

The current state of Self-Sovereign Identity

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Simplifying your SSI journey



Outline

1. Data collection and background of the survey participants
2. Current state of SSI
3. Benefits and challenges
4. Collaboration in TrustOverIP Foundation

Section 1

Data Collection Background of the respondents





About the survey

- Aim of the survey:
 - to get an overview of the current state of SSI and growth scope
 - to identify the main issues that the collaborative effort of TrustOverIP community should focus on, and identify members with common interests

If you still have not filled in the survey, here is the link:
<https://www.surveymonkey.com/r/J2CL9YH>



Survey development

- Exploratory qualitative research
 - Qualitative data gathered via interviews from SSI experts
 - Survey questions are developed collaboratively by many TrustOverIP members
- Thank you all for your help and input, especially David Luchuk, Nicky Hickman, Karl Kneis, Gene Dimira, Herzig Justin, Annegret Henninger, Kapil Bareja, Victor Syntez, Steven Milstein, Antti Kettunen, Markus Hautala, Matti Timonen, Drummond Reed, John Jordan, Scott Perry and Cristina Timón López.
- We simplified and finalized the survey together with Ravikant Agrawal



Data collection

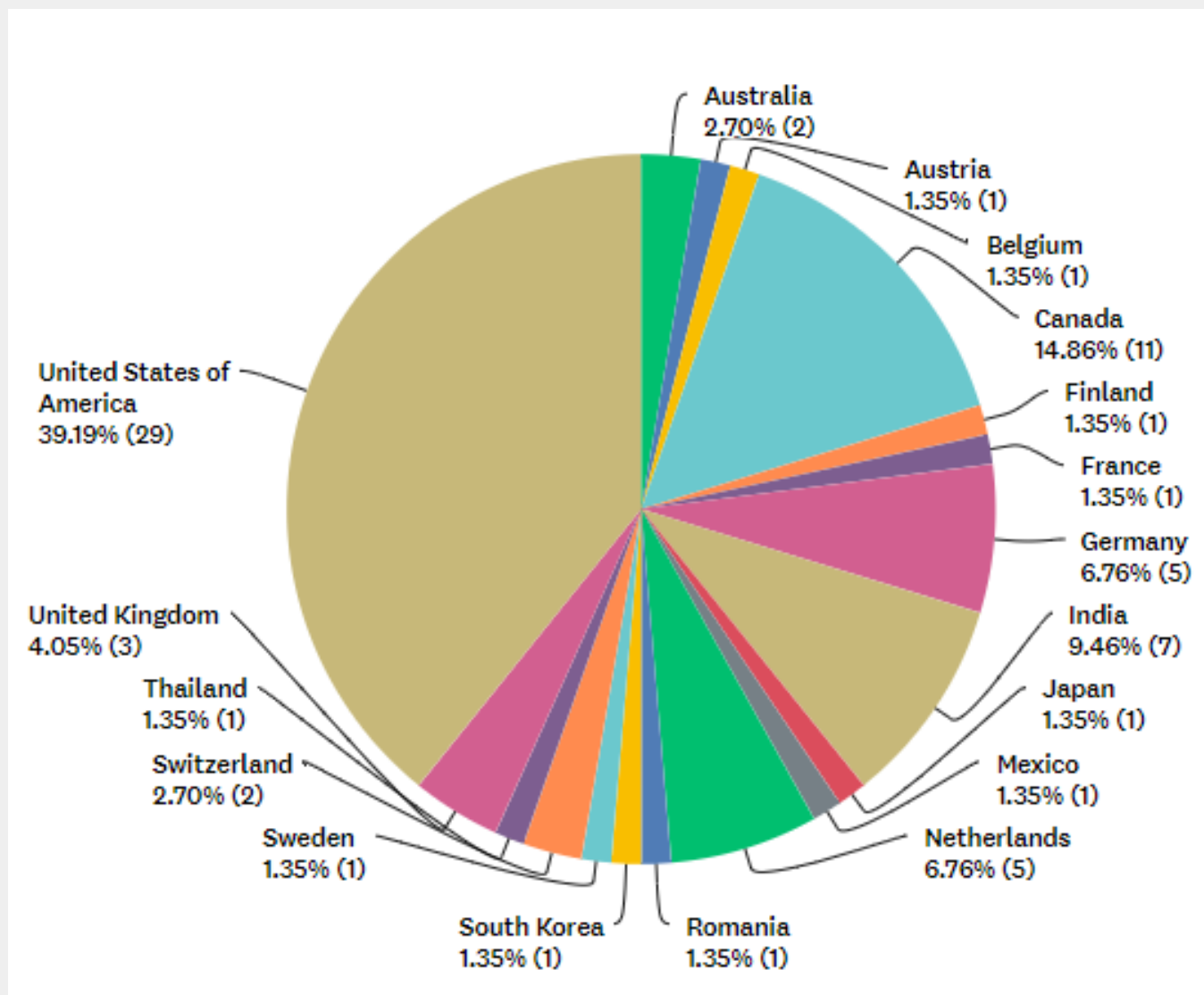
- Survey data collected between 24 March – April 30
 - Primarily from the members of TrustOverIP Foundation
 - The survey link has been distributed also to other open-source communities, such as MyData, Hyperledger, etc.
 - We received answers also from some of the participants of IIW 32 in April 2021
- Number of responses: **79 complete responses**, out of which 50 respondents are TrustOverIP members

Thank you for your answers!



