IETF

User research

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Introduction

This report summarises the findings from interviews conducted as part of the research work for the IETF. It is meant as an informative but not exhaustive summary of the key points discovered during the interviews.

Summary

"There's no entry point, I showed some of this to colleagues and they could barely figure out what IETF does and why they are relevant."

The interviewees came from a range of backgrounds and locations. They represented individuals with different lengths of IETF involvement and varying professional interests. Whether or not they were active participants, users more readily described themselves according to the length of time they had been involved rather than according to their level of activity.

They identified that information of different depth is required by users with different background needs, as well as different lengths of involvement. They identified significant concerns around existing navigation and highlighted how hard it is for new users, regardless of their goals or background, to gain a swift and accurate insight into the work of the IETF.

Overwhelmingly, respondents felt that the current website serves the needs of a very limited subset of users, that the focus on the 'real work' of the IETF should remain and that significant improvements should be made to ensure the IETF website sufficiently serves the wider communities looking to it for (but currently failing to find) guidance.

All of the interviewees provided anecdotal feedback on the user experience from the perspective of potential new users. Those working with students and postgraduate level researchers felt particularly close to the experience of new and potential participants.

Those working in policy areas felt particularly close to users who were seeking information about the IETF's work without necessarily considering becoming a participant.

Entirely new users were not represented in the sample set. As many of the respondents felt able to articulate the needs of new users, we will test our response to these needs with representative new users during initial testing. Experience has taught us that tests with new users are more fruitful than interviews with new users. Nevertheless, we will conduct further interviews with two entirely new users.

Overall, the conclusion drawn is that the user-centred design process should focus on the type of user (because this identifies the type of information that they need) and their core task. Information relevant to that task can then be located on a continuum, i.e. of information for non-participants to information for active participants.

Non participants   New/potential   Active participants
                                participants

Length of
involvement ——→

Summaries   Benefits   Specifics
Key information   Influence   Discussions
Signposts   Highlights   RFCs

A note on the use of metrics

An attempt was made to analyse the data available at www.ietf.org/usagedata. Our Digital Marketing team reviewed this data and found it insufficiently detailed for the purpose of audience research. Whilst there is a lot of qualitative data, this data has very little context. Some insights can be inferred but there is not enough supporting data to be certain of these insights.

For example, we are able to infer from the entry and exit page statistics, which pages are most likely to be visited by users who know what they are looking for (RFC page Meeting information/registration, Blog, RFCdiff). We are also able to infer a very high bounce rate (approx 30%) from the homepage.

This suggests that experienced users are navigating directly to the page they need. And that other visitors entering via the homepage are not finding what they need – or the site is not sufficiently engaging to encourage them to explore.

However, without being able to specifically analyse goals, scrolls, CTE conversions and accurate bounce rates, or understand more accurately who the entry referrers are (IETF is a high internal referrer, consider removing this) it is very difficult for us to map the type of user, their journey, or the purpose and success of visits. Similarly, whilst search strings are included in the data set, no information is provided on whether these are spam searches (some of the strings look unusual), or whether users found the result they were looking for. This makes it difficult for us to draw conclusions as to where the IA is failing, what the most popular searched-for content is, or whether the site search is performing well.

Similarly, it has been difficult for us to determine the specifics of browser usage. User Agent statistics appear to conflate search engine and browser usage although we believe that an alternative configuration of your reporting tool could make this clearer.

We suggest grouping User Agents by type and by specific browser; there is no need to report on the specific upgrade state of each browser type knowing the version in use would be useful.

In the absence of appropriate data, we propose to use the budget allocated for data analysis for keyword research. This would take place after the formulation of the draft IA. The output of this research would be audience-focussed keywords for inclusion in search marketing plans. The goal of these keywords is to increase the visibility of IETF.org to relevant audiences who are using Google Search.

We suggest reviewing your analytics gathering to ensure that it is capturing the data that you need. We can provide advice on this, and could propose a new approach if you would like us to. We mostly use Google Analytics because it offers a powerful suite of tools but we recognise your concerns around data ownership. Our Digital Marketing team would be happy to review the situation with you if you wish and a separate proposal could be discussed with them.

Use of the IETF website

Active participants

"A Chair needs to find out what tools are available without going to a class, and how to manage the document process."

Respondents with long term involvement reported very specific uses of the IETF website. On a day-to-day basis, they are more likely to navigate directly to the DataTracker. Their primary interest in the IETF website is to discover information about upcoming IETF meetings. Their secondary interests are identifying tools and resources, and garnering information on Working Groups, process and news.

