan	3%	Amann Girrbach	2%
Straumann	2%	Smart Optics	2%	Dentsply	2%	Heraeus Kulzer	2%
Dental direkt	2%	Dental direkt	1%	Straumann	2%	Nobel biocare	2%
Other	25%	Other	17%	Other	20%	Other	6%
Don't know	1%	Don't know	1%	Don't know	0%	Don't know	0%
Total	**345**	**Total**	**225**	**Total**	**41**	**Total**	**44**

TOTAL		SP		UK	
3shape	32%	3shape	15%	3shape	17%
Zirkonzahn	7%	Nobel biocare	13%	Straumann	13%
Amann Girrbach	7%	Biotech	9%	3M Espe Lava	10%
Sirona	6%	Straumann	6%	Zirkonzahn	7%
Dental Wings	4%	GT medical	6%	Amann Girrbach	7%
Dentsply	4%	Amann Girrbach	4%	Sirona	7%
Heraeus Kulzer	3%	Dental Wings	4%	Dental Wings	7%
Nobel biocare	3%	Open Technologies	4%	Dental Concept	7%
Schutz dental	2%	3M Espe Lava	4%	Carestream	7%
ZFX - Zimmer	2%	Dentsply	2%	Nobel biocare	3%
Straumann	2%	Schutz dental	2%	R+K	3%
Dental direkt	2%	ZFX - Zimmer	2%	Renishaw	3%
Other	25%	Other	26%	Other	3%
Don't know	1%	Don't know	2%	Don't know	7%
Total	**345**	**Total**	**24**	**Total**	**11**

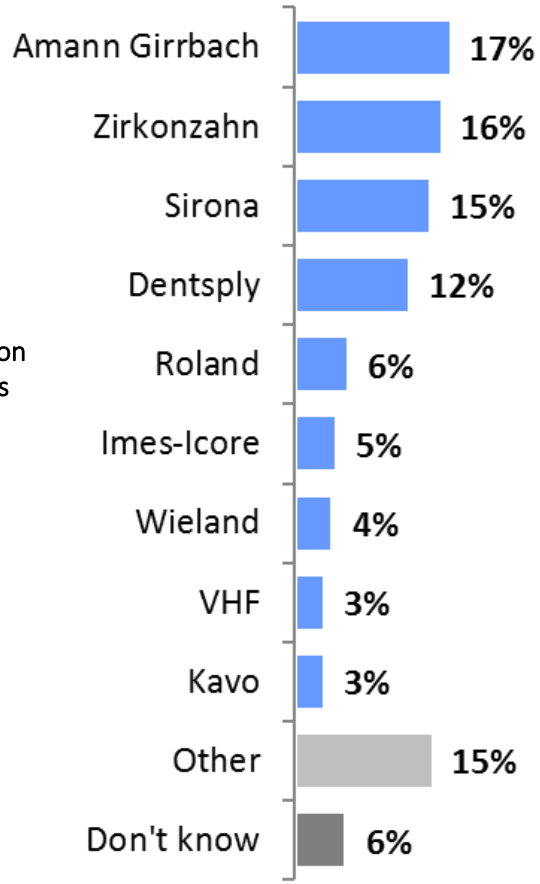
Base: 345 cases

Brand numeric distribution: In-lab milling

What in-lab milling unit brand do you use?



In-lab milling users on digital restorations providers



DE		FR		IT	
Amann Girrbach	1°	Zirkonzahn	1°	Sirona	1°
Zirkonzahn	2°	Sirona	1°	Roland	2°
Dentsply	3°	Roland	1°	Wieland	2°
Sirona	4°	Wieland	2°	Zirkonzahn	3°
Imes-Icore	5°	Dentsply	3°	Amann Girrbach	4°
VHF	6°	Imes-Icore	3°	Dentsply	4°
Kavo	6°	VHF	3°	Imes-Icore	4°
Dental Concept	6°	Kavo	3°	VHF	4°
ZFX	6°	Dental Concept	3°	Kavo	4°
Total	**93**	**Total**	**15**	**Total**	**18**

SP		UK	
Roland	1°	Sirona	1°
Sirona	2°	Amann Girrbach	2°
Zirkonzahn	3°	Dentsply	2°
Dentsply	3°	Zirkonzahn	3°
Wieland	3°	Wieland	3°
VHF	3°	Renishaw	3°
Kavo	3°	3M Espe Lava	3°
ZFX	3°		
R+K	3°		
Total	**10**	**Total**	**6**

Numeric Distribution
It is the percentage of clients that mentioned to use a certain product / brand, or to get delivered by an certain supplier. That's why it is comparable with the coverage index, it is a subjective value, which is named by the clients as "their" product or "their" supplier.

The number of cases is too low, so that the tables above are presented as a qualitative indication only.

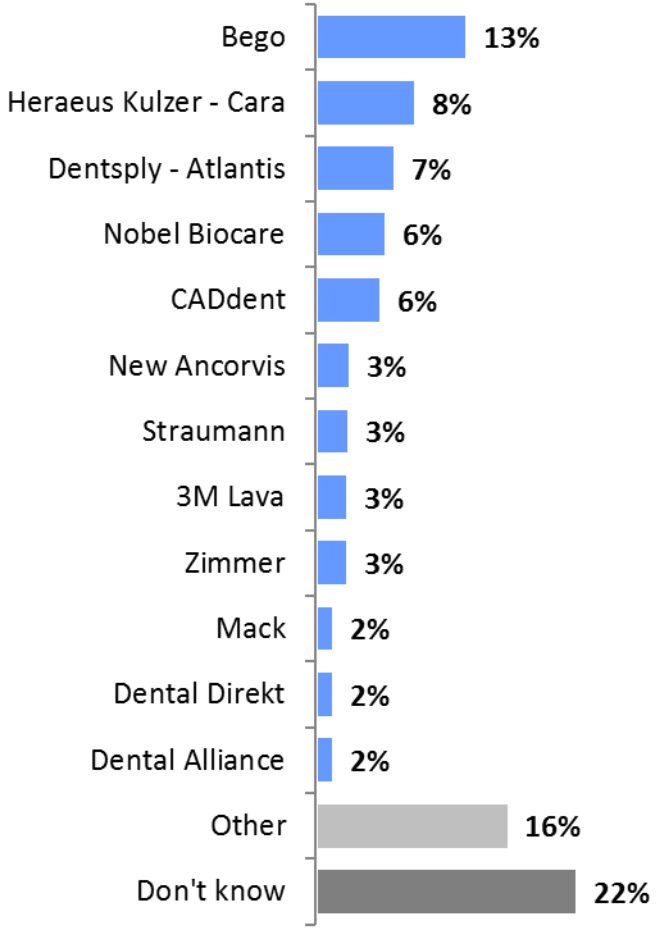
Base: 139 cases

Brand numeric distribution: Manufacturer/Milling center

What manufacturer/milling center do you send your models/scans to?

Numeric Distribution
It is the percentage of clients that mentioned to use a certain product / brand, or to get delivered by an certain supplier. That's why it is comparable with the coverage index, it is a subjective value, which is named by the clients as "their" product or "their" supplier.

Bego was, among the manufacturers/milling centers, the most mentioned one, thanks to its wide presence in Germany. The presence of international competitors is higher in France and UK, while in Italy and Spain is stronger the presence of local players.



DE	
Bego	1°
Heraeus Kulzer - Cara	2°
CADdent	3°
Dentsply - Atlantis	4°
3M Lava	5°
Zimmer	5°
Mack	5°
Dental Direkt	5°
Dental Alliance	5°
Total	100

FR	
Nobel Biocare	1°
Straumann	2°
Anthogyr - Simeda	3°
Bego	4°
CADdent	4°
Zimmer	4°
PX Dental	4°
Dent All Group	4°
CAP	4°
SIs France	4°
GC Tech	4°
France Zirkon	4°
Total	21

IT	
New Ancorvis	1°
Nobel Biocare	2°
3M Lava	2°
Wieland	2°
La Struttura	3°
3Dfast	3°
Bego	3°
Heraeus Kulzer - Cara	3°
Dentsply - Atlantis	3°
Biotech	3°
Biodentalcad	3°
Total	19

SP	
Sineldent	1°
Bioinnovacion Dental	1°
Createch	1°
Nobel Biocare	2°
Biotech	2°
Fresdental	2°
Bego	3°
Dentsply - Atlantis	3°
Straumann	3°
Zimmer	3°
Promedent	3°
Neodent	3°
Total	10

UK	
Dentsply - Atlantis	1°
Nobel Biocare	2°
Straumann	2°
Createch	2°
Kavo	3°
Attenborough	3°
Total	6

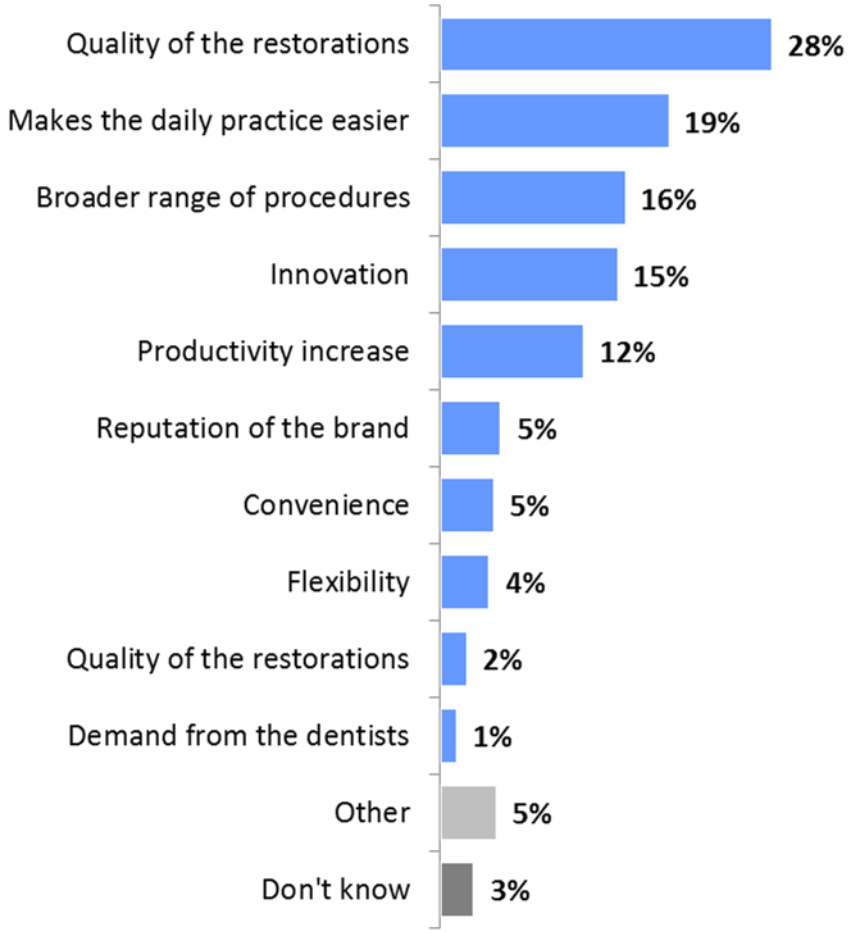
The number of cases is too low, so that the tables above are presented as a qualitative indication only.

Base: 156 cases

Brand numeric distribution: Reasons to use

What is the most relevant reason for you to use your scanner / in-lab milling unit?

Scanner



Base: 230 cases

In-lab milling

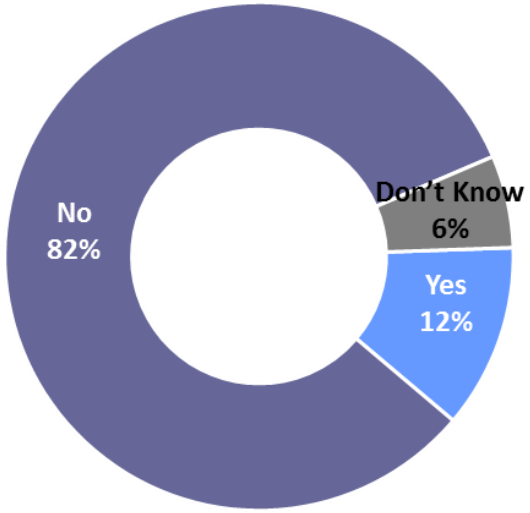
Base: 140 cases

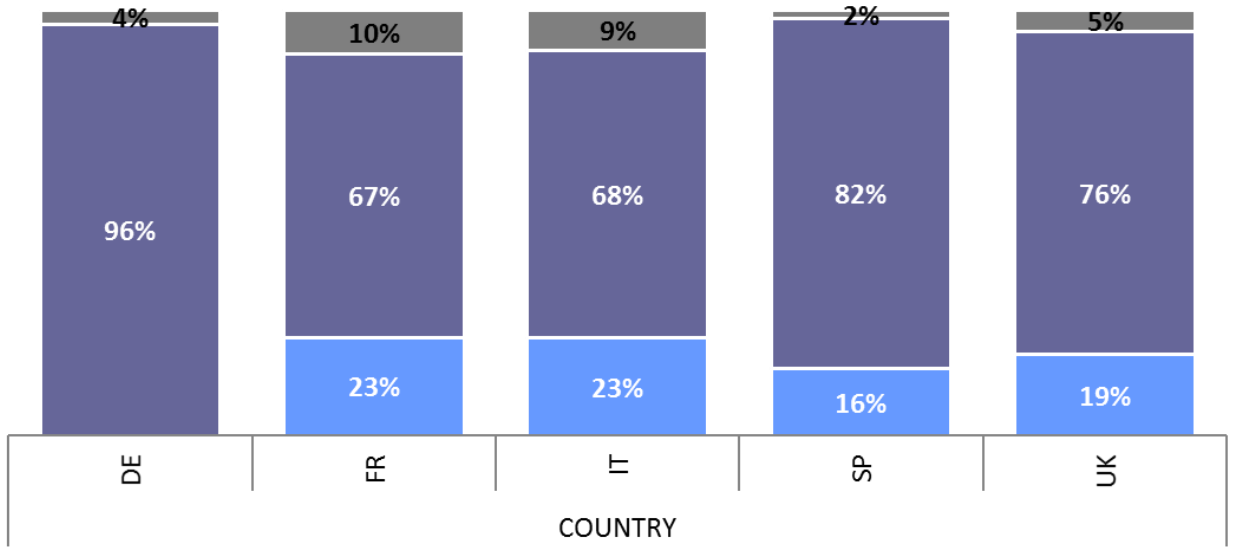
Daily practice made easier and quality of the restorations are the main reasons quoted by the digital equipment users. To a lesser extent, flexibility in terms of a broader range of procedures available and the convenience are also felt to be important.

Technology intention to buy

Are you willing to start using digital technologies within 2 years?

The fact that Germany can be considered a more mature market can also be seen from this slide, where the respondents not providing digital restorations are not willing to start in the near future. With regard to the other countries, there are no particular differences in the intention to buy, except for a higher percentage of “No” in Spain.

