Chapter 3 Cases of Societal Innovation

More and more people acknowledge that innovation is the engine of economic growth, prosperity, and the foundation of the well-being in a society. In the past, innovation mainly refers to physical product-related technological innovation. Technology can certainly help us move forward in solving various issues and problems. However, the major problems we face today, such as healthcare, unemployment, economic crises, and an aging population are better addressed from a social sciences perspective (BEPA 2010: 14; Franz et al. 2012). For example, the Rotterdam study shows that 75 % of the successful policies under review can be explained by effective "soft" innovation, such as new ways of managing, organizing, and working, sustainable collaboration between companies, knowledge institutions, and public authorities (Eijlander 2014). In other words, solutions to major long-term societal problems must be sought in socioeconomic and cultural knowledge (Eijlander 2014).

As introduced in Chap. 2, societal innovation refers to "innovative activities and services that are motivated by the goal of meeting a societal need and are predominantly diffused through organizations whose primary purposes are societal" (Lehtola and Stahle 2014). To be specific, societal innovation is a component of societal change.

In this chapter, four societal innovation cases are introduced. They derive from four UNESCO nominated creative cities, namely, Kanazawa in Japan (year awarded 2009), Lyon in France (2008), Ostersund in Sweden (2010), and Norwich in the United Kingdom (2012). The rationale of selecting these four cases is that they meet the six criteria of societal innovation stipulated in Chap. 2, namely systemic change, structural change, stakeholders' involvement, acceptance by the citizens and government, successful systems interdependency, and having desirable outcomes and impacts. In what follows, we explain the innovative endeavors for a whole society as societal innovation and then examine each case one by one.

3.1 Innovative Endeavors for a Whole Society as Societal Innovation

As described previously, societal innovation refers to a large-scale change. It is a catalyst in breaking down traditional boundaries and involves concrete changes in people's lives and cross-societal power structures (Lehtola and Stahle 2014). It also prompts government to undertake structural and systemic changes with the participation of stakeholders. In addition, it facilitates the integration of interdependent subsystems leading to desirable outcomes and lasting impact. Since structural and interdependent systemic changes most often require both formal and informal legitimization, they need to be accepted and deployed by both individual citizens and the state (Lehtola and Stahle 2014).

Such large-scale successful innovation is more easily found in cities, which motivates our selection of the four UNESCO Creative Cities as the subjects for discussion. There are two other reasons to elaborate societal innovation based on city innovation. First, after the 2008 global financial crisis, the public sector needed to innovate more than ever to boost the economy and meet the evolving needs and expectations of taxpayers against a backdrop of fiscal austerity (European Commission 2010). Second, since half of the world's population lives in cities (Rodrigues and Tomé 2011), cities have been recognized as centers for the production of knowledge, culture, information and innovation (Navarro et al. 2012). City Mayors (an international think tank for urban affairs) believes that metropolitan areas, rather than nation states, will shape the world's social, cultural, technological, and economic agendas in this century (Thite 2011). Within such a context, cities all over the world devote a large amount of work to encouraging and cultivating collective knowledge to shape future competitiveness (Cabrita and Cabrita 2010). However, cities are also struggling to cooperate and compete for the ultimate goal of attracting talent, knowledge, and capital for wealth creation and quality of life. These are the driving forces for societal innovation. City government that understands the importance of city transformation for future competitiveness is generally proactive in innovation. Obtaining various kinds of certification, such as UNESCO creative city, is one way to attract talent, knowledge, capital, and maintain competitive.

Rotmans (2005) found that the transition toward a sustainable society requires a different type of steering. It is necessary to create room for innovation processes and to facilitate the circumstances and conditions in which these processes can strengthen each other, especially for a scaling-up effect to take place. To achieve this goal, all relevant parties—government agencies, knowledge institutes, nongovernmental organizations, companies, and intermediaries—must combine their efforts and create the conditions that make the transition to a sustainable society possible. In other words, these actors have to take on new roles, acquire new competencies, develop new practices, and work together in a new way in the transition process.

Acknowledging the need for cultural recognition that affirms a city's identity in an increasingly competitive globalized world and in light of the fact that many cities have been losing their uniqueness and attractiveness due to globalization and mass production, UNESCO launched the Creative Cities Network in October 2004. Its goal is to bring together public and private partners as well as civil society to contribute toward the development of creative industries and generate new forms of international cooperation. Creative industries are those industries that are based on individual creativity, skill, and talent. They are also those that have the potential to create wealth and jobs through developing intellectual property. Creative Industries include Advertising, Architecture, Art and Antiques Markets, Computer and Video Games, Crafts, Design, Designer Fashion, Film and Video, Music, Performing Arts, Publishing, Software and Television and Radio (Norwich City Council 2012).

Each UNESCO nominated creative city must be unique in its cultural profile in a chosen theme out of seven, and be able to cooperate with the creative and economic institutions in its network (Hartman et al. 2010). The UNESCO Creative Cities Network website mentions that by joining the Network, cities commit to collaborate and develop partnerships with a view to promoting creativity and cultural industries, to share best practices, to strengthen participation in cultural life, and to integrate culture in economic and social development plans. Achieving such goals requires the commitment of different stakeholders at various levels, which fits the nature of societal innovation. For example, the spirit UNESCO promoted—a public, private, and civil society partnership toward city development—is similar to that of societal innovation.

To illustrate the concept of societal innovation, this study chose the above-mentioned four UNESCO nominated creative cities. For a city to become a nominated creative city, a wide-ranging renewal with a successful interactive process between a large number of relevant parties at various levels needs to be implemented. Those endeavors are good manifestations of societal innovation.

In what follows, we start with the background information of each case, and then introduce its individual innovative measures, followed by a summary based on the seven transformation processes proposed by Miles and Huberman (1994), and the six criteria for societal innovation as stated in Chap. 2. In brief, the seven processes include the generation of new ideas, development of innovative approaches, success stories, synergies, experimentation, building capacity, and structural change as exhibited in Fig. 3.1. Due to the fact that "structural change" relates to both innovation processes and the six societal innovation criteria, we skip the illustration of structural change in the innovation processes to avoid repetition.

As exhibited in Fig. 3.2, the six criteria for societal innovation as stated in Chap. 2 include systemic change, structural change, stakeholders' involvement, acceptance and deployment, systems interdependency, and desirable outcome and impact. Briefly speaking, systemic change covers both horizontal and vertical change. Normally, a system can be deployed to various subsystems. The arrangement of and relations between the parts connecting into a whole determine a system. Systemic change can be initiated from the parts and can activate other subsystem change horizontally to achieve a higher-level change vertically; or it can be initiated by first-level change (such as new strategy), deployed to second-level change vertically and then spread to other subsystems horizontally. A structural

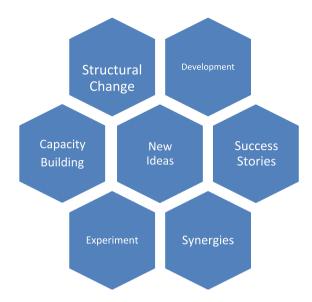


Fig. 3.1 Seven transformational processes

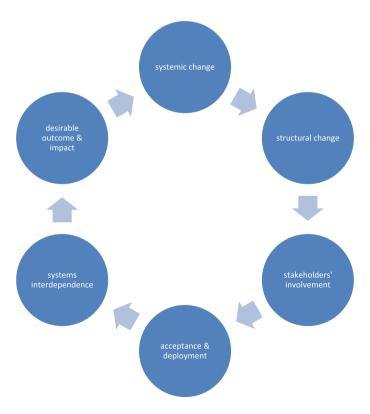


Fig. 3.2 The six criteria of societal innovation

change shifts the parameters of an entity and alters the subunits, reporting system, and even the power structure. Stakeholder involvement and participation promote the ownership of the innovation for sustaining societal change. A successful societal innovation needs to be accepted and deployed by both individual citizens and the government for a lasting effect. Systems interdependency facilitates the building of systemic change and structural change. A successful societal innovation needs to produce a desirable outcome to maximize its impact.

Through case studies, we are looking for the patterns of societal innovation that prompt ideas, nurture virtuous cycles of innovation, fund and support prototypes, manage implementation and eventually install sustainable systemic change. However, large-scale societal changes are often planned by experts, as generally it takes place in established power structures and the public is often a passive receiver (Llie and During 2011). That is, innovation in governmental discourse becomes almost the exclusive outcome of experts' work and leaves no room for discussion on the networks for enhancing popular acceptance. In other words, oftentimes the community is not sufficiently involved, but is expected to adopt and use governmental solutions (Llis and During 2011). As a result, the outcome is sometimes questionable and without lasting effect. The paradigm shift from government to governance (Llie and During 2011), toward more collaborative methods of working with the public in decision-making processes is more desirable. The four cases to be introduced in this chapter are successful ones, taking various issues, including public involvement, into consideration and can provide implications for interested parties.

In what follows, we introduce the cases in the sequence of Kanazawa in Japan, Lyon in France, Ostersund in Sweden, and Norwich in the United Kingdom.