Country of Respondents

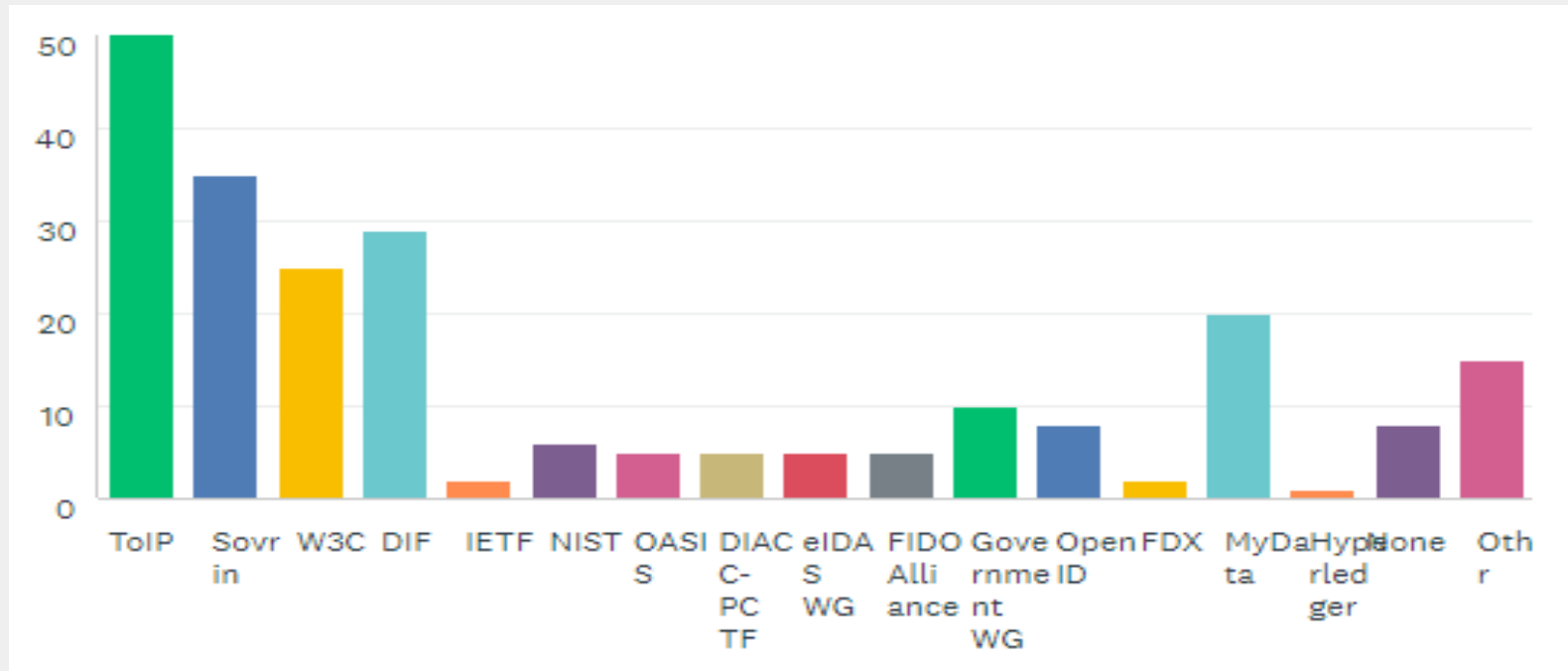
Top 3 countries: US,
Canada and India





Respondents: SDOs and other communities

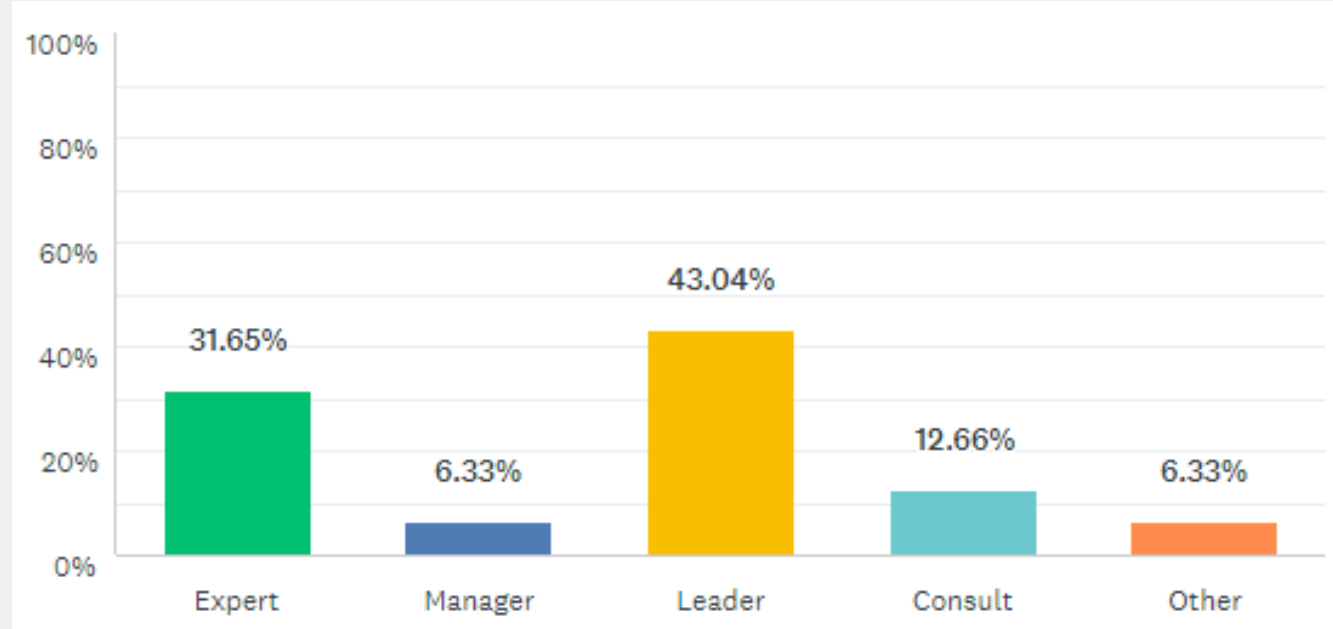
Most of the respondents are ToIP, Sovrin, DIF, W3C and MyData members