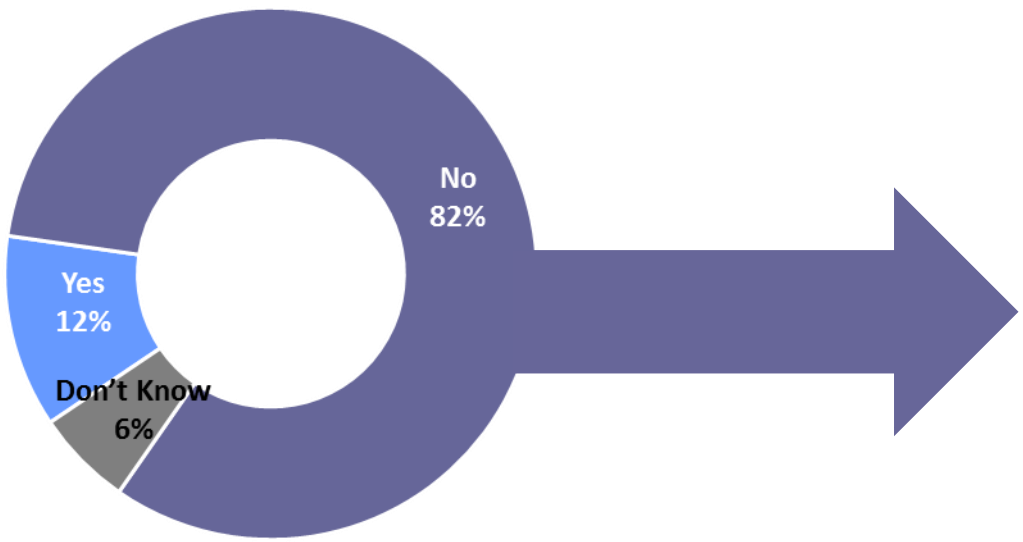


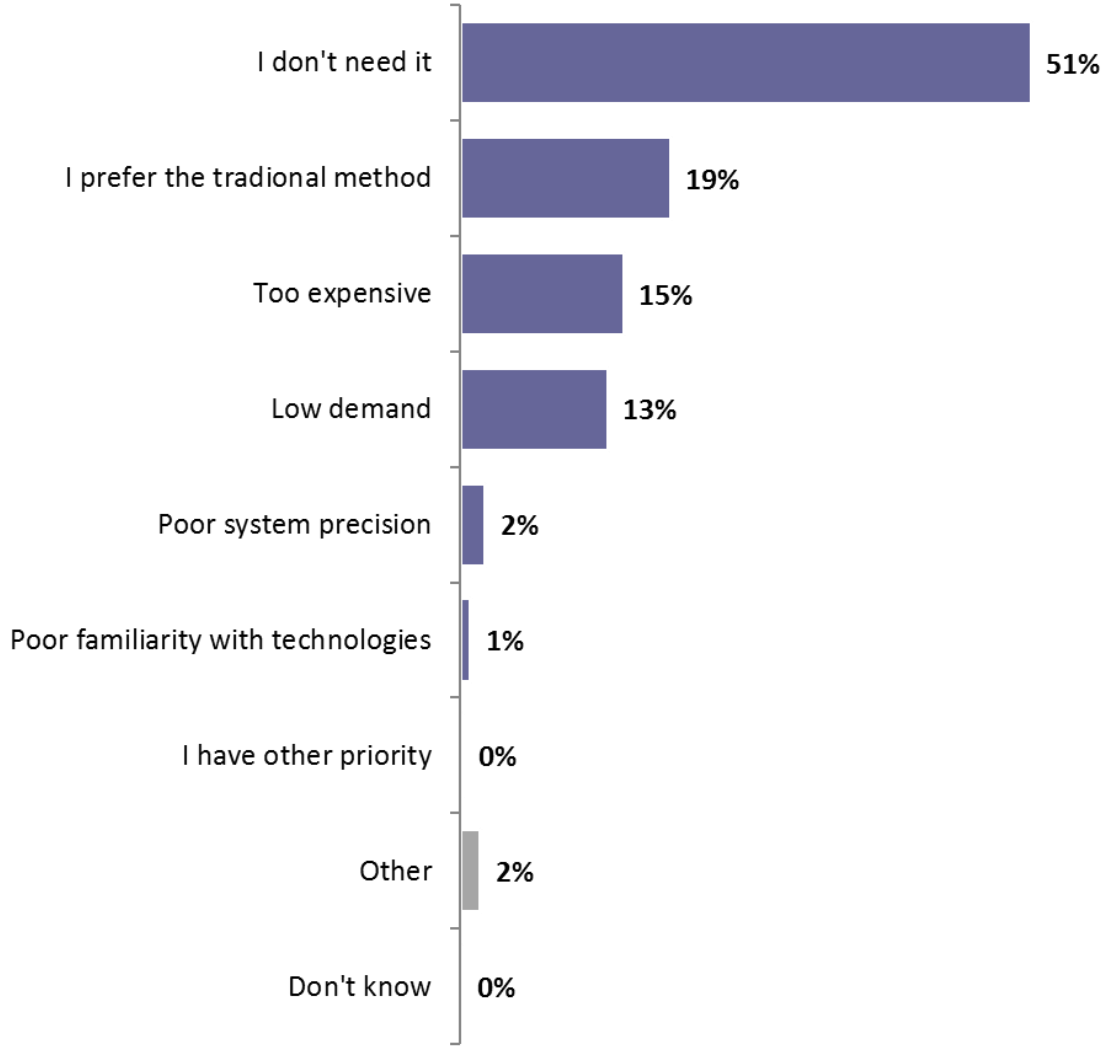


Base: 311 cases

Technology intention to buy: Why not

Are you willing to start using digital technology within 2 years? Why not?





The lack of need and the preference for the traditional method are the most important quotes. Certainly the pricing still is rationally felt to be a barrier on entry, but most of the respondents feel either there's no need or the traditional method will work as well.

Base: 256 cases

Technology intention to buy: Why not

Are you willing to start using digital technology within 2 years? Why not?

While “I don’t need it” was quoted as the main reason in all countries, Italy differentiates from this situation, as the most important barrier is felt to be the expensiveness. I prefer the traditional method is mostly quoted in Germany and France. In overall, the ranking of the reasons why not, is rather even through all investigated countries.

TOTAL		DE		FR		IT	
I don't need it	51%	I don't need it	64%	I don't need it	42%	Too expensive	32%
I prefer the tradional method	19%	I prefer the tradional method	24%	Too expensive	25%	I don't need it	28%
Too expensive	15%	Low demand	9%	I prefer the tradional method	19%	Low demand	24%
Low demand	13%	Too expensive	2%	Low demand	10%	I prefer the tradional method	10%
Poor system precision	2%			Poor system precision	6%	Poor system precision	6%
Poor familiarity with technologies	1%			I have other priority	2%	Poor familiarity with technologies	4%
I have other priority	0%						
Other	2%	Other	2%	Other	2%	Other	2%
Don't know	0%	Don't know	0%	Don't know	0%	Don't know	0%
Total	**256**	**Total**	**134**	**Total**	**32**	**Total**	**46**

TOTAL		SP		UK	
I don't need it	51%	I don't need it	45%	I don't need it	45%
I prefer the tradional method	19%	Too expensive	27%	Too expensive	27%
Too expensive	15%	Low demand	17%	Low demand	17%
Low demand	13%	I prefer the tradional method	10%	I prefer the tradional method	10%
Poor system precision	2%	Poor system precision	5%	Poor system precision	5%
Poor familiarity with technologies	1%				
Other	2%	Other	2%	Other	0%
Don't know	0%	Don't know	2%	Don't know	0%
Total	**256**	**Total**	**21**	**Total**	**23**

Customer Experience and loyalty metrics

LOYALTY METRICS

OVERALL SATISFACTION

The overall experience with a company and the extent to which their needs are met.

PERCEIVED VALUE

The utility and benefit of a product relative to the cost paid for that product.

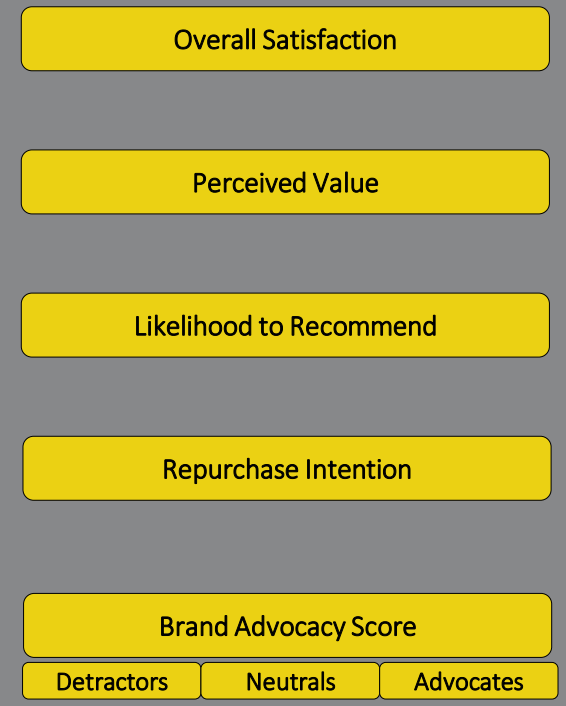
ADVOCACY

A user's willingness to recommend a company to colleagues is a key driver of revenue and profit growth in most industries.

REPURCHASE INTENTION

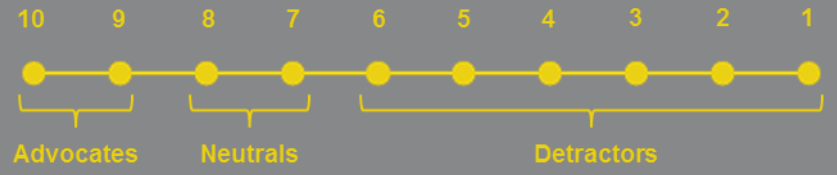
The likelihood a user will continue to use a company's products in the near future.

Loyalty Metrics



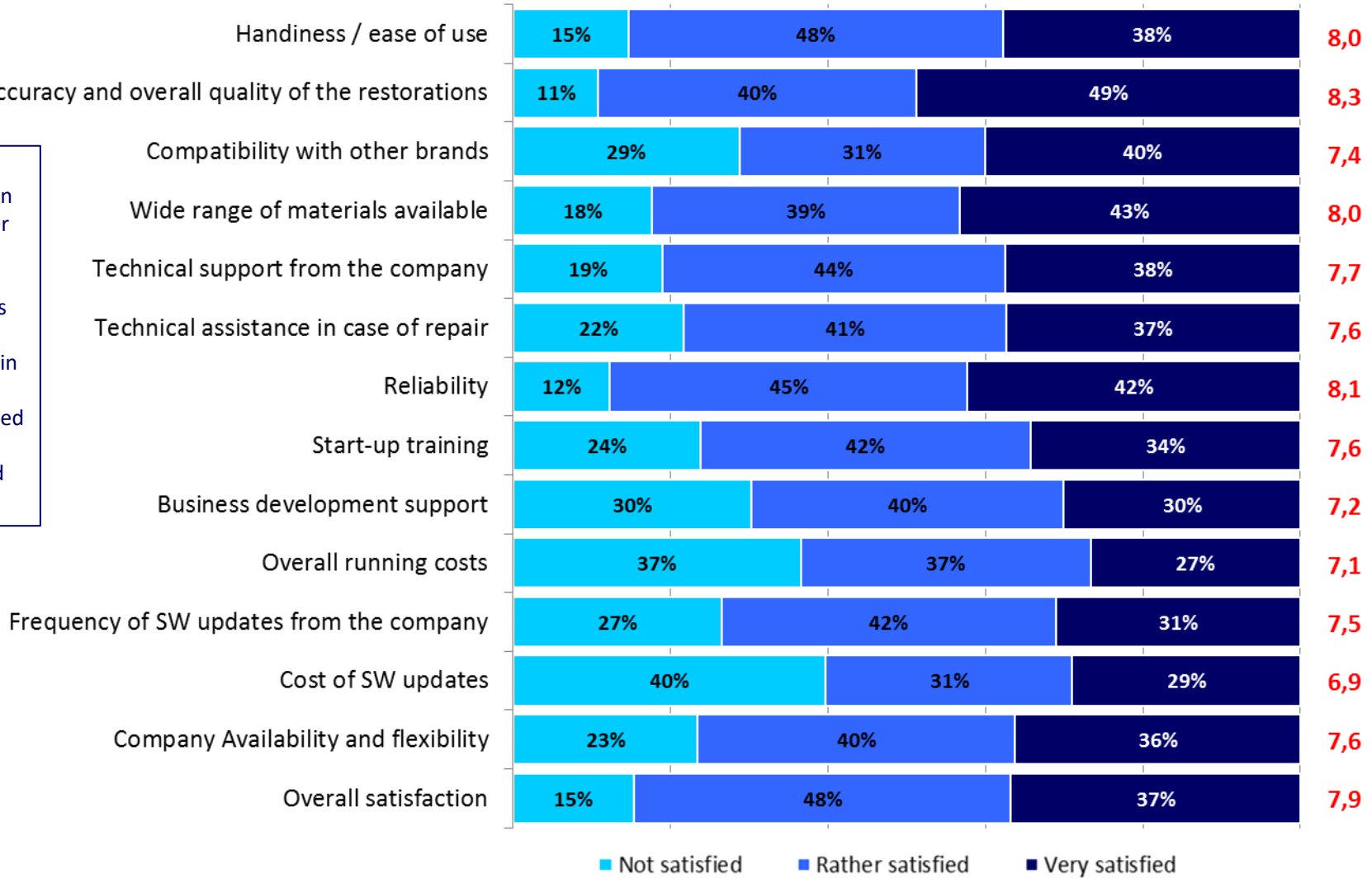
Brand Advocacy Score

Respondents are categorized as either "advocates", "neutrals", or "detractors" of each brand. For each brand overall, the BAS subtracts the percent share of detractors from the percent share of advocates, to show net impact on word-of-mouth referrals.



Satisfaction: Overall

Rate your satisfaction with the following CAD-CAM companies. Please use a scale where 1 represents "Completely not satisfied" and 10 represents "Completely satisfied."



NOTE
The 10 possible answers have been further clustered in order to better highlight the differences in the scores among the items and the brands evaluated. The clustering is the following:
Not satisfied: the scores grouped in this cluster are from 1 to 6.
Rather satisfied: the scores grouped in this cluster are from 7 to 8.
Very satisfied: the scores grouped in this cluster are from 9 to 10.

