Innovation in Experience Tourism: A comparison of two National Tourist Routes MONICA A. BREIBY

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ABSTRACT This study first examines how actors along two National Tourist Routes in Norway perceive different innovative activities. Secondly, it explores how types of innovation influence the conditions that the actors evaluate as most successful. The study draws on theories of innovation and reviews of selected studies from tourism and service industries concerning innovative activity and its effect on different variables. Based on two focus-group interviews, this study has found that there have been incremental innovations with both Routes during the period. Actors along the Rondane Route evaluated as most successful "Increased traffic", influenced by product and organizational innovations. "Increased focus on the road" was evaluated as most successful along the Sognefjell Route, influenced by all the types of innovation. Relating types of innovation to a destination life-cycle, the study has shown that product and organizational innovation take place at the stage "Stagnation".

KEY WORDS: Types of innovation, National Tourist Routes, destination life-cycle

Introduction

The aim of this study is twofold. First, it examines how actors along two National Tourist Routes in Norway perceive different innovative activities, starting from the time they gained the status as National Tourist Routes. To do so, this study categorizes innovative activity based on Schumpeter's (1934) types of innovation; product innovation, process innovation, organizational innovation and market innovation. Secondly, this study explores how the types of innovation influence the conditions that the actors evaluate as most successful for the Tourist Route project. The literature review draws on theories of innovation and selected studies of innovative activity in tourism and service industries and its effect on different variables. The conclusion details the results, points out theoretical and practical implications, and suggests future directions for research. We shall begin with a description of the Tourist Route project and the two National Tourist Routes.

The Tourist Route project started with the Travel Industry Project in 1994. Between 1999 and 2004 they determined and decided the attractions and planned their development towards a new national tourist attraction. The result of this work was published in the Road Director's project directive for the investment sphere *National Tourist Routes 2002-2015*, and the *Project Plan 2006-2015* for the Tourist Route project. There are plans to develop 18 National Tourist Routes by 2015. Commissioned by the Storting (Norwegian parliament) and the Ministry of Transport and Communications, the project involves long-term plans and budgets. Its objectives are both to increase economic activity and to enhance opportunities for local residents, particularly in rural regions (Statens Vegvesen, 2006, p. 3).

The National Tourist Routes will be stretches of road along which tourists are presented with the best of Norwegian scenery... Their experiences of the scenery and cultural landscape are intended to be genuine and unique, where the original scenery is embellished with traces of our own time through innovative architecture, art and design, characterised by quality from the initial idea to the last shovel full, nail and coat of paint" (Detour 2008, p.10).

The target group is the individual round-trip tourist. During 2002-2015, this project will spend more than 258 million euro. Of this sum, 140 million euro are earmarked for the roads budget for the National Tourist Routes for improving journeys, developing rest areas, parking for activities and experiences, information, and more. The elements the Tourist Route project expects the other actors to provide include activities and experiences, as well as food, accommodation and hospitality that meet the same quality requirements that apply to the project's own initiatives. The Norwegian Public Roads Administration has undertaken the project management, which cooperates with two architectural committees comprising architects, landscape architects, and artists (both young and well-established ones).

The two National Tourist Routes in this study are Sognefjellet (Rv 55) and Rondane (Rv 27). Sognefjellet, with a profile of "Across the Roof of Norway", was one of four routes that qualified for status as a Tourist Route in 1997, and this status was renewed in 2003. The route is 108 km, and stretches from Lom in the county of Oppland to Gaupne in the county of Sogn og Fjordane. Rondane has the profile of "Along the Blue Mountains" and qualified as a Tourist Route in 2008 (which acquired the designation of Future Tourist Route in 2000). The route is 42 km and extends from Atnbrua to Folldal in the county of Hedmark. Activities involving art and design installations started in 2000.

Literature review

Innovation is not, of course, a new phenomenon. There seems to be "human" about the tendency to think about new and better ways of doing things and to try them out in practice. The history shows that most important innovations undergo drastic changes. The car, for instance, has radically improved compared to the first commercial models, owing to the incorporation of a large number of other innovations. The first versions of all significant innovations were unreliable versions of the devices that eventually diffused widely (Fagerberg 2005, p. 5), which highlights that innovation is a continuous process.

Schumpeter (1934) was one of the first to offer a comprehensive definition of innovation. He defined innovation as "new combinations" of existing resources (p. 66). He classified innovation according to "type", distinguishing between new products, new methods of production, new sources of supply, the exploitation of new markets and new ways of organizing businesses. This combinatory activity he labelled "the entrepreneurial function", which "entrepreneurs" fulfil (p. 75). In his analyses of innovation diffusion, Schumpeter emphasized the tendency for innovation to "cluster" in certain industries and time periods, and the possible impacts that such "clustering" has on the formation of business cycle and "long waves" in the world economy.

