



## Technology configuration inventory

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Community & UN SDG(s):	<input type="checkbox"/> Individual participation/Serving a context community: Members of residences in Canada who wish to track and manage their household energy consumption to adopt sustainable practices. <input type="checkbox"/> Goal(s) 7 and 11
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### Instructions

It is useful to inventory the current technology configuration of the community, i.e., the current technology that the people working, learning, advancing knowledge (etc.) in the specific area you are engineering software for are using, as a way to understand the community better and what matters to them better. If yours is a new community, it may not have any specific technology yet, but even for brand new communities, the current configuration may not be empty, for instance if general tools like email or phone are going to be used. You can use a version of the table on the next page to inventory and analyze the current configuration of your community:

1. Get the big picture. Research the area and make a list of all the platforms and stand-alone tools in your community's configuration as best you can
2. For each platform, list the tools and check the ones that are being used. Why are some not being used? Are there duplicates? Are there issues around integration between tools?
3. To the left, make a note of which community activities/orientations the tools currently support in your community
4. To the right, identify the key features of tools. Are some of these features commonly or rarely used? What are the reasons for that?
5. Assess actual tool use if you can. Identify which are dominant and which are only used by smaller groups and individuals.

**NOTE:** Add new rows as needed below. Please know your search should be as exhaustive as possible given the area you are researching

Platform	Smart Home Applications (Example: Google Home)		
Supported activities	Tools	Key features	Usage notes
<b>Individual participation</b>	<ul style="list-style-type: none"> <li>- Integration with a variety of home appliances via IoT.</li> <li>- Adding new appliances using Bluetooth, Wi-Fi, or scanning QR codes.</li> <li>- Interactive interface allowing users to easily update or remove appliance details.</li> </ul>	<ul style="list-style-type: none"> <li>- Comprehensive inventory management where members can log and categorize their appliances.</li> <li>- Interactive interface allowing users to easily update or remove appliance details.</li> </ul>	<ul style="list-style-type: none"> <li>- Appliances are automatically identified and their details (power rating, model, brand, etc.) are stored securely.</li> <li>- Potential for integration with manufacturer databases for automatic specification retrieval.</li> </ul>
<b>Service context</b>	<ul style="list-style-type: none"> <li>- Real-time monitoring of appliance usage.</li> <li>- Algorithms to calculate energy consumption</li> </ul>	<ul style="list-style-type: none"> <li>- Dynamic energy consumption display: Application processes</li> </ul>	<ul style="list-style-type: none"> <li>- Visual representation of energy patterns with graphs showcasing daily,</li> </ul>



	based on appliance details and usage duration.	and presents data on-the-fly. - User-friendly dashboard showing the breakdown of energy usage per appliance.	weekly, and monthly consumption. - Application provides insights but might not offer holistic solutions for energy reduction or tailored sustainability suggestions.
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Stand-alone tool	Online Energy Consumption Calculator		
Supported activities	Tool	Key features	Usage notes
<b>Service context</b>	<ul style="list-style-type: none"> <li>- User-friendly interface with fields for appliance details: power rating, usage duration, quantity, etc.</li> <li>- Option to add multiple appliances for a collective energy consumption report.</li> </ul>	<ul style="list-style-type: none"> <li>- Efficient algorithm to calculate energy consumption based on user input.</li> </ul>	<ul style="list-style-type: none"> <li>- The energy consumption result is static, reflecting a snapshot based on the time of calculation.</li> <li>- Users should be aware of the specific metrics the calculator uses and ensure their input aligns with those metrics.</li> <li>- While this tool provides quick calculations, users might need real-time monitoring tools for more dynamic and detailed insights about their consumption trends.</li> </ul>

Stand-alone tool	Online Forums (Example: Reddit, Quora)		
Supported activities	Tool	Key features	Usage notes
<b>Content, Access to expertise, Relationships, Community cultivation</b>	<ul style="list-style-type: none"> <li>- Interactive platform allowing users to generate topics or threads for discussion.</li> <li>- Built-in tools for content categorization, tagging, and searching.</li> <li>- Feature to upvote, downvote, or mark answers as helpful/unhelpful.</li> </ul>	<ul style="list-style-type: none"> <li>- Community-driven knowledge sharing, with real-time feedback on questions posed.</li> <li>- Mechanisms to highlight or pin top answers or important threads.</li> <li>- Ability to connect or follow other users, creating a network of expertise.</li> <li>- Moderation tools to ensure content quality and maintain community standards.</li> </ul>	<ul style="list-style-type: none"> <li>- Creates a digital habitat for users to share their knowledge and clarify questions. Topics of discussion in these habitats can be multiple.</li> <li>- No forum available for niche topics such as sustainability in household energy consumption.</li> </ul>



Stand-alone tool	E-commerce Websites (Example: Amazon)		
Supported activities	Tool	Key features	Usage notes
Content	<ul style="list-style-type: none"><li>- User-friendly interface for seamless product browsing.</li><li>- Search bar with advanced search capabilities and auto-suggestions.</li><li>- Product pages with detailed descriptions, images, reviews, and ratings.</li></ul>	<ul style="list-style-type: none"><li>- Ability to use filters like "eco-friendly" or "sustainable" to narrow down product selections.</li><li>- Recommendation engine suggesting similar or complementary products.</li></ul>	<ul style="list-style-type: none"><li>- E-commerce sites are valuable resources for finding a vast array of products, but users should read product descriptions and reviews carefully.</li><li>- While filters can help find sustainable products, it's essential to verify the sustainability claims through product certifications or independent research.</li></ul>