3.1.1 Kanazawa in Japan—City of Crafts and Folk Art

Kanazawa, founded as a castle town in 1583, has been peaceful ever since. Having avoided serious natural disasters and wartime destruction, various kinds of crafts have been developed and preserved along with the city's distinctive samurai culture and lifestyle. During the Edo Period (1603–1868), the Maeda Clan abandoned military confrontation with Edo in favor of civil administration, promoting and popularizing scholarship, craftwork, and the arts. Prominent scholars and craft artists were invited to the city to teach such skills. During the Meiji Restoration (1868–1912), the population of Kanazawa rapidly declined from 130,000 to 80,000 and needed revitalization. Even though in the latter half of the nineteenth century, Japan was the site of Asia's first Industrial Revolution, Kanazawa did not share its fruits and lagged behind in modernization. Fortunately, in the 1890s, the textile industry started to transform the city. Yonejiro Tsuda invented Japan's first power silk loom in 1900, leading to the development of Kanazawa as a global center of silk production, silk exports, and the development of textile machinery. With the silk industry, Kanazawa began to come back to life (DAIJ 2016). The population of

Kanazawa doubled between 1920 and 1980, rising from 200,000 to 400,000 and by 2010 it increased to 462,361 (CBD 2016).

In June 1995, Kanazawa Mayor Tamotsu Yamade proposed the Kanazawa World City concept, which was accepted as a long-term plan in 1996. Its basic theme was to strengthen Kanazawa's pride through developing its uniqueness cultivated over 400 years as a city of peace and taking responsibility for its preservation of traditional Japanese crafts and arts. After 13 years of transformation, Kanazawa was named a UNESCO city of crafts and folk art in 2009. To learn Kanazawa's city innovation processes, we summarize relevant events in Table 3.1.

Table 3.1 Kanazawa's innovation processes in obtaining UNESCO's Creative City of Crafts and Folk Art

Processes	Kanazawa
New	Mayor Tamotsu Yamade's vision to build Kanazawa into a World City,
ideas/vision	showcasing traditional Japanese crafts and folk art
Development	 The Kanazawa Creative City Steering Committee, which is organized by groups of industries, craft industries, and citizens, as well as the city government, has established a Charter of Craftism This vision supports the city government's resources allocation for the planned development The Committee for the promotion of Kanazawa as a Creative City was established Kanazawa city and craft and economic organizations held the World Creative City Forum in 2008 in Kanazawa, to which it invited members
	of the UNESCO Creative Cities Network for Kanazawa's development
Success stories	 Kanazawa artisans master 22 kinds of traditional crafts They also explore new ways of preserving and developing its traditional industries. In addition, they innovate through combining modern and traditional arts Kanazawa artists' workshops in the city have been turned into craft museums, and a "Craft Tour" involves a tour of craft workshops and art
	exhibits
Synergies	 Linking culture and business to produce highly value-added products that use traditional crafts and technical skills. Colleges conduct joint research with industries from the product planning stage in order to integrate arts and crafts with business. Graduate students become the leaders of projects involving research carried out jointly by companies and college students
	 Promoting manufacturing based on the artisan spirit and developing many creative industries that can break into the international market Various trade fairs have been held in collaboration with the private and public sectors to promote the "Kanazawa" brand Developing close relationships among craftsmen, artists, and industry people through the creative cities network, while functioning as a hub of international exchange The twenty first Century Museum of Contemporary Art was constructed for the purpose of integrating local traditional arts and performing arts
	with modern art. The museum hosts workshops, to which well-known artists are invited (continued)

(continued)

Table 3.1 (continued)

Processes	Kanazawa
	Kanazawa has been promoting its traditional industries through close cooperation between the municipal government and local companies, and that endeavor has vitalized the city Joint research is conducted in collaboration with the United Nations University, the Institute of Advanced Studies and other research institutions to provide information from an academic perspective about the sustainable development of Kanazawa
Experimentation	 Kanazawa City has been providing subsidies to artists in the fields of Kaga yuzen silk dyeing, Kanazawa Kutani ceramics, and Kanazawa lacquerware to develop new products and to expand to new markets In 1989, industry and government collaborated to launch the Kanazawa Crafts Competition, which was developed into the World Crafts Competition in Kanazawa in 1999
Building capacities	 The Kanazawa College of Arts, founded in 1946, was established by Kanazawa City to train people in crafts such as lacquerware, dyeing, and ceramics The Kanazawa Utatsuyama Craft Workshop, established in 1989, supports trainees on scholarships to learn the techniques of ceramics, lacquering, and dyeing for a period of three years. Graduates receive support in the form of a studio to work in or a shop in which to sell their products Kanazawa City has established the fund for Training in Traditional Techniques and Arts in order to preserve traditional techniques and train successors in various fields, provides scholarships to trainees, and subsidies to instructors who pass on their professional expertise and techniques

Source City of Kanazawa Annual Report (2014)

In brief, the city was activated by the mayor's *new ideas and vision* that Kanazawa could become a World City showcasing traditional Japanese crafts and folk art. Afterwards, its *development* became aligned with this vision, including matching resources allocation, the establishment of the Creative City Steering Committee and the Committee for the Promotion of Kanazawa as a Creative City. These organizations facilitated the shaping and development of Kanazawa as a creative city as well as reaching out to promote the city and make Kanazawa known in international arenas. Examples of *success stories* include Kanazawa artisans' mastery in 22 kinds of traditional crafts; they successfully apply high technology in preserving and developing the city's traditional industries; they innovate through combining modern and traditional art. In addition, its artists' workshops have been turned into craft museums and "Craft Tourism" involves a tour of craft workshops and art exhibits.

The *synergy* achieved includes linking culture and business, domestic and international markets, relevant colleges and companies for joint research, public and private partnership for promoting the "Kanazawa" brand, and close relationships among craftsmen, artists and industry people. Furthermore, collaborating with the

United Nations University, the city's Institute of Advanced Studies provide information from an academic perspective about the sustainable development of Kanazawa, a city of crafts, and the role of creative cities in the twenty-first century. The outcomes of such synergy are many; for example, the twenty-first Century Museum of Contemporary Art was constructed for the purpose of integrating local traditional arts and performing arts with modern art. The museum houses works of art that have been produced since 1980 and holds open workshops, to which well-known artists are invited. In 1989, industry and government collaborated to launch the Kanazawa Crafts Competition, which was later developed into the World Crafts Competition in Kanazawa in 1999. With the vision and mission to harmonize tradition and creativity, and historical and cultural features, Kanazawa's creative industries and art works have become known both in Japan and abroad.

In terms of *experimentation*, Kanazawa City has been providing subsidies to artists in the fields of Kaga yuzen silk dyeing, Kanazawa Kutani ceramics, and Kanazawa lacquerware to develop new products and to expand to new markets. In addition, the city supports artists to learn advanced technology in other countries for the purpose of blending traditional Japanese arts with high technology. As for *building capacities*, the Kanazawa College of Arts was endowed by Kanazawa City to train people in crafts such as lacquerware, dyeing, and ceramics. The Kanazawa Utatsuyama Craft Workshop supports trainees on a scholarship to learn the techniques of ceramics, lacquering, and dyeing for a period of three years. Graduates also receive support in the form of a studio to work in or a shop in which to sell their products. Kanazawa City also set up a fund for Training in Traditional Techniques and Arts in order to preserve traditional techniques by providing scholarships to trainees, and subsidies to instructors who pass on their professional expertise and techniques.

Table 3.2 shows that Kanazawa's city transformation indeed meets the six criteria of societal innovation, as introduced in Chap. 2. In brief, Kanazawa has gone through systemic change including the formation of relevant workshops held by public as well as private organizations. As explained previously, systemic change covers interrelated horizontal and vertical change. The trigger for systemic change in Kanazawa was the mayor's vision of becoming a World City of crafts and arts. The vision has activated the establishment of several relevant schools and organizations. For example, the Kanazawa Children's Craft School provides schooling in design, metal work, dyeing, and ceramics over a period of two years, for the purpose of discovering and training future craftsmen. To advance their skills, students, upon completion of the above two-year workshop, can receive further training in the Takumi-kai Association to acquire professional knowledge and technical skills. Similarly, the Kanazawa Utatsuyama Craft Workshop supports trainees on scholarship to learn the techniques of ceramics, lacquering and dyeing for a period of three years. Graduates receive support in the form of a studio to work in or a shop in which to sell their products. In addition, private associations invest in the promotion of local Noh drama. That is, a web of relevant institutions, schools and foundations (horizontal) were set up to provide training for individuals from children to professionals (vertical) with the same goal of becoming a creative city.