Schmooklers (1966) definition of innovation focuses on technical change. "When an enterprise produces a good or service or uses a method or input that is new to it, it makes a technical change. The first company to make a given technical change is an innovator. Its action is innovation" (p. 2). This definition's focus on technical change indicates that products or processes must be new both to the firm and to the market. Deakins and Freel (2003) have noted that all kinds of innovation involve "newness" and embrace the commercial application of inventions. According to Deakins and Freel products or processes that are new to a firm but not to the industry or market are "imitations". Fagerberg (2005) argues that imitations are

much more likely to succeed in their aims if they improve on the original innovation and become innovators themselves. This process is more natural because one important innovation tends to facilitate others in the same or a related field. In this way innovation becomes a creative process in which one important innovation sets the stage for series of subsequent innovations. Fagerberg has built this understanding on Schumpeter's (1942) later argument that imitators are more likely to succeed than those leading change.

Another approach to innovations, also based on Schumpeter's work, has been to classify them according to how radical they are compared to contemporary technology. Improvements are often characterized as "incremental" or "marginal" innovations, as opposed to "radical" innovations, such as "technological revolutions" that may have very far-reaching impact (Fagerberg 2005, p. 7). Such radical innovations as the computer or the steam engine were results of a combination of radical technological breakthroughs as well as many cumulative incremental innovations. Some innovations are, therefore, radical because of a continuous stream of incremental innovations following the introduction of a basic new design. According to Verspagen (1992), although technological revolutions, such as the diffusion of Information and Communication Technologies (ICTs), may look as though they were planned from the very beginning for the sake of creating a "new economy", no person can foresee the huge potential of a new innovation when it first emerges. It is through a process of incremental innovations, each one of which is implemented by an entrepreneur who sees some market for the newly resulting artefact, that the full potential of the technology eventually unfolds.

Research on the role of innovation in economic and social change, particularly with a bent towards cross-disciplinarity, has increased in recent years. This reflects the facts that no single discipline can deal with all aspects of innovation; it is necessary to combine insights from several disciplines. Innovative processes have much to do with *learning*, a central topic in cognitive science. Such learning occurs in organized settings (e.g., groups, teams, firms and networks), and the working of which are studied within disciplines such as sociology, organizational science, management and business studies (Fagerberg 2005, pp. 3-4). Innovation is by its nature a systemic phenomenon, since it results from continuing interaction between different actors and organizations. That is why "innovation systems" has become a central topic in the innovation research (e.g., Freeman 1987, Lundvall 1985, Edquist 1997). The Triple Helix-model is central in this context, where development stems from the cooperation between the government, industry, and academia (Etzokowitz and Leydesdorff, 1997). From this review of the literature, we can conclude that the authors mean different things by the term "innovation", and the conceptual tools should, therefore, be influenced by what kind of innovation we want to study. In the next section, we shall focus on different types of innovation.

Types of innovation

Building on Schumpeter, we can outline four categories or types of innovation; product innovation, process innovation, organizational innovation and market innovation. In economics, most of the focus has been on product innovation and process innovation. But during the first half of the twentieth century, many innovations have been of the organizational kind, such as new ways to organizing production and distribution. Other studies have also focused on market innovations.

Schumpeter (1934) defined *product innovation* as "the introduction of a new good…or a new quality of a good" (p. 66). The main criterion used, according to Edquist (2001), is that product innovations are new, or better, material goods or new intangible services. According to Pianta (2000), product innovations generally increase the quality and variety of goods and may open up new markets and lead to greater production and employment.

Process innovation is defined by Schumpeter (1934) as "the introduction of a new method of production or a new way of handling a commodity commercially" (p. 66). Edquist (2001) has suggested the division of the category of process innovation into technological process innovations and organizational process innovations, the former related to new types of machinery, and the latter to new ways to organizing work. In Fagerberg's (2004) view, organizational innovations are not limited to new ways of organizing the process of production within a given firm. Pianta (2000) has argued that the development of process innovations may lead to greater efficiency of production, with savings in labour or capital, or both, and a potential for price reduction. The usual outcome is higher productivity and loss of employment; to the extent that process innovations increase product quality or reduce prices, a rise in demand (when elasticity is high) may result in more jobs.

Schumpeter defined an *organizational innovation* as "new way to organize business" (p. 66). Lam (2002) has taken this term to refer to the creation or adoption of an idea or behavior new to the organization. The literature has, furthermore, advanced our understanding of the effects of organizational structure on the ability of organizations to learn, to create knowledge, and to generate technological innovation. According to Fagerberg (2005), organizational innovation in Schumpeter's sense also includes arrangements across firms such as the reorganization of entire industries. Drawing from Caroli (2001) Pianta has argued that, in addition to product and process innovation, organizational innovation also can affect the quantity and quality of employment and is usually closely linked to the introduction of new technologies.

