



UK ACCESS MANAGEMENT FEDERATION CUSTOMER SATISFACTION RESEARCH

EXECUTIVE SUMMARY

Prepared for Simon Cooper

UK Federation Service Manager

JANET(UK) Lumen House Library Avenue

Harwell Science and Innovation Campus

Didcot

Oxfordshire OX11 0SG

Prepared by: Angela Dalrymple

Director

Prodata Partners Ltd Rivington House 82 Great Eastern Street

London EC2A 3JF

Tel: 0845 054 9929 / 07973 821 767

Fax: 020 8892 1041

E-Mail: angela.dalrymple@prodata-partners.com

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1 Overall Summary

302 IdP and Service Provider federation users were interviewed by telephone and online during April – May 2010 by Prodata Partners on behalf of JANET(UK), in respect of user levels of satisfaction with the UK Access Management Federation service.

The resulting level of overall satisfaction with UK federation services is very high, at an average 5.63 out of 7.0 or 80.4%. This is above the technology industry standard for very customer high satisfaction, which is usually 80% or 5.60 out of 7.0 (Source: Prodata).

There are no areas for which customers of the UK federation score average dissatisfaction (<4.0 out of 7.0) or even a level of "somewhat satisfied" (<5.0 out of 7.0), with all areas measured averaging between 5.0 and 6.0 out of 7.0 (i.e. between "somewhat satisfied" and "very satisfied).:-

- Events:
- Training;
- Documentation;
- Website:
- Communication;
- Customer Support.

Key drivers of satisfaction scores were derived for 12 metric areas based on statistical responses to the customer survey, i.e.:-

- Overall Satisfaction;
- Training: Overall Quality;
- Events: Meeting Expectations;
- Events: Overall Quality;
- Documentation: Accuracy;
- Documentation: Overall Quality;
- Website: Navigation;
- Website: Content;
- Communication: Relevance;
- Customer Support: General Queries;
- Customer Support: Technical Queries;
- Customer Support: Added Value.

The highest scoring metrics, each scoring over 5.6 out of 7.0 for overall satisfaction, were:-

- Overall Satisfaction;
- Events Meet Expectations;
- Events Overall Quality;
- Communication Relevance.

4 of the 12 area metrics of satisfaction measured scored customer satisfaction above importance. Even for the 8 metrics where customer satisfaction scored below average importance, all consisted of very small shortfalls of 0.47 or less out of 7.0.

Statistical key driver analysis on the results of the UK access federation customer satisfaction survey shows that website content contributes most as a key driver of overall satisfaction amongst federation members interviewed, followed by documentation and customer support for technical queries, customer support for general queries, and communication.

This indicates that these are the main areas where JANET(UK) should apply focus in order to improve overall satisfaction scores.

Training, website navigation and events are not important statistical drivers of satisfaction, so here JANET(UK) should focus on continuing to provide quality services for members, but should not over-invest in these areas with the objective of improving overall customer satisfaction.

HE and FE federation members are clearly the most active users of federation services, with HE members scoring above average overall satisfaction at 5.74 out of 7.0, and FE members scoring overall satisfaction slightly below average at 5.54 out of 7.0. UK Research Institutions scored above average overall satisfaction at 5.75 out of 7.0.

Local authorities in England are also relatively knowledgeable and active users of federation services, and scored above average overall satisfaction at 5.74 out of 7.0. This compared with a slightly below average overall satisfaction score for local authorities in Scotland at 5.33 out of 7.0, with the latter perceiving their usage of federation services as more detached than their English counterparts, particularly in areas such as attending events.

Regional broadband consortia scored above average satisfaction at 5.71 out of 7.0, as did outsourced IdP Providers at 6.00 out of 7.0, and service providers at 5.68 out of 7.0.

Publicly funded triallists however were highly critical of many service areas, and scored below average satisfaction overall at 5.29 out of 7.0.

Technical users score overall satisfaction more highly than average at 5.84 out of 7.0, with non-technical users scoring average satisfaction at the same level as respondents overall, at 5.63 out of 7.0.

Overall, federated access appears to be have been deployed in pockets, with users in general either having federated only around 25% of their services, or as much as 75%, with few users in between these levels.

Federated access has only resulted in a clear reduction in user management and administration for around 36% of member organisations interviewed, although many members felt that this could be improved with more general awareness of what can be federated, more road shows and case studies on the federation website, and more work with key figures such as school and college principals to promote the benefits of federated access.

Respondents also voiced a view that the federation website itself could be made less technical and more visually impactful, particularly for non-technical users, with similar comments made about federation customer support.

Overall, however, federation members appear to be very satisfied with the federation events, training, website, documentation, customer support and communication provided, and the key task for JANET(UK) going forward will be to retain such high levels of satisfaction.