Table 3.2 Kanazawa meets the six criteria of societal innovation

	Kanazawa
Systemic change	 Workshops are held at the Kanazawa Children's Craft School in the areas of design, metal work, dyeing, and ceramics over a period of two years, for the purpose of discovering and training future craftsmen Children take part in craft making and, upon completion of their workshop, can receive further training in the Takumi-kai Association in the areas of metalwork, dyeing or ceramics. In the Takumi-kai Association they can acquire professional knowledge and technical skills
Structural change	 The Kanazawa Craftwork Business Creation Agency was established to expand sales channels for crafts and to disseminate information about crafts. The organization carries out various activities to support craft business, including the branding of "Crafts for your lifestyle—Kanazawa" OshareMesse, one of Kanazawa's exhibitions as a creative city, is held regularly to introduce textile products and traditional crafts at home and overseas, and to promote craft business Kanazawa established an experimental store "Mono to hito" to capitalize craft business for daily use, aiming to expand sales channels and human resource development Kanazawa has set up a value creation center for the sustainable development of local industries; it has also carried out public works to revitalize the local economy, disseminated Kanazawa crafts and strengthened the foundation of manufacturing skills Kanazawa has developed its infrastructure to make it a hub city for international art exchange by improving regional transportation. That is, an inner-city traffic network forms a graceful cityscape and facilitates urban functions Kanazawa lends out business rooms, ceramics facilities, and traditional houses in Kanazawa's city center to serve as studios, which support youth entrepreneurship. It also established a consulting service staffed by those with expertise in supporting youth entrepreneurs
Stakeholders' involvement	 To enable traditional crafts to be adapted to suit modern lifestyles, Kanazawa established industry institutes that focus on the research of Kaga Yuzen and Kanazawa Metal Leaf to enable artists to explore how to sustain industry technical skills, develop new products and expand markets Kanazawa develops new Kaga Yuzen furniture and interior decoration products in collaboration with major Tokyo metropolitan area department stores Kanazawa invites artists to study the properties of metal leaf and the paper used for pounding metal leaf, also documents the process of making metal leaf
Acceptance by citizens and government	 Kanazawa households are proud to own Kanazawa art works. As a result, the city does not have to rely totally on exports for developing its creative industries (continued)

(continued)

Table 3.2 (continued)

	Kanazawa
	A private association was set up to promote traditional Noh drama Other than preserving traditional Japanese crafts and arts, the city's transformation revived relevant industries and created wealth for its citizens With the support of the government and the collaboration of both public and private sectors, Kanazawa's fame has spread throughout the world
Systems interdependency at various levels	 Craftsmen and artists in Kanazawa are inspired through interaction with other craftsmen and artists in Japan and abroad to extend their range of activities on a global scale Students of the Kanazawa College of Art are sent to UNESCO Creative Cities for training. They are given opportunities to gain inspiration by learning and experiencing the cultures of UNESCO Creative Cities, to join international networks, and to gain new perspectives. The city of Kanazawa is also considering accepting students from other UNESCO Creative Cities Kanazawa Craft Tourism helps diffuse information about Kanazawa as a "City of Handicrafts" through hands-on traditional culture activities (e.g., crafts and performing arts) and carries out studies regarding the commercialization of Kanazawa Craft Tourism The city also encourages MICE tourism (Meetings, Incentives, Conferences and Exhibitions) to promote conventions that can be held in Kanazawa through the city's subsidy system for academic associations that offer "craft tourism" tours in conjunction with their meetings
Desirable outcome and impact	 Local college students host a study-tour for first-year college students from inside and outside Ishikawa Prefecture, with the aim of giving them a taste of Kanazawa's history and culture through touring the city and attending traditional craft activities To foster children's international understanding and educate the successors of a sustainable society, the city has increased the number of UNESCO Associated Schools Project Network (ASPnet) member schools in Kanazawa. It also promotes the study of its traditional culture, the global environment, and the world, and further interaction with other schools in the UNESCO (ASPnet) network Kanazawa plays a leading role as a hub of the Creative Cities Network in Asia by supporting cities that aspire to become a creative city, thereby contributing to the promotion of the craft industry

In terms of *structural change*, several organizations were set up. The Kanazawa Craftwork Business Creation Agency was established to expand sales channels for crafts and to disseminate information about Japanese crafts. The organization carries out various activities to support craft business, including the branding of

"Crafts for your lifestyle—Kanazawa." OshareMesse, one of Kanazawa's exhibitions as a creative city, is held regularly to introduce textile products and traditional crafts at home and overseas, and to create craft business. An experimental store, "Mono to hito," was also established to capitalize craft business for daily use, aiming to expand sales channels and human resource development. Kanazawa also set up a value creation center for the sustainable development of local industries, and to carry out public works to revitalize the local economy, disseminate Kanazawa crafts and strengthen the foundation of manufacturing skills. In addition, the city developed the infrastructure of Kanazawa to make it a hub city for international art exchange. All these efforts have changed the lifestyle in Kanazawa by cultivating citizen art appreciation. Local households are proud to own Kanazawa works of art. As a result, the city does not have to rely totally on exports for developing its creative industries. The structural change shifted parameters and altered past trends. In the past, companies ran their own businesses, at most getting subsidies from the government. Now the Kanazawa city government provides business rooms, ceramics facilities, and traditional houses in the city center to serve as studios, which support youth entrepreneurship. In addition, the city government established a consulting service staffed by those with expertise in supporting youth entrepreneurs to improve and commercialize their creative products.

For *stakeholders' involvement*, Kanazawa involves relevant stakeholders in its undertakings spanning a wide cross-section, including children, parents, experts, companies in various industries, research institutes, and the city government. For example, the city established industry institutes that focus on the research of Kaga Yuzen (a traditional technique of dyeing silk fabrics for kimonos) and Kanazawa Metal Leaf to enable traditional crafts to be adapted to suit modern lifestyles. In particular, relevant parties have developed new Kaga Yuzen furniture and interior decoration products in collaboration with major Tokyo metropolitan area department stores. In addition, research institutes study the properties of metal leaf and the paper used for pounding metal leaf, also document the process of making metal leaf. Researchers devote themselves to exploring how to sustain the technical skills of the industry, develop new products, and expand markets.

As for the acceptance and deployment by *citizens and government*, Kanazawa's households are proud to own Kanazawa works of art, thereby showing their support for the city's transformation. In addition, a private association was set up to promote traditional Noh drama. In the transformation of Kanazawa city, the city government was the initiator in matching policies and resource deployment. Other than preserving traditional Japanese crafts and arts, this transformation revived relevant industries and created wealth for the local citizens. With the support of the government and the collaboration of the public and private sectors, Kanazawa's fame has spread throughout the world.

Regarding *systems interdependency* at various levels, the city government provides money and opportunities for craftsmen and artists in Kanazawa to interact with other craftsmen and artists in Japan and abroad, expecting that such interactions will inspire them to extend their range of activities on a global scale. Students of the Kanazawa College of Art are sent to UNESCO Creative Cities for a training

program that resembles the "Waltz" system. They are given opportunities to gain inspiration by learning and experiencing the cultures of UNESCO Creative Cities, to join international networks, and to gain new perspectives. The city established Kanazawa Craft Tourism in order to diffuse information about Kanazawa as a "City of Handicrafts" through hands-on traditional culture activities (e.g., crafts and performing arts) and carry out studies regarding the commercialization of Kanazawa Craft Tourism. In discussing Kanazawa as a creative and sustainable city, Sasaki (2003) reported that universities, technical schools, research institutes, theaters, libraries, and cultural institutions, which support creative activity of science and art in a city, have to function as creative support infrastructure. That is, systemic interdependency needs to be in place.

For *desirable outcome and impact*, Kanazawa encourages MICE tourism (Meetings, Incentives, Conferences and Exhibitions), and also promotes conventions that can be held in Kanazawa through the city subsidy system for academic associations, that offer "craft tourism" tours in conjunction with their meetings. OshareMesse, one of Kanazawa's exhibitions as a creative city, is held regularly to introduce textile products and traditional crafts at home and overseas, and to promote craft business.

3.1.2 Lyon in France—City of Media Arts

Lyon is a city in east-central France, about 470 km (292 miles) southeast of Paris. The city has a population of around 496,343, with 2.2 million inhabitants in Metropolitan Lyon in 2012. It is the birthplace of cinema, and is the silk capital of the world, and the gastronomic capital of France. It is the second largest Renaissance city after Venice, and is home to 2000 years of history (OnlyLyon 2014). The Lumière Brothers invented cinematography here and shot the first film in history in 1895. In the nineteenth century, Lyon witnessed important architectural developments with the construction of the Opera House, the Court House, the Stock Exchange, the Tête d'Or Urban Park, and the Fourvière Basilica.

Lyon is an important Gallo-Roman city and numerous excellent remains from the period are extant. It was the political and administrative capital of Gaul as well as an extremely important economic hub in ancient times. Furthermore, the city leverages its geo-strategic position as the crossroads of Northern and Southern Europe. Its faithful preservation of the old city has made Lyon well known. In the old city of the Romans, the Renaissance, the silk and the architecture districts, nothing has been destroyed (Trouxe 2011). Due to Lyon's numerous historic sites, the city was listed on the UNESCO World Heritage of Humanity in December 1998 (Becker 2014).

In modern times, Paris became the capital of France. In order not to be overshadowed by Paris, the Greater Lyon Authority established a policy dedicated to the creative industries for economic development. Even though Lyon is particularly strong in the banking, chemical, pharmaceutical, and biotech industries, it decided to develop its creative industries and allocated substantial resources to this endeavor. The city contains a significant software industry with a particular focus on video games, and in recent years has fostered a growing local start-up sector. The city is also known for its famous light festival, 'Fête des Lumières,' which takes place every December 8 and lasts for four days, earning Lyon the title of Capital of Lights.