Roles of the Respondents

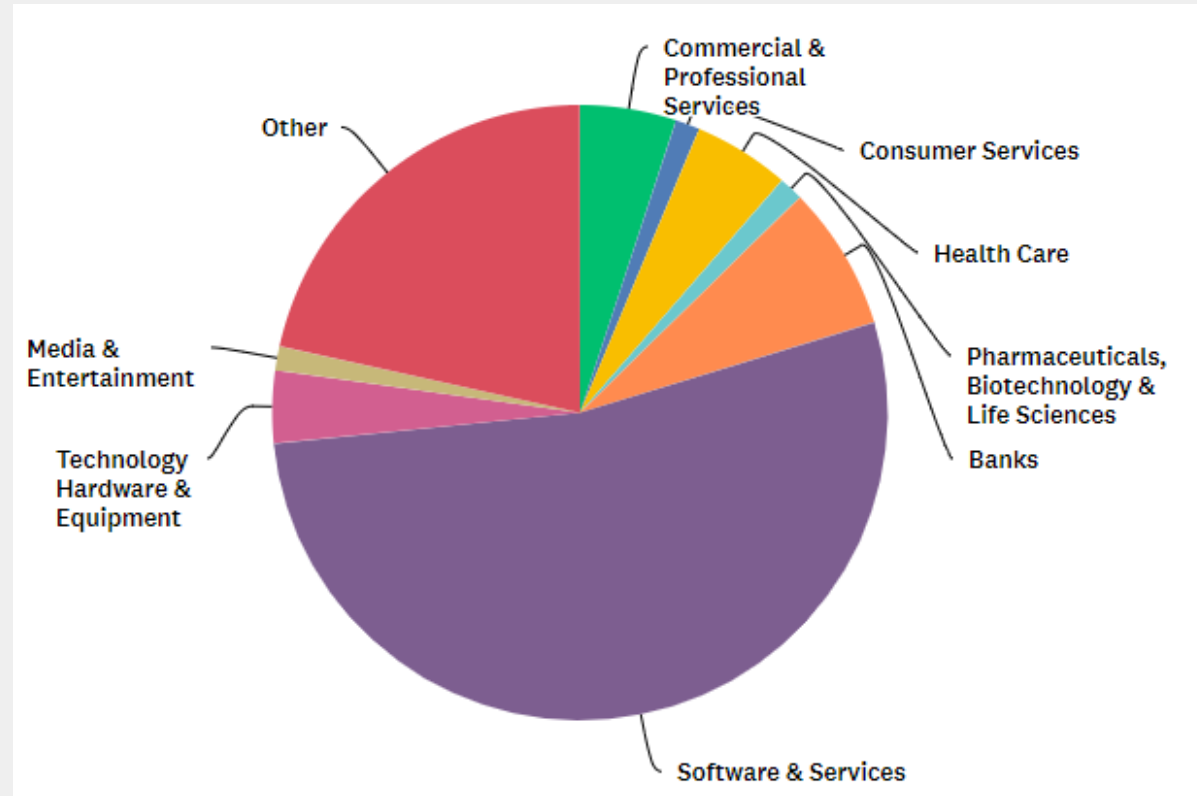
Mostly leaders and experts





Industry Sector of the Respondents' Organizations

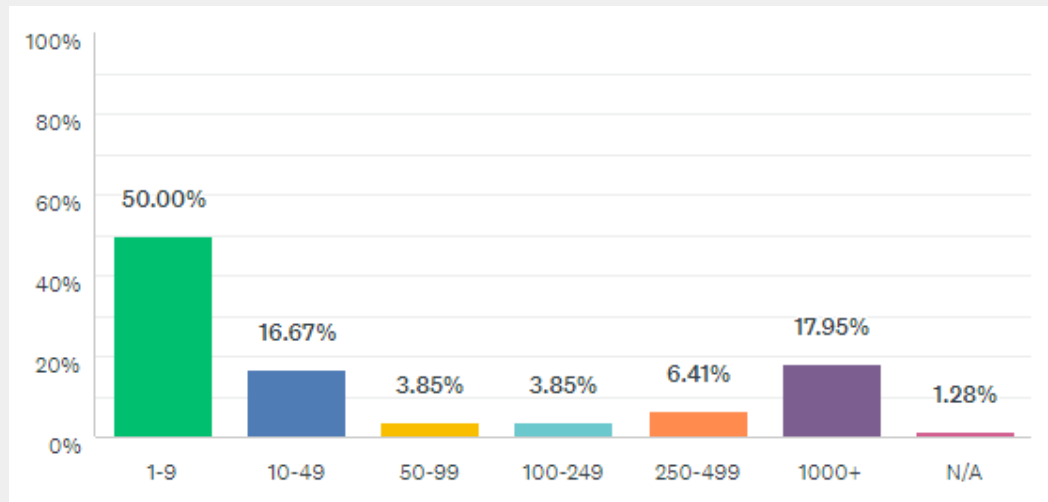
Software and Services is the most common industry



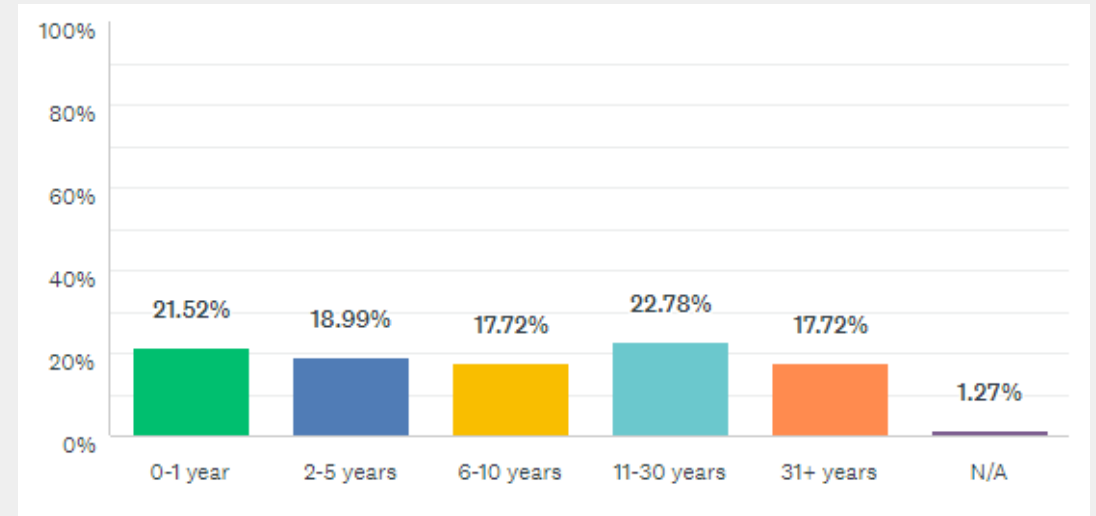


Organizations' size and age

50% are small organizations (1-9 employees)