Research on innovation has paid less attention to *Market innovation*, which Schumpeter defines as "...the exploitation of new markets" (p. 66). Aksnes et al. (2005) depict it as "new methods for sale and marketing" (p. 141), which might be defined as "marketing" innovation. This kind of innovation involves significant changes either in product design and product

promotion or the introduction into new markets. This notion is built on the Eurostats Community Innovation Survey that follows the recommendations given by Eurostat/OECD and the Oslo Manual. The next section will focus on innovative activity in tourism and service industries concerning the four types of innovations and their effect on different variables.

Innovation activity in tourism and service industries

The degree of innovativeness is something that attracts much interest, and there have been several attempts to develop ways of classifying industries according to such criteria. Often it is equated with high, medium and low intensity of research and development (R&D) in production. A focus on R&D alone might lead one to ignore or overlook innovative activities based on other sources, such as skilled personnel, learning by doing, interacting and so forth (Fagerberg 2005, p. 16). Most authors agree that innovation in service firms has a different character than in manufacturing. They are often non-technological, involve small and incremental changes in processes and procedures, and rather modest. They have often already been implemented in or by other service organizations (Jong et al 2003). Services are typically interactive, involving high levels of contact between service supplier and client in the design, production, delivery, and consumption as well as other areas of service activity. Service products are often produced and consumed in the course of supplier-client interaction at a particular time and place. Innovations may focus on this interaction concerning social and cultural knowledge and may rely less on technical knowledge (Miles 1999). This also includes innovation in tourism, where suppliers, employees, consumers and various in formal actors take part.

Pralahad and Ramaswamy (2004) prognosticate that the competitive arena for tourism in the future will centre around a network of companies that will offer innovative solutions together with the customers (co-creation). They argue that the actual value to meaningful experiences lies in the customers` experiences within the context of a specific event (p. 52). From this point of view, the customers themselves define whether the product is an experience or not. Boswijk et al. (2007) have pointed out some principles of design to develop meaningful experiences. The concept must have a theme and a story to tell. It is also important to eliminate negative cues and to engage all five senses (pp. 156-157). In the next section, selected studies show innovative activity in tourism and service industries and how it affects different variables, for example, increased customer value and the attractiveness of destinations.

Starting with *product and process innovations*, a study of new product development based on two case studies on nature-based activity operators in Finland has shown that product innovations result in more and more attractive activities to fulfill the customers` needs for emotional experiences (Komppula, 2001). A study by Tetchner et al. (2003) on the potential of innovation and social entrepreneurship in tourism for local business development, based on five cases from Denmark, has shown that product innovations result in new attractors. Drawing from empirical research on Europe and North America and product improvement or innovation in relation to success in tourism, Weiermair (2004) has found that both product and process innovations result in lower costs and increase customer value.

A study of important findings in academic research from the Netherlands on strategic success by Jong et al. (2003) shows, that there is no distinction between product and process innovations. The impact of innovative efforts can be financial benefits, increased customer value and strategic success. Focusing on standardization and specialization in services with evidence from Germany, Tehter et al (2007) find that such strategic choices as focusing on process innovation and standardization or service innovation and specialization relate to commercial and economic success (or failure) in the longer term. Services are tremendously diverse both between and within sectors, and this is a challenge for future research on service firms and their innovative activities.

Ionnides et al. (2003) have conducted a study that focused on tourism "nonentrepreneurship" in peripheral destinations, based on a case study of small and medium tourism enterprises (SMTE) on the island of Bornholm in Denmark. The findings show that most of the SMTEs can be described as "gap-fillers", which do not have adopted significant product or process innovations. Among the key barriers is the extreme seasonality of the island's tourist industry. Some of these challenges are similar to the National Tourist Routes in the rural areas in Norway. A study on innovative systems in Nordic Tourism (based on 10 case studies) by Hjalager et al (2008) shows that product innovation has a positive effect on the competitiveness for destinations and on the attractiveness for the experience product.

Focusing on *organizational and marketing innovations*, Hjalager et al. (2008) find that organizational innovation (e.g., managerial innovation and networking) results in increasing productivity and profitability. The results from a study of Gera et al (2004) on Canadian firms also show that organizational innovation in the areas of production and efficiency practices and product and service quality-related practices, along with ICT (information and communication technology use), relate to better performance by the firm. Findings from a study on workplace organization and innovation by Zoghi et al. (2007), based on the Canadian Workplace and Employee Survey, show that organizational innovations as decentralized decision-making, information-sharing programmes or incentive-pay plans are significant. Focusing on the impact of marketing and organizational innovations on firms' performance, based on the Community Innovation Survey (2002-2004), Ngyen et al. (2007) show that organizational innovations enhances only their propensity to innovate, not their innovative activity have effects for both the propensity to innovate and the innovative performance. The results form Tetzshcner et al. (2003) also show that market innovations

(such as a new form of marketing or a logistic innovation with new forms of supplying the product to consumers) function as mediators of existing attractions.