Lyon launched branding "ONLYLYON" in January 2007, attempting to position Lyon as a creative conurbation, networking all economic players, academic, and artististic. These measures illustrate the city's desire to assert its difference, its values, its identity, its personality and its exclusivity (OnlyLyon 2014). As an important city in the Roman Empire, Lyon was in an advantageous position to develop the arts, architecture, silk manufacturing and the like. Such a rich cultural heritage is the source of competitive advantage and cannot easily be surpassed by other cities. In 2008, Lyon was named a UNESCO city of media arts.

In what follows, we first present Table 3.3 to explain the stages of innovation processes proposed by Miles and Huberman (1994), omitting "structural change" as it is included in the six criteria in Table 3.4. Second, we summarize in Table 3.4 how Lyon implements societal innovation based on the six criteria of societal innovation stated in Chap. 2.

Lyon's journey to fame as the city of media arts starts with the city's clear vision to develop its creative industries. In 2013, the Festivals of Lights attracted 4 million visitors and boosted the tourist industries. The Numeric Center of Lyon employs nearly 30,000 people in 2000 companies, including major leaders in the software, services, telecommunications, multimedia and video games sectors (e.g., Cegid, IBM, Jet Multimedia). It explains that the generation of new ideas can lead to employment creation and social inclusion. The second innovation process is the development, testing, and validation of innovative approaches and practices. To realize its vision, the city authority supports and increases the visibility of sectors that have a large creative component, such as design, fashion, and the moving image. It accelerated the process of innovation through creativity and cross-fertilization between the various sectors. The initial testing and validation of the Festival of Lights confirmed the potential of such development. The third process is the accumulation of good practices and success stories to be spread and transferred. Branding "ONLYLYON" in January 2007 is an endeavor to position Lyon as a creative conurbation, networking all economic players, academic and artistic, expanding to music, digital hobbies, video games, graphic arts, design and new technologies related to the arts. The Festival of Lights has become a successful event associated with the city of Lyon.

The fourth process is building bridges and exploiting *synergie*s between unrelated systems, institutions or actions of support. To facilitate synergies between the different image sectors (video games, cinema, audio-visual, animation, and multimedia) to increase its competitiveness in product design, production and distribution, the city established the "Imaginove" cluster dedicated exclusively to the creation and distribution of multimedia content. In addition, various festivals, such as the Festival of Lights has co-evolved with the development of Lyon's media arts.

Table 3.3 Lyon's innovation processes in obtaining UNESCO's City of Media Arts

Processes	Lyon
New ideas	In order not to be overshadowed by Paris, the Greater Lyon Authority established a policy dedicated to the creative industries
Development	This policy supports and increases the visibility of the design, fashion, and the moving image sectors. It accelerated the process of innovation through creativity and cross fertilization between the various sectors
Success stories	 Lyon created the "Imaginove" cluster in 2005 to facilitate synergies between the different image sectors to increase the competitiveness of product design, production, and distribution Imaginove attracted talents far and wide and in 2014 it numbered 650 companies, 23 research laboratories, 28 image-related training programs and international events such as the Marché et le Festival du Film d'Animation d'Annecy, the Cartoon Movie and the Serious Games Sessions, which were produced there Lyon was awarded for having the best combination of creativity, technological innovation and sustainable development
Synergies	 The "Imaginove" cluster is dedicated exclusively to the creation and distribution of multimedia content. It not only facilitates synergies between the different image sectors (video games, cinema, audio-visual, animation, and multimedia) to increase the competitiveness of product design, production and distribution, but also enhances the city's identity Various festivals, such as the Festival of Lights, have coevolved with the development of Lyon's media arts. In addition, the Institut Lumière shows films every night in its refurbished factory and organizes an outdoor cinema festival each summer. These showcase the media artists to demonstrate their synergic skills Branding ONLYLYON has successfully attracted knowledge and creative workers to the city. Thus, high-tech industries, software development, game design, and internet services are growing
Experimentation	Lyon City provides practical support in technological research and training, development, sales, and employment. Since December 2009, Greater Lyon's "digital mission" has included an approach dedicated to innovative services and uses, placing users at the center of its strategy for the city of tomorrow
Building capacities	 The Institut Lumière supports the development of media arts industries. Lyon provides practical support in technological research and training, development, sales, and employment Lyon has 10,000 researchers and 18 higher education establishments, which offer world-class training and research potential in media arts. In addition, the city supports local SMEs, universities and research centers to achieve fields of excellence by offering high-quality business support services (Greater Lyon 2014c)

Furthermore, Lyon has been awarded the best combination of creativity, technological innovation, and sustainable development. Branding ONLYLYON also successfully attracted knowledge and creative workers to the city. Thus, high-tech industries, software development, game design, and internet services are growing concurrently.

Table 3.4 Lyon meets the six criteria of societal innovation

	Lyon
Systemic change	 Lyon supports companies by providing simple, practical support in three areas: technological research and development, sales and internationalization, and employment training Since its creation, Imaginove has anticipated elements such as international competition, changing patterns of use (digitization, mobility, etc.) and the "cross-media" strategies of international groups
Structural change	 Through its establishment of Imaginove, Lyon supports and increases the visibility of various sectors (video games, audio-visual, cinema, animation, and multimedia) that have a large creative component to accelerate the process of innovation By reallocating resources to media arts and dedicating itself to innovative services, the city launched structural change at the society level The increasing moving image companies, associations, research labs, and supporting services have not only changed the industrial structure of Lyon, but also the departmental structure of universities in Lyon Another structural change is the city's integration of citizen participation into urban planning and development
Stakeholders' involvement	 The city respects citizens' traditions (lighting their houses in December) and skills, and integrates their participation into urban planning and development to seek their involvement and to find new technological, urban, social, and environmental solutions to existing problems During the Festival of Lights, the citizens need to give consent for the artists to project lights onto their buildings
Accepted by citizens and government	 In building a creative city, Lyon has successfully brought together public and private investment into a partnership The Festival of Lights has become an activity involving all citizens that lasts for four days, having evolved from the candle-day tradition Lyon's development benefits citizens greatly. It has become a city of commerce, a city of innovation, and a city of healthy, happy and culturally enlightened living
Systems interdependency at various levels	Encouraging business creation and support the emergence of jobs of the future in the digital economy and in the green economy, the city promotes production/distribution/consumption changes in energy use and offers new transport solutions in areas affected by more and more constraining factors The animation sector unifies public and private companies and gathers different actors, including companies, laboratories, and training centers for more innovation

(continued)

Table 3.4 (continued)

	Lyon
	The city government firmly believes that the vitality of its economy, the dynamism of its businesses, the ability to innovate, the excellence of its university and research, and its openness to the world are key factors that allow the Lyon urban area to continue developing
Desirable outcome and impact	 Lyon receives significant foreign investment. In 2012, 66 % of the businesses set up in Lyon were foreign owned. The region hosts one-fourth of France's foreign businesses and there are now 1800 foreign companies in the region, employing 92,000 people in total The 2013 Festival of Lights in Lyon attracted around 4 million visitors, and 80 light projects; 8 million small candles were sold in Greater Lyon, 400,000 programs were broadcast and more than 250 newspaper articles were written about it In addition, the city's hotels were full during the 4-day festival, with 3 times the turnover for the city bars and restaurants compared to normal periods, and with 47 public and private partners

Source Greater Lyon (2014a, b)

The fifth process is testing of hypotheses through *experimentation*. In order to develop Lyon as a smart city and a city of tomorrow, Lyon provides practical support in technological research and training, development, sales, and employment. The Festival of Lights demonstrated the successful combination of high technology and multimedia. To push the experiment further, since December 2009, Greater Lyon's "digital mission" has included an approach dedicated to innovative services and uses, placing users at the center of its strategy for the city of tomorrow. The sixth process is building capacities and mobilizing for change amongst governmental administrators and decision-makers. In addition to nurturing media experts in the Imaginove, Lyon has 10,000 researchers and 18 higher education establishments, which offer world-class training and research potential in media arts. The capacity building in multimedia has become a consensual effort. Such system support would not be possible, if governmental administrators and decision-makers had not mobilized for change by setting up a multimedia research center. Relevant academic departments in the local universities need to be approved by the government. The most direct impact on the city bureaucracy is that, unlike traditional citizen services, the city needs to offer high-quality business support services to facilitate the building of a smart city of tomorrow (Greater Lyon 2014c).

Table 3.3 summarizes relevant events regarding Lyon's innovation processes. Lyon, indeed, has gone through the required transformation to qualify as an innovative city.

In determining whether Lyon meets the six criteria of societal innovation, Table 3.4 summarizes relevant events. The first criterion is that societal innovation needs to bring systemic change. *Systemic change* implies the creation of a chain

effect, meaning a subsystem change triggers another subsystem change and so on. In the end, it entails a system-wide change. Lyon's case shows exactly chain of events. Before Lyon decided to develop its creative industries, its precious assets were limited to cinema technology, the undestroyed Roman remains, and the tradition of lighting candles in early December. Over the past decade, Lyon's systemic change could be seen one step at a time. First, the city developed talents in design, fashion, and the moving image industries. Then, in combining with high technology, video games, cinema, audio-visual, animation, and multimedia each formed a subsystem that could work independently. Furthermore, the synergies arising through mutual reinforcement became so powerful that many outstanding major projects were completed. The famous Festival of Lights spectacle came about through the joint efforts of several sectors. Later on, innovative services and uses developed into another industry to serve those media arts sectors. Such development illustrates the chain effect of horizontal and vertical changes. One subsystem change triggers many sub-system changes and their co-evolution leads to a holistic systemic change.

