Capacity Exchange

VISION & PURPOSE

capx.toolforge.org

2026

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Introduction

The Capacity Exchange (CapX) is a platform designed by and for the Wikimedia Movement - an open, global, and diverse social movement. It is a centrally-designed tool that allows for decentralized capacity building, from the recognition that the knowledge and skills needed for community capacity-building are already within our reach, among us. As envisaged in the Grant proposal, CapX is *"an interactive, online platform, backed by a database, that allows Wikimedians across the globe to publish information about themselves and their affiliates, conduct searches and (directly) connect to each other"*.

CapX allows individuals, groups, and organizations that want to share or develop skills (capacities) to find each other and connect, enhancing knowledge exchange across communities. By promoting learning as a multi-directional process and genuine collaboration without commercial exploitation, CapX arises as an alternative to Big Tech platforms, on a mobile-first, multilingual, and privacy-preserving platform. It is running on Toolforge, which is hosted on Wikimedia Cloud Services, and therefore is fully integrated into the Wikimedia ecosystem and its policies.

The project directly responds to Recommendation 6 of the Movement Strategy 2030 by providing a service to facilitate matching/connecting people for teaching and learning skills, addressing the largest missing item in the movement's toolbox: peer support. And it does that in an accessible, discoverable, and inclusive way. CapX allows users to find people based on skills, languages, and territories, making it easier to identify collaborators even when knowing nothing about them.

For knowledge and skills to be shared, the tool matches the Movement's current needs with resources that are already among us. As planned before, *"by creating a platform which people can use to enter their assets, shareable skills as well as their needs, we develop a real-time map of capacities in the movement"*. And, by analyzing this data, capacity building providers in the movement can plan and address unmet needs.

This allows for a global, decentralized peer exchange between wikimedians, using channels that are common in the community and that are in

line with its values and principles. In addition to a user-friendly environment, CapX offers an alternative for those who are not comfortable expressing themselves in English.

With this document, we want to organize existing information about the Capacity Exchange project. We also outline how the community has been involved through the discussions that informed this initiative; highlight the platform's strengths; and explain how it is integrated within the Wikimedia ecosystem. Finally, we describe the decision-making processes of the technical team as well as the project's governance framework.

We hope it offers clarity and helps you better understand this inspiring and powerful initiative.

The Capacity Exchange's team.

January 2026.

Vision & background

The current and second iteration of the Capacity Exchange (CapX) project is coordinated and administered by Wikimedia Brasil, with the guidance of an international Advisory Committee. It is funded by the Wikimedia Foundation, through a Movement Strategy grant, which is planned to last until June 2026.

The vision of the project, though, dates to the Wikimedia Movement Strategy discussions about capacity building, which consistently mentioned the need for better spaces for peer exchanges and knowledge management. CapX emerged from discussions among European affiliates during this process, with the intention of creating a centrally designed tool that would enable decentralized peer learning across the movement, showing also basic information of who was doing what and where.

The dream started to be built by a voluntary working group of Wikimedians, after a pitch at a Wikimedia European Affiliates meeting. In the initial phase of the project, this group of European affiliates conducted extensive research to assess the need for a different platform to develop the tool. They found that Meta-Wiki presented limitations in searchability, information discoverability, and its effectiveness as a tool for facilitating individual connections. This group formulated the concept, taxonomy, and pilot platform for the Capacity Exchange The project activities and its coordination were transitioned to the Wikimedia Brasil (then Wiki Movimento Brasil), as of November 2022. The project proposal for the new phase was submitted to the Wikimedia Foundation and granted by the Movement Strategy Implementation Grants (MSIG).

In 2022, this former working group (2021-2023) delivered CapX's first prototype, that was later partially incorporated into a different infrastructure and hosted at toolforge.org, as detailed in the following section. The transition of the project's coordination took place due to Wikimedia Brasil's technical skills and its strong connections with communities in the Global Majority. The project's founders continued to collaborate through their participation in the international Advisory Committee, which is composed of representatives from Wikimedia affiliates, user groups, and hubs from across the globe. All initial documentation can be found here.

From its theory of change, CapX vision continues to be focused on:

- ❖ Mapping Human and Knowledge Resources Across the Wikimedia Movement
- ❖ Profiling Skills and Services to Facilitate Peer Connections
- ❖ Enabling Exchanges as the Ultimate Goal

It is worth noting CapX does not, and never did, seek to replace actual capacity building or peer learning programs, or be the human hand supporting these connections. It offers a movement-wide sociotechnical infrastructure (capx.toolforge.org) that is useful for programs and communities wanting to connect and/or organize peer learning or other capacity building initiatives. Besides all the technical developments, the CapX team constantly do extensive community consultations and outreach, building CapX in a way that responds to Movement's needs.