Number of employees

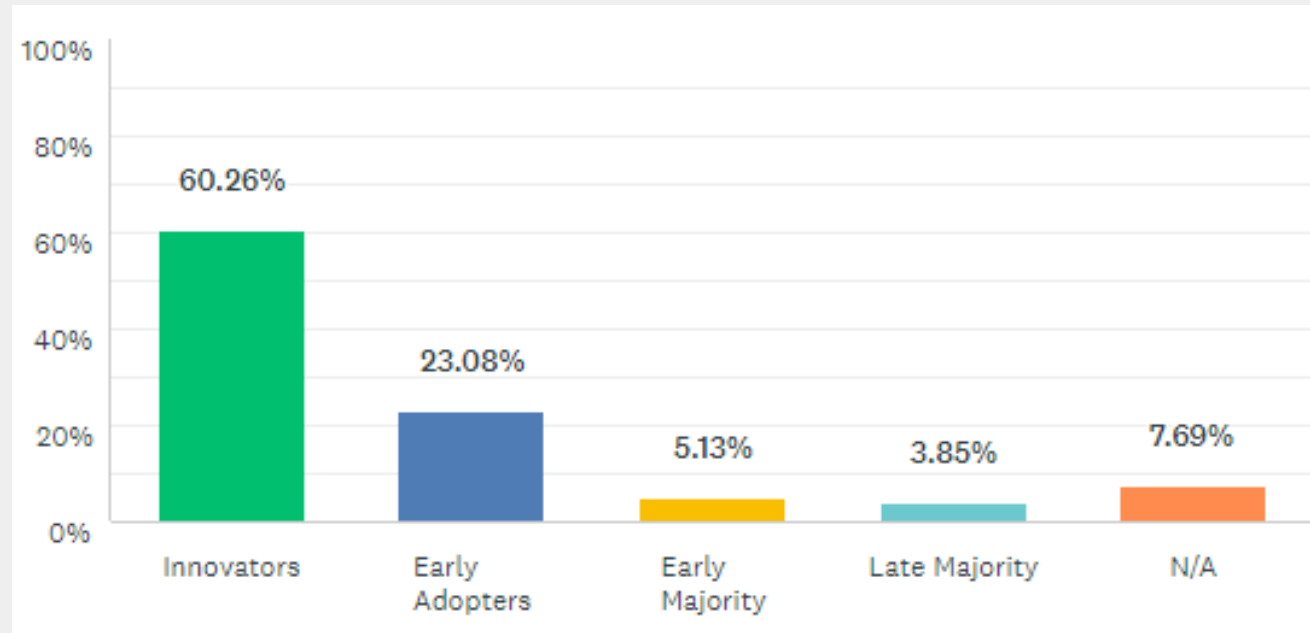


Age of the organization



Self-assessed innovativeness of the organization in general

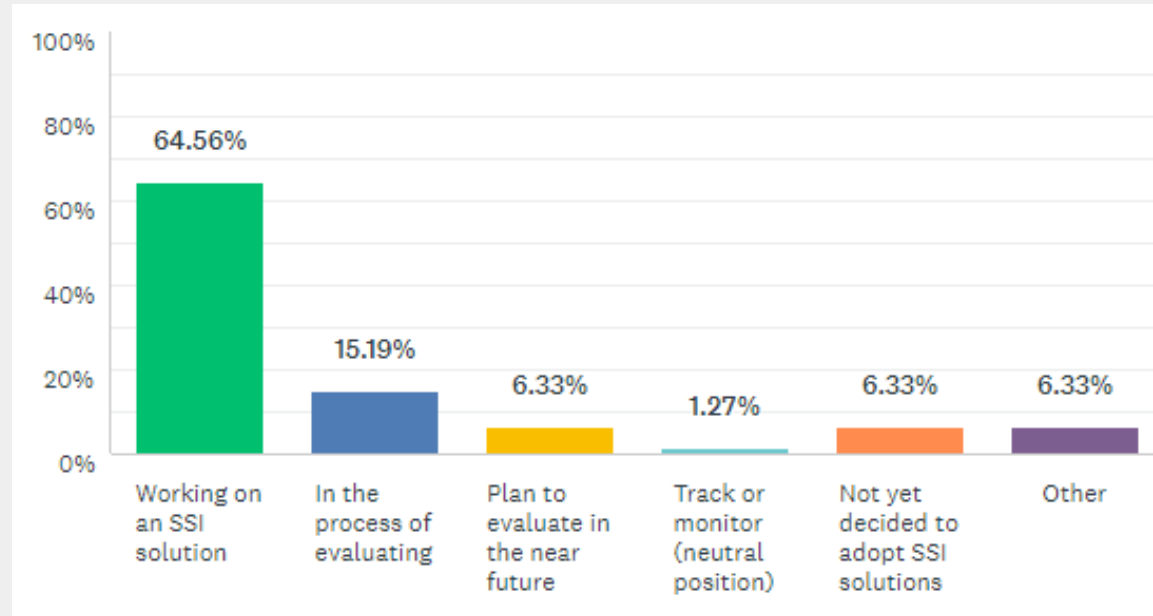
Innovators and early adopters





Phase of SSI adoption for the respondents' organization

Most of the respondents are working on an SSI solution already



Section 2

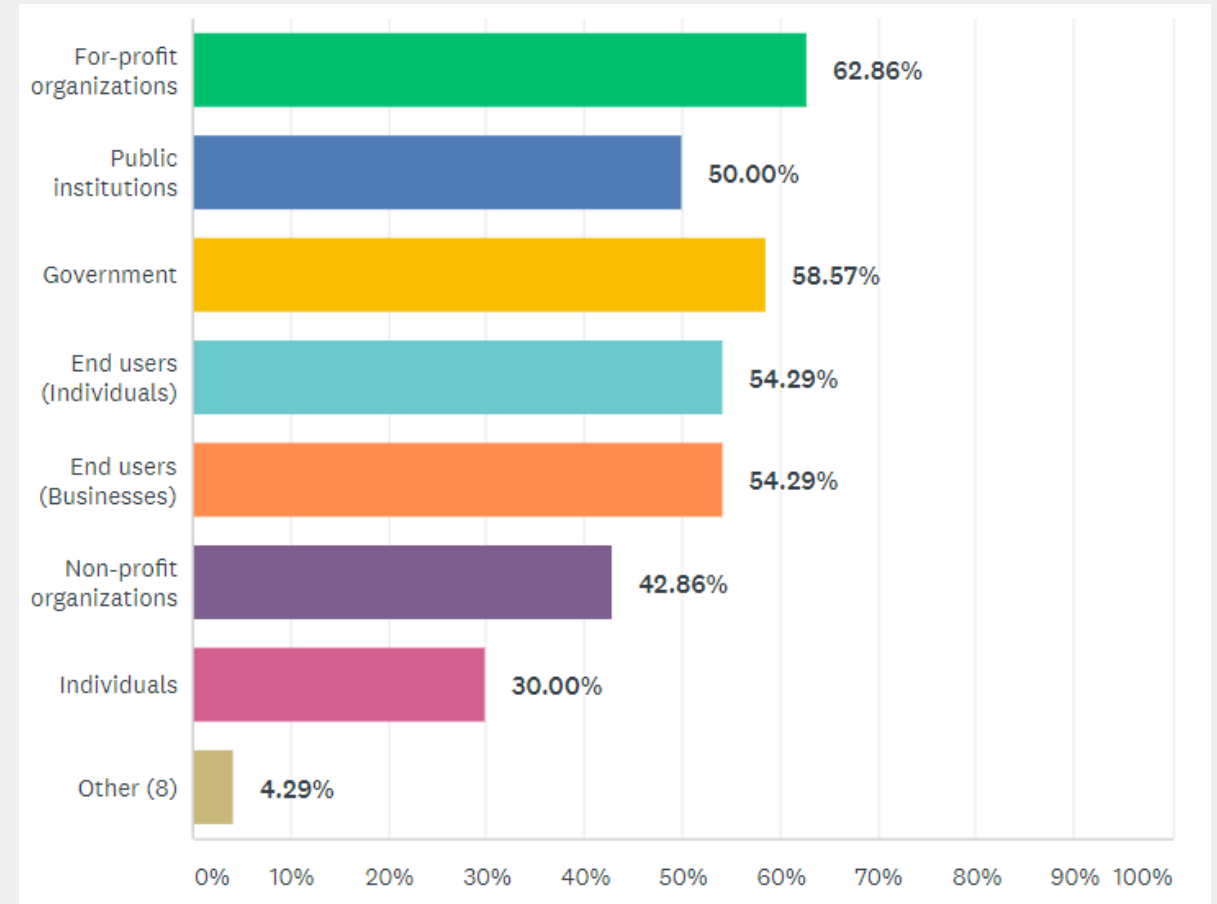
The Current State of SSI





SSI affects the whole society

- SSI might affect all industries: 25+ different industries mentioned
 - TOP 3 industry: Software and Services, Banks and Healthcare
- SSI affects everyone:
 - Businesses
 - Non-Profit organizations
 - Public institutions
 - Governments
 - Individuals