These studies show that product and process innovation have effects on economic variables such as firm competitiveness, employment, productivity growth and lower costs. They result in increased customer value and attractive activities and destinations. The findings indicate that organizational innovations have an effect on the firms` performance and increasing productivity and profitability. Marketing innovations also have an effect on the propensity to innovate and on the innovative performance and have a function as mediators of existing attractions.

Innovation in general does not take place in isolation, and innovation in tourism should, therefore, preferably be seen within the geographically delimited social system (.i.e., a destination) of which the tourism production system is part. Schumpeter (1934) has noted that innovations (and growth) tend to concentrate in certain sectors and their surroundings. He saw it as a possible explanatory factor behind business cycles of various lengths (p. 100). Butler (1980) has proposed a model of the life-cycle of a tourist destination. The basic idea is that a destination is in the beginning relatively unknown, and visitors initially come in small numbers. As more people discover the destination, the word spreads about its attractions and the amenities are increased and improved. Tourist arrivals then begin to grow rapidly, which begins to involve the given social and environmental limits. Next is stagnation, and the destination has to make a strategic choice, and here Butler's model shows various possible outcomes. In this way, the life-cycle model resist the view that destinations are constant over time.

Methodology

This study collected data from two focus groups with actors along Sognefjellet and Rondane Routes in November 2008. The participants were gathered in Lom for Sognefjellet, and in Folldal for Rondane. Two main criteria were underlined for the choosing of the sample: the number of participants should reflect the geographical dispersion, and the sample should include enough participants to reach the degree of saturation in order to obtain satisfactory information (Ryen 2002, p. 93). Business development along the routes includes activity from both private and public actors with a product or industry role. Each respondent from the focus group had some sort of influence and position in the destinations at the time of the interview. The sampling was done to reflect variations with respect to private and public actors (including both politicians and civil servants). Some of the actors were part of the firm networks along the routes, and others were not.

The participants represent tourist firms and community and destination organizations. I selected the private actors in order to obtain variations with regards to company size and type at the destination. They represent different types of tourist firms, such as hotels, farms, and cottages as well activities and attractions along the Routes. In total, there were six participants from Sognefjellet and six from Rondane. In addition to these, I conducted five interviews with participants from Luster. Each focus-group discussion lasted about two hours. Using the same interview guide, I conducted the telephone interviews with the actors from Luster, each of which lasted about one hour.

At the beginning of the discussion, I informed the participants of the aim and purpose of the discussion. They were also informed about the assurance of confidentiality. The participants started with a short presentation and told how they have been involved with the project. After they had agreed to participate, a video-taped discussion took place. In the main part of the focus-group discussion, the participants talked about what kind of innovative activities they perceived had taken place that is, whether they were product innovations, process innovations, organizational innovations or marketing innovations. Then I asked the participants what activities they evaluated as most successful for the Tourist Route project, and what they evaluated as not so successful. In the end, the participants mentioned other central topics concerning the project.

One advantage of using focus groups is that they might bring up topics which not have been discussed in individual interviews. Another is that a video-taped discussion makes it possible to study afterwards the interaction between the group members. On the negative side, focus-group discussions may hinder the voicing of some opinions. There might also be one or several participants who dominate the discussion (Mehmetoglu 2003, p. 73). The presence of a video-tape recorder might even prevent some participants from giving their opinions. The reader should also note that some direct quotations have been used in the article. When quoting the participants, this article has translated words and phrases in Norwegian into English.

I thoroughly examined the responses of the participants in each focus group and coded the comments related to the research questions into categories by means of thematic analysis. The frequency of concept or topic arising and the number of participants who talked about the topics or concept were the main criteria in developing the categories. Besides tracing relationships between particular themes within the two data sets, I compared them closely in order to tease out themes that were common to both data sets. In addition to the focus groups, I studied a number of reports and documents relating to the National Tourist Routes in Norway.

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Results

The results are classified into four different types of innovation; product, process, organizational, and market innovation. I shall then present conditions the actors found the most successful concerning the Tourist Route project.

Product innovation

According to the actors from Sognefjellet, the art and design installations along the route are examples of new products:

It is quite epoch-making, combining exciting architecture and new modern design solutions, in some of the most stunning and wildest mountain areas that exist.

The art and design installations give the tourists more to talk about; you can not neglect them, either you like them or you dislike them.