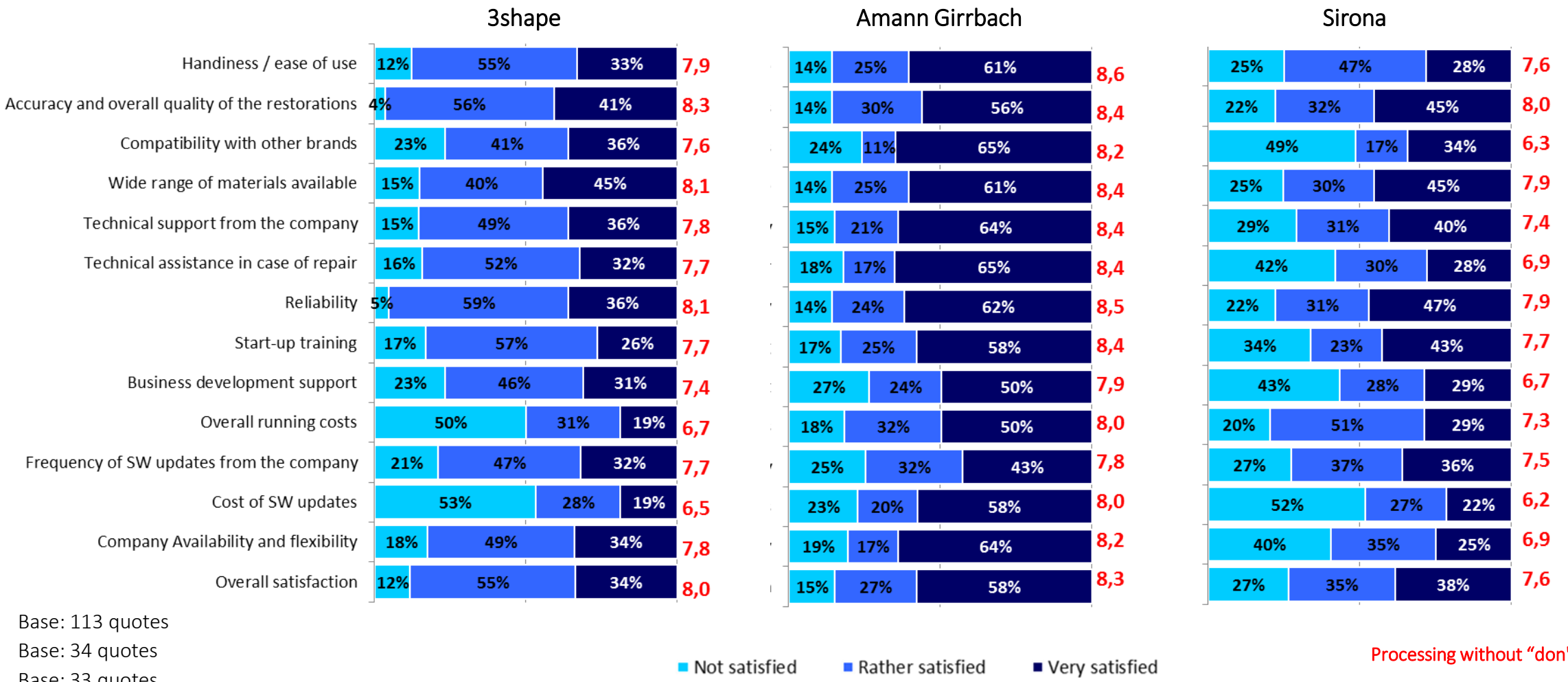
Most satisfactory items were the accuracy and quality of the restorations and the reliability, while the least ones were the cost of SW updates and the overall running costs.

Processing without "don't know"

Base: 435 quotes

Satisfaction: 3shape, Amann Girrbach, Sirona

Rate your satisfaction with the following CAD-CAM companies. Please use a scale where 1 represents "Completely not satisfied" and 10 represents "Completely satisfied."



Base: 113 quotes

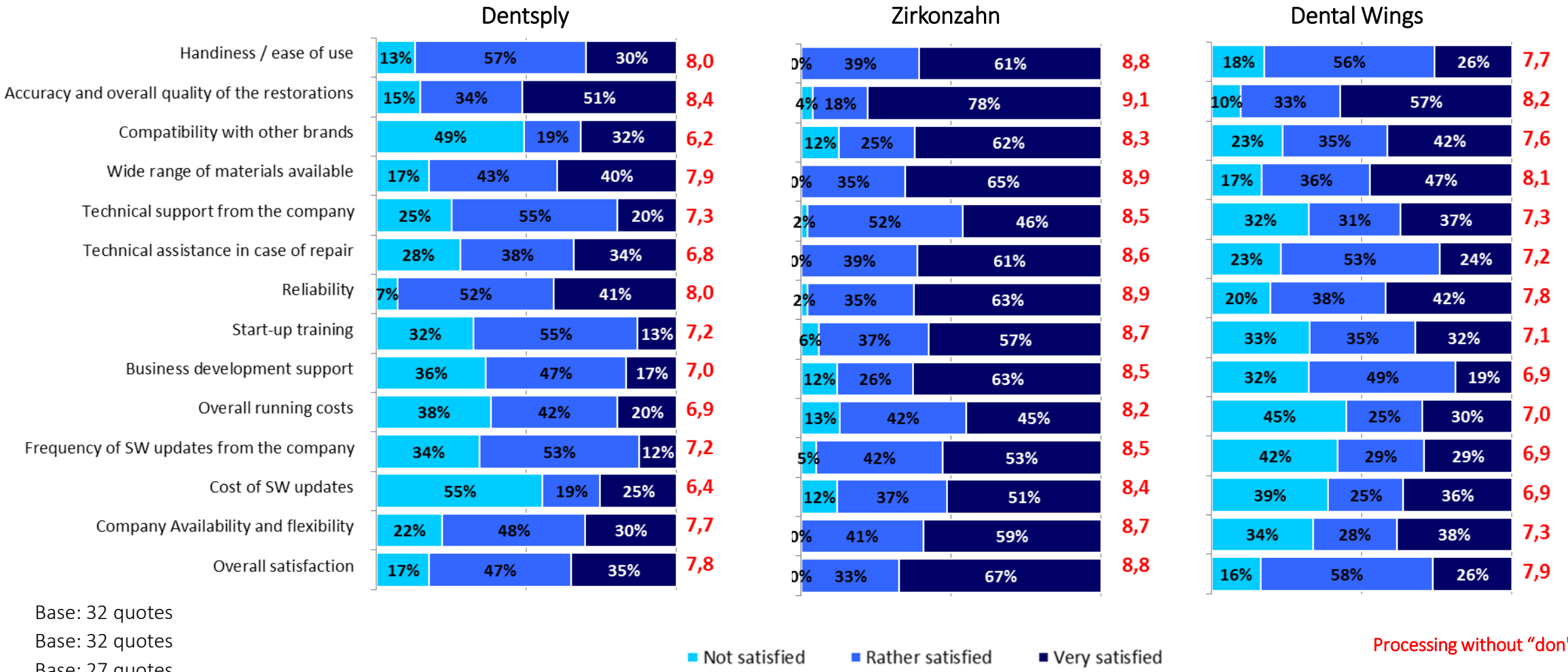
Base: 34 quotes

Base: 33 quotes

Processing without "don't know"

Satisfaction: Dentsply, Zirkonzahn, Dental Wings

Rate your satisfaction with the following CAD-CAM companies. Please use a scale where 1 represents "Completely not satisfied" and 10 represents "Completely satisfied."

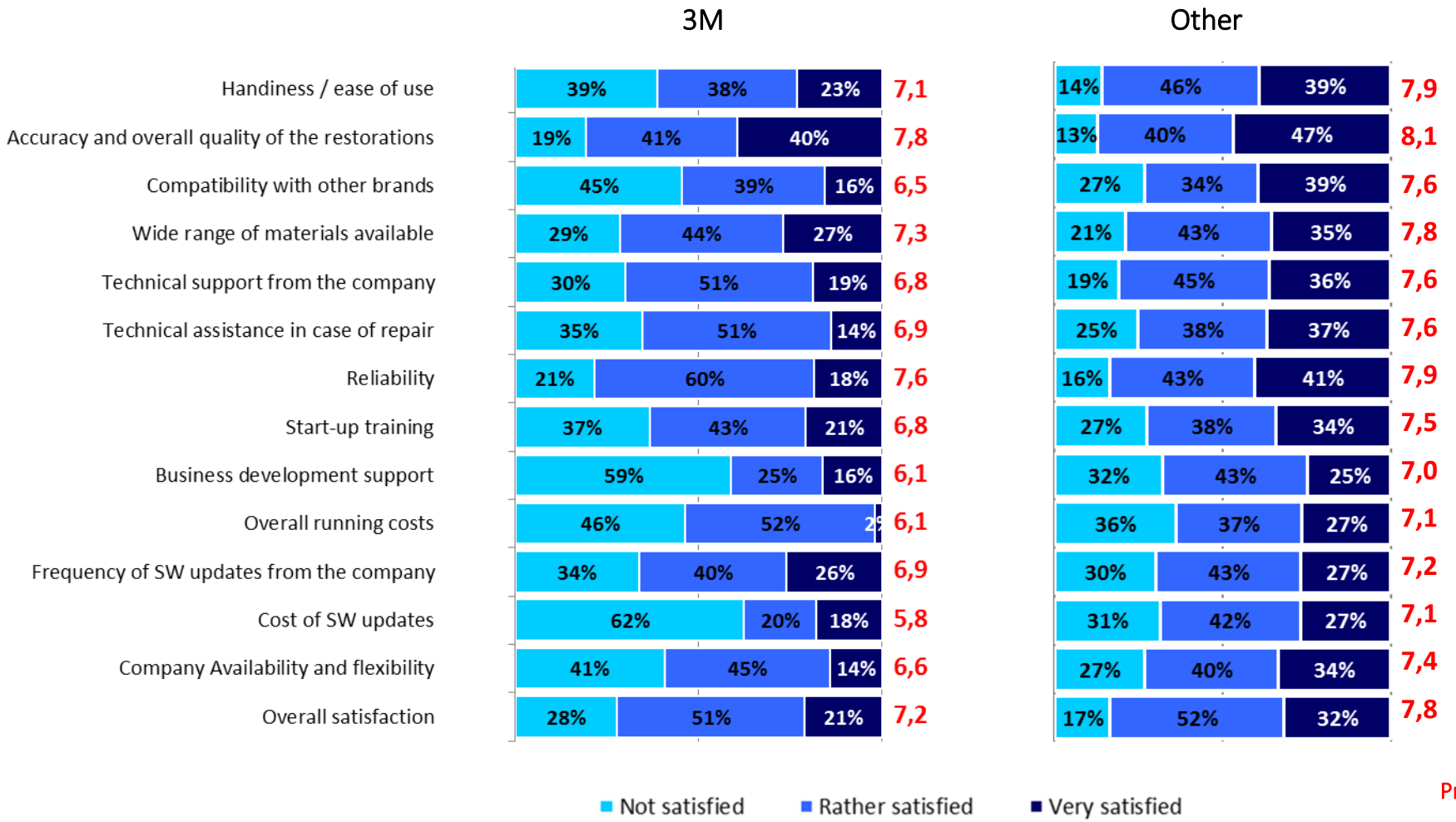


Base: 32 quotes
Base: 32 quotes
Base: 27 quotes

Processing without "don't know"

Satisfaction: 3M, Others

Rate your satisfaction with the following CAD-CAM companies. Please use a scale where 1 represents "Completely not satisfied" and 10 represents "Completely satisfied."



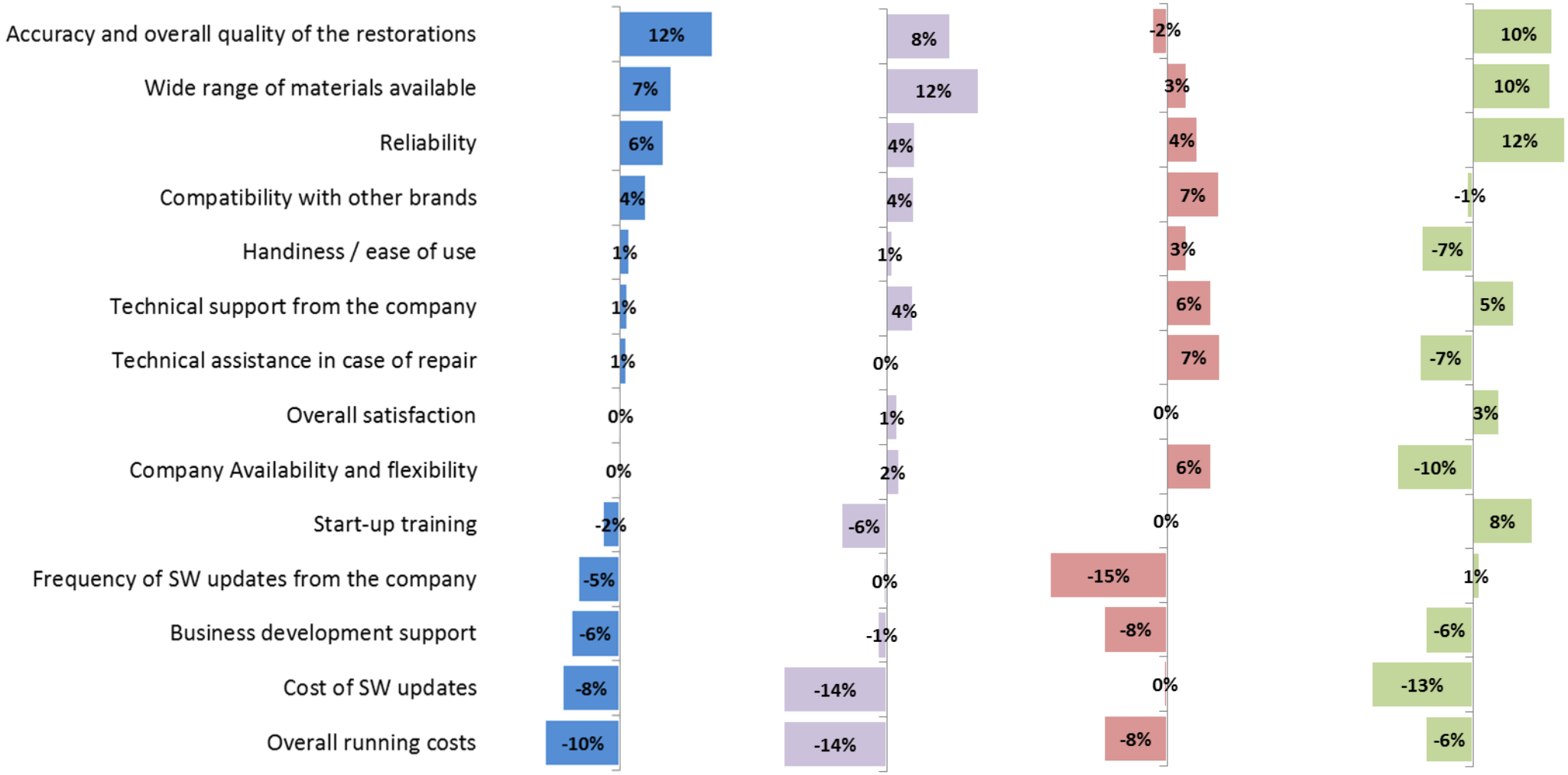
Base: 22 quotes

Base: 145 quotes

Processing without "don't know"

Satisfaction

Rate your satisfaction with the following CAD-CAM companies. Please use a scale where 1 represents "Completely not satisfied" and 10 represents "Completely satisfied."