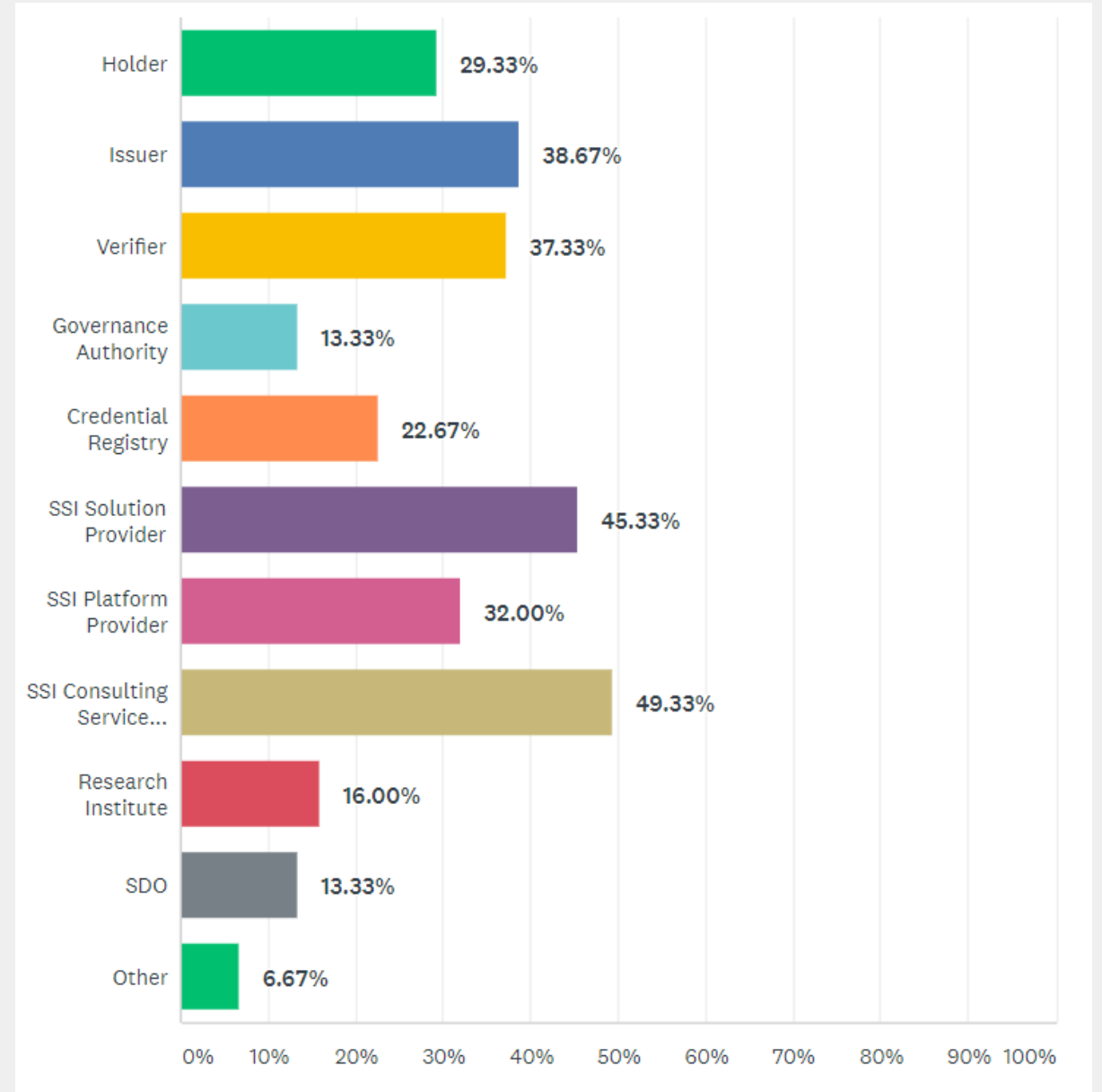


Actors in the respondents' SSI ecosystem



Role of the respondents' organization in its SSI ecosystem

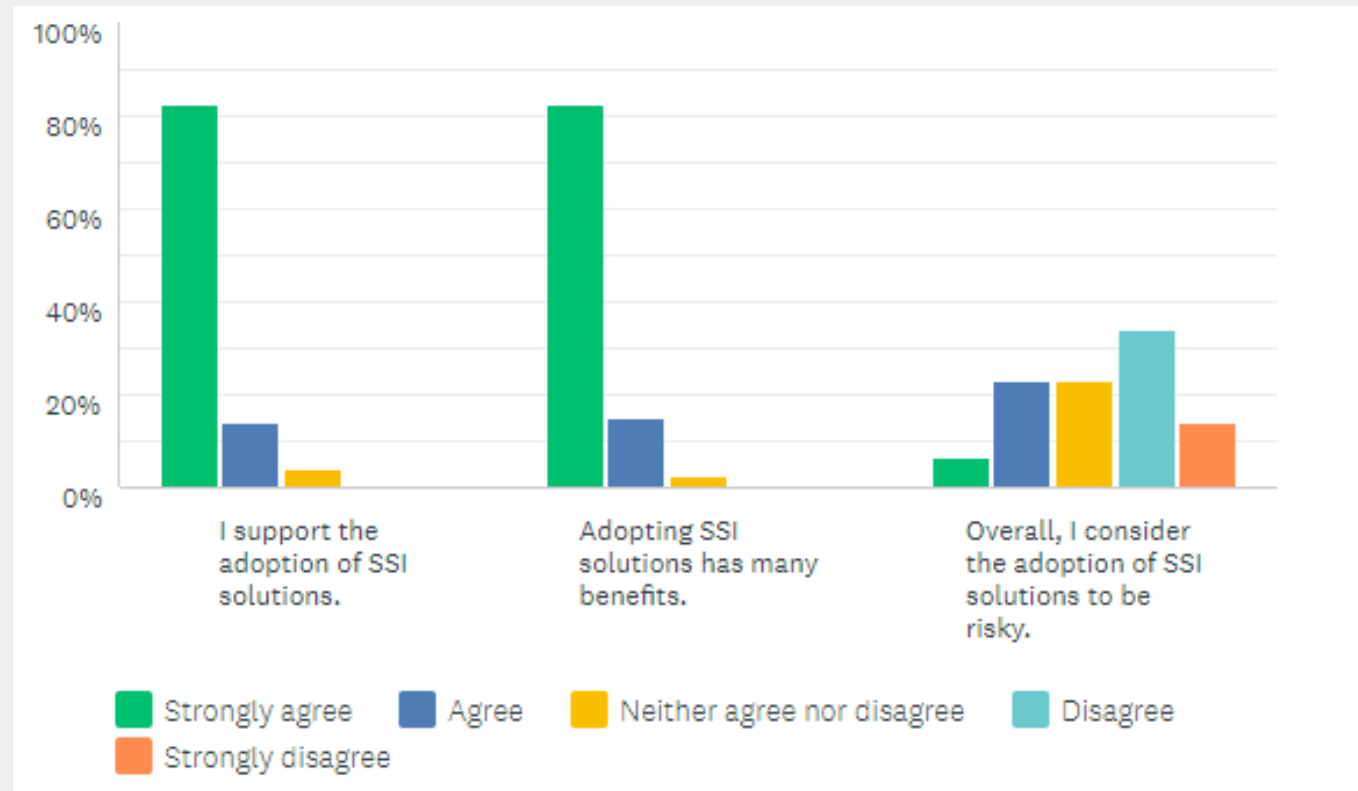
- SSI ecosystem seems to be vibrant, participation are from all types of actors
- Diverse answers





Attitude towards SSI adoption

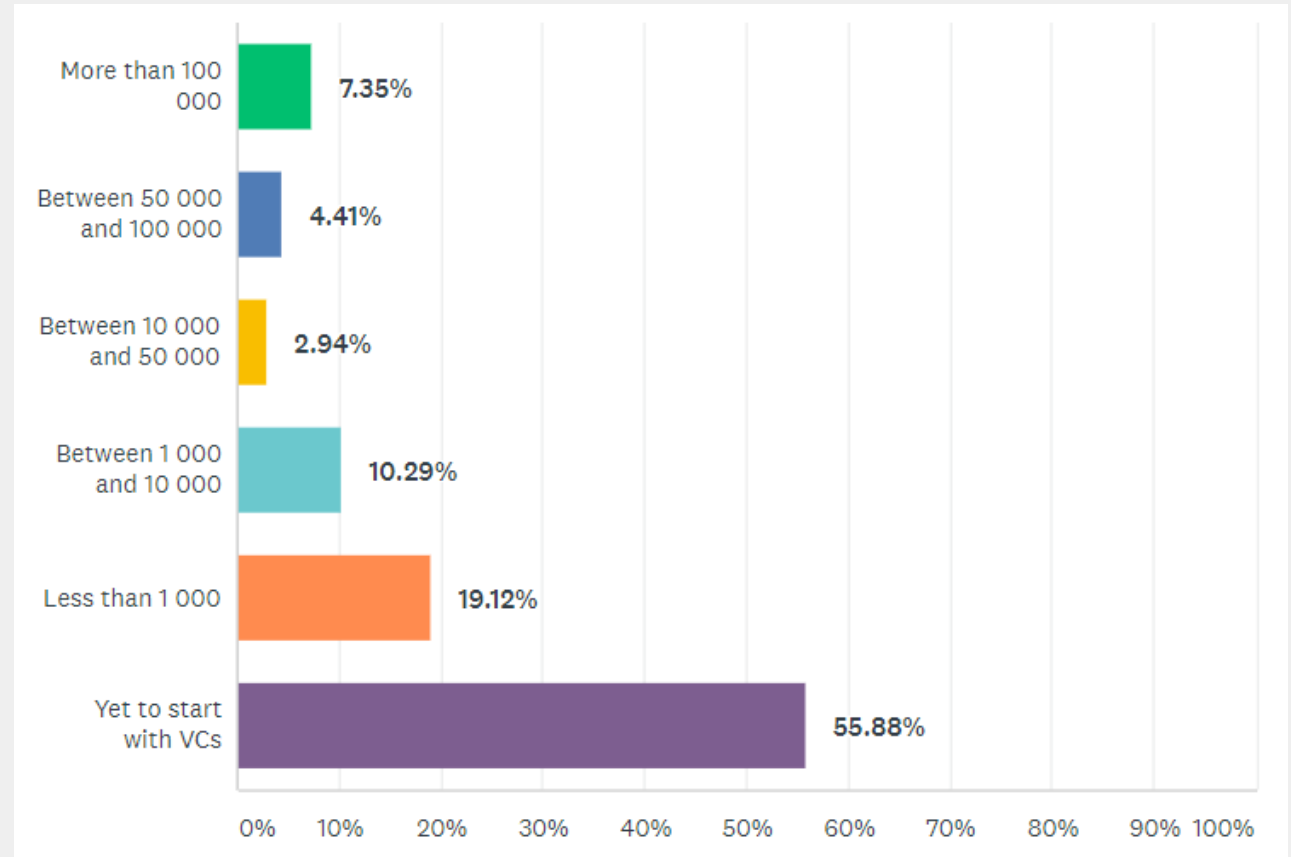
- Most of the respondents support the adoption and see it beneficial
- It is not generally considered as a high-risk technology