Active participants differ from new and potential participants in that they already know what they need, and how this need fits with the IETF's world. Consequently, the site must allow them to focus quickly on their reason for visiting.

Serving active participants

Fast route to in depth information	Allow Participants to go deep quickly.
Quick access to Meetings, process info & resources	Make meeting information, proceedings, IPR disclosures, liaison statements etc. easy to find. Illuminate processes.
Highlight available tools	List tools, the context and reason for their use.
Map to a representative structure	Intuitively match the way these users think about the IETF's structure.
Working Group information	Digestible Charter text, group news, current discussion, Chair contact information, recent key decisions.
Links to DataTracker / RFC provision	Focus on key questions and linking out to answers, e.g. "What's going on with my document?" > DataTracker.

To make sure the new site continues to serve experienced users we will explore opportunities to quickly deep link these users with the content they need most often.

New/Potential participants

"This is very interesting, relevant work but when I follow a link to their site I can't understand the relevance of things."

New and potential participants primarily want to use the site to explore the IETF's work and impact in specific technical areas. They do not feel the site adequately meets this need. Their secondary need is to identify Working Groups active in those areas and build an understanding of the work in progress. The current site does help them to do this, but they do not find it efficient or easy.

This user group differs from active members in that they have less context within which to place their query and need more help identifying what they should be looking for, where it can be found and why it is important. Only when they have a full understanding of the general picture, the technical areas being actively discussed and the current progress of relevant discussions will they consider becoming active participants. To accelerate the transition from potential to active participant, the site must demonstrate the social and personal benefits of participation.

Consequently, the site must allow them to explore areas of interest, add context to their discoveries, offer a clear path to deepening engagement and consistently demonstrate relevant real world impact.

Serving new/potential participants

Clear demonstration of breadth and depth – with ability to quickly focus	Introductions focussing on structure, process, technology areas and impact.
Facilitate overview-level understanding of work in a given area	Provide Area introductions with suggested start points for exploration.
Highlight achievements	Show how the IETF positively impacts everyone.
Working Group information	Digestible Charter text, group news, current discussion, Chair contact information, recent key decisions.
Highlight benefits of personal participation	Participation is good for you, your field, your peers and your community. No influence without participation.
Activity summaries – by technology	Demonstrate what's going on now, across the IETF in your area of interest.

This group reported that the site's navigation is unfit for purpose and that RFCs are an impractical method of sharing important general information. The new Information Architecture must be more intuitive and information should be better contextualised.

Non-participants

"They seem to expect people to come to them, instead of engaging the communities they're relevant to."

Non-participants primarily use the IETF site to explore areas of work that touch on their professional lives. They are looking to understand whether or not they should be taking note of the IETF's work in a given area and what the impact of that work will be. They need quick access to high-level summaries and a way to find the information of interest to them without having to follow current discussions, read pages of past discussion or trawl through irrelevant RFCs.

Their secondary need is that the website provide a swift and accessible public-facing explanation of the IETF's role and impact both generally and in specific areas. This is so they can use the site to help explain the importance of engagement to their seniors, colleagues and peers.

Serving non participants

Clear demonstration of breadth and depth – with ability to quickly focus	Introductions focussing on technology areas and impact.
Facilitate overview level understanding of work	Provide Area introductions with links to sector-specific information.
Activity summaries – by sector	Demonstrate what's going on now, across the IETF relevant to users' sector.
Working Group information	Digestible Charter text, group news, current discussion, Chair contact information, recent key decisions.
Highlight benefits of personal participation	Participation is good for you, your field, your peers and your community. No influence without participation.
Highlight benefits of organisational participation	Participation makes your work stronger, you influence the technologies you'll have to work with anyway; get important information early. No influence without participation.

Non participants reported that the current site's navigation was unfit for purpose and that if they could not find what they were looking for using a domain search on Google, they may stop looking. They also reported that supporting contextual information was sorely lacking, making it hard for them to identify and understand what they were reading. The new site must use a more intuitive Information Architecture and make an editorial effort to serve this audience. Entry and exit usage statistics support this insight.

Focus on user groups

Three clear areas of user focus were identified. Policy, academic research and commercial development. Each area of focus has different needs. The site's architecture and content need to reflect these needs.

Policy and Governance

"It's a community I want to be part of but they're not utilising or selling their work to the world well enough."

The Policy and Governance audience are looking for non-technical summaries that tie the IETF's work to its real world impact. This audience would benefit from access to the organisation's broad knowledge without having to refer to RFCs or technical discussions. They also want to know what's being discussed because they may want to influence the discussion – but they are not confident using the current website as a gateway to do this.