2 Objectives and Methodology

JANET(UK) commissioned Prodata to carry out market research with members of the UK Access Management Federation during April-May 2010. The research project was aimed at analysing levels of customer satisfaction with different aspects of the UK federation service provided by JANET(UK).

The research results will be used to establish benchmarks against which the federated service can be measured in future surveys and improved to meet changing user requirements over time. This can be achieved by analysing the initial survey results, then agreeing on benchmark scores for different drivers of satisfaction on the part of UK federation members for future measurement. The survey results will also enable JANET(UK) to adapt its support and offerings to meet the future needs of the UK education and research sectors across the UK federation membership.

JANET(UK)'s key research objective was to survey the current levels of customer satisfaction across all areas of service available to federation members, in order to:-

- Contribute to a review by JANET(UK) of the UK federation service;
- Identify a range of appropriate customer service metrics for the UK federation;
- Conduct a survey of current levels of customer satisfaction, using the metrics identified in order to establish measurable benchmarks;
- Seek to identify the degree to which federated access management technology and the UK federation has been successful, both from a user and an organisational perspective.

Three main strands of project research and analysis were carried out by Prodata to meet JANET's research objectives.

The first strand of research included measurement, analysis and recommendations of overall customer satisfaction metrics, as well as potential approaches for key drivers of satisfaction modelling.

The second strand of research consisted of:-

- Telephone and online interviews with Federation members across Higher education (HE), further education (FE), Local authorities (LAs), regional broadband consortia, Research Institutions, Service Providers, Triallists and Outsourced IdP Providers;
- Development of a quantitative view of customer satisfaction and importance by area;
- Development of a qualitative view of usage of the federated service.

The third strand of research consisted of the analysis and preparation of a final report, data tables and presentation. These documents detail the customer satisfaction results, effective usage of federated access management technology and recommended benchmarks for JANET(UK).

3 Primary Research Findings

Telephone and online interviews were carried out with 302 federation users across the IdP and Service Provider spectrum of customers. JANET(UK)'s own sample database was used for contacting respondents. The 20 minute questionnaire used in the research included questions on:-

- Overall satisfaction with and importance of each key measurement area (e.g. Training, Communications etc.);
- Additional questions on satisfaction and importance of specific metrics relating to each key measurement area;
- Open questions inviting respondents to explain the reasons for their levels of satisfaction with key measurement areas;
- A final set of open questions asking respondents about areas of improvement as well as the impact of using the UK federation.

Summary of Completed Interviews

Institution Sector (Column B of Database)	Total No. of Proposed Interviews	Total percentage of Proposed Interviews	Actual No. of Interviews	Total percentage of Interviews
Further Education (FE)	125	42%	130	43%
Higher Education (HE)	66	22%	77	26%
Local Authorities (Scotland)	10	3%	12	4%
Local Authorities (England)	15	5%	5	2%
Regional Broadband Consortia	11	4%	7	2%
UK Research Institutions	3	1%	4	1%
Publicly Funded / Trial	5	1.5%	7	2%
Outsourced IdP Providers	5	1.5%	3	1%
Service Providers	60	20%	57	19%
TOTAL	300	100%	302	100%

Respondents were a mix of those using the UK federation directly to access online sources, and accessing the federation via outsourced identity provision e.g. via Eduserv.

38% of respondents had the **role** of librarian, information manager or information director, with the highest concentration in FE (47%). 33% of respondents had IT or telecoms management roles.

More than 70% of respondents have used **the UK federation website**, **documentation and communications**. 40.1% of respondents have contacted UK federation **customer**

support, 22.9% have used federation **training**, and 17.9% have attended a UK federation **event**.

22.9% of respondents have used UK federation **training** courses. The most popular courses attended were "*Identity provider implementation*" (46%) and "*Introduction to the UK federation*" (41%).

Respondents were generally very satisfied with the overall quality of UK federation training, with a close match between ratings for importance versus satisfaction for training. The mean satisfaction score was 5.8, and the mean importance score 5.9 out of 7.

17.9% of respondents have attended UK federation **events**. The events seem to be primarily aimed at a technical audience, since 27% of IT/ Telecoms managers and 25% of technical specialists have attended events. However, only 11% of librarians / info managers and 11% of service providers have attended an event. Some institutions may be underrepresented at events, since 80% of FE, 77% of HE and 92% of Scottish local authorities had not attended any federation events.

Of the 54 respondents who have attended an event, 50% have attended an event on awareness of federated access, and 26% have attended an event on participation in federated access. 69% of librarian / information manager respondents attended events on awareness of federated access versus 50% overall. However, only 8% of librarian / info manager respondents attended events on participation and membership access. This seems to indicate that non-technical managers may have more limited choice of federation events to attend than technical managers.