The number of VCs in production in the respondent's SSI solution

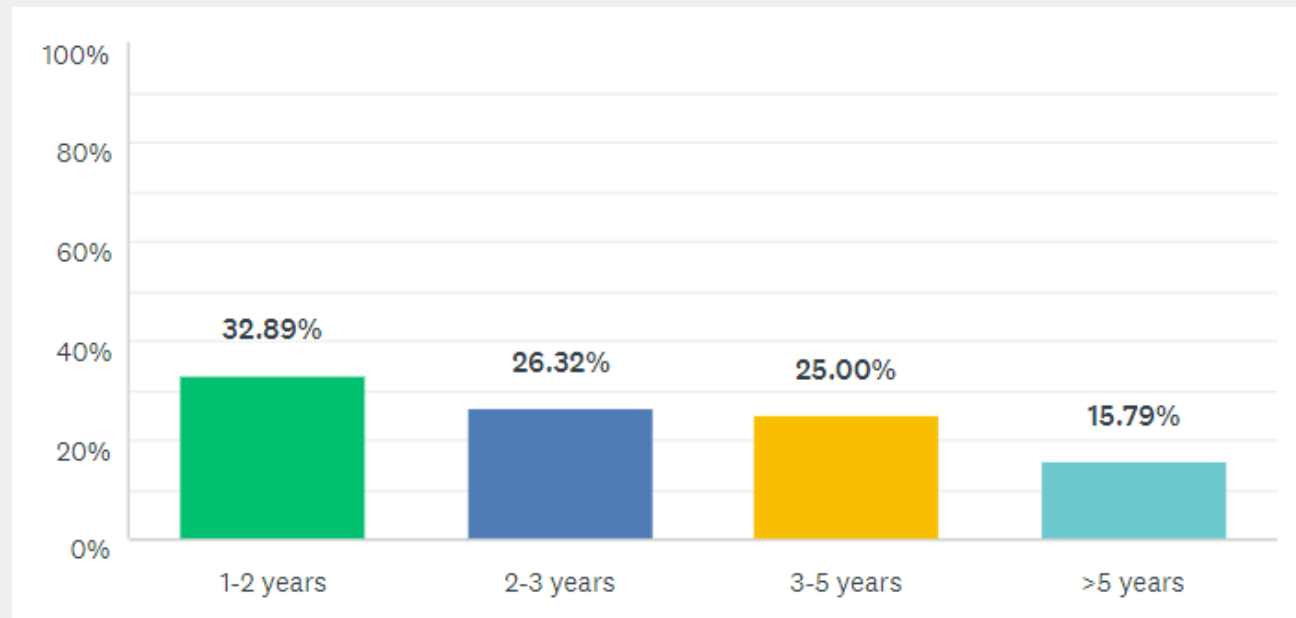
- Most solutions are not yet in production
- More than 7% of the respondents have more than 100 000 VCs





The number of years when SSI becomes mainstream in the respondents' domain

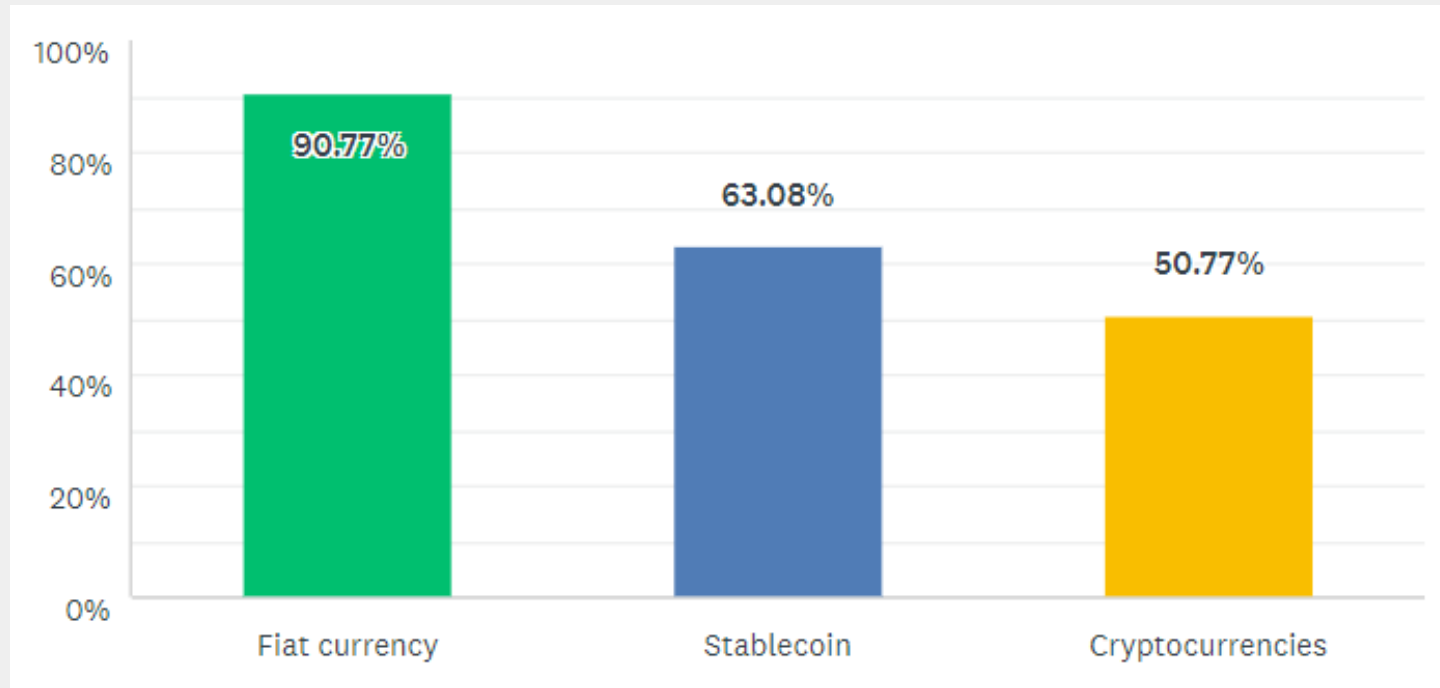
- Rapid development is expected
- Almost 60% think that SSI reaches mass adoption within 3 years





Accepted payment methods for SSI services

SSI experts are in favor of universal, globally accepted payment methods



Section 3

Benefits and challenges





Key benefits of SSI (ordered based on the results)

For the society

1. Trustful, secure and private digital interactions
2. Data owners' possibility to control their data
3. Digital transformation
4. Global and interoperable identity
5. Financial inclusion

For the organization

1. New innovations
2. Strategic alliances
3. Competitive advantage
4. Increasing our customer base
5. Simplifying processes