The participants mentioned new product combinations such as "The Sognefjellet culinary route" and "The Sognefjellet cairn trail" and new arrangements such as High Camp, Tinderittet and the Nordic Mountain Film Festival. The participants also mentioned new organized activities, for example, guided walks, fishing trips, climbing, glacier and peak tours, kayaking and rafting. The participants along Rondane pointed out Sohlbergplassen as a "mega-attraction" for the area:

The most visible is Sohlbergplassen, opening as a mega-attraction. Atnasjø Kafè has been a success enterprise thanks to the National Tourist Route.

The comments show that the installations near parking places and stopping points, combined with mountains and unspoilt nature along both the routes, touch the tourists` feelings. This supports Komppula`s (2001) study, where product innovations result in ever more attractive

activities to fulfil the customers` needs for emotional experiences. New firms and networks are also established along the Rondane Road during the period.

The art gallery at Jomsbu is also interesting. (...) Famous actors from the region offer art to the local inhabitants; the artists and painters participate, and it is quite unique (...) Jomsbu is situated at the start of the National Tourist Route Rondane and has special architectural qualities that many can envy (...) The actors sell more in three days at "Fossedagene" [the Waterfall Days] than during two weeks at Lillehammer or Elverum.

These results indicate that there have been product innovations along the two Routes in the period. The new art and design installations at stopping points are examples of products that are new for the destinations and new for the market, according to Schmookler's (1966) definition. The participants described Sohlbergplassen as a new "mega-attraction" for the area. The installations are not exactly examples of new business activity in Schumpeter's (1934) sense, but the spin-offs with new firms and the combination of improvements on existing products might qualify them as product innovations. The Sognefjellet culinary route and new arrangements and art gallery in Rondane are examples of new combinations. New products are developed in conjunction with existing products.

It can be difficult to distinguish between innovative and imitative products in this context. Spilling (2006) has argued that it would more correct to consider first the grade of innovation and then that it might occur along several dimensions (p. 34). New products, like guided walks, climbing etc., might be described as imitations. It might also be difficult to sort out how radical the innovations are. According to Schumpeter (1934), radical innovations are "technological revolutions" that may have very extensive consequences. From this point of view, we might define the product innovations as incremental innovations.

Process innovation

New equipment to clear the Sognefjell road of snow during the springtime was mentioned as a new process innovation.

More advanced equipment to clear the road of snow needs to be mentioned as an example of new technology. Today we use satellite equipment (GPS). The road opens on the first of May each year; this is important for the firms along the road.

Along the Rondane Route they are planning a treasure hunt involving GPS navigation known as "geocatching". They have already pointed out some cultural activities along the Route. This demonstrates an adaptive capacity for the latest technology and a willingness to implant it in the proper setting. The case studies from the Nordic countries by Hjalager et al. (2008) also show that an IT-Ingredient was added to many tourist services. The firms along both Routes have focus on quality, but the participants expressed concerned about the lack of a common standards of quality. This was pointed out by the participants from Rondane:

Concerning high quality along the roads, what do the Norwegian Public Roads Administration want from the firms along the road? They should make a standard, and say that firms who want to be a part of the National Tourist Route Rondane have to meet these engagements (...) What do they want from us?

These results indicate that there has been process innovation along the Sognefjell Route comparing to Scumpeter's (1934) definition. Using GPS navigation to clear the road of snow to open the road earlier in the spring is an example of an implementation of an improved method. The cooperation involved in " The Sognefjellet culinary route", which uses local food producers, is an example of an improved method to deliver goods. It is too early to locate process innovations along the Rondane Route. The results show that the participants wish for a standard of quality for the firms along the Routes. This might be necessary concerning the

development of activities and experiences, as well as food, accommodation and hospitality to meet the same quality requirements that apply to the project management.

Organizational innovation

The network of firms was mentioned as a new type of organization between companies and the local councils along both Routes.

It is exciting that the Sognefjell Route has improved the contact between the eastern and western sides of the mountain.

Along Sognefjellet "Top of Norway", "The Sognefjellet culinary route", "Kom til Lom" and a new company in Skjolden were mentioned as new examples of cooperation. Along Rondane they have more ad hoc networks with actors and trades. They also cooperate with tourist organizations in Sweden for tours in Scandinavia. However, according to the participants along Sognefjellet, cooperation between industry and academia are not being exploited.

We have been on a research trip in Central Europe. They are more clever at combining the companies and the research. We have had some cooperation with Lillehammer University College. We are so lucky to have a doctor from a university who has studied Food and Bioenergy. It would be exciting to research the food products along Sognefjellet.

Along the Rondane Route they have plans to cooperate with the Hedmark University College and the Evenstad Campus, which offers studies in ecotourism and hunting and fishing tourism. The network has plans to offer students jobs as guides along the Rondane Route.