Respondents were generally very satisfied that events met their expectations and requirements, with a mean score of 5.7 out of 7 on event satisfaction, versus a mean importance score of 5.4 out of 7.

Respondents were generally very satisfied with the overall quality of UK federation events. This area achieved an average satisfaction score of 5.8 for event quality overall versus an average importance rating of 5.5.

74.2% of respondents overall have used **documentation** on the <u>www.ukfederation.org.uk</u> website. The main reason stated for not using federation website documentation by respondents who had not used UK federation documentation was not having time to read it (41% of respondents not using). Overall there were no real issues with the content of documentation itself, with only 5% of respondents claiming that the documentation was not worth using at all. Lack of usage of UK federation documentation is therefore largely down to of lack of time or this being the responsibility of other colleagues rather than the respondents themselves.

Technical documentation and specifications were the type of documentation most widely used (82%). Identity provider deployment documentation was most widely used by HE respondents (73% versus 56% overall) and respondents in IT roles (67%). Case studies were most widely used by FE respondents (42% versus 31% overall) and teaching / research staff (80% versus 31%). This indicates a potential need for more case study material on using the federation service for non-technical managers.

There was a small shortfall between mean satisfaction with and overall importance of up to date, accurate and appropriate nature of federation documentation. This is indicated by the mean satisfaction level of 5.4 versus the corresponding importance level of 5.9 out of 7.

There was again a small shortfall between mean satisfaction with and overall importance of the overall quality of documentation provided. The average satisfaction level was 5.5 out of 7, versus an average importance level of 5.8 out of 7.

Positive comments around the overall quality of the documentation provided via the UK federation website centred largely around the clarity of technical documentation and video clips. Negative comments around the overall quality of the documentation provided via the UK federation website centred largely around the complexity of technical language used in documentation, which non-technical users can find offputting.

74.8% of respondents have made use of the **UK federation website**. Of the 73 respondents who have not used the federation website, the most frequent reason was again having "no time to use it" (55%). The 8 respondents who thought that the website was not worthwhile accessing were mainly HE, FE and publicly funded/trial respondents.

The most popular areas of the federation website used were areas offering technical documents, member lists, and FAQs.

There was a shortfall between the average federation website navigation and search facility mean satisfaction score of 5.1, versus the important score for this area of 5.4.

Positive comments around website navigation and search facilities centred largely around the search facility and visual clarity of the website. Negative comments around website navigation and search facilities centred largely around the circular and sometimes complex navigation design of the website.

There was a small shortfall between the UK federation website content mean satisfaction score of 5.4 and the mean importance score of 5.6 out of 7.

70.9% of respondents stated that they had received **communication** from JANET(UK) relating to the UK federation. Announcements (67%), newsletters (54%) and service improvements (45%) were the most frequently received types of communication relating to the UK federation.

Mean satisfaction with communication frequency, tone and relevance at 5.3 out of 7 exceeded the overall importance score for this area of 4.9 out of 7.

Positive comments around the frequency, tone and relevance of communications received centred largely around the regularity and tone of communications being appropriate, rather than overburdening respondents with communications. Negative comments around the frequency, tone and relevance of communications received at Question 6.4 (Satisfaction with the frequency, tone and relevance of communications received - reasons for scores given) centred largely around the overly technical and text-based look and feel of communications:-

Only 40.1% of respondents have made use of the UK federation customer support facility. The overwhelming reason for not using customer support was not at all related to the quality of the service offered, but owing to many respondents simply having "no need to use it" (91% of respondents not using). Customer support was used mostly for general gueries (58% of respondents using customer support), service implementation problems (31%) and service access problems (28%).

The mean satisfaction with responsiveness to general customer support queries was 5.7 out of 7, which fell slightly short of the overall importance score for this area of 5.9. Technical specialists / developers were most satisfied (6.1), and librarians/info managers were least satisfied (5.4). This seems to indicate that non-technical respondents may perceive the UK federation customer support team as possibly being more responsive in dealing with general queries from technical than non-technical contacts.

Mean satisfaction with responsiveness to technical customer support queries was 5.5, which again fell slightly short of the mean importance score for this area of 5.9. Again, technical respondents were more satisfied (6.0) and librarians/info managers were less satisfied (5.1), indicating that the UK federation customer support team may also be perceived by nontechnical users as more responsive in dealing with technical queries from technical than non-technical contacts.

Respondents give a mean satisfaction score of 5.2 out of 7 for the level of added value provided by the service desk, which fell slightly short of the mean importance score of 5.3 for this area.

Positive comments around the level of added value provided by the customer support service centred largely around the competence, helpfulness and ability to resolve problems on the part of service desk staff. Negative comments around the level of added value

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provided by the customer support service centred largely occasional perceptions of slow responsiveness on the part of service desk staff to non-technical contacts.