Key challenges (ordered based on the results)

1. User experience
2. Immaturity of technology
3. Lack of interoperability and standards
4. Developing the governance rules and policies
5. Challenges of business model development

Section 4

Collaboration in TrustOverIP Foundation

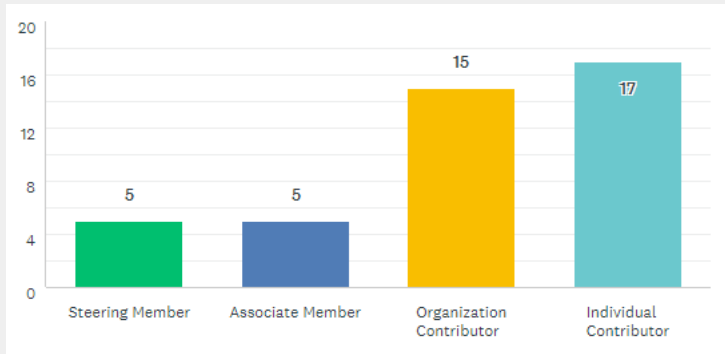




Background information of the respondents

ToIP membership type of the respondents:

- More than 40% of the respondents are individual contributors

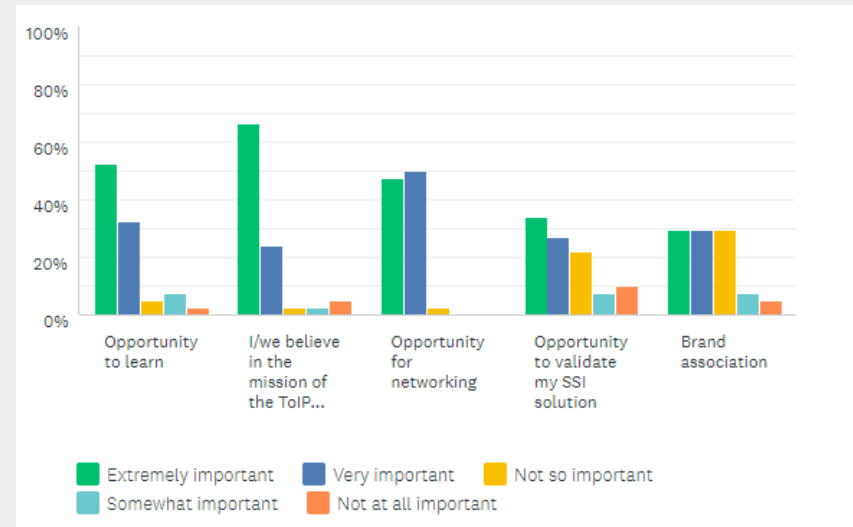


ToIP activity level of the respondents:

- Almost 40% is very active (17)
- 18,6% active (8)
- 28% neither active nor inactive (12)
- 11,63% not so active (5)
- 2,3% inactive (1)

Key reasons for joining the ToIP Foundation:

1. Belief in the mission
2. Opportunity for networking and building strategic alliances
3. Opportunity to learn
4. Brand association
5. Opportunity to validate my SSI solution



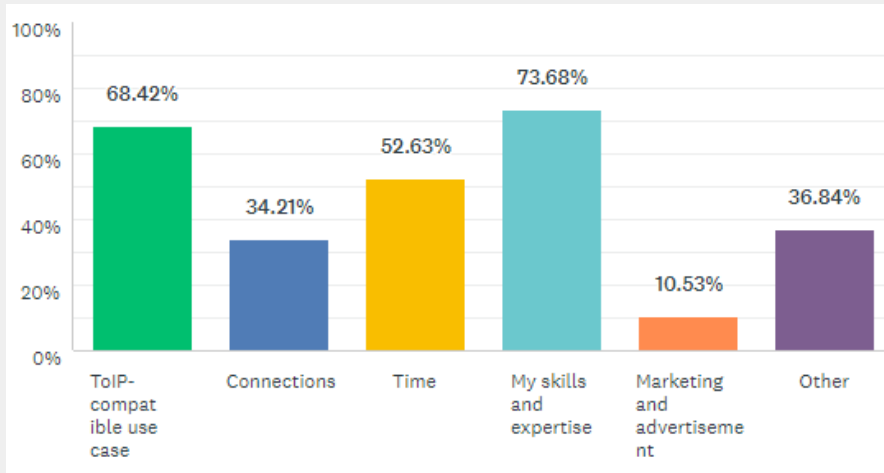


Q: How can you contribute? What are the resources that you could help with?

1. My skills and expertise (28)
2. A ToIP-compatible use case (26)
3. Time (20)
4. Other (14 answers, in the right)
5. Connections (13)

Other (free text):

- "Healthcare & Healthcare Policy"
- "Indy Network Management"
- "My company is driving SSI in Germany in many projects"
- "Expertise in verifiable credentials and VC ecosystems"
- "Semantics"
- "Decentralized identity, Blockchain security & open source security"
- "my specific subject matter expertise related to use case"
- "Software engineering and architecture"
- "Enterprise Identity and Access Management"
- "MedCreds, Research, Product Development"
- "Trust Assurance and Governance Development"
- "TNO has been visionary in several aspects of SSI: assurance community development, terminology, guardianship, anti-coersion measures, ..."
- "education industry"
- "project management"





Q: What challenges the TrustOverIP Foundation is facing on his journey?

1. Noise in the space, competing with other initiatives & SDOs (57,5%, 23)
2. Small full-time staff members, limited resources (35%, 14)
3. Lack of members' commitment and activity (27,5%, 11)
4. Balancing principles vs. operational practicalities (27,5%, 11)
5. Too broad – trying to boil the ocean (25%, 10)
6. Contradicting objectives of the members (25%, 10)

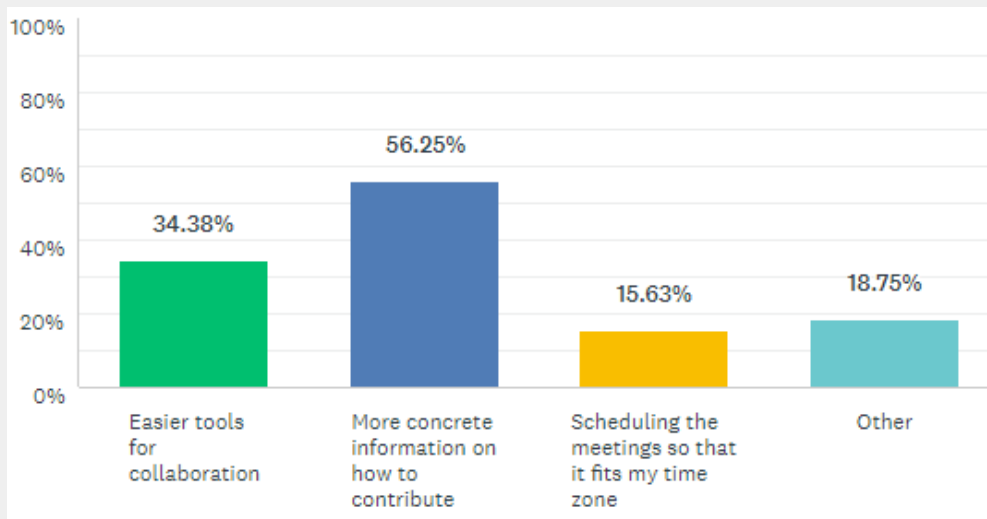
Other (free text):

- "ToIP's Authoritarian Centralizationist attitude"
- "Lack of urgency in the members/contributors."
- "Lack of domain expertise"
- "Confidence to be transparent given larger members and their objectives - regarding projects and use cases for smaller organizations/initiatives"
- "Still a sub-critical mass, suspicion of its US-based bylaws"
- "A technical and adoption path from current state of web/economy to SSI based Digital Economy"



Q: How the Trust over IP Foundation can help you to get you more involved in Trust over IP activities?