This audience are looking for the IETF to help locate its work within the policy landscape. The activity of Working Groups is currently hidden from non-participants and hard for them to access or absorb quickly. The IETF must ensure that outputs with a bearing on policy are identified and communicated. The policy audience believe that the website is the best place to do this. When this is done, information on relevant Working Groups and contacts should be provided with it; this will facilitate conversion to participation.

Serving the Policy and Governance audience

Identify international relevance	e.g. Human rights, Privacy, Monitoring, Security.
Demonstrate fundamental importance	Infrastructure, Rights, Governance, Everyday.
Be clear	Non-technical summaries, avoid jargon.
Be useful for sharing	Present information in a format that's useful to outsiders.
Welcome relevant actors	Help people join in by providing discussion updates, decision summaries and discoverable key contacts.
Extend reach and influence	More public- and stakeholder-focussed communication.

This audience are more likely to become active participants if it is made clear to them that:

- Accessible explanations are available;
- Discussions and RFCs are influencing the real world now and every minute;
- Participation can influence policy and governance solutions at source;
- This is a global, expert, respected, heavy-weight community;
- The IETF recognises the need to relate arcane technical information with nuanced policy – and welcomes help from this audience;
- The IETF is great for networking.

Academic research

The academic research audience is looking to learn what the current, real issues are and to make sure that they are operating from a well-informed position. They want to both increase and contribute their expertise.

The IETF site should provide resources that help them identify problems that matter and that exist – rather than theoretical problems that, whilst interesting, have little likelihood of deployment or practical application. This serves the academic audience by helping to keep their research current and relevant. It also helps them tie their research to practical applications and so more easily access funding.

This audience are not inclined to read email threads to trace the path of a discussion and report that the current site makes it too hard to find answers to specific questions because of the low visibility of discussions. The site should highlight the most active or far-reaching discussions in a given Area, providing summaries of the problems being solved and the progress to-date.

Serving the Academic research audience

Summarise the responsibilities/topics within each Area	High-level summaries of Area responsibilities with example practical applications.
Working Group information	Digestible Charter text, group news, current discussion, Chair contact information, recent key decisions.
Summarise RFCs	Provide RFC explainers that help avoid the need to waste time reading irrelevant RFCs and quickly identify context.
Highlight benefits of personal participation	Participation is good for you, your field, your peers and your community. No influence without participation.
Highlight 'big names'	Feature short biographies of interesting participants. Sell the community.

Encourage diversity (geography, race, gender) to increase relevance	Show-case participation by region. Be clear that for emerging markets, the IETF is a great way to influence on behalf of your own community.

Academic researchers are more likely to become active participants if it is made clear to them that:

- This is where you solve problems that matter, and exist;
- This is where the people you need to meet are already operating;
- You get to contribute to real world solutions and running code;
- You can learn the operators' language here;
- The IETF is great for networking.

Commercial development

"They could learn a lot from top corporates on utilisation of resources. How to present their new stuff. There's a gap between industry and IETF. IETF don't understand what industry are looking for."

Commercial operators report that the IETF site demonstrates a poor understanding of corporate needs. They are looking to the IETF to help them make cost-effective decisions, understand the direction that particular technologies are taking and to be clear whether a discussion point is about cost or technical implementation (they judge that cost discussions may sometimes be veiled as technology discussions and this is unhelpful).

To serve this audience, the site should provide audience-focussed summaries of the implications of a discussion or decision. Failure to adequately summarise for 'busy people' means much is overlooked.

Serving the commercial audience

Summarise the responsibilities/topics within each Area	High-level summaries of Area responsibilities with example practical applications.
Working Group information	Digestible Charter text, group news, current discussion, Chair contact information, recent key decisions.
Summarise RFCs	Provide RFC explainers that help avoid the need to waste time reading irrelevant RFCs and quickly identify context.
Blog with this audience in mind	Use blogs written in the language of commercial operators to highlight and

	disseminate relevant information.
Highlight benefits of organisational participation	Participation makes your work stronger, you influence the technologies you'll have to work with anyway; get important information early. No influence without participation.
Highlight benefits of personal participation	Participation is good for you, your field, your peers and your community. No influence without participation.

The commercial audience are more likely to become active participants if it is made clear to them that the IETF can help them understand:

- If this is this a tiny bug, or a fundamental issue;
- Does this treat a cause, or a symptom;
- Whether the discussion is about costs or technology;
- This is the community with the expertise you need to save time and money;
- We want to make it easy for you – keep abreast of discussions and RFCs through summaries.