I want a guiding bank, including all the names of the guides, phone numbers, and guiding themes. The tourists want to walk safely in the mountain, and I think many tourists would like guided walks with a theme from which they actually can learn something. (...) We have the education for this at the Evenstad Campus, and we want the summer students to be guides.

The results indicate the presence of new organizational innovations along both Routes. The cooperation between the Norwegian Public Roads Administration and the two architectural committees involving architects and artists are also examples of new organizational innovations in line with Schumpeter's definition. There is not any formal cooperation along the two Routes based on the Triple-Helix model, which might be necessary for the learning and innovation process (Etzkowitz & Leydesdorff 1997). The future cooperation with the Geopark Rondane including the Folldal Mine and the National Tourist Route Rondane, will fit well with the Route's profile and theme: "Along Blue Mountains" and "A voyage of discovery in geology, culture and nature".

Marketing innovation

A new website has been developed in the period for Sognefjellet that markets the Sognefjellet culinary route, the Sognefjellet cairn trail, the new arrangements, and the new organized activities to national and international markets. They also have links to the websites for the destinations` organizations and for The National Tourist Routes. This activity supports the study by Tetzschner et al. that shows that market innovations (like new forms of marketing and logistic innovations with new forms of supplying the product to consumers) function as mediators of existing attractions (2003, pp. 22-24). They also mention brokerage events as a new sales method.

There is more use of Internet; this is the most important. The customers use the Internet during the weekend, and make reservations on Monday or Tuesday.

We participate in brokerage events, where you can make an appointment with potential customers. (...) This works out quite well. It is an expensive way of selling, but quite effective.

The actors along Rondane cooperate on producing a brochure and a website. According to Aksnes et al (2005), there must be significant changes in product design or packages to meet the definition of a marketing innovation. They might be, for example, the creation of new combinations and the selling of them as packages with different themes. At Sognefjellet, the cruise tourists constitute a new market, but the participants pointed out that this influx is not a result of the Tourist Route project.

The Sognefjellet cairn trail has been an improvement for the secondary market, that is, the mountain tourist, along Sognefjellet. Opening the road on the first of May each year, combined with new arrangements, has resulted in increased traffic in that month. New arrangements, like Tinderittet, the Nordic Mountain Film Festival and High Camp, are examples of new combinations that make more of the existing markets. The participants in the focus group questioned what has been chosen as the secondary market.

The Norwegian Public Roads Administration decided that family with kids are the secondary market, without involving the locals (...) I don't know if this market has increased, but there have not been developed products for them, except those at Folldal Mine.

Instead of Norwegian families, the participants suggested that young people and middle-aged searching for hunting, fishing, eco-tourism, architecture and design, and "peace and quiet" should be the secondary market, according to the Route's profile and theme. The results indicate that it is too early to say if there has been an exploitation of new markets. Along Sognefjellet, new market innovations have taken place as new form of selling (brokerage events on the Internet) and marketing (i.e., marketing the new combinations like the Sognefjellet culinary route on the web site to national and international markets).

Most successful activities for the Tourist Route project

This section explores how the types of innovation influence the conditions the actors find most successful concerning the Tourist Route project. As one of them said:

The project has given the Sognefjell Route increased focus. It has increased the product standard along the road, like toilet, parking places, stopping points, attractions and activities.

The route and the area have a new focus. New routes have been opened as National Tourist Routes during the period. The traffic has been stabilized. And the cooperation has resulted in the Sognefjellet culinary route and the Sognefjellet cairn trail.

This indicates that the Tourist Route project has given Sognefjellet greater attention, both on a national and an international level. The project has increased the standards of stopping and viewing points and parking places and has resulted in cooperative projects. These are efforts the participants evaluate as being the most successful with the project. The analysis shows that innovative activity from all the types has influenced the condition, "increased focus on the road". One example of product innovation has been the introduction of art and design installations at stopping points. Clearing the road of snow by GPS is an example of process innovation. An example of organizational innovation is the network "Sognefjellsproject", and new methods for distribution and sale are examples of marketing innovations. The actors along Rondane point out Sohlbergplassen, the media attention, the network of firms and the increased traffic, as being the most successful with the project so far.

The most visible is Sohlbergplassen, opening as a mega-attraction.

The increased traffic and the attention given to the National Tourist Route give positive results for Atnasjø Kafè and the grocery shop. And that means a lot for us in the local community.

The network of firms has succeeded. And I think that has to do with local pride, but also that we have a paid person as a project manager. This is important for achieving the good results. Voluntary contribution does not work out over a long period.

