

# Community Co-creation Based on a Comprehensive Cooperation Agreement

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## Abstract

As our rapidly evolving world throws up a dizzying array of new challenges, communities across Japan are struggling to cope with a broad range of complex issues. To support these communities, NEC is promoting community co-creation through a comprehensive cooperation agreement with local stakeholders — and by actually working with them on-site — in order to identify issues and potential values and enable the community to achieve its desired goals on a medium to long term basis. In this paper, we will illustrate NEC's efforts in this area by examining projects based on a comprehensive cooperation agreement undertaken in collaboration with local universities and municipalities staff members introducing the case studies in the Asahikawa area on Japan's northern Hokkaido island and Kamakura City in Kanagawa Prefecture.



comprehensive cooperation agreement, community, co-creation, Asahikawa City, Kamakura City, university, seniors

## 1. Introduction – Importance of Community Co-creation through a Comprehensive Cooperation Agreement

One of the biggest issues facing Japan today and one which is receiving increasing attention from media and advocacy groups alike is the combination of a declining birthrate and aging population. One side effect of this trend is the growing need for regional revitalization in many communities around the country. This need consists of two basic currents.

The first current is the need to maintain the present level of services even though the number of users is decreasing, as we can see in public services such as transportation. And the second current is the need to attract people from outside the community; or to put it another way, it is the need to increase revenues and employment by rediscovering local resources and repurposing them to redefine the attractiveness of the community.

Addressing these needs is the first step to putting the brakes on the acceleration of the declining population and aging society. In other words, these currents can be interpreted as representing the shift from active, vigorous investment for growth to the minimum investment

necessary to make a community sustainable.

In almost every case, when faced with these issues, communities have no idea what to do or even where to start. This means that before goals can be set, or a solution can be proposed, the problem must be identified. Moreover, the impact of any changes does not take effect immediately. Progress may be slow and imperceptible at first, contributing to the vaguely perceived notion that issues of local communities are increasing in complexity.

Given this background, we must start by identifying the issues on the assumption of a commitment that extends over the medium to long term. Consequently, we are actively implementing comprehensive cooperation agreements with stakeholders in each community because we need to leverage the strengths of the community and the strengths of NEC in order to find effective solutions.

In this paper, we will look at two cases — one in the Asahikawa area on Japan's northern Hokkaido island and the other in Kamakura City in Kanagawa Prefecture — and examine the specific approaches taken in each case.

## 2. Case Study 1:

### Community Co-creation in the Asahikawa Area, Hokkaido

#### (1) Launch of community co-creation project

This project began at the request of NEC's Hokkaido branch office. By 2014, all of Hokkaido's major cities except Sapporo were suffering from severe population decline. Municipalities in these areas — who were already our clients — wanted to know if we could offer any assistance in finding solutions to the problem of depopulation and the accompanying erosion of community vitality. Our Hokkaido branch office soon realized that the survival of these communities necessitated finding a way to make the maintenance of existing businesses and the sustainability of the community compatible with each other.

#### (2) Identification of issues and establishment of NEC's value proposition

First of all, we visited a few dozen companies in various industries in the Asahikawa area and interviewed their chief executives in order to correctly understand the issues the area was facing while compartmentalizing the municipal policies put forth by local authorities and the issues driving them.

Next, we classified issues raised in public hearings and in discussions with municipal officials and business people using a relationship diagram. We then visited those companies again and had meetings repeatedly to discuss what the bottlenecks were and what actions could be taken to solve them.

The issues identified at those meetings varied. But when it came to the goal of an ideal city, the opinions could be roughly divided into two: a city easy to live in for residents and a city easy to visit for foreign tourists.

As we proceeded with these discussions, we soon found that the community's various stakeholders tended to act on their own. To build a more cooperative and collaborative framework that could develop a shared goal and a common strategy, in 2015, NEC gathered together all of the community's stakeholders — such as the president of Asahikawa University, the manager of the Regional Development Division of Asahikawa Shinkin Bank, and the chairperson of downtown store associations.

#### (3) Conclusion of the comprehensive cooperation agreement

Once we had brought together all the stakeholders, we quickly discovered that a primary goal shared by all of them was to redefine the attractiveness of the Asahikawa area by rediscovering local resources.

This, it was hoped, would lead to increased tourism revenue and local employment. All were agreed that the focus should not be on just foreign tourists, but no one had any clue how to attract tourists in general.

Together, the stakeholders and NEC formed an executive committee and inaugurated a project called the "Future of Asahikawa" in 2016. The first thing we did was partner with college students to ask approximately three hundred random passers-by on the streets to write down what aspects of Asahikawa they liked and what kind of future they wanted for Asahikawa. We then took pictures of these people holding their comments in front of them and made a collection of pictures. In so doing, we successfully visualized the ideas and hopes of the local people (**Photo 1**).

Next, we solicited the participation of about seventy people from various walks of life — including presidents and employees of companies, NPO staff, housewives, and students — and held a workshop called "Envisioning Asahikawa in 2042" which drew on the comments from the 300 on-the-street interviews (**Photo 2**).

In this workshop, we elucidated the strength and



Photo 1 On-the-street comments from about 300 people (excerpted).



Photo 2 "Future of Asahikawa" workshop.

attractiveness of Asahikawa as perceived by the community residents at an unconscious level. The findings were then combined with current trends to depict an image of the future of Asahikawa as specifically envisioned by the residents of the Asahikawa area. This helped us get a better idea of what the community members were hoping for the future.

Our efforts were favorably received as local people came to understand and appreciate the new methodology and information we were bringing to the community. This led to the conclusion of the comprehensive cooperation agreement with Asahikawa University in December 2016.