Base: 435 quotes
Overall

Base: 113 quotes
3shape

Base: 34 quotes
Amann Girrbach

Base: 33 quotes
Sirona

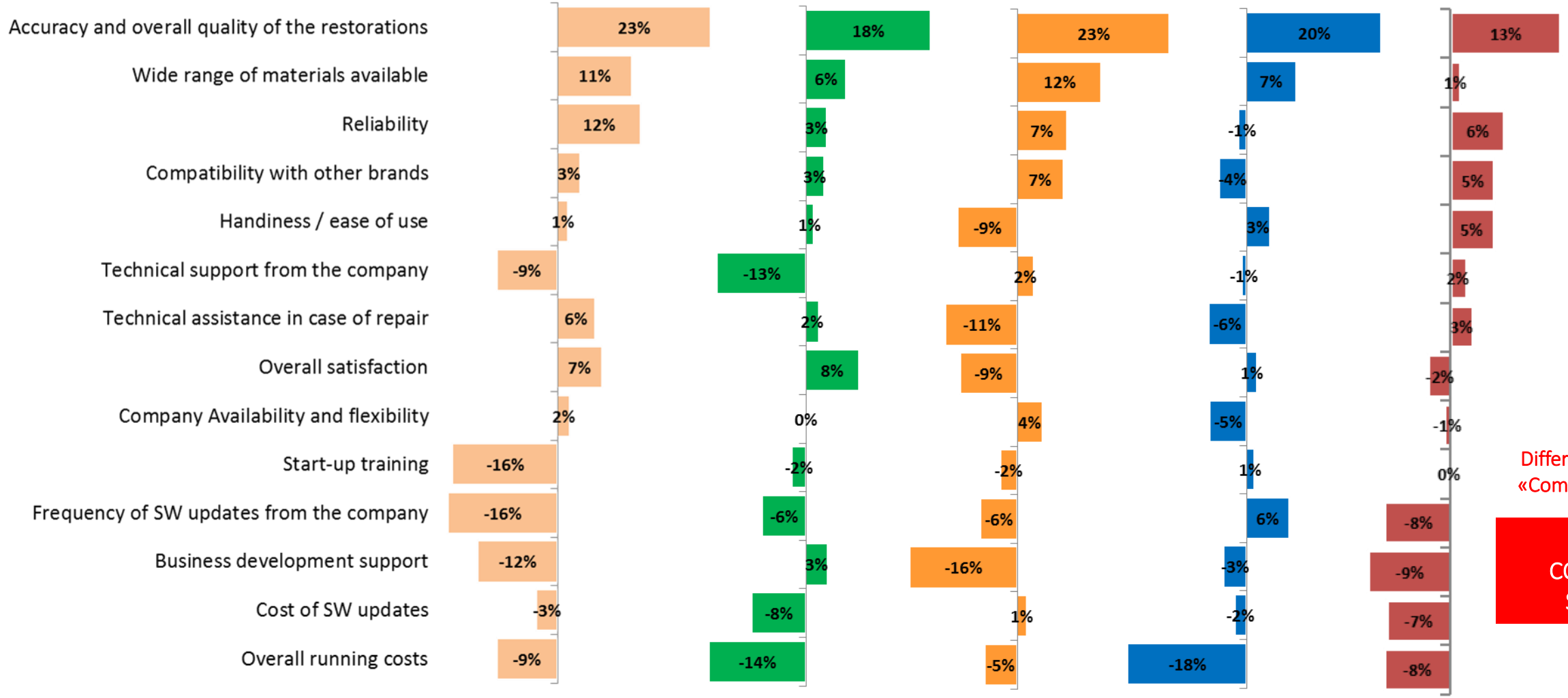
In comparison with the mean of the score "Completely satisfied", Sirona seems to perform better than average for Reliability, Accuracy and Wide range of materials, while seems to perform below average concerning Assistance, Flexibility and Ease of use.

Difference from mean «Completely satisfied»

Focus on COMPLETELY SATISFIED

Satisfaction

Rate your satisfaction with the following CAD-CAM companies. Please use a scale where 1 represents "Completely not satisfied" and 10 represents "Completely satisfied."



Base: 32 quotes Dentsply

Base: 32 quotes Zirkonzahn

Base: 27 quotes Dental Wings

Base: 22 quotes 3M

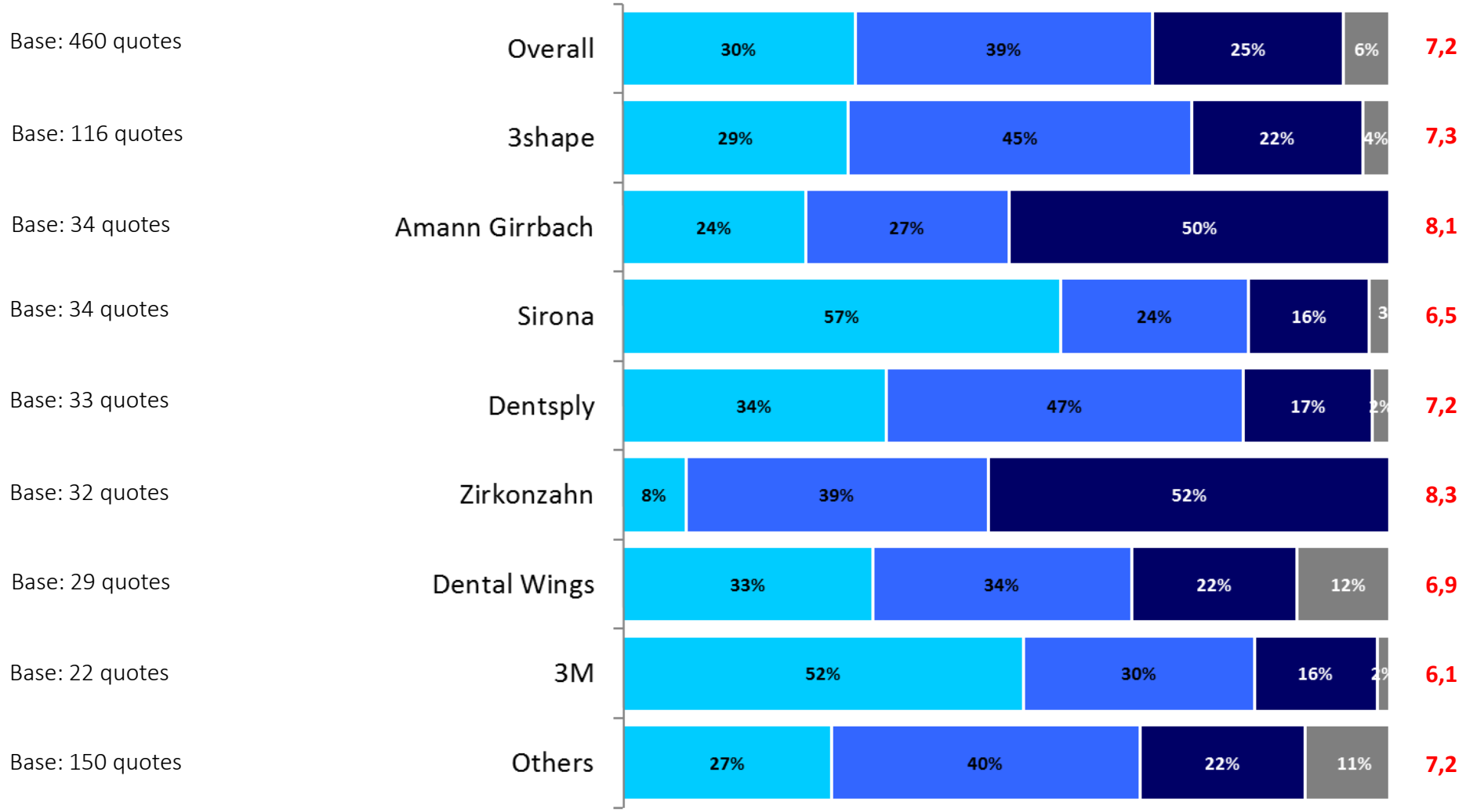
Base: 145 quotes Others

Difference from mean «Completely satisfied»

Focus on COMPLETELY SATISFIED

Perceived value

To what extent would you agree that the CAD-CAM products of the following manufacturers are worth their purchasing price? Please use a scale where 1 represents "Strongly Disagree" and 10 represents "Strongly Agree".



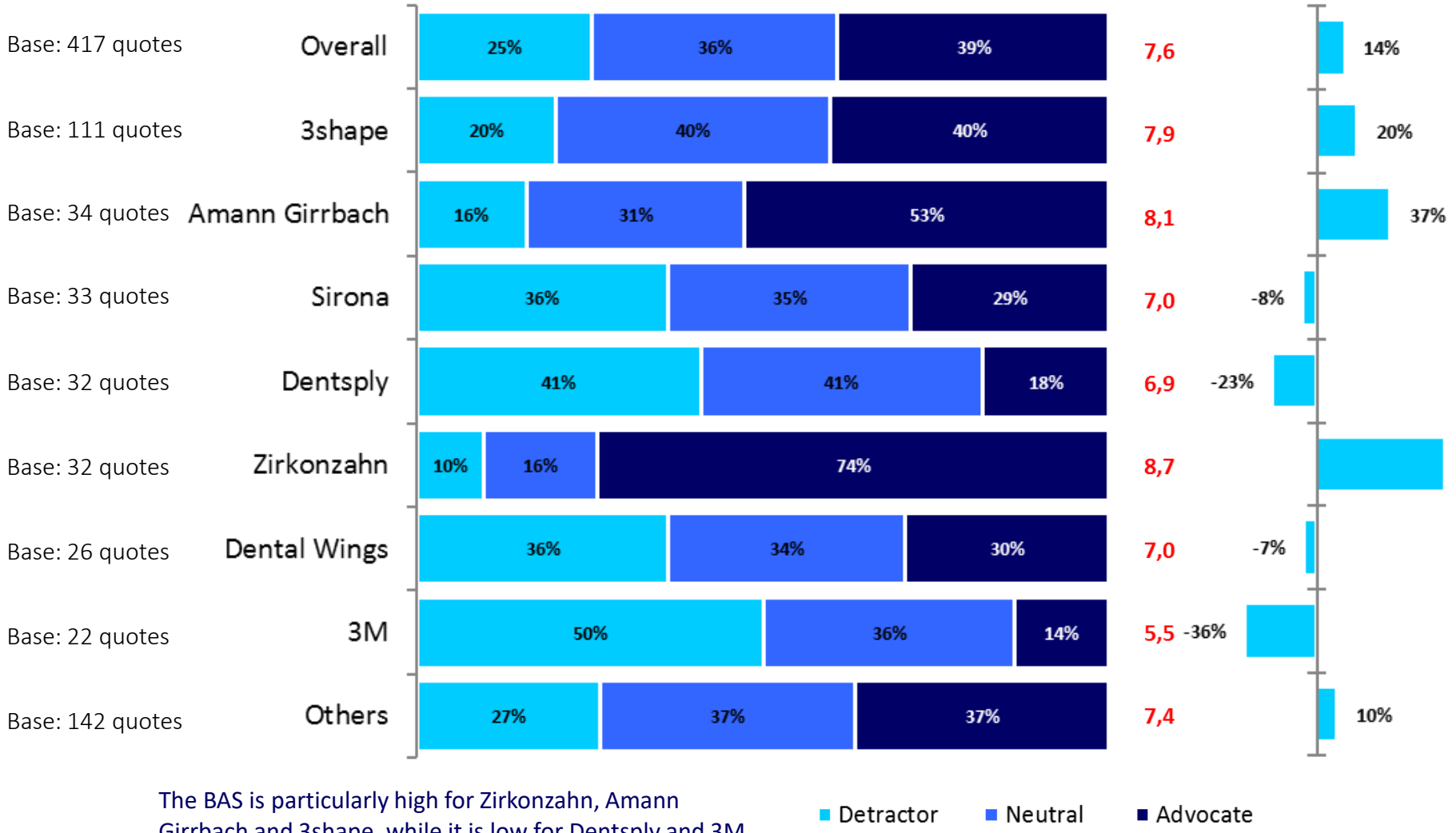
NOTE
The 10 possible answers have been further clustered in order to better highlight the differences in the scores among the brands evaluated. The clustering is the following:
Low Value/Price ratio: the scores grouped in this cluster are from 1 to 6.
Medium Value/Price ratio: the scores grouped in this cluster are from 7 to 8.
High Value/Price ratio: the scores grouped in this cluster are from 9 to 10.

Amann Girrbach and Zirkonzahn show a relevant difference from the rest of the investigated brands, as their scores are the only ones above 8.

- Low Value/Price ratio
- Medium Value/Price ratio
- High Value/Price ratio
- Don't Know

Recommendation: Brand Avocacy Score

How likely are you to recommend the following CAD-CAM companies to a colleague? Please use a scale where 1 represents "Extremely Unlikely" and 10 represents "Extremely Likely."



NOTE
The 10 possible answers have been further clustered in order to better highlight the differences in the scores among the brands evaluated. The clustering is the following:
Detractor: the scores grouped in this cluster are from 1 to 6.
Neutral: the scores grouped in this cluster are from 7 to 8.
Advocate: the scores grouped in this cluster are from 9 to 10.

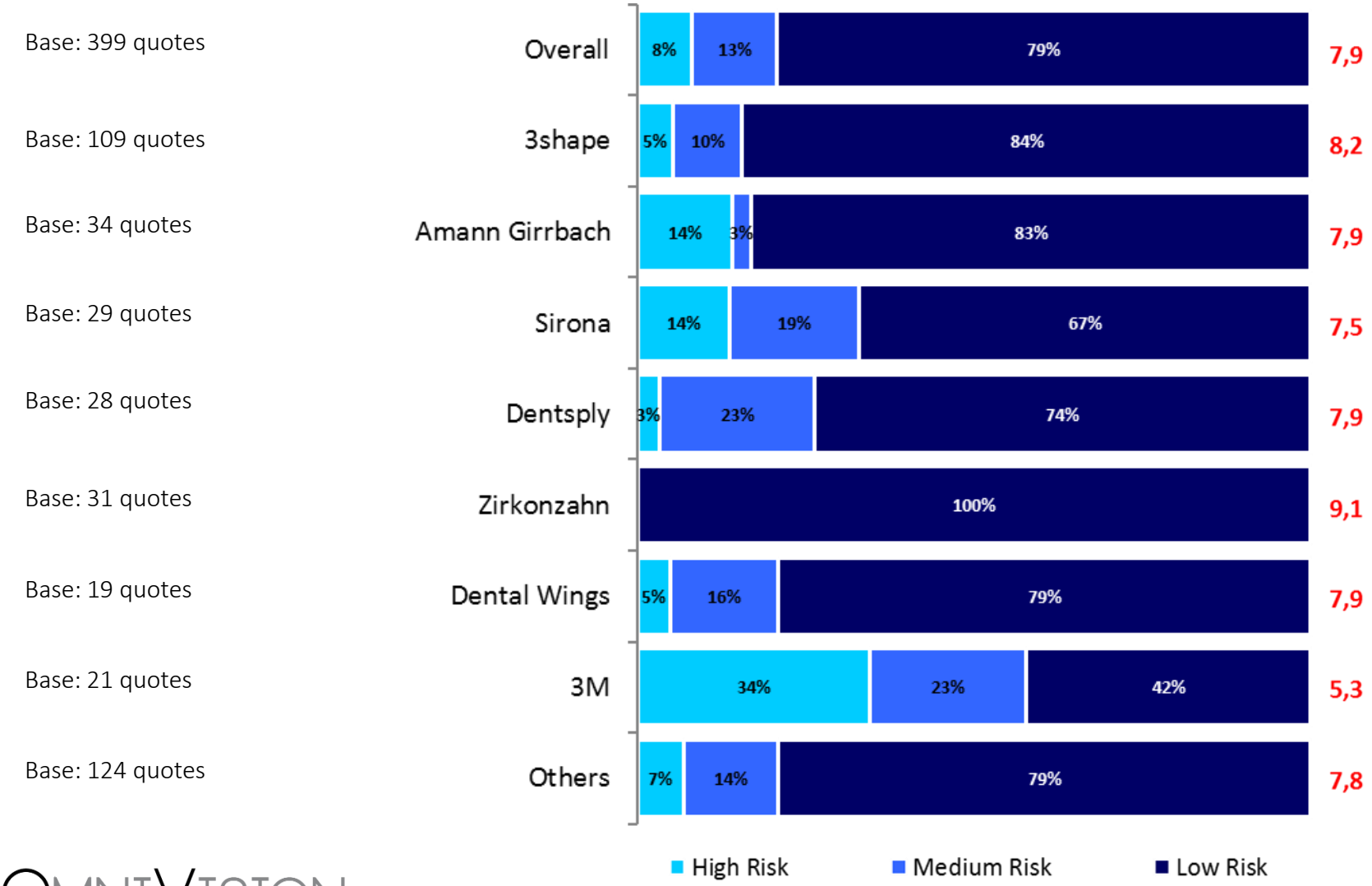
Brand Advocacy Score
Respondents are categorized as either "advocates", "neutrals", or "detractors" of each brand. For each brand overall, the BAS subtracts the percent share of detractors from the percent share of advocates, to show net impact on word-of-mouth referrals.
It's interesting to note the rather high number of "neutrals", while, in the case of Sirona and Kavo, the portion of "Advocates" is as much as the one of "Detractors".