These results indicate that the Tourist Route project has given the route and destination increased traffic and attention, especially Sohlbergplassen, where the results show, for example, increased trade for nearby firms. It has increased the standard along the route with regard to parking places, viewing points, and signpost for trails. It has also resulted in a process of increasing awareness of the quality of the area for the inhabitants, and improved cooperation within the network of firms. The analysis shows that innovative activity from product and organizational innovations influences the condition of "increased traffic". One example of product innovation is "Sohlbergplassen", and the network of firms with a paid project manager is an example of organizational innovation. The results even show that as a new Tourist Route, they have several plans that might result in innovative activity in the near future. They have, as mentioned earlier, initiated a process to introduce geo-catching in the area.

One of the participants points out that the increased traffic along the road is a combination of the focus on Sohlbergplassen and also the use of GPS, which shows that the shortest way from Oslo to Trondheim, is via Folldal (about 17 km shorter).

Discussion and Conclusion

The first aim of this study was to examine how different innovative activities are perceived by actors along the two National Tourist Routes. The new art and design installations at stopping points are examples of new product innovations along both the routes. Using GPS navigation to clear the Sognefjell road of snow for earlier opening in the spring is an example of process innovation. The participants indicated new organizational innovations during the period with networks of companies along both Routes. It is too early to say if there has been an exploitation of new markets in Schumpeter's (1934) sense. Along the Sognefjell Route marketing innovations have taken place as new forms of selling and marketing. It might be difficult to differentiate between innovative and imitative products in this context. According to Spilling (2006), it might be more accurate to consider the grade of innovation, which happens along several dimensions. It might also be difficult to determine how radical the innovations are. According to Schumpeter (1934) radical innovations are "technological revolutions" that may have very far-reaching consequences. From this point of view, we might define the product innovations along the two National Routes as incremental.

The second aim was to explore how types of innovation influence the conditions the actors evaluate as being the most successful with the Tourist Route project. According to the participants, the project has gained Sognefjellet more attention, both nationally and internationally. It has increased the standards along the Route with respect to stopping and viewing points and parking places and has resulted in cooperative projects. These are efforts the participants evaluate as most successful with the project. The analysis shows that activity from all types of innovation has influenced the condition of "increased focus on the road". This indicates that product, process, organizational and marketing innovations are all important for increasing the focus for a destination.

The project has given the Rondane Route increased traffic and increased standards with parking places, viewing points and signpost for trails. It has also resulted in a process of increasing awareness concerning the quality of the area for the inhabitants, and improved cooperation within the network of firms. The analysis shows that innovative activity from product and organizational innovations, especially Sohlbergplassen, influences the condition of "increased traffic". Sohlberplassen has won national and international architecture prizes, and several international architect magazines have written about it.

Theoretical implications

Based on the results from the analysis, I have related the innovative activity from the four types of innovation to Butler's destination life-cycle. Figure 1 identifies the Route's stages at the destination life-cycle and when the different innovative activities have taken place during the period. The Rondane Route can be described as a destination at the stage "Development", where product and organizational innovation have taken place. Statistics from the summer 2007 and 2008 (from May until September) show that the traffic has increased (Norwegian Public Roads Administration, 14.04.09). The destination might need more technological development, infrastructural improvements, and amenities in the future. As one of the participants pointed out, they need, say, a hotel where a bus with tourists can stay the night. Currently, most of the people only drive through the area.

The Sognefjell Route can be described as a destination at the stage "Stagnation", where all the types of innovation have taken place. The possible trajectories indicated by lines A-C are examples of a subset of possible outcomes. Statistics from 1997 until 2008 (May-September) show that the traffic along Sognefjellet has been stable (http://www.vegvesen.no/Fag/Trafikk/Trafikkdata/Trafikktellinger,10.12.08). One of the qualities for the area is the unspoiled nature. It might be necessary to focus on the environment in the future rather than increasing the number of tourist. A focus of ecotourism and a sustainable

development will harmonize with the profile and theme. A main goal for many tourist destinations is to convince the visitors to stay for longer periods, with the aim of increasing the firms` economic outcome. Hjalager et al. (2008) have argued that peripheral regions in particular, realize the importance of a diversified portfolio of attractions. According to Boswijk et al. (2007), the development must take place as co-creation between the tourists and the firms and must focus on meaningful experiences.

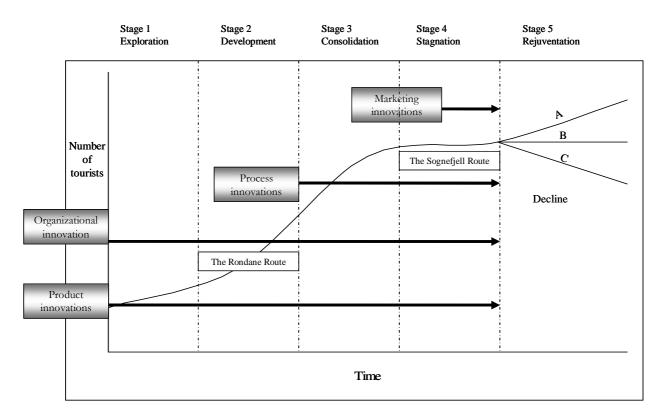


Figure 4: The destination lifecycle (Butler 1980).