#### (4) Our responsibilities after conclusion of the agreement

Since concluding the agreement, we have been playing the role of advisor by examining the curricula and offering NEC courses at the university. We have also participated in various meetings in the community to strengthen our commitment to community revitalization activities. Consultation requests from the local government have also increased, enabling us to expand our activities from a merely an advisory role to a more comprehensive support function in which we are to provide actual solutions such as providing systems to improve the efficiency in administrative tasks using ICT.

For example, to address the issue of tourism revitalization, in collaboration with Asahikawa City and Asahikawa Shinkin Bank we held an exhibition of products from Asahikawa at one of our facilities in the Tokyo metropolitan area. With tens of thousands of people as potential visitors, this event not only helped raise awareness of Asahikawa's products, but also served as a test market, helping to establish what products were popular and what prices were appropriate, thereby contributing to future policy making aimed at expanding tourism revenue.

### 3. Case Study 2:

#### Community Co-creation in Kamakura City, Kanagawa

##### (1) Launch of community co-creation activity

This project began when NEC dispatched employees to Kamakura City for three months as part of a short-term employee training program held by Code for Japan.

To help identify the overarching issues that needed to be addressed, we met with neighborhood associations to talk about issues faced by the growing number of elderly residents in the area, held a user

experience (UX) workshop on the theme of "civic cooperation" between city staff and community members, and engaged in discussions on the theme of work-style reform (Photo 3).

##### (2) Identification of issues and establishment of NEC's value proposition

As a result of our participation in these activities, we identified the following issues:

- Achievement of a community in which the elderly can live actively and positively
- Utilization of private-sector methodology (e.g., UX method) in policy making
- Achievement of work-style reform that improves operational efficiency of city staff

In addition to our ability to provide IT services as a vendor, our private-sector methodology and know-how add value to our services, enabling us to better support the community in addressing these issues and needs.

##### (3) Conclusion of the comprehensive cooperation agreement

Confident that NEC's philosophy of creating new value propositions by solving social issues through co-creation complemented Kamakura City's Open Government Policy, which seeks to implement community development in collaboration with various entities while taking advantage of private-sector methodology, we concluded a comprehensive cooperation agreement for the implementation of co-creation activities on a medium to long term basis.

As for the specific details of the agreement, five pillars of activity were defined, including activities aimed at the creation of a prosperous city where people could enjoy healthy and meaningful lives, human resource training targeted at city staff, and community development using ICT.



Photo 3 UX workshop attended by city staff and community members.

#### (4) Our responsibilities after conclusion of the agreement

One of our responsibilities is to verify the effectiveness of robotic process automation (RPA)\*.

While the need to improve productivity through workstyle reform has been strongly advocated, Kamakura City was reviewing not only operational processes but also the improvement of operational efficiency by utilizing IT. City officials were especially interested in the effects and processes of RPA — which has begun to see wide-scale use recently. But they had no idea what RPA was. Moreover, even though we were already deploying RPA as a solution, we needed to learn how to appropriately focus RPA tasks by getting a better understanding of our customers' operational processes. Thus, our needs complemented the needs of Kamakura City and we worked together to simplify verification of RPA.

After an analysis by both NEC and Kamakura City, the city's tax department was selected as a target because it had a high operational load, and the introduction of RPA was implemented in the flow shown below:

- 1) Presentation of RPA to the tax department
- 2) Understanding the operational details of the tax department and selection of RPA applied tasks
- 3) Verification of RPA in validation environment

Conventionally, this relationship is regarded as one between client and vendor, meaning that to carry out processes 1) to 3), the vendor must first learn the details of the business and then propose to the client the areas where RPA can be applied. However, there are drawbacks to this method, namely that it takes too long to determine where RPA can best be applied and the proposal tends to be one-sided making it difficult to satisfy both sides. That is why we implemented the processes in a co-creation fashion by holding workshops (**Photo 4**).

Specifically, a group was formed with members from the tax department's staff and NEC to coordinate the understanding of RPA functions. The group members compartmentalize the operation processes by marking their tasks with tags on sketchboards or large-size papers. This way the operations with high load were pinpointed, allowing us to focus on precisely the operations where RPA should be applied. Once those operations were identified, NEC created the RPA program while the city side coordinated the schedule and prepared for the verification



Photo 4 Workshop attended by NEC and city staff.

environment. The effectiveness of the introduction was verified by both sides.

Through the commitment discussed above, NEC was able to verify the procedure to select RPA-applicable operations, while the city verified the effectiveness of the introduction of RPA and the introduction procedure, as well as improving their understanding of RPA. All this contributed the achievement of workstyle reform.

In addition, we are also making efforts to solve other community issues such as verification of elderly monitoring service and verification of computer programming education for elementary schools.

#### 4. Conclusion

This paper has introduced two co-creation case studies. As we have seen, community co-creation based on a comprehensive cooperation agreement is a very effective means of identifying local issues, exploring the possibilities for new businesses, and developing solutions and strategies to achieve the goals determined by the community and vendor working in tandem.

In addition to Asahikawa University and Kamakura City, NEC Group has concluded comprehensive cooperation agreements with various other municipalities including Kushiro City in Hokkaido, Yuzawa City in Akita, Hakui City in Ishikawa, Wakayama Prefecture, and Kumejima Town, Shimajiri District in Okinawa. We are also strongly committed to solving social issues and verifying feasibility of operations.

As laid out in the Mid-term Management Plan 2020, NEC will continue to promote co-creation activities with community stakeholders, focusing on developing solutions for social issues by partnering with customers.

\* Robotic process automation (RPA) is the utilization of recognition technology (rule engine, machine learning, etc.) to improve the operational efficiency of business and government offices.

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Special Issue TOP