The BAS is particularly high for Zirkonzahn, Amann Girrbach and 3shape, while it is low for Dentsply and 3M.

Processing without "don't know"

Repurchase intention

5 years from now, how likely are you to still be using the following CAD-CAM companies' products? Please use a scale where 1 represents "Definitely Will Not Be Using" and 10 represents "Definitely Will Be Using."



NOTE
The 10 possible answers have been further clustered in order to better highlight the differences in the scores among the brands evaluated. The clustering is the following:
High Risk: the scores grouped in this cluster are from 1 to 3.
Medium Risk: the scores grouped in this cluster are from 4 to 6.
Low Risk: the scores grouped in this cluster are from 7 to 10.

The defection risk derives from the assumption that a low value of repurchase intention may mean a risk that in the future the product will not be used anymore. Lower scores in the repurchase intention bear a higher defection risk, while higher scores mean that a current customer will probably still be using that product also in the future.

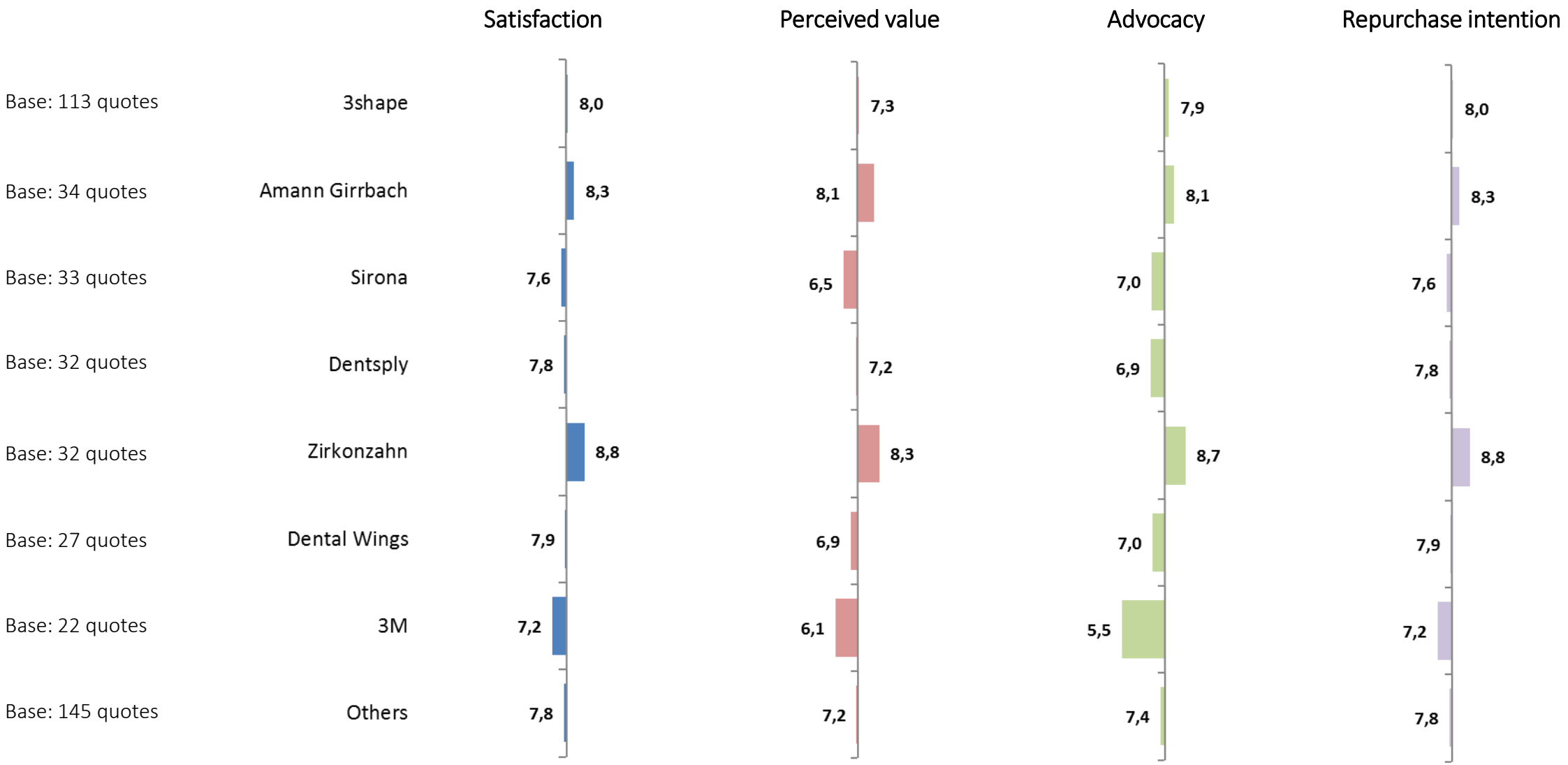
3shape and Zirkonzahn again have higher than average scores concerning the repurchase intention and they show the highest percentages of Low risk among their clients.

Processing without "don't know"

Loyalty metrics compared

Focus on mean

Satisfaction, Perceived value, Advocacy, Repurchase intention



Customer Satisfaction

In-depth analysis

Customer satisfaction - Correlation analysis

BIVARIATE CORRELATION ANALYSIS

The bivariate correlation analysis is a technique that helps **to identify and measure the influence of the independent variables** (in this case, each brand positioning item) **on the dependent one** (in this case, the **recommendation**). The bivariate correlation analysis has been used to quantify the relation between the score on the single factors and the rating on the recommendation

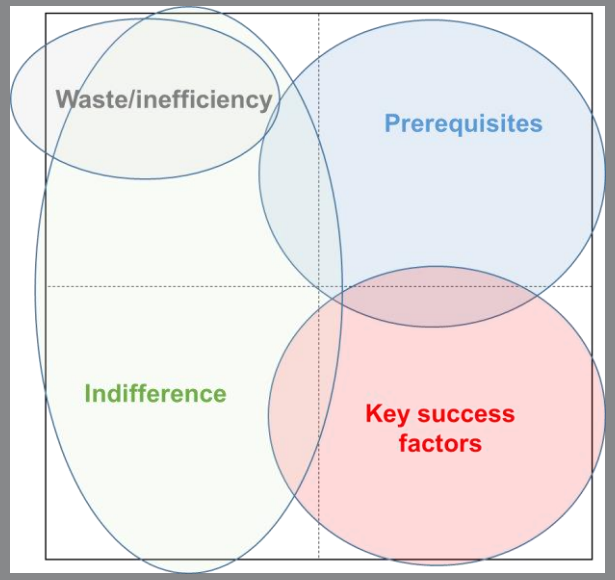
The considerations coming from the bivariate analysis, allow us to highlight some important issues. The items have a different meaning according to the point of view with which they are considered: the satisfaction related to the whole market or the satisfaction related to a single product/brand.

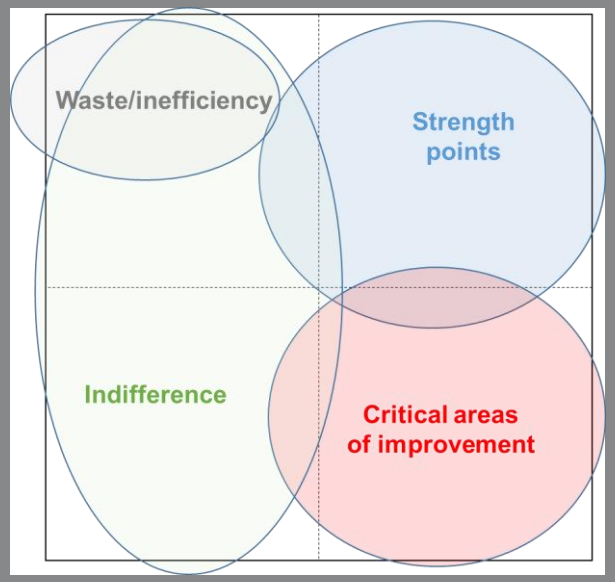
Satisfaction related to the whole market

Here we can highlight some prerequisites (upper-right corner of the map, where almost all the competitors satisfy the market), some key factors of success (lower-right corner of the map, where companies are not always able to satisfy customers with regard to strategic issues), and indifference areas (lower-left side of the map) which become waste/not efficient areas when a company decides to invest in those items belonging to the upper-left side of the map since, they tends to satisfy the market but they actually don't affect the overall satisfaction at all.

Satisfaction related to a specific company/product

Here the scheme is the same, but we can highlight the strength points in the upper-right side of the map, which can determine inefficiency or low differentiation if placed in the left side of the map. In the lower-right we can note an improvement area, where we can find the weak points of a certain company.

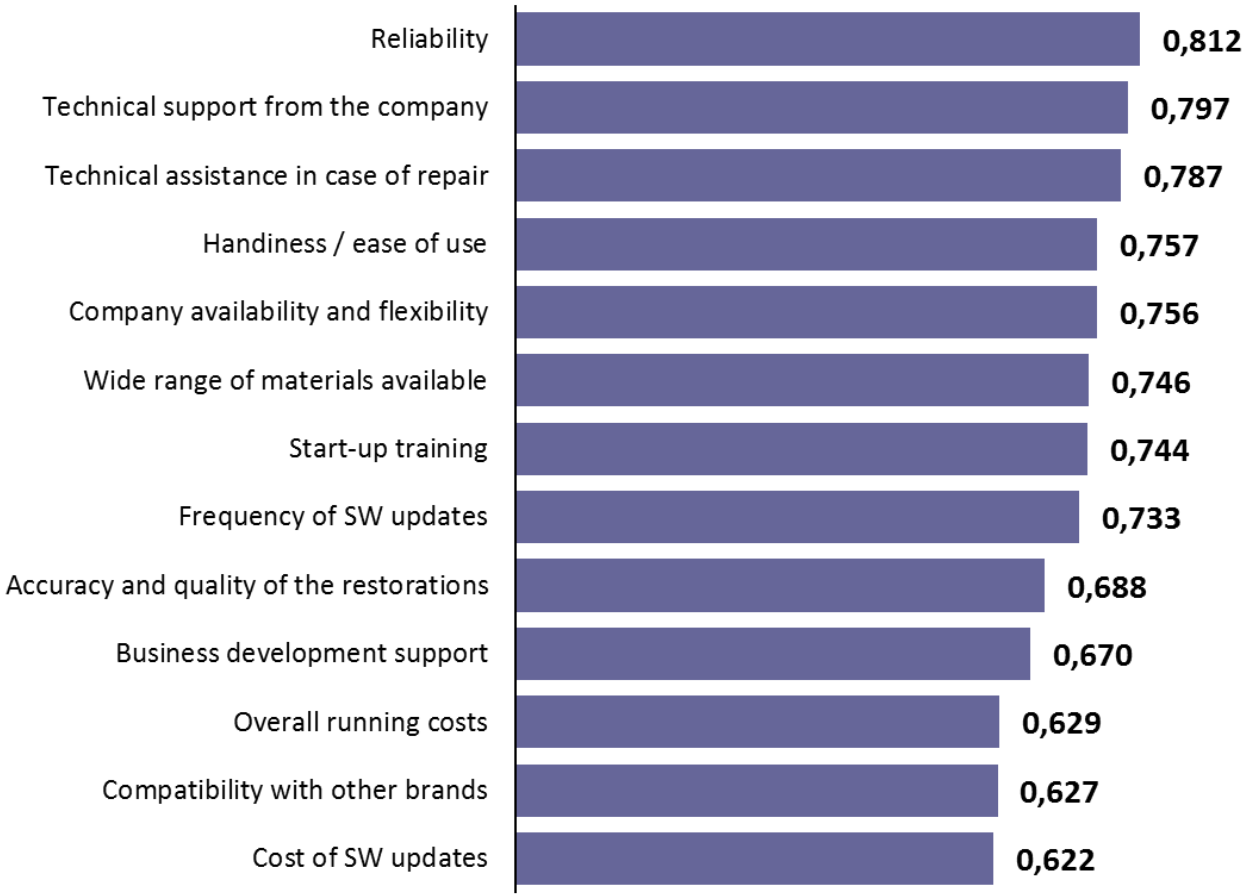




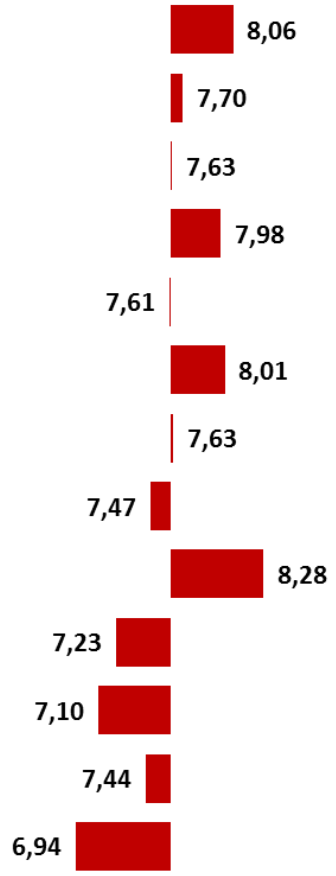
Customer satisfaction - Correlation analysis

How much are worth the single items on the overall satisfaction?