Note: The commercial audience feel that too much time commitment is required to influence discussions. The site revamp does not have the remit to suggest new processes but a method of including the opinions and feedback of those who want to be engaged but face significant time-pressure may be useful for the IETF to explore when considering growing their audience share.

Using the DataTracker

For obvious reasons, across the site repeated mention is made of many different RFCs. Sometimes in context, sometimes with little supporting information. We assess that all users would benefit from more immediate contextual information about RFCs. Much of this information is available within the DataTracker. We will explore integrating the new site with selected DataTracker metadata using the DataTracker API and displaying this information in context; perhaps using a tooltip style model.

Example triggers, context of use and tasks

As part of our user-centred design process, we associate use-cases with specific contexts and outcomes. We include an example below. This is not an exhaustive list but provides a useful reference for Information Architecture and Visual Design approaches.

Person	Context	Needs	Task
Area Director with knowledge of a mistake in an RFC	Someone has informed the AD that there is an error in an RFC	To be reminded of when and how an errata should be issued. Gain clarity on whether this error should be addressed	Find information on issuing errata and guidelines for so doing
Working Group chair	New Chair wants to better understand Internet Draft submission process	Step-by-step explainer and knowledge of relevant tools	Get an end-to-end understanding of the Internet Draft submission process and what they should do to make it easier/more successfu
Participant looking for information on next meeting	Looking to plan time, check session info, book travel	Dates, schedule etc	Get info on next meeting
Participant looking for protocol definition in a specific area	Participant looking to understand how to factor privacy concerns into design/documentation of a new protocol	RFC6973 via DataTracker	Find and keyword search DataTracker
Computer Science graduate looking to understand the relevance of the IETF	Has heard about IETF, is curious to know more	To get a quickly digestible breakdown of the IETF's role, importance and structure	Learn about the role of the IETF, how it makes decisions and why those decisions are important
Computer Science graduate considering participation	Is looking for an activity that interests them, increases their knowledge, contacts and profile	An overview of current discussions, an understanding of how to get involved and a clear picture of the	Identify active, influential working groups, tie their progress to real world impact, contact Chair

		personal benefits	and/or join mailing list
NGO employee looking for IETF work relevant to user privacy	Is writing a report about the impact of technology decisons on the ability of oppressive states to track citizens	To understand how privacy concerns feature in IETF decision making (Identify relevant working groups, their current discussion, the decisions they've made and how/if they)	Find relevant working groups, their current discussion, the decisions they've made and locate any privacy relevant decisions.
Govt. employee looking for IETF work relevant to internet access	Is preparing briefing on internet access in deprived areas	To understand how/if a change in standards might require investment in new technology or risk leaving people behind.	Identify an example discussion that demonstrates standards driving infrastructure changes. Get in touch with knowledgeable person
Academic trying to identify how a particular problem has been solved	Is planning next phase of research. Wants better understanding of related areas	Wants to update knowledge of real world application of technology in a specific area	Identify summaries of recent progress in key areas. Use these to narrow focus before identifying relevant Working Group
Commercial employee researching upcoming risks to new product	New product in the pipeline, needs to be aligned with standards	Seeking to make sure that new product is future proofed against upcoming standards	Identify and join relevant Working Grops, influence decision making through participation
Manager asked to pay IETF meeting expenses	Employee wants to attend IETF meeting in order to further participation relevant to work	To understand what the IETF does and why. Clear information on how the IETF works, and the benefits of participation to relevant organisation	Discover the point of IETF meetings and place understand what IETF participation means; for individuals and organisations.

Location and general use of the internet

Users from Europe, North America, South America and South Asia were represented in the sample. The new site must function well both for those with reliable high speed broadband and limited (3G) connectivity. The image use and accessibility requirements outlined in the Statement of Work are supported by the research. The usage data is not useful in determining the location of users, with approximately 80% of users undefined in terms of location.

All respondents reported that they primarily accessed the IETF site using a laptop, although they did use smartphones and tablets for other browsing. Users reported that they would visit the IETF on an alternative device if the browsing experience were better on those devices. This supports the requirement for a responsive device outlined in the brief.

As part of scoping, we will discuss with you the required level of browser support. To inform this decision, we suggest you gather more data on browser usage than is currently available in the usage stats.

Specifically, we are looking to learn the breadth browsers in use by current users (Chrome, Safari, IE, Mozilla etc) and the version of the browser they are using. This allows us to determine the correct level of browser support required. It is useful to know this in percentage terms, e.g. if only 2% of users are using IE8 we might suggest choosing not to support that browser; although given you user base and the fact that some users in more remote countries cannot be expected to be using recent versions, this decision would be made in close consultation with you.