The second criterion is that societal innovation needs to bring about structural change. Lyon was accredited by UNESCO as a city of media arts in June 2008. With its aspiration of building a smart city of tomorrow, Lyon has to design the synergies of different sectors, attract talents from the local community and abroad, and reallocate resources to support its vision. Inevitably, these efforts bring in their wake of structural changes at the society level and changes in organizations and institutional frameworks as well. In preparing itself for becoming a creative city, Lyon established a new structure—Imaginove–dedicated exclusively to the creation and distribution of multimedia content. Imaginove is a cluster of moving image sectors comprised of companies in the overlapping areas of video games, audio-visual, cinema, animation and multimedia. Its aim is to develop synergies between these sectors by encouraging and stimulating interrelated innovation (Greater Lyon 2014b). Relocating and attracting companies to this new location by providing matching resources (such as financial support and tax incentives) requires a different set of tasks at the city government level. In addition, the increasing number of moving image companies, associations, research labs, and supporting services has not only changed the industrial structure of Lyon, but has also impacted the department structure of universities in Lyon. Another structural change can be seen in the efforts made by the city to integrate citizen participation into urban planning and development.

The third criterion is *stakeholders' involvement*. From the available literature, Lyon city authorities play a major role in orchestrating the development of the media arts. However, for such a large-scale city transformation, its success would not be possible without stakeholders' involvement. For a city, the most prominent stakeholders are its citizens. From the beginning, Lyon has integrated citizen participation into urban planning and development. As mentioned earlier, during the Festival of Lights, the local citizens needed to give their consent for the artists to project lights on their buildings. From the growing number of companies in Imaginove, it is evident that the establishment suits the needs of the people working there.

The fourth criterion is that the innovation needs to be *accepted by citizens and government*. In the case of Lyon, media arts development was initiated by the city government and matching resources have been invested in this endeavor, resulting in its accreditation as a UNESCO city of media arts. As for the acceptance of citizens, Lyon's development benefits citizens greatly. It has become a city of commerce, a city of innovation, and a city of healthy, happy and culturally enlightened living. In addition, its urban planning is sustainably driven, public-minded, yet business savvy, and at the cutting edge of innovation (Croucher 2013).

The fifth criterion is systems interdependency at various levels. The development of Lyon's media arts system depends on other systems at different levels as well. Branding ONLYLYON has successfully attracted knowledge and creative workers to the city. Thus, high-tech industries, software development, game design, and internet services are growing in numbers. It also requires a good city-level system that brings tourists to enjoy the major events of the media arts, such as the Festival of Lights, the Electronic Music Festival, and the Festival of Film. To attract experts, artists, and university graduates to Lyon, the cost of consumer goods and housing needs to be affordable for organizations and individuals. Interdependency can also be expanded to the macro level. Currently, Greater Lyon is reaching out to combine economic dynamism with sustainable (green) development and wants to become a test bed area for the design and development of innovative services and usages (Greater Lyon 2014a). The city has put into place a new generation of networks to reinvigorate innovation over the Greater Lyon area, is developing new services and usages for businesses and citizens, and is promoting the transition to the economy of tomorrow by relying, in particular, on the dynamism of digital industries and eco-technology (Greater Lyon 2014a). The integration of these interdependent systems at different levels has resulted in Lyon being recognized as having the optimum combination of creativity, technological innovation and sustainable development.

The last criterion is *desirable outcome and impact*. In 2012, Lyon had 39,543 businesses and institutions, among which 14,800 new businesses were recently created. Lyon was ranked as the eighth most innovative city in the world (2thin-know Innovative Cities index 2011) and the ninth most attractive European city (Ernst and Young 2013 Survey). Lyon also receives significant foreign investment. In 2012, 66 % of the businesses set up in Lyon were foreign owned. In 2014, the region hosted one-fourth of France's foreign businesses, with 1800 foreign companies in the region, employing a combined 92,000 people (Aderly 2014). The 2013 Festival of Lights in Lyon attracted around 4 million visitors and 80 light projects; 8 million small candles were sold in Greater Lyon, 400,000 programs were broadcast and more than 250 newspaper articles were written. In addition, the city's hotels were full during the 4-day festival, with 3 times the turnover for the city bars and restaurants compared to normal periods, and with 47 public and private partners (Fete de Lumieres 2013). The city's transformation has contributed to its economic and social development.

3.1.3 Ostersund in Sweden—City of Gastronomy

Östersund, founded as a trading center in 1786, has a population of about 60,000 and is the only town in the region of Jämtland with about 126,000 inhabitants (Kundcenter 2014). Ostersund municipality was formed in 1971 by the amalgamation of the City of Östersund with five surrounding rural municipalities. It has an attractive rural area with very good living conditions. Down-hill biking, running and cross-country skiing are examples of activities that attract tourists in every season. It has the best cross-country skiing establishment of Northern Europe, with an all-the-year-round stadium, and 89 km of tracks (Ostersunds Kommun 2014a). The test-lab at the National Winter Sports Centre supports the training of Sweden's leading cross-country skiers. Östersund is also a commercial town, with many small companies specializing in winter sports, outdoor life, events, and adventure. Its tourism industry demands a sustainable development of the assets of the region, not only economically and culturally, but also ecologically (City of Ostersund 2011). It was the first municipality in Sweden to receive environmental certification in accordance with both ISO 14001 and EMAS (European Eco-Management and Audit Scheme). Östersund invests in renewable energy sources, such as district heating and natural gas, and it is among the most successful Swedish municipalities in reducing carbon dioxide emissions (Ostersunds Kommun 2014a).

Between 2000 and 2004, the region went through a turbulent structural change; several regiments were closed down in Ostersund and the effect was a massive loss of jobs. This seeming economic disaster turned out to open opportunities for the development of new industries, the creation of new markets, and the chance to build a new identity. The region's clean air and fresh water provide optimal conditions to grow superb vegetables. The continuous events of sports and various types of festivals, combined with gastronomy have become a co-branding that attracts increasing numbers of visitors.

With the joint efforts of entrepreneurs, local governments and food producers, this rural and sparsely populated region in Sweden is now being appreciated for its gastronomic culture, based on locally produced food and traditional culinary. In 2010, the Ostersund region was named a UNESCO City of Gastronomy.

The idea of vying for recognition as a UNESCO City of Gastronomy started from a female chef named "Fia." After many years of overseas experience in the U.S.A, Israel, and Australia, she returned to her hometown of Ostersund and found Ostersund blessed with fertile soil and abundant forests with everything imaginable from the forest's pantry. Organic farming is very popular in the region because of the predominantly freezing weather. Combined with fresh water and long growth time, the produce is especially sweet. As a chef, she knew it would be a waste if such advantages were not capitalized and made known to the outside world. Therefore, she started searching for international accreditation for gastronomy and found the UNESCO Creative Cities Network.

With her boundless passion for making Ostersund a city of gastronomy, she approached the Ostersund municipal government for its support of this project in

2007. After several rounds of discussion, including intercepting the mayor on the street, the government finally approved the project with a limited budget in 2008. Such a *development* excited Fia and she herself worked part-time on the project. She then formed a team of case writers, photographers, chefs and gourmets to make a series of interviews with the artisan food producers; films were shot, chefs used the local organic food, and gourmets provided testimonies. Such efforts led to the publication of a magazine entitled *Chronicle* and a mass media report about the gastronomy of Ostersund. The unique features of the local farming and food were *successfully* promulgated far and wide. Ostersund has since become the gastronomic hub of Sweden's most exciting food region (City of Ostersund 2015).

Fia fully understood that the project needed to be carried out by key players with *synergies*, including government officers, food producers, distributors, chefs, and restaurant owners. To prepare for the UNESCO proposal, the mayor assigned an officer to work together with Fia and to provide needed assistance. In addition, Fia invited the renowned chef, Magnus Nilsson, for a media report. She also sent copies of the *Chronicle* to tourist offices, sport resorts and festivals. In order to reduce the cost of organic food, Fia negotiated with the distributors to pick up organic vegetables and food from farmers free of charge on their way back from sending necessities to the sparsely populated farms. The project also worked closely with the Tourism Research Institute at Mid-Sweden University in Ostersund to maximize the benefit of the accumulated knowledge for the entrepreneurs of the region. Cultural activities, small-scale food production and the event industry became a cooperative tripod that boosted the gastronomy in Ostersund.

For *experiment*, Fia, who uses 80 % organic food in her own restaurant, persuaded other restaurant owners to do the same. With a higher and higher percentage of organic food, cuisine in Ostersund became more and more reputable. Negotiating with distributors to pick up organic food from distant farms free of charge in exchange for her own purchases from them was an experiment itself. In addition, organic food industries collaborating with various festivals for mutual support can be viewed as experimental. For example, a food festival held before a music festival turns out to be a win-win situation. For *building capacities*, the food academy trains food producers to advance their skills and offers vocational education to members of the younger generation. The food academy also does research on diets for special events, such as high-energy food for winter sports. Eldrimner, the Swedish National Centre for Small-scale Artisan Food Processing, is situated just outside Ostersund to advance gastronomic skills. In addition, food festivals provide internship opportunities of building up their capacities for food academy students (Table 3.5).