Items weight on overall satisfaction

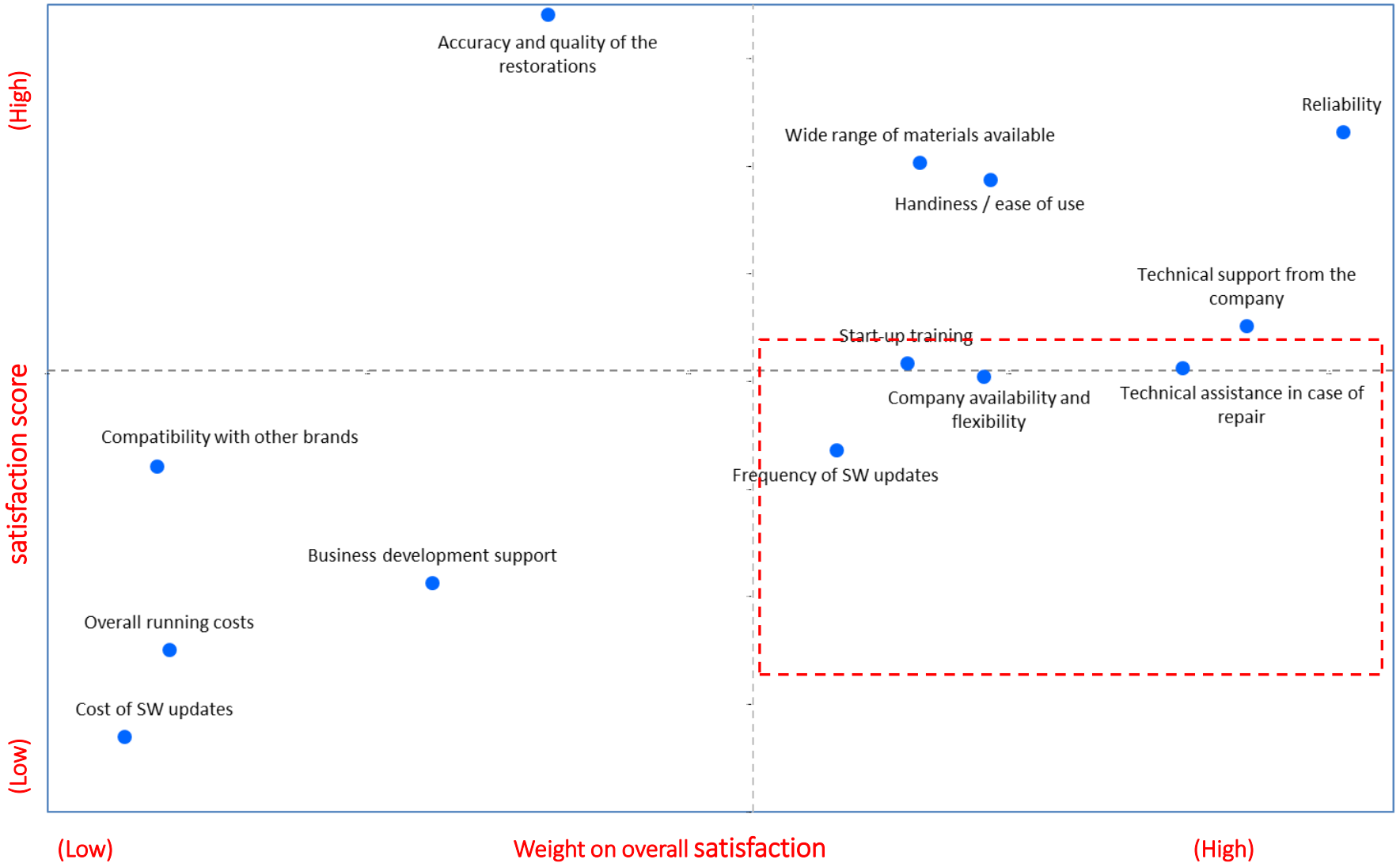


Items satisfaction score



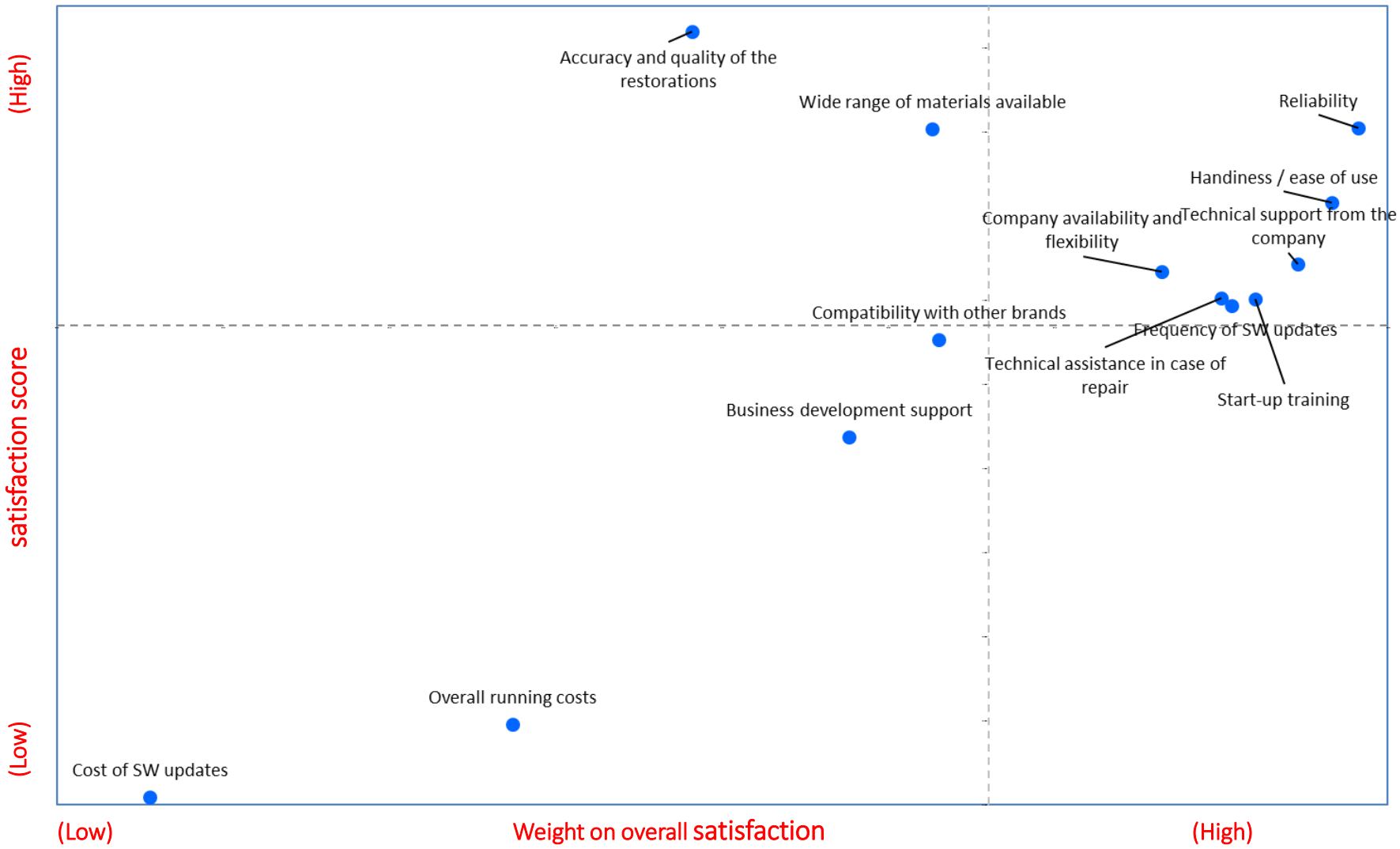
In the correlation data processing all items proved to be relevant, thus all items are included in the analysis.
The Reliability and the support and assistance from the company have the highest weight on the overall satisfaction, while the cost of SW updates and the compatibility with other brands seem to have the lowest weight.

Customer satisfaction - Correlation analysis Overall



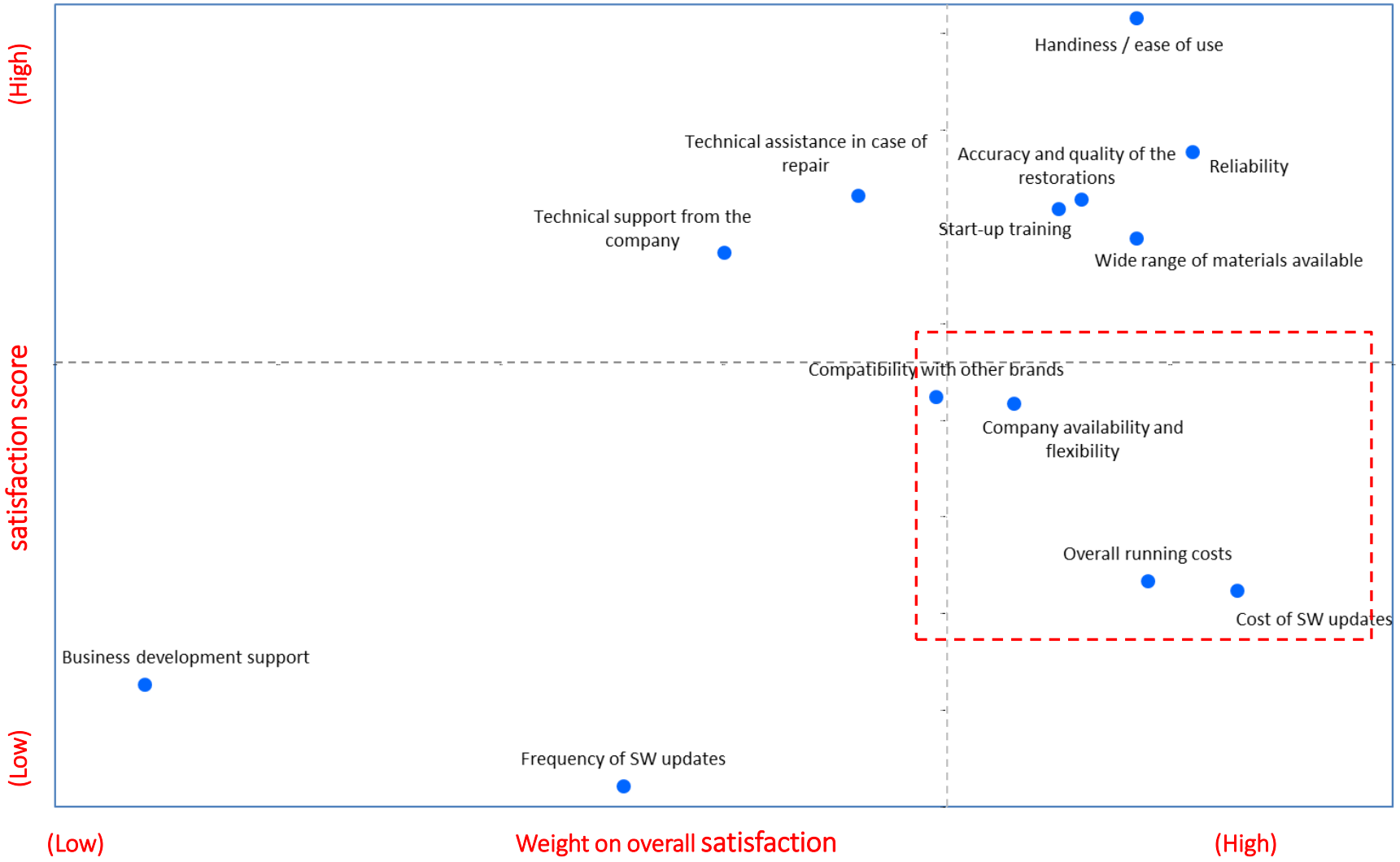
Not all the most relevant items in the assessment of the overall satisfaction belong to a specific area of service or technical features of the products, but there is a mix of them.
It's interesting to note, however, that the items more linked to the service area have received lower satisfaction rates, such as Technical assistance, Company availability and Start-up training.
In overall, the costs don't seem to be relevant in the assessment of the overall satisfaction.

Customer satisfaction - Correlation analysis 3SHAPE



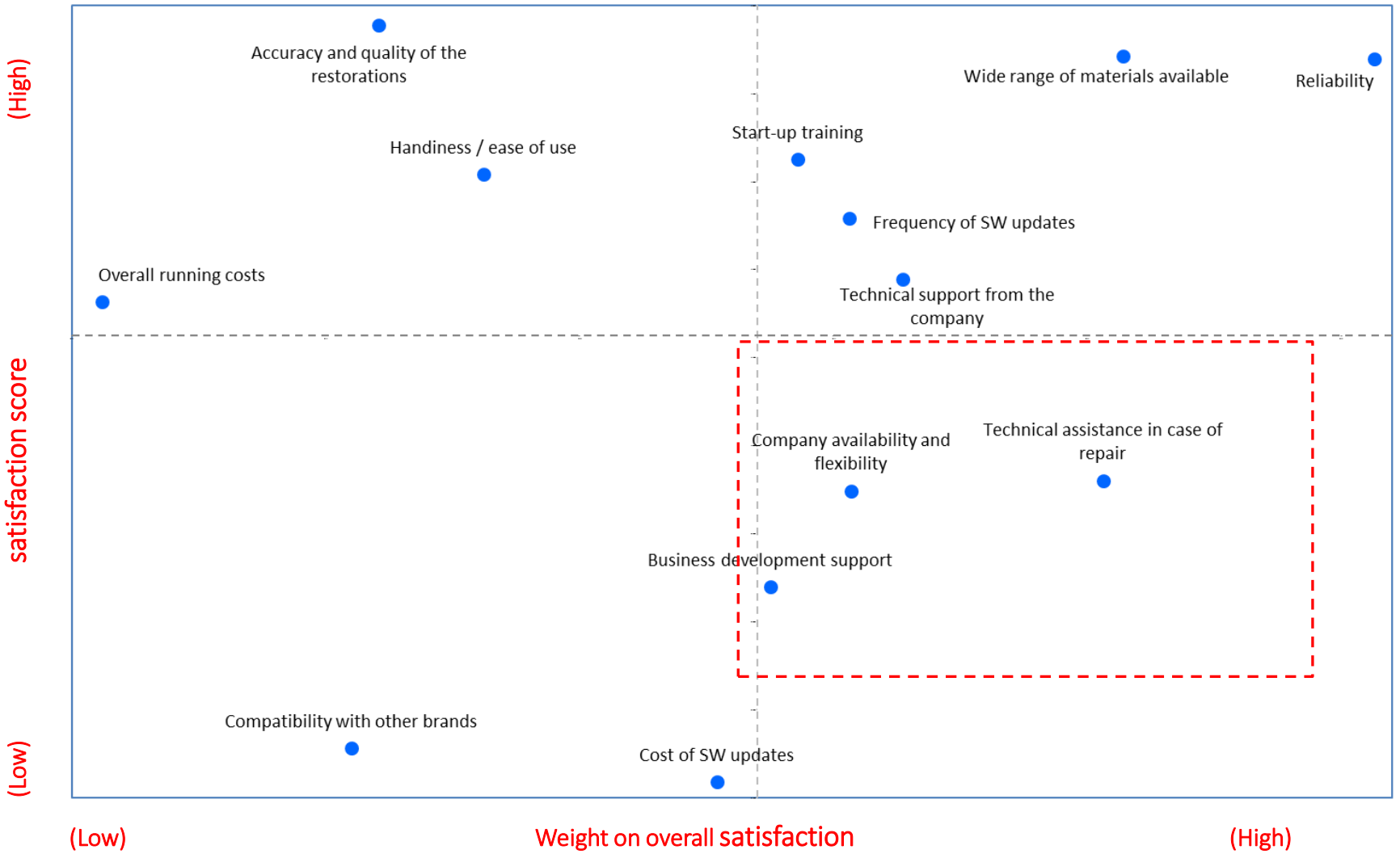
As seen in the overall map, the cost areas is not part of the most relevant items affecting the overall satisfaction.
Moreover, all important items seem to be quite satisfactory to 3shape users.
It must be said, however, that some items look to be in a weaker position, such as Start-up training, Frequency of SW updates and Technical assistance in case of repair.