When asked about **overall satisfaction** with the UK federation service, 65% of respondents replied "very satisfied", creating a mean satisfaction score of 5.6 out of 7. Outsourced access providers were most satisfied at 6.3, followed by English local authorities at 6.2, then technical specialists / developers and UK research Institutions at 5.8. By contrast, publicly funded/ trial and Scottish local authorities respondents were lowest at 5.3, followed by IT/ telecoms managers at 5.5. The mean importance score was exactly matched to overall satisfaction at 5.6 out of 7.

The survey revealed that **52% of services have been federated**. However, there appear to be two "all or nothing" extremes here:-

- 25% of respondents said that less than 20% of their services have been migrated;
- 26% of respondents said that more than 80% of their services have been migrated.

As many as 56.9% of respondents stated that adoption of federated access has not reduced their burden of user management and administration.

Respondents believed that reductions in user management and administration via the adoption of federated access could be **measured** via e.g.:-

- Calculation of lower manpower needed for set-up (FE, Service Providers);
- Lower number of support calls and user queries per month (Service Providers, Publicly Funded / Triallists, HE, UK Research Institutions);
- Increased productivity for librarians to focus on core work rather than password admin (FE);
- Time savings from no longer having to set up individual user accounts (FE, HE);
- Decomplexity through no longer having to create staff and student accounts and multiple passwords as in the case of Athens (FE, HE, Scottish LA);
- Easier access for users without additional barriers to overcome (Scottish LA);
- Measurement of pull-throughs on the Shibboleth server compared with the amount of user education needed to help users do so (HE).

Respondents suggested that there were several **identifiable cost or efficiency savings** when deploying federated access management, e.g.:-

- Cost savings from no longer having to subscribe to Athens (average saving £3-£6k p.a.);
- Efficiency savings on additional staff work around passwords and set-up, although many respondents were unable to precisely quantify these savings;
- Efficiency savings from no longer having to maintain large user databases;
- Efficiency savings from own deployment, rather than relying on IT institutions such as Eduserv as intermediaries.

Respondents made a number of interesting suggestions as to how to **encourage wider** adoption of federated access:-

- Improved buy-in by commercial resource providers;
- Stronger brand "UK Access Management Federation" is less easy to remember or understand what it stands for than "Athens";
- Improved promotion of the services offered e.g. via Twitter etc.;
- Greater clarity as to where federated access sits versus other technology;
- More and easier to understand case studies around federated access adoption;
- National roadmap for schools to take up federated access and engage more with potential suppliers of educational material, help to get them into Shibboleth 2 and what an IdP does;
- Roadshow for institutions which do not yet use federated access services;
- Improved awareness of what JANET(UK) does as a federated access body;
- More help for smaller institutions to implement federated access;
- More suppliers on board;

- Establish more of a real "federation", i.e. with links between members;
- Engage more with college/school principals not just technical managers;
- Lower set-up costs.

The main types of federation help and support which respondents made most use of were briefing papers (27%), federation roadmap (20%), and blogs (13%).

Very few respondents stated any **areas of help and support they wanted expanded**, or suggested new areas. Nonetheless, there were some helpful suggestions, e.g.:-

- Briefing paper expansion was desired particularly by UK research Institutions (50%) and teaching/research staff (30%);
- Podcast expansion was desired particularly by FE (13%);
- Two new areas were suggested: migration guides (2%) and video tutorials (2%).

The main ways suggested by respondents in which the **UK federation website should be improved** going forward were:-

- Easier and simpler to navigate;
- Improve search facility;
- More pop-up displays in the help section;
- More videos and information for non-technical users;
- Adaptation for narrow screens e.g. lpods;
- Incorporate a "Beginners Start Here" area for "dummies";
- More information on the upgrade route to Shibboleth for varying set-ups;
- Make technical documents clearer and less convoluted;
- Incorporate a page with problems users were finding going through the implementation process, and how they solved them;
- Data archive/forum/knowledge base area;
- More information about migrating to new versions of Shibboleth;
- More compelling visuals to draw users in to read different parts of the website;
- More information on what types of information can or can't be Shibbolized;
- More documentation on setting up entities and upgrading them.

The top level recommendations for improvements to the UK federation service suggested by respondents were:-

- More promotion and awareness of Shibboleth and federated access;
- Simpler use of language around UK federation service;
- · Better usage statistics as in the case of Athens;
- More documentation and assistance in setting up federation services;
- More publishers on board, e.g. Wiley Blackwell;
- Easier implementation for small institutions;
- Improved WAYF service;
- Better liaison with schools community:
- Make documentation less wordy and complex to read;
- Better beginners' guides to setting up;
- Send out less paper documents;
- Provision for more complex authorization through technologies such as Shintau;
- More examples/case studies of best practice.