In addition to being named a city of gastronomy by UNESCO, in 2011 Ostersund was designated Sweden's first Culinary Capital by the government (City of Ostersund 2015). The local passionate food enthusiasts, such as Fia, have created a cluster of organic farmers, culinary entrepreneurs, and restaurateurs. The proportion of local organic farmers and commodity producers is high compared to the number in the rest of Sweden (City of Ostersund 2015). An increasing number of small-scale entrepreneurs succeeded in combining prime food production with interesting events, including music festivals and winter sports. Now, gastronomy

Table 3.5 Ostersund's innovation processes in obtaining UNESCO's City of Gastronomy

Processes	Ostersund
New ideas	In 2007, a chef and entrepreneur named "Fia" knew the value of organic food in her hometown and found out about the UNESCO City of Gastronomy prize. In order to revive the economy of Ostersund, she urged local government officials to apply for the UNESCO City of Gastronomy designation
Development	 In 2008, the Ostersund municipal government agreed to support Fia's to work part-time in preparing for the application to UNESCO A team of case writers, photographers, chefs, and gourmets were employed to interview artisan food producers, shoot films, have the chefs use the local organic food and have the gourmets provide testimonies
Success stories	 The stories about organic farmers, cheese makers, artisan food makers, and brewers were published in the <i>Chronicle</i> magazine to raise the public's awareness of Ostersund's precious gastronomic assets Ostersund has become the gastronomic hub of Sweden's most exciting food region
Synergies	 The city government assigned an officer (Dag Hartman) to work together with Fia in preparing the application for UNESCO Creative Cities Network To promote Ostersund's fine food, Fia invited the renowned chef, Magnus Nilsson, for a media report. She also sent copies of the <i>Chronicle</i> to the local tourist offices, sport resorts, and festivals In order to reduce the cost of organic food, Fia negotiated with distributors to pick up organic vegetables and food from farmers free of charge on their way back from sending necessities to the sparsely populated farms
Experimentation	 Fia uses 80 % organic food in her own restaurant, and persuaded other restaurant owners to do the same. With a higher and higher percentage of organic food, the cuisine in Ostersund has become more and more highly regarded Food festival before music festival is an experiment that turns out to be a win-win situation
Building capacities	 The food academy trains food producers to advance their skills and offers vocational education to members of the younger generation The food academy also does research on diets for special events, such as high energy food for winter sports Various festivals and events provide internship opportunities for food academy students, which serve to build their capacities

has become an attraction for Ostersund's visitors. The transformation process of Ostersund incorporates the six criteria of societal innovation, elaborated as follows.

Systemic change—to promote the food industries in Ostersund, a festival dedicated entirely to small-scale food production is "Sarimner." It is an annual forum arranged by Eldrimner, the Swedish National Centre for Small-scale Artisan Food Processing. The center supports entrepreneurs with guidance, workshops, study travel, product development, inspiration, and experience, to enable the local small-scale artisan food production to flourish. The center has established contact with experts in all spheres of artisan food production. Schools are large consumers

of local food. In 2011, 20 % of the food served in the schools in Ostersund was organic. A university program in small-scale food production, a joint project involving Eldrimner, JiLU (Jamtland Institute Local Food Production) and Dalarna University was set up to promote locally produced food with a gastronomic profile. Locally produced food is mainly organic and of very high quality. No hazardous chemicals are used in growing the crops and it is cultivated in a resource saving way by people working under fair conditions. People in Ostersund are adjusting their eating habits by consuming more food in season, thus reducing the necessity of long distance transports. Vegetarian food has become a natural and commonplace element on menus (Ostersunds Kommun 2014b).

Structural change—as mentioned previously, a food industry ecosystem in the region has been established. The ecosystem of organic farmers, artisan food producers, distributors, politicians, civil servants, restaurants, event and tourism entrepreneurs, and cultural workers all take on individual roles in the value chain and coordinate with each other for the total benefit of Ostersund City. The new societal structure has become quite different from the traditional disconnected one. To promote locally produced food with a gastronomic profile, a new structure—a joint university program in small-scale food production, supported by Eldrimner, JiLU (Jamtland Institute Local Food Production) and Dalarna University, was set up. In addition, an annual forum arranged by the Swedish National Centre for Small-scale Artisan Food Processing is dedicated to small-scale food production.

Stakeholders' involvement—in addition to the farmers, food producers, distributors, cooks and restaurant owners, members of the creative economy, companies, entrepreneurs, and event designers from both the private and public sectors are stakeholders. For its successful nomination as a city of gastronomy, the involvement of the relevant stakeholders was the key, such as the distributors' willingness to transport organic vegetables free of charge to reduce costs and restaurants' willingness to increase the percentage of organic food. To further benefit all concerned parties, the project "Creative Region of Gastronomy-Jamtland," a food, culture, and tourism project, created a joint arena for sustainable food production with a gastronomic profile for the region. The aim of the project was to create networks of people and organizations to promote gastronomic culture, to improve and create new events to enhance the consciousness of the local citizens to improve their health and quality of life. Ostersund's vision 2040 was formed in consultation with local residents and is a manifestation of what the citizens of Östersund want for their city in the future. Most importantly, all of Östersund's citizens are aware of and support the vision and do everything in their power to achieve the goal (Ostersunds Kommun 2014a).

Acceptance by the citizens—the concern about public health and food quality has aroused public awareness in Ostersund. As a result, the promoted gastronomic profile was well received by the local citizens. Besides, the new development has revived the economy after the closing down of the military regiments. An increasing number of visitors bring more business to the city. The annual food festival in October is part of a food-experience with participation and support from high school students, and from restaurants and hotels in the region. Ostersund's

successful transformation has benefited its citizens, provided the city a new identity and brought about economic value.

Systems interdependence—the development of the food industries in Ostersund relied a lot on other industries. The music festival Storsjoyran, the youth soccer tournament Storjocupen and the Biathlon World Cup are annual events generating millions of dollars through shopping, accommodation, food, and activities. "Storsjoyran," the largest street festival in Sweden with more than 100,000 visitors, features a number of temporary restaurants in the harbor area, creating a vivid gastronomic atmosphere for 10 days. In Ostersund, trade and industry cooperate intimately with the city and the university to secure a sustainable future development of the region. The city government also involves universities and academic institutions. Regional developments are studied by qualified researchers affiliated with the Mid-Sweden University in Ostersund. The interdependence between fishing and gastronomy is worth mentioning. Every year, 200,000 fishing permits are sold; there are 200 fishery conservation associations, and generally the grounds for salmon trout and char are easily accessed.

Desirable outcome and impact—Ostersund is now known for its excellent raw material for food and traditional culinary. As an official member of the UNESCO Creative Cities Network, Ostersund has actively participated in various international platforms to enlighten Ostersund as a region with a creative culture and as a valuable gastronomic destination (City of Ostersund 2011: 32). Statistics show that the tourism industry employs approximately 1400 people with an annual turnover close to SEK 3.3 billion per annum, and accounts for around 8.3 million overnight stays in the county according to the county's tourism organization. The Mid-Sweden Science Park is a creative hub for knowledge-intensive companies, academia and motivated entrepreneurs. These entities all support the gastronomy in Ostersund (Table 3.6).

3.1.4 Norwich in the United Kingdom—City of Literature

Norwich has been a literary city for 900 years: a place of ideas where the power of words has changed lives, promulgated parliamentary democracy, fomented revolution, fought for the abolition of slavery, and transformed the literary arts. Today, it remains a regional center for publishing and is home to five per cent of the UK's independent publishing sector. Norwich remains a destination for poets, novelists, biographers, playwrights, translators, editors, literary critics, social critics, historians, environmentalists, and philosophers (Norwich City Council 2010).

In May 2012, Norwich became England's first UNESCO City of Literature. The accreditation is an acknowledgement of Norwich's literary heritage, contemporary strengths, and future potential. The force behind the city of literature application is the Writers' Centre Norwich, formed in 2004. It is a literature development agency that works locally, nationally, and internationally. The center provides professional

Table 3.6 Ostersund meets the six criteria of societal innovation

	Ostersund
Systemic change	 An annual forum outside Ostersund arranged by Eldrimner provides a meeting place for all those who work with small-scale artisan food processing. Such gatherings promote knowledge sharing and systemic change Eldrimner has established contact with experts in all spheres of artisan food production worldwide to foster the advancement of the food industry In 2011, 20 % of the food served in the schools in Ostersund is organic. A university program in small-scale food production, a joint project in between Eldrimner, JiLU, and Dalarna University, was set up to promote locally produced food with a gastronomic profile
Structural change	 A food industry ecosystem in the region has been established. The ecosystem, made up of organic farmers, artisan food producers, distributors, politicians, civil servants, restaurants, event and tourism entrepreneurs, and cultural workers, takes its individual role in the value chain and coordinates with each other for the overall benefit of Ostersund City To promote locally produced food with a gastronomic profile, a new structure, a joint university program in small-scale food production, supported by Eldrimner, JiLU (Jamtland Institute Local Food Production), and Dalarna University, was set up An annual forum arranged by the Swedish National Centre for Small-scale Artisan Food Processing is dedicated to small-scale food production
Stakeholders' involvement	 Players in the afore-mentioned ecosystem from both the private and public sectors are stakeholders To benefit all concerned, the project "Creative Region of Gastronomy-Jamtland" is a food, culture, and tourism project that has created a joint arena for sustainable food production with a gastronomic profile for the region The food festival aims to create networks of people and organizations to promote the gastronomic culture and to enhance the consciousness of the local citizens with respect to the health and quality of life in Ostersund
Accepted by citizens and government	 The concern about public health and food quality has aroused public awareness. As a result, the promoted gastronomic profile was well received by the citizens The new development has revived the economy after the closing down of the military regiments, and has been warmly received by the citizens An ever increasing number of visitors bring more business to the city The annual food festival in October is part of a food-experience with participation and support from the high school students and from restaurant and hotel programs in the region