In addition to the objectives described above, CapX also aims to support individuals who are not deeply familiar with the movement's contact networks or who do not have an extensive wiki-network. We recognize that it can be challenging to understand who is who and who does what when one is outside these established circles. Furthermore, the platform serves as a solution for those who experience difficulties navigating wiki pages with limited usability or engaging with more technical wiki tools.

Not all communities have access to the same channels, and not everyone feels comfortable engaging in English, particularly in spaces that may feel intimidating for newer contributors. CapX seeks to make skill-sharing more accessible by enabling people to connect in the languages they are most comfortable with, and in the manner that best suits their needs. Sending a message through the tool (via Meta-Wiki messages) is only the initial point of contact, from which conversations may continue through other channels as most convenient for the participants.

Additionally, the tool helps to highlight the work of individuals who are not part of Wikimedia's central networks but make significant contributions to the ecosystem, and are willing to share their knowledge with their peers. Through CapX, it is possible to connect with others engaged in similar activities across diverse geographic and cultural contexts. In this sense, CapX also provides an opportunity to move beyond the most visible and established voices within

dominant networks, fostering greater inclusion of diverse perspectives and experiences.

By creating a platform that allows people to register their assets, shareable skills, and needs, we build a real-time map of ‘capacities’ across the movement. Analyzing the data generated from user and organization profiles enables capacity building providers to identify unmet needs and strategically orient their actions within the movement. Currently, it is possible to read and assess this information on our Data Analytics page, and we aim to continuously expand and improve the ways in which these data can be visualized and evaluated.

Technical history

In 2022, the Europe-based working group (2021-2023) delivered CapX's first prototype, which was derived from OER World Map software. It was based on Java and Ruby programming languages, and hosted at wmcloud.org.

Adapted to use the MediaWiki Login, the first prototype allowed users to create their own profile and search for other users' profiles. The search was based on different skill tags, and profiles displayed the dates of creation and edition. Users were allowed to pinpoint their exact geographic location, enabling the search for editors on a world map. Furthermore, the framework presented good scalability from desktop to mobile.

But, the initial prototype became unstable shortly after being initially tested, in late 2022. Subsequently, the OER World Map repository on GitHub was archived. Already under the coordination of Wikimedia Brasil, the initial prototype was evaluated through two focus groups involving CapX's key stakeholders: members of user groups, affiliates, and initiatives from the Wikimedia Movement.

In mid-2023, Wikimedia Brasil's (2023-2026) diagnosis was that geospatial mapping - a central aspect of the first prototype - was counterintuitive, given the nature of the Wikimedia Movement, and considering users' privacy concerns. Nonetheless, some other main functionalities served CapX collective vision. Based on the feedback collected during those sessions, the results guided the development of the conceptual design, task workflows, and interface screens of the second prototype. Profile edition and view, tag search, and mobile-desktop scalability should then be migrated during the development of a new solution for CapX under the new coordination and development team.

The team started to develop a new prototype using a different infrastructure: a new code language and library, Django and React, and run it at *toolforge.org*. Toolforge is a reliable, scalable hosting environment for community developers working on tools and bots developed by and for the Wikimedia Movement, and it is hosted on the Wikimedia Cloud Services. Django is an open-source backend web framework written in Python, while React is a free and open-source frontend JavaScript library for building user interfaces. We took advantage of the robustness and widespread adoption of the Python and

JavaScript frameworks, enabling the project to benefit from a larger pool of potential developers, and an increased likelihood of long-term maintenance.

The first version of the current software was launched at Wikimania 2024 (capx.toolforge.org) in August 2024. Following the same methodology, the prototype was again tested with CapX's stakeholders. After several workshops, events, and focus groups, the team developed an updated and enhanced version that incorporates community feedback. Launched on March 2025, the current version of the software offers a unique look and feel, and includes all the improvements envisioned in the Technical Plan version 3.0.

It is worth highlighting that, during the development of the current version, all technical decisions were made with users' privacy in mind, in order to accommodate different Wikimedia contexts. This resulted in the elimination of some previously collected data, such as gender, profile pictures, and real names, as well as in the creation of a database that stores minimal data and is aligned with Wikimedia's values (see our Privacy Policy).