1. More concrete information on how to contribute (18)
2. Easier tools for collaboration (e.g. Confluence, GitHub; 11 answers)
3. Scheduling the meetings so that it fits my time zone (5 answers)



Other (free text):

- “Search for granular info - search is hard - this is why there is one leader (Google)”
- ”Different attitude”
- “Release plan for docs&materials, clear objectives what&when
- “Don't need the help, actively involved. Committed.”
- “Avenue to get paid for my time”
- “Accreditation for contribution - other similar groups offering credentials that can take to clients as credible experts on this tech”

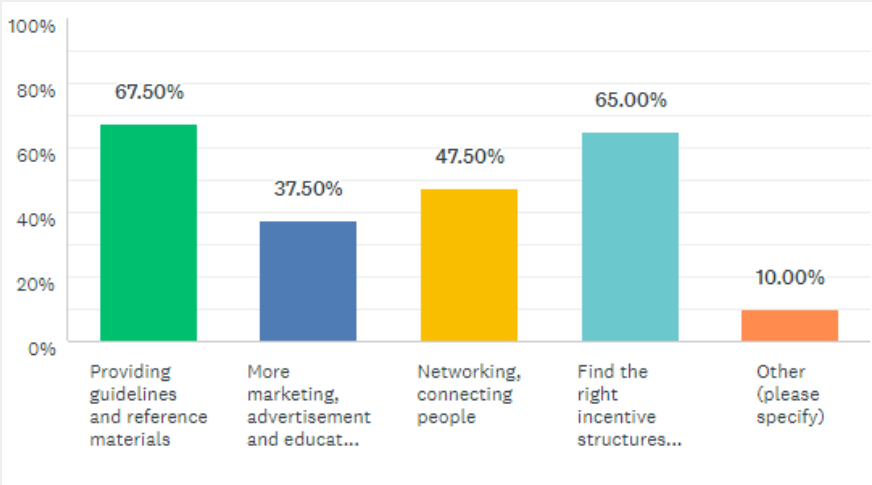


Q: How the Trust over IP Foundation can help you to achieve your (or your organization's) goals?

1. Providing guidelines and reference materials (27)
2. Find the right incentive structures for universal adoption (26)
3. Networking, connecting people (19)
4. More marketing, advertisement and education to reduce information asymmetry (15)

Other (free text):

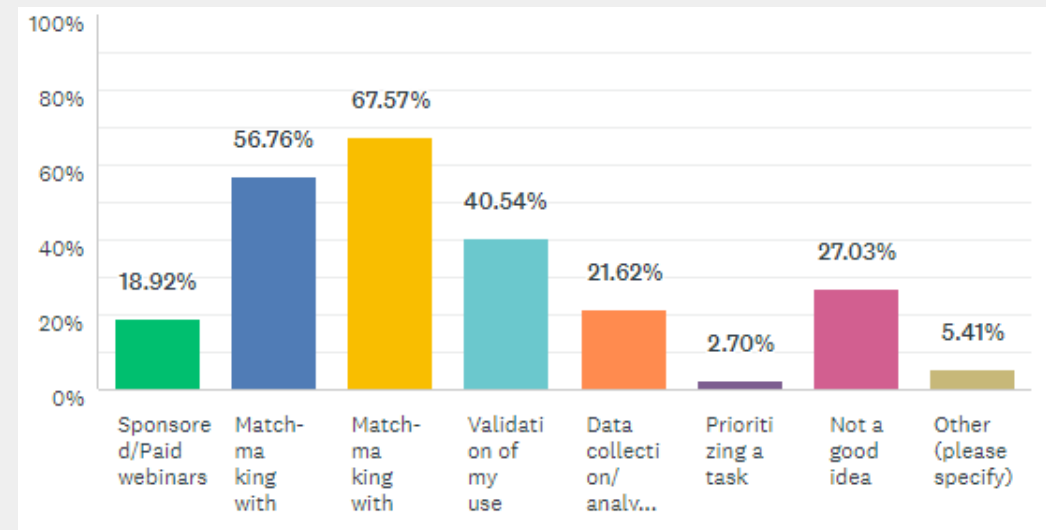
- "You guys are doing GREAT- I appreciate you all VERY MUCH!"
- "We're happy with the ToIP assistance."
- "Show practical & productive SSI use cases backed by ToIP stack"
- "Coordinating paid tiger teams for clients"





Q: If the TrustOverIP Foundation created a marketplace where members could promote their services and expertise, what types of services would be most valuable to you and your organization?

1. Matchmaking with prospective collaborators/partners (25)
2. Matchmaking with prospective clients (21)
3. Validation of my use case (15)
4. The marketplace is not a good idea (10)
5. Data collection / analysis from ToIP members (8)
6. Sponsored/Paid webinars or events (7)
7. Other: “I think development help - User testing user research is the best use case for this”; “I've not thought about this much.”





Free comments

- “While the org is stratified on how much a contributor is willing to pay, it should create a separate program for thought leaders to incent them to contribute their time. Without that, they will choose to follow the money.”
- “Would like to see increased transparency from TOIP steering. For example, voting on changes that impact the foundation structure without fostering public debate first is not good governance. The community have been working together for a year and have no deliverables published to show the market what we are doing. We seem to think Healthcare is a priority over all else which is confusing. We need to focus on Trust deliverables and not headlines that invite risk to the foundation or the needs of any one special ecosystem. We are pushing members away with this course. For future refence SSI and Verifiable Credentials are not the same thing. We seem to think of them as one thing in this survey. Not a big issue but some may be confused on that point.”
- “Should Trust Over IP be part of Sovrin.”
- “Here is my problem as an entrepreneur in the space - it is hard to tell who is doing what - the standards wars are leading me to waste time and resources (time is \$) I want to support and build our solution in the right way (the truly self sovereign way,) but cant waste time reviewing irrelevant material, understanding edge cases that don't pertain to my solution, or - most importantly - trying to understand the agenda of every commenter, so I can understand the value (or lack thereof) of their commentary ”



Free comments

- “Build awareness”
- “We at TNO see that SSI is an architecture, not a technology. It allows to have assurances in a digital world, such as we now have in a physical world.”
- “Currently SSI has yet to be integrated into how people live their lives. Until that happens, there can be no mass adoption. People use apps not identity. We need new strategies. Also, there are revocability issues, scalability issues, performance issues, size issues, and monetization issues. There are over a million credentials in market in the US. Problem - why are they not being used and how do you make money with it. Is it possible that the SSI community is focused on the wrong things?”
- “The Geoff Moore Crossing the Chasm model for market adoption of disruptive technology should be applied. We are still at step 1 ("technology enthusiasts") and there are very few referenceable early adopters. The would-be industry needs to start focusing on market and customer development instead of ever-more obscure technologies that nobody knows how to operate or support.”
- “I am very new to SSI however the concept and some executions seem we thought out. The issue seems to be finding a reason to move away from traditional methods with a compelling event. Users see, hear and experience data breaches but feel helpless to fix or move away. Mass adoption comes with influence and this tech, whilst compelling, has limited influence beyond mainstream methods (OAuth, FIDO2, OpenID, WebAuthn). There also seem to be a prevalence of typical open source development infighting over approaches and standards, this does nothing to instill confidence in enterprises and corporations whom are the key part to widespread adoption. ”

Thank you!
Comments and questions?



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