(continued)

Table 3.6 (continued)

	Ostersund
Systems interdependency at various levels	 The music festival Storsjoyran, the youth soccer tournament Storjocupen and the Biathlon World Cup are annual events, generating millions of dollars through shopping, accomodation, food and activities "Storsjoyran," the largest street festival in Sweden, with an audience exceeding 100,000 visitors, features a number of temporary restaurants in the harbor area, creating a vivid gastronomic atmosphere for a 10-day period In Ostersund, trade and industry cooperates intimately with the city and the university to secure a sustainable future development of the region. The city government cooperates with universities and academic institutions Many regional developments are studied by qualified researchers affiliated with the Mid-Sweden University in Ostersund to enhance the outcome
Desirable outcome and impact	Ostersund is now known for its excellent raw material for food and traditional cuisine As an official member of the UNESCO Creative Cities Network, Ostersund has actively participated in various international platforms to promote Ostersund as a region with a creative culture and as a valuable gastronomic destination The tourism industry employs approximately 1400 people with annual turnover close to SEK 3.3 billion per annum, and accounts for around 8.3 million overnight stays in the county in 2006, according to Jamtland Harjedalen Turism, the county's tourism organization

development for writers through workshops, courses, networking, and competitions; it reaches out to thousands of children through innovative school programs, connects with readers through a successful summer reading campaign, and hosts a series of high-profile events throughout the year. The World's International Gathering of Writers is held each June and offers a uniquely writer-focused forum for discussion and debate about writing and literature from a writer's perspective.

Societal innovation in Norwich builds on its hundreds of years of literary heritage. From the Middle Ages until the eighteenth century, Norwich was the second largest city in England next to London. It was also a place of religious and political dissent and a haven for waves of refugees fleeing persecution in Europe. Norwich became a hotbed of new ideas, new forms of printing and literary expression (Norwich City Council 2010). Throughout the eighteenth and nineteenth centuries, Norwich was a radical center for writing and publishing, for dissenters, revolutionaries, translators, internationalists, and social reformers. Many writers and innovators, today and in the past, have drawn inspiration from a city where literature has been, and continues to be, the locus for change, experiment, and contemplation (Norwich City Council 2010). For centuries, Norwich has embodied literary experiment and social change.

Norwich is a city of writers with hundreds of writers living in the city. It has fabulous bookshops and, more importantly, thousands of readers. UK's first Creative Writing Master of Arts program at the University of East Anglia (UEA) was established in Norwich in 1970, which has become a global hub of national and international literature and produced many prize winners. The British Center for Literary Translation at UEA, founded by the renowned author W. G. Sebald, is Britain's leading center for the development, promotion, and support of literary translation from and into many languages (Norwich City Council 2012).

Norwich is also a city of independent minds. Writers from Norwich have, quite literally, changed the world. Born just south of Norwich, Thomas Paine wrote *Common Sense*, a treatise that influenced the course of the American Revolution, and his *Rights of Man* is one of the most widely read books of all times. Harriet Martineau, another genuine radical, wrote for the causes of gender and racial equality, personal responsibility, fair economics, evidence-based science and campaign journalism. In addition, prison reformer Elizabeth Fry and humorist Stephen Fry are also from Norwich (Norwich City Council 2012).

Greater Norwich has established strengths in the Creative Industries, which make it a key sector in the local economy. These strengths include a cluster of established businesses, organizations and growing smaller companies. Companies in clusters are believed to have a higher rate of innovation than their non-cluster counterparts. This sort of growth derives from businesses taking advantage of their close proximity to share and create knowledge through exploiting specialized labor and social networks and through networks of support services (Norwich City Council 2012). In general, the transformation of Norwich has been supported by multiple constituents over the years.

The designation of Norwich as a UNESCO City of Literature has brought great value to the city. A cabinet member for Cultural Services at the Norfolk County Council said "This international award not only recognizes their outstanding efforts but also puts Norwich and Norfolk on the global stage, and gives us great hope for the future in that we can inspire, encourage and do everything possible to help our writers of tomorrow." In March 2012, Writers' Centre Norwich was awarded £3 million from the Arts Council England's Capital Investment Program Fund to develop the International Centre for Writing (ICW) (Norwich City Council 2012). The ICW, in partnership with the Norwich City Council, UEA and the Norfolk County Council, will be a hub for excellence in literature from around the world.

Table 3.7 provides details about the transformation of Norwich based on the innovation processes of societal innovation. For innovation processes, the first stage is *new ideas* generation. The Writers' Center Norwich is the main impetus for the city's application for the UNESCO's Creative Cities Network for the purpose of exploring new opportunities to connect with other cities worldwide and as a means of further developing the writing skills and appreciation of the humanities of its own population. Such insight builds on its rich literary heritage of hundreds of years described above. The second stage, *development*, can be seen from the city's evolution that literature has been harnessed to foster positive social change, e.g., Norwich has become a leading center for science writing to break down the mindset

Table 3.7 Norwich's innovation processes in becoming UNESCO's City of Literature

Processes	Norwich
New ideas	The main reason for the Writers' Centre Norwich to apply for status of the UNESCO City of Literature was to explore new opportunities to connect with other cities worldwide and to further develop the writing skills and appreciation of the humanities of its own population
Development	 Norwich is a city in which literature has been harnessed to foster positive social change for hundreds of years Norwich is a city of writers with hundreds of writers living in the city Norwich has become a leading center for science writing to break down the mindset of mutual suspicion between science and the humanities Norwich has become a city of refuge with its history of protecting dissenters and revolutionists in the past
Success stories	 Norwich's Summer Reads and the WCN Book Club are run every year Norwich boasts an award-winning bookshop in the Jarrold Department Store 200 schoolchildren worked with writers to compose a series of Letters to Europe, addressed to other young people across the North Sea, expressing some of their hopes and dreams for the future The city is ranked fifth in the UK (outside of London) for the number of day visitors (17.7 million) it attracts
Synergies	 WCN is in partnership with the University of East Anglia (UEA) to promote literature Norwich's unique and historic culture has been broadened and nurtured by the far-sighted attention of Arts Council England, the Norwich City Council, the Norfolk County Council, and the University of East Anglia The commitment to literature in Norwich has been strongly supported by the business sector—the New Anglia Local Enterprise Partnership, the Jarrold Group and the region's largest media group, Archant—and by many other cultural stalwarts, most notably BBC East
Experimentation	 A series of school and young people's workshops provide opportunities to bring creative reading and writing into the heart of their lives Norwich promotes various literature-related activities, such as readers' clubs and writers' salons for different age groups inspiring more citizens to appreciate literature and be creative
Building capacities	 The Writer Centre's Salon takes place on the first Tuesday of every month. The salon invites writers, translators, literary professionals, and literature lovers for an evening of relaxed chat and inspiring reading The World's Roundtable Salon allows a valuable space for writers to think and reflect together The activities sponsored by the Writers' Center aim to unlock talent, harness potential and experiment with ideas founded on principles of free expression, tolerance and diversity

of mutual suspicion between science and the humanities. In addition, it has become a city of refuge with its history of protecting dissenters and revolutionists in the past. The third stage is having *success stories*. Nurturing many prize winners, including Kazuo Ishiguro, Ian McEwan, Anne Enright, Tracy Chevalier, Joe Dunthorne, and Naomi Alderman, testify to the city's success. A unique attribute of

the city is that it boasts an award-winning bookshop in the Jarrold Department Store in Norwich. Another successful project is that the Writer's Center invited 200 schoolchildren to work with writers to compose a series of Letters to Europe, expressing some of their hopes and dreams for the future to other young people across the North Sea. The fact that Norwich was ranked fifth for the number of day visitors (17.7 million) in the UK (outside of London) (Norwich City Council 2014a) also shows that the city transformation has had its effect.

The fourth stage is achieving *synergies*. WCN is in partnership with the University of East Anglia (UEA) to promote literature. Norwich's unique and historic culture has been broadened and nurtured by the insightful attention of Arts Council England, the Norwich City Council, the Norfolk County Council, and the University of East Anglia. In addition, the commitment to literature in Norwich has been strongly supported by the business sector—the New Anglia Local Enterprise Partnership, the Jarrold Group and the region's largest media group, Archant—and by many other cultural stalwarts, most notably BBC East (Norwich City Council 2010).