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4 Statistical Analysis and Key Drivers of Satisfaction

During the requirements phase, JANET(UK) requested that six areas of service be benchmarked for levels of customer satisfaction:-

- Federation website
- Customer support
- Documentation
- Events
- Communications
- Training

During initial analysis a number of key metrics were developed for use in determining customer satisfaction in each area, including:-

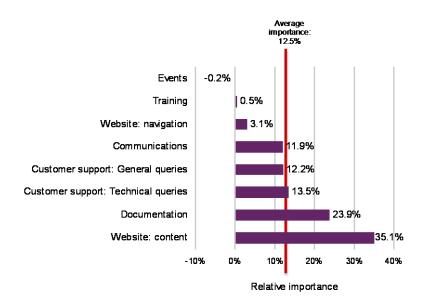
- Documentation: up-to-date, accurate and appropriate nature of documentation provided;
- Federation website: navigation and search facilities, content;
- Customer support: responsiveness to general queries;
- Communication: frequency, relevance and tone.

These metrics were then used in conjunction with the main key driver areas above to analyse statistically the key drivers of satisfaction for the UK federation arising from the survey results.

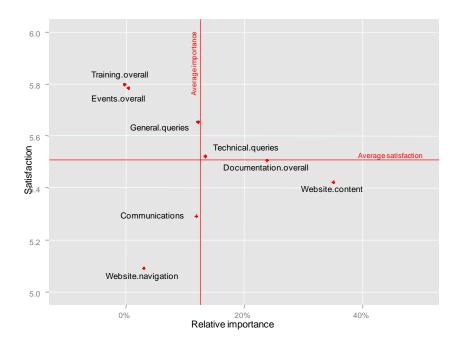
Key driver analysis was carried out using multivariate regression analysis, which looked at the relative relationships between each of the metrics driving customer satisfaction, and scores for overall satisfaction.

The results of key driver analysis on the results of the UK Access Management Federation Customer Satisfaction Survey show that **website content contributes most as a key driver of overall satisfaction** amongst UK federation members interviewed, **followed by documentation**, **customer support on technical queries and on general queries**, and **communications**. This means that these are the areas on which JANET(UK) should apply most focus in order to improve overall customer satisfaction by a significant level of magnitude.

Training, website navigation and events were however relatively less important as key drivers of satisfaction.



Website content, customer support for technical and general queries, documentation and communications are therefore key areas for investment and maintenance of high service levels to UK federation customers.



For the **FE** segment, website content is the most important area, followed by communications and website navigation. Thus communications is relatively more important to this segment, and response to technical queries is relatively less important.

For the **HE** segment, two areas are very important as key drivers of satisfaction: website content and documentation. As with FE, technical queries are relatively less important.

From the key driver analysis it is apparent that **service providers** place relatively more importance on the resolution of technical and general queries than other segments. Together with communications and documentation, these are the key areas for investment and maintenance of high satisfaction levels.

UK research institutions care most about training & response from the service desk.

Customer support around technical and general queries, website content and documentation are key to invest and maintain high service levels for all **other segments** surveyed.

Technical query resolution is important as a key driver of satisfaction for **technical users**. Technical users include IT/ telecoms managers, technical specialists, developers, outsourced access provider/ facilitators and access managers.

Non-technical users place more emphasis on documentation and website content and less importance on resolution of technical queries as key drivers of satisfaction. Non-technical users include admin staff, librarians and information managers, product managers, managing directors and teaching / research staff.

Communication is an important key driver of satisfaction for technical users in FE.

Website content is an important key driver of satisfaction for non-technical users in FE.

Response to technical queries is an important key driver of satisfaction for **technical users** in **HE**.

Documentation is an important key driver of satisfaction for non-technical users in HE.

The main focus of attention for JANET(UK) to improve customer satisfaction with the UK federation service overall should therefore be on **improving website content and documentation**.

High levels of service should be maintained by JANET(UK) in the areas of **customer** support ability to resolve general and technical queries, as well as communications.

If budget constraints are an issue, JANET(UK) should consider de-emphasising investment in the areas of training and events, where effort and resource would not result in any meaningful statistical improvements in customer satisfaction with the UK federation service overall.

Since this is the first time that JANET (UK) has conducted a UK federation customer satisfaction survey, there are no comparable results to benchmark for target scores. However, in similar B2B technology sector surveys, Prodata's experience is that a score of 80% is usually considered as the benchmark for very high satisfaction. This means achieving an average of 5.6 on a 7-point satisfaction scale.

Prodata would therefore propose "closing a percentage of the gap" between achieved scores and the target of 5.6 as the benchmark, depending on current satisfaction and importance scores by key driver area.