During the extended project period (2025-2026), CapX focused on consolidating its integration with Let's Connect (WMF peer support initiative), and developing a strategic framework for software scalability and long-term maintenance. The team actively expanded user participation, and increased awareness of the tool, always gathering community feedback through workshops, events, and focus groups. CapX's activities are always validated through regular meetings with the Advisory Committee, reporting to the Wikimedia Foundation, and consultations with movement partners, ensuring that development remains aligned with community needs.

CapX adopts a research-driven and user-centered approach to improve navigation, usability, and accessibility. In line with best practices in software development and the organizational culture of Wikimedia Brasil, each modification includes code review to ensure quality and adherence to the project's coding standards. It also includes systematic testing to verify that features work as intended, and proper documentation to support understanding and future maintenance. The team is currently focused on bug fixing and UX/UI enhancements, while also developing new features requested by the community. Some examples are the Mentorship feature, the personalized Carousel of Suggestions, the Data Analysis dashboard and the improvements that are being made to the Capacity Directory with partners' support.

Capacity Exchange primarily mirrors data from Wikidata, Metabase, and Wikimedia Commons, relying on the Wikimedia projects themselves for content moderation and verification, while ensuring that information is automatically kept up to date. All technical information can be found in details in the CapX's Technical Plans, which are available at our Wikimedia Commons Category. It is worth noting that each Technical Plan iteration and its activities are conducted by the whole CapX team, taking in consideration the specialty of each team member (See Team). Additional guidance is sought with Advisory Committee members, project supporters, and in Wikimedia Events. The source code for the project is hosted on GitHub under the WMB repository, divided into two separate components: capx-frontend for the user interface and capx-backend for server-side functionalities.

Although the CapX Toolforge Database does not contain sensitive data, access to it is restricted to the technical team for security reasons. Selected partners may be granted access to a user-friendly view of this database, subject to a formal agreement between the parties, as it already occurs with EduWiki Hub and Volunteer Supporters Network Hub. For user safety, all data related to individual user profiles on the platform is only accessible by logged users, as this helps prevent data scraping by external tools. Only the list of organizational profiles and of events are available without authentication.

If you are interested in learning more about the database, please contact the team. Technical experts are also invited to review our full documentation, which is publicly available on GitHub and our Meta-wiki page. We welcome discussions on new and alternative solutions and highly value expert feedback. Please contact us at capx@wmnobrasil.org.

Wiki integration

The Capacity Exchange is a project born within the wikimedia circles, and it is made by and for wikimedians. Its vision dates to the Wikimedia Movement Strategy discussions about capacity building, which means that it has always been aligned with the Wikimedia 2030 Movement Strategy Recommendations and with the needs identified by the wikimedia community.

Its activities are always validated by an international Advisory Committee, which is composed of representatives from Wikimedia affiliates, user groups, and hubs from across the globe. The team is constantly consulting movement partners to ensure that the development remains aligned with wikimedian communities needs, and periodically reports to the Wikimedia Foundation.

Capacity Exchange is not one of the fifteen Wikimedia projects maintained by the Wikimedia Foundation, but it runs on a Wikimedia Cloud Services environment called Toolforge. Toolforge is a reliable, scalable hosting environment for community developers working on tools and bots developed by and for the Wikimedia Movement. Therefore, it is fully integrated into the Wikimedia ecosystem and governed by the same policies.

It responds to the reality that Wikimedians already seek external platforms to connect and find each other, such as Facebook, Instagram, X (Twitter) and Mastodon. In contrast to commercial social media platforms, Capacity Exchange is specifically designed to respond to community needs, is aligned with the values of the Wikimedia Movement. It is not driven by opaque algorithms or profit-oriented goals, and is a non-commercial and community-centered space that respects the culture and practices of wikimedian communities. In addition, the project is highly committed to data responsibility, collecting and storing only minimal information and not tracking its users (see our Privacy Policy).

CapX uses the Meta-Wiki messaging service as its communication system because it aligns with and preserves the established Wikimedia community practices. Being sent via Meta-Wiki, these messages provide the same level of privacy and functionality. Users can choose to send messages by email (if the recipient has an email linked to their Wikimedia account) or by writing a topic on the user's Talkpage. In both cases, the recipient can decide

where to reply to the message. All user's message logs are displayed in the "Sent" tab, and the tool only stores the date they were sent, recipients' usernames, and status. The message subject and content are not stored in the database for privacy reasons.