The fifth stage is *experiment*. Norwich has promoted various literature-related activities, such as readers' clubs and writers' salons for different age groups, inspiring more citizens to appreciate literature and be creative. Every year, a series of activities provided by local schools and young people's workshops brings creative reading and writing into the heart of citizens' lives. The sixth stage is *building capacities*. WCN sponsors various workshops, salons, and the like to unlock talent, harness potential and experiment with ideas founded on the principles of free expression, tolerance and diversity. For example, the Writer Centre's Salon takes place on the first Tuesday of every month. The salon invites writers, translators, literary professionals, and keen literature lovers for an evening of relaxed chat, serving to inspire readers. The World's Roundtable Salon allows a rare space for writers to think and reflect together. The seventh stage, *structural change*, will be combined with the six societal innovation criteria to avoid repetition.

Table 3.8 provides the details of the six criteria of societal innovation. The first criterion states that the initial innovation should trigger *systemic change*. With the establishment of WCN, the center not only has held various literature-related activities, but has also aroused the awareness of different entities to take part in the efforts. For example, Norwich Public Library offers a welcoming, neutral and safe place for communities to come together and develop the ties that are essential for local well-being and a healthy and tolerant society. As a City of Refuge, the WCN has taken refugee writers into schools, libraries, museums, and art centers. These institutions need to have a matching policy in place to receive those refugee writers. The Norfolk Record Office collects and preserves records of historical significance and makes them available through its education programs to as many people as possible. The office is affiliated with the House Parliament in London, including the Norfolk Sound Archive and the East Anglian Film Archive. These programs and activities require systemic change toward the same goal.

Table 3.8 Norwich meets the six criteria of societal innovation

	Norwich
Systemic change	 As a City of Refuge, the Writers' Centre has taken refugee writers into schools, libraries, museums, and art centers. These institutions need to have a matching policy to receive the refugee writers In addition to the Writers' Centre Norwich, the public library also offers a welcoming, neutral and safe place for communities to come together and develop the ties that are essential for local well-being and the health of a tolerant society Norwich's efforts in establishing a city of literature has attracted relevant investors. The East of England Production Innovation Center (EPIC), one of the most advanced broadcast production facilities in Europe, provides world-class equipment and studios for professional production companies and facilities for schools and colleges. EPIC provides training and the development of new services and digital communication technologies
Structural change	 To facilitate the remarkable literary activity at UEA, the Writers' Centre was located in the city center Café Writers—a members-led writing group was established Norwich launched a social exclusion network, promoting social justice, equality of access and cultural development, and is focused on developing new ways to connect with disadvantaged minorities (disability groups, needy children, older people, refugees, asylum seekers, prisoners, and travelers) The Norfolk Record Office collects and preserves records of historical significance and makes them available through its education programs to as many people as possible. The office is affiliated with the House Parliament in London, including the Norfolk Sound Archive and the East Anglian Film Archive Norwich was launched as a City of Refuge in June 2007. The Writers' Centre has taken refugee writers into schools, libraries, museums, and art centers In 2007, Norwich joined Barcelona, Brussels, Frankfurt, Stockholm, and Stavanger to launch the EU-funded Shahrazad Program: an open uncensored space in which writers from all over the world can safely connect and release their stories. The focus is on giving children and young people a voice through creative workshops and digital story production
Stakeholders' involvement	 Writers' Centre Norwich provides professional development for writers through workshops, courses, networking, and competitions; it reaches out to thousands of children through innovative schools programs, and connects with readers through a successful summer reading campaign Norwich is home to a multiplicity of educational programs with shared agendas across schools and communities and a large cohort of writers and artists
Accepted by citizens and government	Norwich is a city of words—bookshops, book groups, libraries, universities, publishers, printers, live literature, and creative writing across all levels of local life (continue)

Table 3.8 (continued)

	Norwich
	 The Norfolk and Norwich Millennium Library was the most visited public library in the UK from 2007 to 2012. The Millennium Library allows wider access to knowledge and reading and helps people to develop digital and information skills that enable them to become fully active citizens, with extra help for those who are socially excluded There are 27 small independent publishers based in Norwich and eight more outside the city, which shows that the publishing industry is booming in Norwich The John Jarrold Printing Museum in Norwich holds a superb collection of historic printing presses, a living museum run by a volunteer group of retired printers, freely used by students and members of the public
Systems interdependency at various levels	 Norfolk Library Service, the Norfolk Record Office, the Norwich Arts Centre, the Norwich Playhouse, and Waterstones Castle Street (a street bookshop), café writers, and Norwich writers' circle host yearly or monthly events. These organizations work together and support each other to create a vibrant literary environment and programs Norwich is home to the British Center for Literary Translation, a world model for the promotion of writing translated from and into many languages and cultures
Desirable outcome and impact	 The Writers' Centre evolved to become a driving force behind the rapid development of the city's creative industries and a leading national literature development agency with a special interest in the social, economic, and cultural impact of creative writing Norwich has become a regional center for publishing and a national publishing hotspot, developed over time. "Norwich' has become a publishing brand It tendered a £360 k partnership bid to Heritage Lottery Fund to explore, celebrate, and make accessible Norwich and Norfolk's literary history for visitors Norwich's working age (16–64 years) population has grown strongly, increasing from 79,700 in 2000 to 103,100 in 2012 and the number is still increasing Part of the University of East Anglia, the British Centre for Literary Translation (or BCLT) is Britain's leading center dedicated to exploring, developing, and promoting the best in literary translation and writing from around the world In March 2012, Writers' Centre Norwich was awarded £3 million from the Arts Council England's Capital Investment Program fund to develop the International Centre for Writing (ICW). The ICW, in partnership with the Norwich City Council, UEA and the Norfolk County Council, will be a hub for excellence in literature from around the world and is due to open to the public in April 2016. It will be a place of inspiration, enjoyment, learning, and transformation through creative writing, reading, translation, and education in a world-class literary city

The second criterion is that innovation should lead to *structural change*. To extend the literary activity at UEA, the Writers' Centre was placed in the city center, where historically it belonged and socially would have the most impact. Reflecting its humanity, Norwich was launched as a City of Refuge in June 2007. Also in 2007, Norwich joined Barcelona, Brussels, Frankfurt, Stockholm, and Stavanger to launch the EU-funded Shahrazad Program: an open uncensored space in which writers from all over the world can safely connect and release their stories. The focus is on giving children and young people a voice through creative workshops and digital story production. In addition, Café Writers, a members-led writing group, was established and a social exclusion network focuses on developing new ways to connect with disadvantaged minorities (the disabled, disadvantaged children, older people, refugees, asylum seekers, prisoners, and travelers).

The third criterion is that a successful societal innovation should have *stake-holders' involvement*. The Writers' Centre Norwich provides professional development for writers through workshops, courses, networking, and competitions; it reaches out to thousands of children through innovative schools programs, and connects with readers through a successful summer reading campaign. Now, Norwich is home to a multiplicity of educational programs with shared agendas across schools and communities led by a large cohort of writers and artists. In addition, a members-led writing group, Café Writers, was established. In other words, the program design involves relevant stakeholders.

The fourth criterion stipulates that the innovation should be accepted by *citizens* and government. Norwich is a city of the word—bookshops, book groups, libraries, universities, publishers, printers, live literature, and creative writing across all levels of local life. There are 27 small independent publishers based in Norwich and eight more outside the city, which shows how well established the publishing industry in Norwich is. The John Jarrold Printing Museum in Norwich houses a superb collection of historic printing presses, a living museum run by a volunteer group of retired printers, freely used by students and members of the public. The Norfolk and Norwich Millennium Library was the most visited public library in the UK from 2007 to 2012. The Millennium Library allows wide access to knowledge and reading and helps individuals develop digital and information skills that enable them to become fully active citizens, while providing extra help for those who are socially excluded. These organizations and programs fit the needs and interests of the local citizens.

The fifth criterion is that a successful societal innovation should see *systems interdependence* at various levels. WCN, Norfolk Library Service, the Norfolk Record Office, the Norwich Arts Centre, the Norwich Playhouse, and Waterstones Castle Street (a street bookshop), café writers, Norwich writers' circle have yearly or monthly events. These organizations work together and support each other to create the rich literary environment and programs to cultivate citizens and visitors. In addition, Norwich is home to the British Center for Literary Translation, a world model for the promotion of writing translated from and into many languages and cultures.

The sixth criterion is that a successful societal innovation should have a *desirable outcome and impact*. The efforts of the city government and WCN have

indeed led to Norwich's successful designation as a UNESCO City of Literature. Norwich has also become a regional center for publishing and a national publishing hotspot. Part of the University of East Anglia, the British Centre for Literary Translation (or BCLT) is Britain's leading translation center. The Writers' Centre has evolved to become a driving force behind the rapid development of the city's creative industries and a leading national literature development agency with a special interest in the social, economic, and cultural impact of creative writing. The city tendered a £360 k partnership bid to the Heritage Lottery Fund to explore, celebrate, and make accessible Norwich and Norfolk's literary history for its visitors. "Norwich" has become a publishing brand. In March 2012, Writers' Centre Norwich was awarded £3 million from the Arts Council England's Capital Investment Program fund to develop the International Centre for Writing (ICW). The ICW, in partnership with the Norwich City Council, UEA and the Norfolk County Council, will be a hub for excellence in literature from around the world (Writers' Centre Norwich 2012).