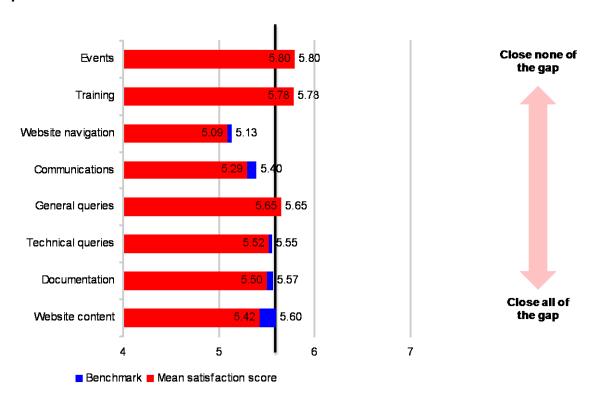
Customers of the UK federation are already satisfied with the service they receive. This is indicated by three metrics with a very high satisfaction score of 5.6 or higher: events, training and resolving general customer support queries.

Although website navigation has the lowest mean score, at 5.1, no areas are anywhere near dissatisfaction levels (<4.0 out of 7).

Prodata propose using key driver relative importance as a weighting mechanism to calculate a benchmark score. This ensures that the benchmark for the most important issue is 5.6.

Prodata therefore recommends setting future improvement targets to the satisfaction scores outlined below.

Proposed benchmark satisfaction scores



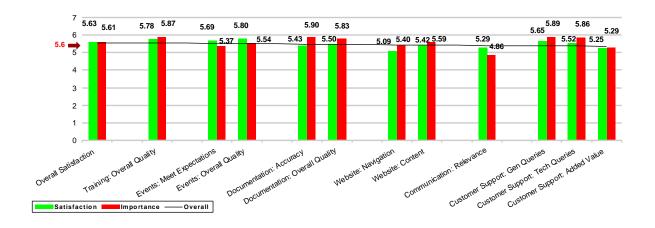
5 Conclusions and Recommendations

Conclusions

Overall, UK federation members appear to be somewhat to very satisfied with most of the areas of service offered to them. No satisfaction scores equal dissatisfaction (<4.0 out of 7) or are even below "somewhat satisfied" (<5.0 out of 7).

4 out of 12 metrics show satisfaction scores above importance (Overall Satisfaction; Events: Meet Expectations; Events: Overall Quality; Communication: Relevance)

Overall Satisfaction & Importance Scores by Key Area of Satisfaction



Although the other 8 metrics score satisfaction below importance, these are mostly small gaps of 0.47 out of 7.0 or less, with the largest gap for Documentation: Accuracy.

Several metrics already score above the notional target score of 80% satisfaction (5.6 out of 7.0), i.e. Overall Satisfaction; Training - Overall Quality; Event: - Meet Expectations; Events - Overall Quality; Customer Support - General Queries.

Training

Around 23% of members have attended federation training courses, with "Identity Provider Implementation" and "Introduction to the UK federation" the most frequently attended courses.

There is a very close correlation between satisfaction with the quality of training (5.78 out of 7) and the importance of training (5.87 out of 7).

The highest scores tend to be given by HE, FE and technical respondents. However, non-technical respondents such as teaching and research staff tend either to not attend federation training courses, or to give lower scores. This indicates federation training courses may come across as overly aimed at technical, HE and FE staff, to the potential exclusion of other segments and member roles.

Training only contributes 0.5% however as a key driver of overall satisfaction.

Prodata would therefore recommend that JANET(UK) maintains the current level of quality on training courses, but does not divert additional resources to significant improvements in this area in order to maintain or improve overall customer satisfaction.

Events

Around 18% of members have attended federation events. Events on awareness of and participation in federated access are the most frequently attended.

As with training, attendees tend mainly to be technical developers / specialists or IT / telecoms managers, with only 11% of non-technical respondents such as teaching, admin and research staff attending federation events. Scottish local authorities also attended few events.

This indicates federation events may be marketed as mainly aimed at technical staff, to the potential exclusion of other roles and members outside England.

Events are one of the federation's highest rated areas, with a very positive correlation between satisfaction regarding events meeting expectations (satisfaction score of 5.69 out of 7 versus 5.37 importance score) and overall event quality (5.80 satisfaction versus 5.54 importance score).

However, events contribute 0% as a key driver of overall satisfaction.

Prodata would therefore recommend that JANET(UK) maintains the current level of quality on events, but does not divert additional resources to significant improvements in order to maintain or improve overall customer satisfaction.

Documentation

Around 74% of members have used documentation on the federation website. This was mostly technical managers, with lower usage amongst non-technical staff, Scottish local authorities and UK research institutions.