The Capacity Exchange software is integrated with TranslateWiki and, therefore, can be easily translated into any language. Translatewiki.net is an independent open source project, a translation community and a localization platform for free and open source projects. It started out with localization for MediaWiki and added support for other free and open source projects later.

The Capacity Exchange's Capacity Directory is a comprehensive list of skills, knowledge, and services that users can share or learn, that was derived from the Skills Directory proposed by Let's Connect Peer Program. They were based on community input, suggesting the creation of more general categories for initial connections. It is worth noting that the team is working with the Volunteer Supporters Network Hub, the EduWiki Hub, and the Language Diversity Hub to expand or better define the list to include capacities relevant to their areas of work.

The 'capacities' are the core feature of the tool, as user profiles, organization profiles, and events are all organized and filtered around them. Currently, there are seven main capacity categories, each containing more specific capacities, for a total of 134 capacities. These capacities are displayed as cards, showing their clickable QIDs on Wikidata and Metabase, along with their names and descriptions. The names and descriptions in the Capacity Directory are pulled from Metabase (and Wikidata), and their translations are made directly in those respective databases.

As a result, by making Capacity Exchange available in multiple languages, Wikimedians also contribute to the translation and enrichment of other Movement resources, through Translatewiki, Wikidata, and Metabase.

Another form of integration with the wiki projects is the display of personal images on the user profile that can only be added via Wikidata items. Users who have a personal item on Wikidata (see Wikidata's notability criteria for more info), can choose to associate their CapX username with that item. By selecting this option in the tool, the system automatically searches for the corresponding item on Wikidata and, if found, displays the related image on the user's CapX profile. Wikidata is used to ensure moderation and data quality, as it

is supported by a large and active community of volunteer editors. Consequently, users who do not have a Wikidata item, or who choose not to associate it with an image, are limited to using avatars on their CapX profiles.

The Capacity Exchange Events page serves as an interactive, capacity-related feature for discovering Wikimedia community events, and includes a search and filtering system. It uses Wikimedia project URLs from Meta-wiki and WikiLearn as references to retrieve basic information and to facilitate the completion of event data by the responsible organization.

CapX also provides a user template (*{{Capacity Exchange}}*)that allows users to display basic information from their user profile on their Meta-Wiki pages, facilitating visibility and integration between them.

The CapX team reports its activities periodically to the community through Wikimedia Diff posts. Furthermore, all project activities, together with comprehensive documentation - such as the user guide with step-by-step tutorials for all features, the FAQ section, and information about the project team and network - are detailed and continuously updated on the project's Meta-Wiki page.

Governance and network

The Capacity Exchange's activities are currently coordinated by Wikimedia Brasil, and are always validated through regular meetings with the Advisory Committee, reporting to the Wikimedia Foundation, and consultations with movement partners, ensuring that development remains aligned with community needs.

The Advisory Committee is open, and all Sister Initiatives are invited to join the discussions by sending a representative to be part of the conversation, and to present their collective perspectives and needs. The aim of the Committee is to strengthen connections with Sister Initiatives and enable their involvement and agency in the project. Members are expected to participate in general meetings, conduct capacity-building needs assessments, provide feedback on the tool, and contribute ideas and recommendations for the project's future governance. The Advisory Committee meets at a one-hour pre-scheduled meeting, once a month, and is meant to be community-based.

We refer to as *Sister Initiatives* all groups, hubs, and organizations within the Wikimedia Movement that are closely aligned with the vision and mission of the project. They are key stakeholders who are consistently involved throughout development cycles, as they are key partners in co-creating the software and ensuring that it effectively addresses the needs of the Movement.

To raise community awareness of Capacity Exchange, the team developed an Outreach Plan shared with the members of the Advisory Committee. The plan defines the engagement and communication strategy, focusing on the involvement of Sister Initiatives in the project's development and on promoting its activities across Wikimedia communities. All activities can be found on CapX's Meta page.

The team is committed to co-creating and formalizing additional governance protocols with the Advisory Committee across all areas of the Capacity Exchange project, in order to ensure continuity during coordination transitions. By the end of the current iteration, these protocols will be openly on the project's Meta-Wiki page, strengthening collective alignment and transparency for future development cycles.

Access
https://meta.wikimedia.org/wiki/Capacity_Exchange
for more information, or write to
capx@wmnobrasil.org.