Customer satisfaction - Correlation analysis AMANN GIRRBACH



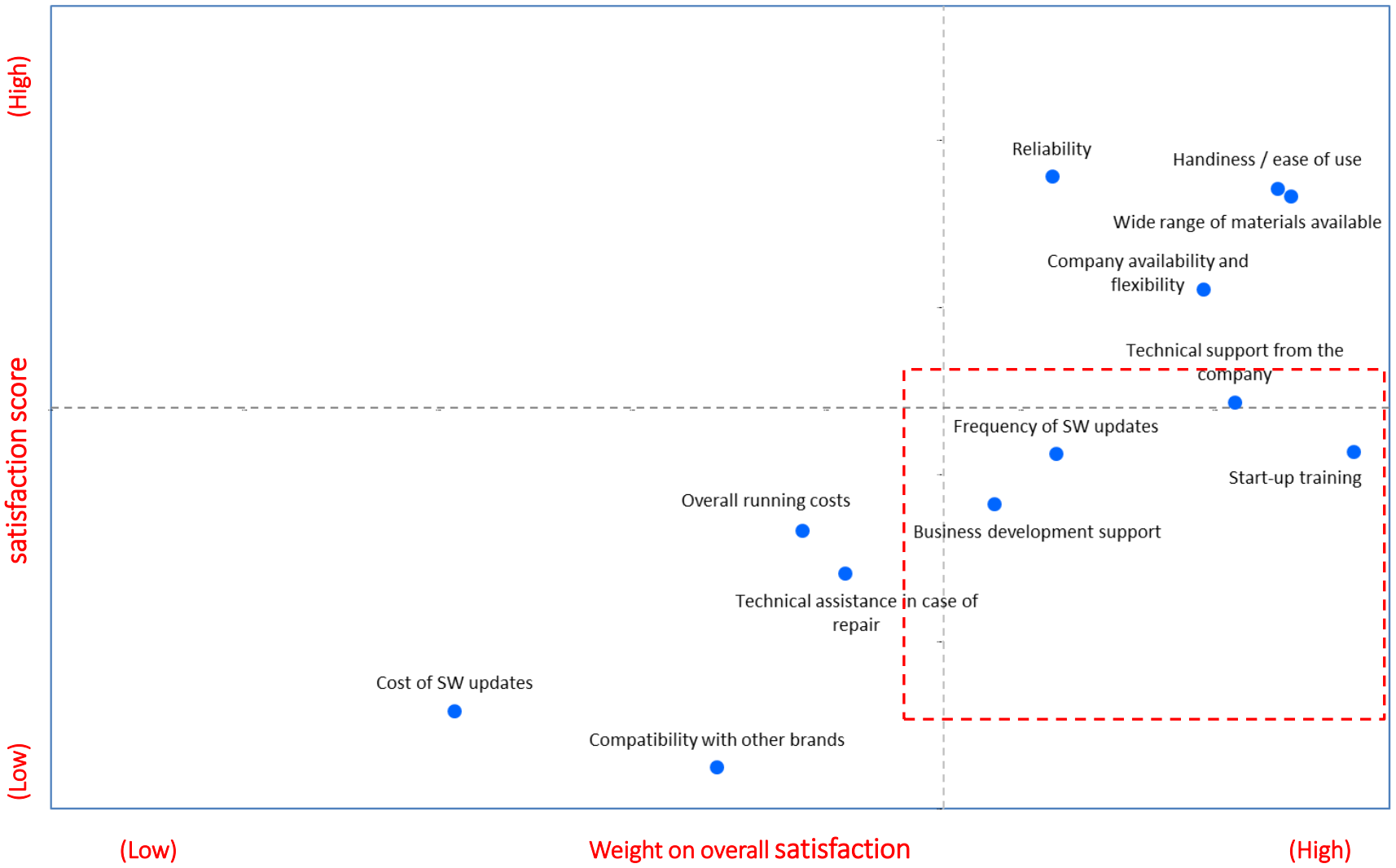
Amann Girrbach overall satisfaction seems to be affected by several items, being important to its users, but not all of them show a high score.
The weakest items are related to the "Cost" area, to the Availability and flexibility of the company and the Compatibility with other brands.
Technical assistance and Technical support, despite showing very good rates, looks to be less important than other items.

Customer satisfaction - Correlation analysis SIRONA



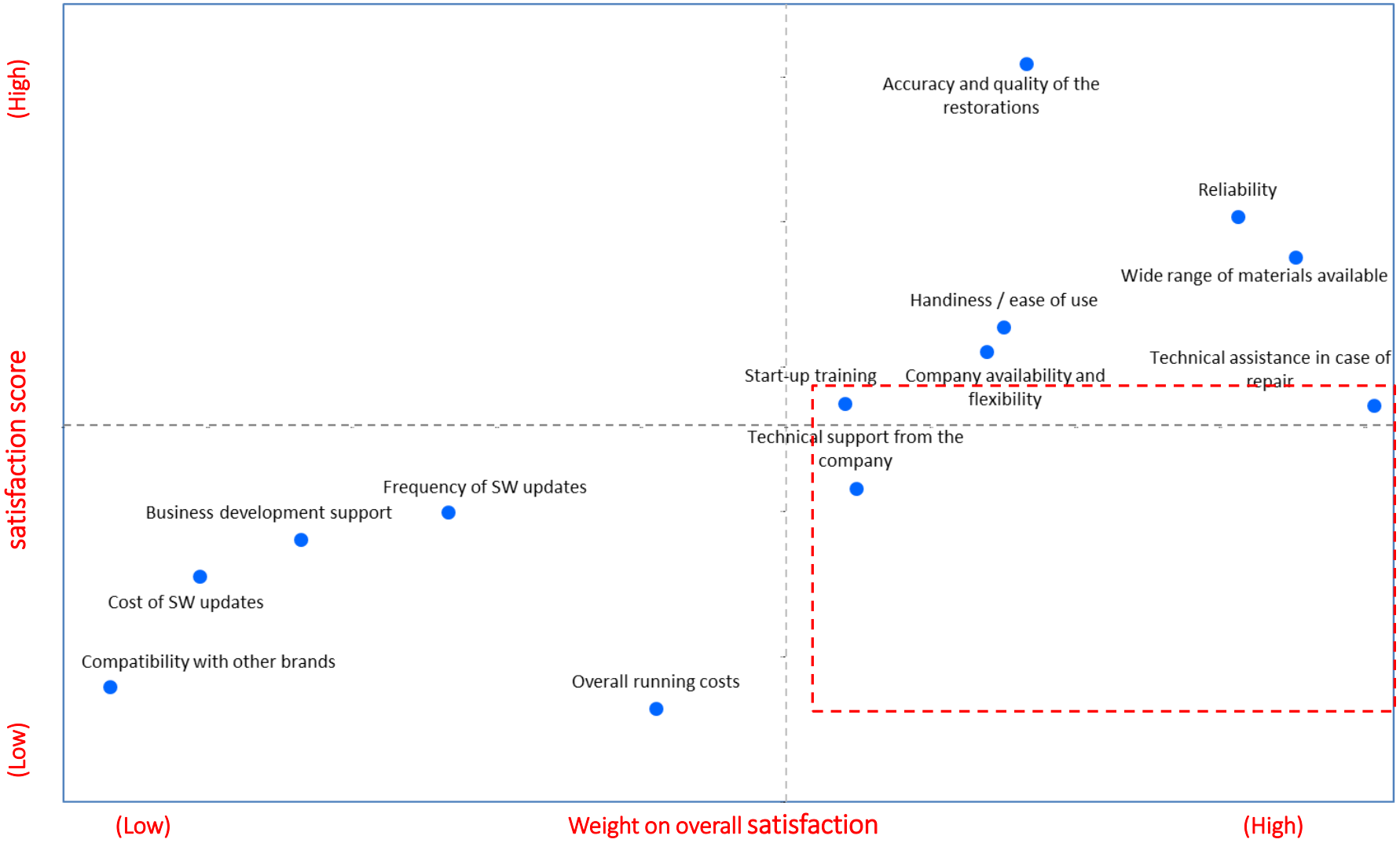
The Cost of the SW updates looks to be very close to be an issue with Sirona customers, as it received very low scores, and it is very close to the region where the importance in the assessment of the overall satisfaction is higher than average.
Other weak items are Technical assistance, Company availability and flexibility and Business development support.

Customer satisfaction - Correlation analysis DENTSPLY



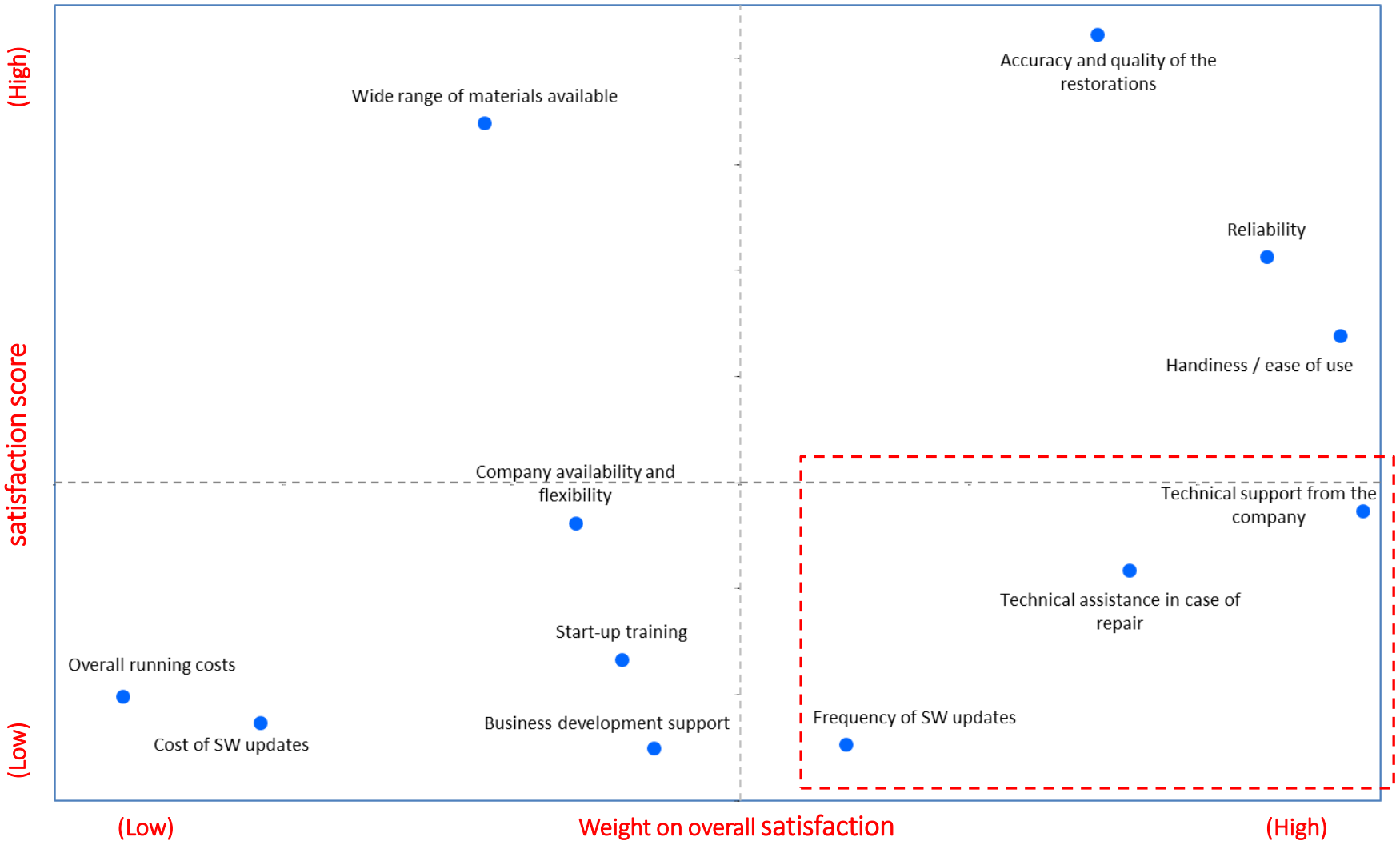
In the map for Dentsply, the weakest items in the overall satisfaction look to belong to the area of support from the company, such as Start-up training, Business development support, Technical support, but also the Frequency of SW updates is felt to be important, while its rating was not so satisfactory.

Customer satisfaction - Correlation analysis ZIRKONZAHN



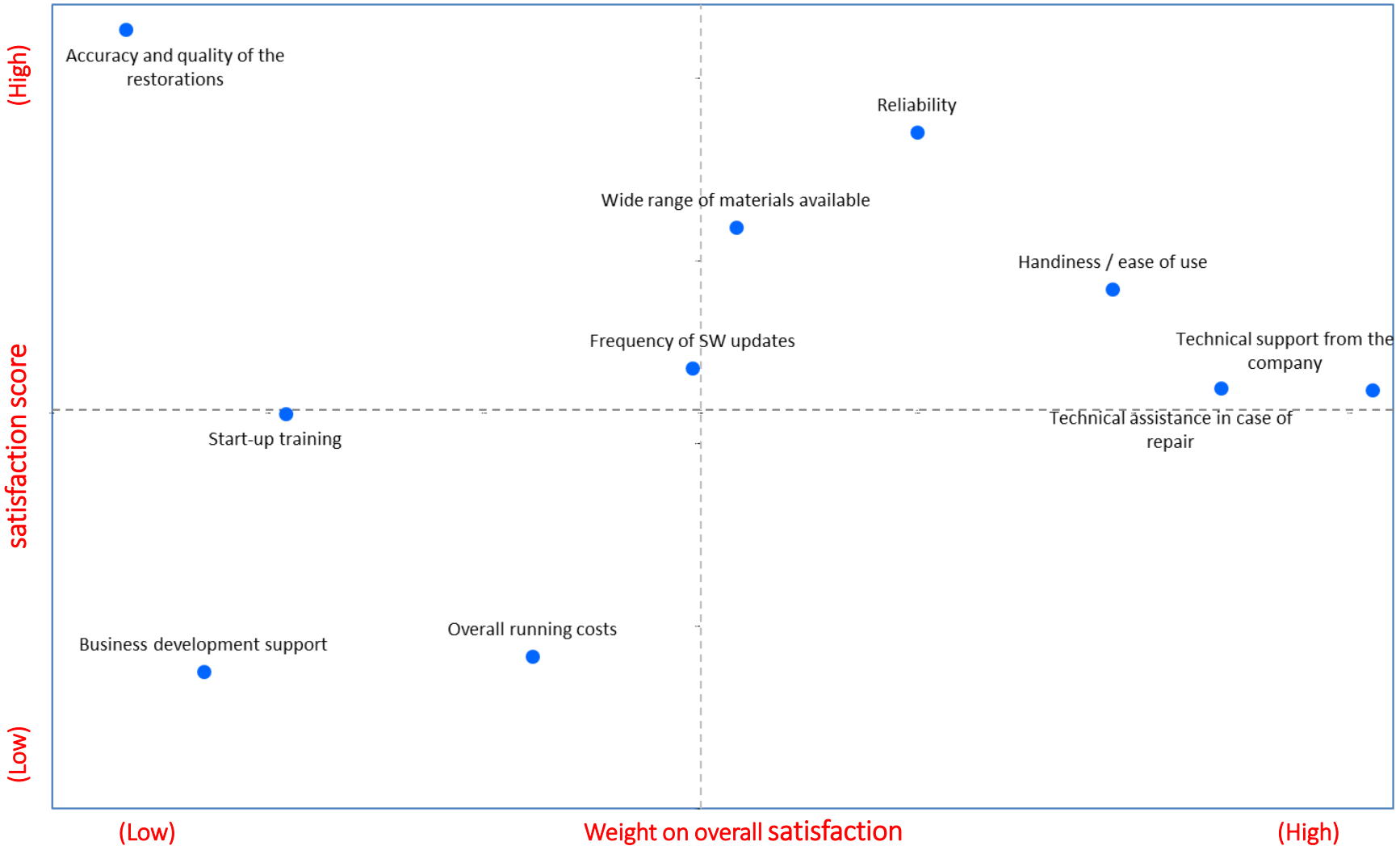
The map for Zirkonzahn is quite coherent and almost all important items have received satisfactory ratings.
Among the weakest ones, can be mentioned Start-up training, Technical support and Technical assistance in case of repair. All of them belongs to the “service” area.