The results support what Fagerberg (2005), based on Vernon (1966), has argued, namely, that the ability to engage in product innovation matters mostly at the early stage of the "productlife-cycle theory", in which there are many different and competing versions of the product on the market. With time, the product will standardize, and this will be accompanied by a greater emphasis on process innovation (p. 15). At the stage "Stagnation", all the types of innovation take place. The results indicate that market innovation takes time, and appears at a later stage of the destination life-cycle.

Sohlbergplassen is a result of a new organizational innovation in the Tourist Route project, including actors from the The Norwegian Public Roads Administration and architects and artists. "The Sognefjellet culinary route" is a result of the network of firms along Sognefjellet, and might be defined as a new organizational innovation according to Schumpeter's definition. These results show that different types of innovation depend on each other, as shown in this example, whereby organizational innovations results in product innovations.

The results from this study indicate that it might be difficult to categorize some activity into types of innovation. These difficulty supports Deakins and Freel `s (2003) view that Schumpeter`s types of innovation are not mutually exclusive. Hjalager et al. (2008) reflect both the Schumpeterian conceptual heritage and the distinctiveness of tourism and the tourism community environments in their categorization of innovation. These are 1) new products and services for tourists; 2) new managerial methods and resource mobilization; 3) educational spin-offs and innovation in the educational sector; 4) reverse community innovation (innovation aiming at the benefits of the residents); and 5) reverse business innovation (innovation furthering other business branches) (p. 33). Category one and two are very similar to product and process innovation. It would be beyond the aim of this article to discuss the other three categories, but the art gallery at Jomsbu might be an example of "reverse community innovation" where development and innovation are channeled backwards to the benefit of the destination. The actors also mention more variety at the grocery store and the cafe.

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Practical implications

The participants in both focus groups mentioned that the cooperation between the local and the national actors in the Tourist Route project have not been successful so far.

I think the ownership of the modern art at the stopping points would had been better handled if the locals had been more involved with the project (...). The material investments are welcome to the area, but the development and the focus on service and the hosts along the road should have been better, concerning both the quality and the host development.

Good cooperation between the locals and national actors is valuable for the further development in the area. One of the design principles for meaningful experiences, according to Boswijk et al.(2007), is to eliminate negative cues. Even an otherwise beautiful environment can often leave a negative impression. Overfilled rubbish skips and wrecked cars along the National Tourist Routes are examples on negative cues for the travellers. The growing whale-watching industry has made the local population in the town Hùsavík aware of their town. One result of this awareness is that the houses are better maintained and gardens trimmed; people want their town to look nice for the guests (Hjalager et al. 2008, p.39).

The participants wished for a better cooperation between industry and academia and common standards of quality. I recommend cooperation as a Triple-Helix model along both Routes that would focus on learning and new knowledge. In order to develop meaningful experiences in co-creation with the travellers, I recommend a system of quality assurance which would be based mainly on results from marketing research and discussions on the web.

Suggestions for future research

The art and design installations have increased the quality and variety of attractions and may in the future open up new markets, thus leading to greater production and employment along both the National Tourist Routes. Results from the selected studies show that both product and process innovation especially have significant effects on economic variables such as firm competitiveness, employment, productivity growth and lower costs. Even though it is almost universally accepted that technological change and other kinds of innovation have important effects on economic variables, Nordin et al. (2005) have argued that the exact relationships between innovations and these variables are the subject of continuing debate. This issue would make for an important research topic in the future. The relationship between the different types of innovation would also be a fruitful research topic.

According to Hjalager et al. (2008) the investigation of the driving forces behind the innovate practices is needed. This Tourist Route project is an example of what they describe as "the public sector as a driving force", which features the building new infrastructure etc. (p. 46). We might in this case even talk about "the art and design as a driving force" for innovative activity along two National Tourist Routes. This supports a study from Haraldsen et al. (2005) that focused on two strategies for culture-based business development: culture as an attraction (e.g., the Guggenheim Museum in Bilbao) and culture as a driving force (e.g., Huddersfield in England). For the two National Tourist Routes and the results from this study, it would be worthwhile to consider culture, not only as a driving force, but as an attraction.

Rather than assuming what the actors think is innovative activity and the most successful with the Tourist Route project, it is necessary to understand how they describe it themselves. To do so, we need to ask the actors about their view. This study represents one attempt to convey the opinions of certain actors along two National Tourist Routes. It might contain useful information for the further development along the two Routes, and might even be

useful for other National Tourist Routes. Because innovation is seen as a cumulative process that is context-dependent, I recommend other Routes to do their own research, with respect to innovative activity.

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