Technical and identity provider deployment documentation is the most widely read.

This indicates a potential need for more case studies and other material on using the federation service for non-technical managers.

The main reason for not using documentation was lack of time rather than quality of documentation itself.

There is a wider than average shortfall between satisfaction with and importance of the accuracy and appropriateness of documentation (5.43 satisfaction out of 7 versus 5.90 importance score) and overall documentation quality (5.50 satisfaction versus 5.83 importance score). The main reasons include excessive technical complexity for non-technical users and triallists, and confusion between different Athens / Shibboleth versions and upgrades.

Documentation contributes as much as 23.9% as a key driver of overall satisfaction.

Prodata would therefore recommend that JANET(UK) invests in improvements in this area, in order to maintain and improve overall customer satisfaction.

Federation Website

Almost 75% of members have used the federation website. Technical documents and lists of members were most frequently accessed via the federation website.

The website received positive comments around ease of Google search facilities. However, there were some negative comments about "circular" site navigation and confusing signposting.

The main reasons for not using the website were related to lack of time rather than problems with the content or functionality of the website itself.

There is a shortfall between satisfaction with and importance of website navigation (5.09 satisfaction out of 7 versus 5.40 importance score), and website content (5.42 satisfaction versus 5.59 importance score.)

The federation website content contributes as much as 35.1% as a key driver of overall satisfaction, and website navigation 3.1%.

Prodata would therefore recommend that JANET(UK) invests in improvements in this website content in particular, in order to improve overall customer satisfaction.

Communication

Almost 71% of members have received communication from JANET(UK) relating to the UK federation.

Communication around announcements, newsletters and service improvements are most frequently received.

The frequency of communication was about right for most respondents, although communication content was sometimes perceived as overly technical for some.

Communication is the area which attracts the lowest importance score relative to satisfaction, with satisfaction with the quality of communications rated at 5.29 out of 7, versus importance of communication at only 4.86 out of 7.

Communication contributes 11.9% as a key driver of overall satisfaction.

Prodata would therefore recommend that JANET(UK) maintains the current level of quality of communication, but does not divert additional resources to significant improvements in this area in order to maintain or improve overall customer satisfaction.

Customer Support

Around 40% of members have made use of federation customer support.

Of the 91% not using customer support had no need to do so, rather than any doubts about the quality of federation customer support. The main uses of customer support were for general queries and service implementation, particularly among publicly funded / trial respondents.

There were positive comments around customer support value add concerning competence, helpfulness, responsiveness and quick turnaround of helpdesk staff. However, there were negative comments around customer support value add. Although negative comments were very few, some respondents were concerned with the accuracy and flexibility of advice, and timeliness to respond.

There is a shortfall between satisfaction with and importance of customer support for general queries (5.65 satisfaction out of 7 versus 5.89 importance score), for technical queries (5.52 satisfaction versus 5.86 importance score), and customer support value add (5.25 satisfaction versus 5.29 importance score).

Customer support around technical queries contributes 13.5% as a key driver of overall satisfaction, and around general queries 12.2%.

Prodata would therefore recommend that JANET(UK) works to maintains and improve the current level of customer support, in order to maintain or improved overall customer satisfaction.

HE and FE Users

HE and FE respondents tend to be active users of federation events, training courses, website information and documentation. They expressed high satisfaction levels with event and documentation provided by the UK federation.

However, they expressed lower than average satisfaction with federation website content.

Overall, HE respondents were slightly above overall satisfaction score of 5.63 at 5.74, and FE respondents slightly below average at 5.54.

Local Authorities in England and Scotland

English local authorities tend to rate many areas with highest average importance but also highest average satisfaction, often scoring 6.0 out of 7.0 or more.

Scottish local authorities are active users of communication with the federation, but low usage and rating of events and training courses, possible due to distance from where these are held. They tend to be more "detached" from the federation overall, as several references were made to only using federation owing to Glow.

Overall, English local authority respondents well above overall satisfaction score of 5.63 at 6.20 (highest satisfaction overall), and Scottish local authorities respondents slightly below average at 5.33.

Service Providers and Outsourced IdP Providers

Service provider and outsourced IdP provider respondents were different in the responses given:-

- Both rated federation events much lower than average;
- Both however rated federation website content more highly than average;
- Outsourced IdP providers rated customer support much higher than service providers, who gave low ratings here;
- Overall, outsourced IdP providers were well above overall satisfaction score of 5.63 at 6.00, with service providers at 5.68.

Regional Broadband consortia, UK Research Institutions and Publicly Funded/ Triallist Users

Publicly Funded/Triallist respondents were highly critical of most service areas, but also gave low importance scores to many service areas.

UK research institutions appeared to make little use of events, training or other forms of informing themselves about the federation service, and scored below average on satisfaction importance (around 5.00) for most areas used.