Customer satisfaction - Correlation analysis DENTAL WINGS



Dental Wings map shows several interesting situations.
The items being close to critical area are several and none is related to a technical feature of the equipment: all of them are related to services provided by the company.
The Wide range of materials available received satisfactory ratings but they don't seem to affect the overall satisfaction relevantly.

Customer satisfaction - Correlation analysis 3M



Like already seen for 3shape, the map for 3M doesn't show a specific issue in the lower-right side of the map.
Close to this area there are the technical assistance in case of repair and the Technical support from the company.
Some of the items have been removed due to the fact that they are not relevant in 3M correlation analysis.

Customer satisfaction: Factor analysis

The reduction into factors allowed us to obtain 4 main drivers, **"Product quality"**, **"Support and assistance"**, **"Management costs"**, **"Compatibility"**.

Factor 1 (Product quality) it is related to the intrinsic qualities of the product. Differently from what seen in the analysis carried out on dental practices, the first factor clearly is related to the performance of the product. Not only in terms of accuracy and reliability, but also handiness and wide range of materials available. Start-up training is considered to be a topic necessary to the use of the product, not properly related to the service a company can provide, but most of all it's necessary to the same use of the product.

Factor 2 (Support and assistance) the second factor shows all soft components related to the grade of availability and support the company can provide to their customers in the use of the digital technologies. The strongest items of this factor are the Technical support and the Business development support. It's interesting to note that what was not relevant to the assessment of the overall satisfaction in the analysis on dental practices, for the laboratories, the Business development support becomes relevant and it is among the driving items of the second factor.

4 Factors	Product quality	Support and assistance	Management costs	Compatibility
Accuracy and quality of the restorations	0,807			
Reliability	0,733			
Handiness / ease of use	0,730			
Wide range of materials available	0,607			
Start-up training	0,552			
Technical support from the company		0,734		
Business development support		0,709		
Company availability and flexibility		0,679		
Technical assistance in case of repair		0,668		
Frequency of SW updates		0,601		
Cost of SW updates			0,811	
Overall running costs			0,752	
Compatibility with other brands				0,806

Factor 3 (Management costs) The new digital technologies have to be considered a business of the dental laboratories, like it was for dental practices, so that the management costs are also important to make this business profitable for the dental labs. In this sense, the running costs and the cost for SW updates make a separate factor accounting for the overall satisfaction. This factor has not to be confused with the cost for acquiring a digital equipment, but clearly, the ordinary costs, sustained every year to run the digital business, do have their own importance.

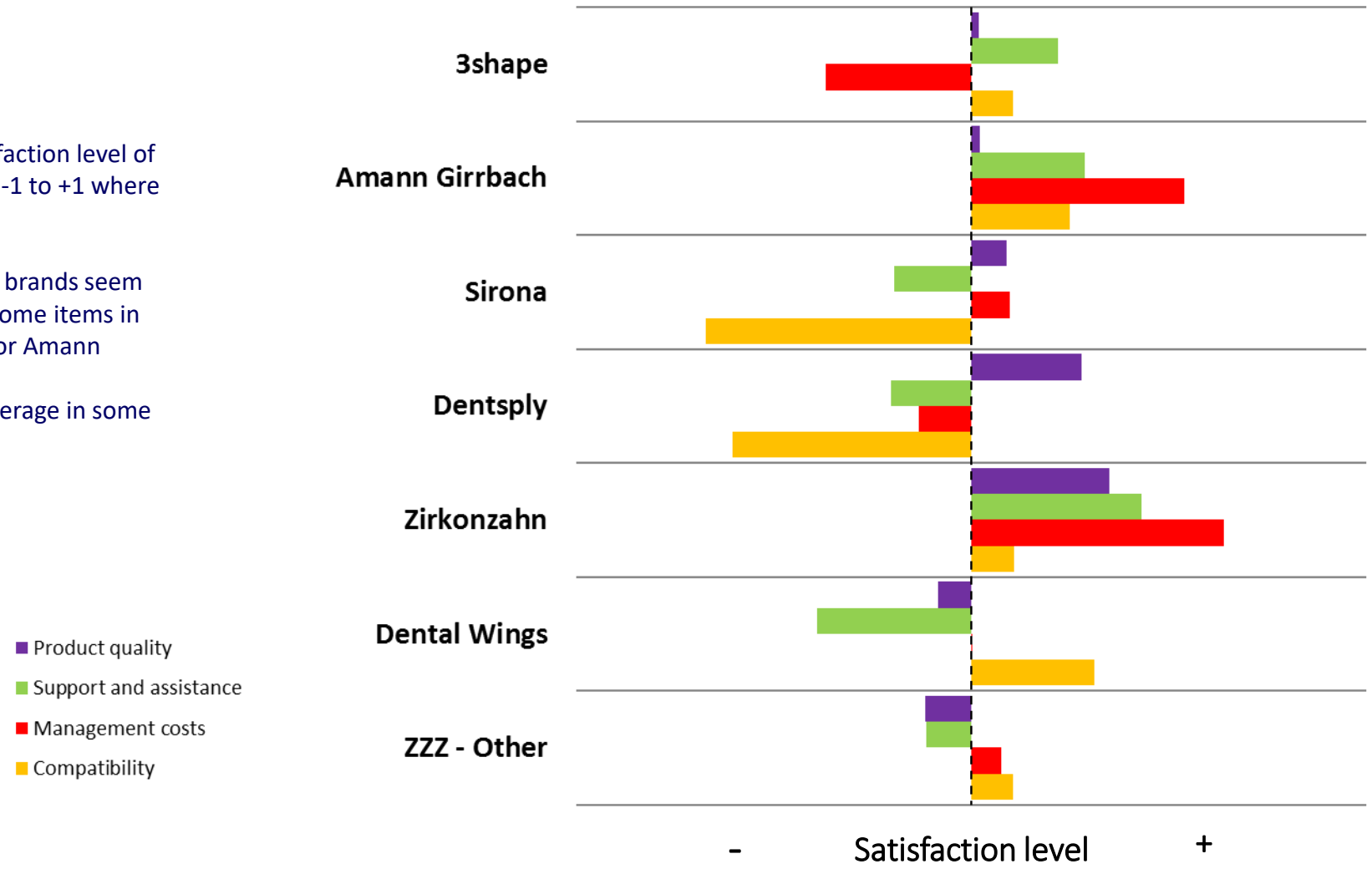
Factor 4 (Compatibility) The fourth and last factor is strictly related to the compatibility with other systems, which allows for a easy way to expand the business and meet the needs from the clients (dentists and other laboratories). An open systems surely helps the users to be more flexible and ready to face the different situations that digital restorations shows.

Customer satisfaction: Factor analysis - difference from the mean

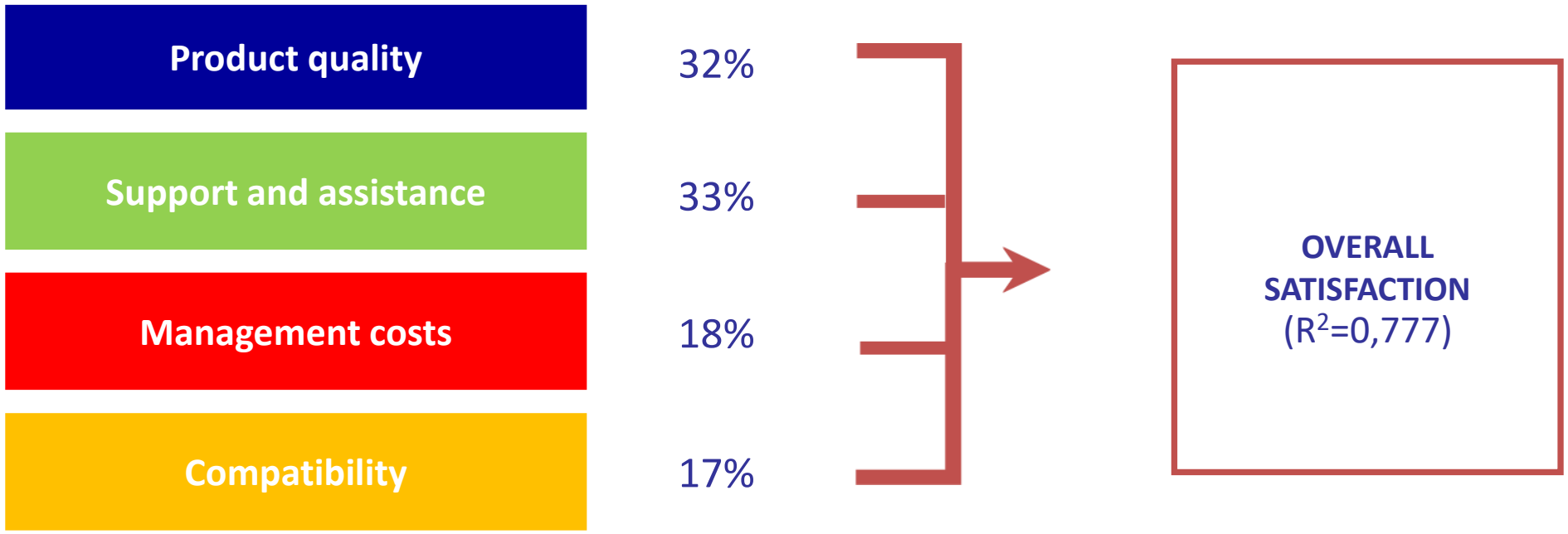
Level of satisfaction by brand on the factors resulting from the factor analysis.

The displayed values represent the satisfaction level of those factors, with a value ranging from -1 to +1 where 0 represents the overall mean value.

As shown in the chart on the right some brands seem to perform better in the satisfaction of some items in comparison to other ones, as happens for Amann Girrbach and Zirkonzahn.
Other brands seem to perform below average in some of the considered factors.



Customer satisfaction: Multiple regression analysis



What seen in the factor analysis takes here an assessment with regard to the importance that the multiple regression analysis highlights the single factors may have in determining the overall satisfaction.

Like it happened with the regression analysis on dental practices, the value of R2 is really high (0,777), so that a large portion of satisfaction can be explained by the items contained in the factors here shown.

Unlike what seen in the report for dental practices, there is no clear prevalence of one factor over the other ones. In this case, the items showing the highest weights on the satisfaction are two: “Product quality” and “Support and assistance”. It will be interesting to see if the same weight on the overall satisfaction is shown in the analysis performed on the single brands.

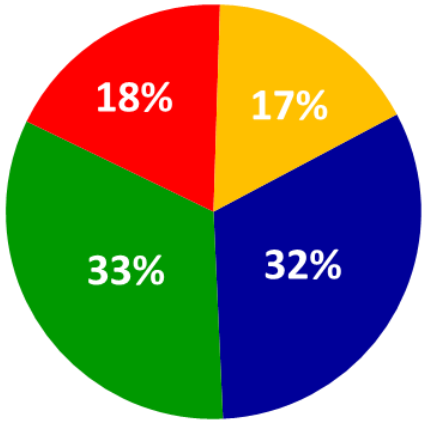
The other factors are the same of the analysis performed on dental practices. “Management costs” and “Compatibility” again shows almost the same weight (18% the former, 17% the latter).

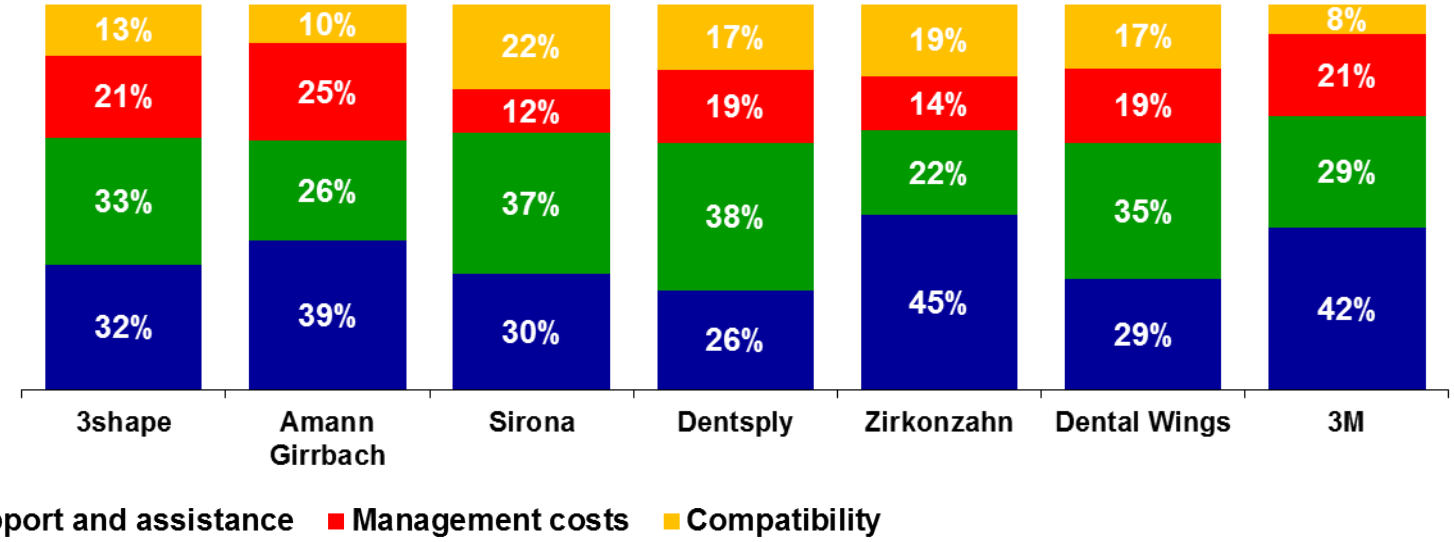
Customer satisfaction: Multiple regression analysis

MULTIPLE REGRESSION ANALYSIS

The regression analysis is a multi-variate statistical technique whose main aim is to find out the existing relationship between a target variable (dependent variable, in our case, the overall satisfaction) and a group of independent variables (each single factor derived from the factor analysis).

One of the main focus of the multiple regression is to assess how much part of the dependent variable (satisfaction) is explained by the independent variables (corner stone factors of the satisfaction which have been previously indicated: Product quality, Support and assistance, Management costs, Compatibility), i.e. how much these factors are influencing the behavior of the dependent one.





While 3shape breakdown of the weights of the different factors looks to be on par with the overall situation (only a lower weight for the "Compatibility"), other companies show a different breakdown. This is the case of Amann Girrbach, where the "Product quality" and the "Management costs" show a higher than average weights. Zirkonzahn and 3M show a very high weight of "Product quality", while then overall satisfaction of Sirona, Dentsply and Dental Wings look to be mostly affected by the factor "Support and assistance".

Conclusions

The German respondents had their relevant weight in this analysis, as the weight of this country is quite high.
Germany looks to be the most mature market with regard to the digital technologies, and to a certain extent the approach and the stance versus the digital world is different from that of the other countries.

The overall scenario analysis highlighted a common belief regarding the fact that digital technologies are going to change the way the restorations and the dentistry in general will be performed.
The change looks to be not so dramatic, meaning that the traditional prosthetic will maintain a certain distinct role even in the future.
The roles and the cooperation between dentists and technicians looks not to be in danger, on the contrary it may tighten. Moreover, a closer cooperation with the industry is expected as well.

We are working on a further deepening of the topics investigated on an extensive, integrated report, which will include findings from both surveys (clinical and technical) and will contain our conclusions about the overall results.

DENTAL MONITOR

powered by

KEY-STONE
Marketing research and consulting

Italy: Torino - Roma

+39 011 3119430

+39 011 3118669

www.key-stone.it

key-stone@key-stone.it