RBCs scored documentation poorly, but otherwise gave satisfactory scores.

Overall, regional broadband consortia were above overall satisfaction score of 5.63 at 5.71, UK research institutions were also above average at 5.75, but publicly funded/triallist respondents were least satisfied at 5.29.

Technical Respondents

Technical respondents were the highest attendees of events and training courses, and users of technical documentation and federation website updates. They also tended to rate customer support and communication with JANET(UK) highly.

This seems to be an indication that the UK federation are "speaking the same language" as technical respondents.

Technical specialist / developer overall satisfaction was higher than the 5.63 average at 5.83, with IT/ telecoms Managers at 5.54 and Outsourced Access Providers high at 6.25

Non-Technical Respondents

Admin Staff and Librarian / Information Managers in particular did not always feel engaged by the tone of the website or federation documentation, did not tend to attend events or training courses, and had many less positive experiences when contacting customer support.

Non-technical respondents voiced a need for more federated access case studies, beginners' guides, more clarity of documentation, and greater responsiveness of customer support to general queries.

Librarian / info manager overall satisfaction was the same as the 5.63 average at 5.63, with Admin Staff lower at 5.50, MDs higher at 6.00, and Teaching / research staff at 5.70.

Impact of Deploying Federated Access

An average of 52% of services had been federated across all respondents for federated access. However, this was an average of "all or nothing" approaches, with most shibbolising either around 75% or 25% of services.

Only 36.1% of respondents believed that implementing federated access had reduced user management and administration. This was particularly voiced by local authorities in England and Scotland.

Many respondents felt that the impact was difficult to measure, although many cited time and cost savings had been found in not having to pay for Athens or set up multiple user passwords.

Key factors which would drive greater adoption of federated access included greater awareness and branding of what federated access and JANET(UK) can offer, particularly at school and college levels.

The areas which respondents felt could be expanded were federated access briefing papers, roadmaps and blogs.

Many recommendations were offered for improving the simplicity, visual impact and adaptability of federation services, e.g. standardising output of the UK federation website to fit mobile devices.

Other improvements to the federated service overall included more usage statistics, case studies, beginners' guides, and getting more publishers on board.

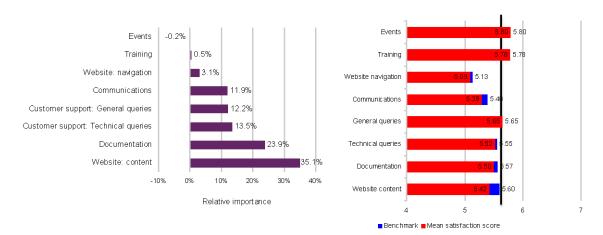
Recommendations

Benchmarks for Future Measurement

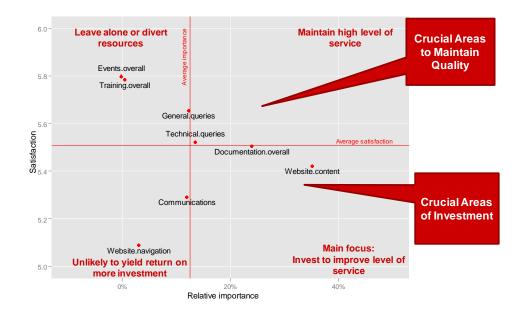
JANET(UK) should use the key driver of satisfaction analysis arising from the federated member customer satisfaction survey to invest resource and budget in working towards the

benchmark scores shown below, with particular emphasis on improving website content, customer support for technical queries, and content of federation documentation, as shown in below.

Areas for Recommended Improvements to Overall Satisfaction



Key Metrics for Improving Overall Satisfaction



Recommendations for Potential Areas of Service Improvement

Key recommendations for specific areas of service improvement to boost customer satisfaction for the UK federation going forward can be summarised as follows:-

- Improvements to clarity of documentation website content for non-technical users;
- Significant improvements to the tone of communicating with, writing documentation/case studies and website information for and providing customer support to non-technical users, to make them feel more engaged with federated access:
- Greater focus on the needs of publicly funded/trial members, who tend to have far lower satisfaction and engagement with the UK federation than other users;
- More promotion and awareness of Shibboleth and federated access to smaller colleges and to schools in particular;
- Improved documentation and assistance in setting up federation services;

- More publishers on board, e.g. Wiley Blackwell;
- Improved WAYF service;
- Greater opportunities for training and event attendance for teaching, admin, research, management staff and Local authorities outside England;
- Greater availability of information e.g. specific metrics as to cost, efficiency, management and administrative benefits of migrating to federated access;
- General updating and modernisation of federation website and member materials around e.g. blogs, adaptation of material to mobile phone screens, school users etc.