The Dutch Board for the Hotel and Catering Industry developed an online innovation database with innovations currently available for the hospitality sector. However, due to the large amount of new products, services, processes and business models identified there is no overview. In addition, the database is centered on innovations already available within the hospitality sector, while the large part of innovation origins from related sectors. The further development of the innovation database questions a wider view on several sectors to conduct an overview of the major developments in innovation within the hospitality sector.

Towards a Complete Innovation Overview

To overcome these challenges and to enable a further understanding and development of the innovation database a foresight exercise was issued, containing the following two objectives:

- Insight in innovative developments in related sectors - The restricted scope to the hospitality sectors of both the stakeholders and thereby the knowledge on innovation questions a wider view on innovation in related sectors. The aim is to conduct an overview of the major developments in innovation currently approaching the hospitality sector.

- Structuring of innovations within the database - To overcome the information overload on innovation currently available an overview is needed. This overview also enables a further top-down search on missing relevant innovations developed within the sector and more important, approaching the sector.
‘Syntegration’ of Innovation Concepts

For the structuring of innovations a concept was needed, which contained several aggregation levels of innovation to acknowledge the main innovative trends within the hospitality sector. The so-called Dynamo framework of future developments is used here (figure 1).

This framework is designed to ‘syntegrate’ developments, i.e. cluster on their core subject. In case of innovations, structuring takes place based on renewal. Innovations or innovation concepts can be syntegrated into innovation areas if they are directly related in the sense of competing with or complementing each other. Innovation areas can be aggregated to innovation themes, which are basically the thematic renewal approaches within a specific sector.

Methodologically, the foresight exercise contained the following three steps.

1. Scanning the Horizon

In terms of innovation, the hospitality sector is mainly related to the food industry, construction, recreation and tourism and communication, business and logistics. Figure 3 shows some topical innovation themes in these related sectors. Innovation themes are thematic approaches within innovation waves mentioned below.

The food industry is mainly developing towards safe and healthy food, while also the convenience consumer is in the picture within the food industry. Convenience is also the main topic for the recreation and tourism sector. The construction sector is evolving towards smart buildings enabled by advances in technology, while the public and the government are inducing sustainable building and construction. Finally, the information society, network economy and new business models are evolving from telecommunication and related sectors. Innovation waves like sustainable energy, smart consumer electronics, sustainable regions and efficient and effective health care also have some relation with the developments within the hospitality sector.

2. Selection of Innovation Themes

The identified innovation themes are checked on relevance by the occurrence of characteristic innovations, and time and impact by experts of the hospitality sector.

The 700 innovations within the database of the hospitality sector show a nice resemblance of innovation themes currently
topical. In total, 24 innovation themes can be recognized within the database. Experience concepts and advanced cooking equipment are nicely represented by around 70 innovations. Surprisingly, corporate social responsibility is third with 53 innovations, followed by convenience food, e-commerce, e-procurement and integrated recreation all accounting for 40+ innovations. Based on the innovation themes covered by the innovations in the database, a strong relation can be found with the food industry, recreation and tourism sector.

Surprisingly innovation themes like home automation, spatial concepts and advanced service robots are not covered, while they are already in practice in the hospitality sector or indicated relevant in the future by future studies. Striking is that the hospitality experts also indicate these topics as non-topical and having hardly any impact.

According to the experts of the hospitality sector convenience food and experience concepts are very topical and have a large impact. Also topical, but intermediate impacts have corporate social responsibility, local products and functional servicing. On medium-term intelligent logistics, e-procurement, e-commerce and food monitoring will have a large impact on the hospitality sector.

Based on the innovation database, hospitality experts and literature, 26 innovation themes were selected and assigned to the front office or back office of a hospitality firm. Innovation themes in the front office refer to external renewal, focusing on the customer, while the back office refers to internal renewal, focusing on the customer, while the back office refers to internal innovation. Only three innovation themes were indicated as relevant for both the front office and the back office.

Innovation Radar Front Office

At the front office of a hospitality firm, clients are generally offered three types of services: accommodation, nutrition and relaxation. No matter a hotel, restaurant, cafeteria or pub is being visited, they all offer a place to stay, food and drinks and some kind of surplus value. Albeit, the effect and emphasis can vary widely, based on the formula. Figure 4 shows the relevant innovation themes at the front office with an indication of the timeline and the size.

Regarding accommodation, renewal is expected in the field of customer safety and security, and increasing comfort, which in the future will be increasingly automated. Nutrition shows a wider diversification for the client across the hospitality sector. Depending on the formula, image and target group a hospitality undertaker can go for more convenience, healthiness, local and/or ecological food. The customer can also expect more smart packaging to increase or communicate the food quality, food safety or convenience.

Innovation Radar Back Office

At the back office, the entrepreneur has to deal with the premises, business processes and a business concept. The premises refer to both - the building and its interior. The business concept is the general formula in location, price, quality and undertaking, while business processes refer to - the organisation of - daily activities. Figure 5 shows the relevant innovation themes at the back office with an indication of the timeline and the size.

Relaxation within the hospitality sector develops towards a wide variety of experiences, going to more extremes, designed to a specific function and/or integrating several forms of recreation into one concept. Additionally, the convenience in the customers’ leisure time is also increasing with several concepts and customer relations are developing into a new era with ICT. Finally, digital entertainment will be more widely available within the hospitality sector.
Within the premises, the hospitality sector develops towards more safety and security of employees. While costs of energy and employees are cut by energy efficiency, home automation and advanced service robots.

Daily business processes will be enhanced in a wide variety of internal activities. Renewal in food preparation is concentrating on speeding up the delivery time and assuring high quality with convenience food, advanced cooking equipment, food monitoring and smart packaging. Marketing, education, logistics and administrative work are increasingly supported by ICT or, to be more concrete, by e-commerce, e-procurement, intelligent logistics, e-government and e-learning.

Business concepts will be more oriented on experience and/or on the short-term budget. Their surroundings and sustainability issues also increasingly affect formulas.

The Need to Focus on Mid-Term and Long-Term Innovation

The innovation themes and innovation areas identified give a broad overview of the major innovation trends within the hospitality sector. In terms of innovation, the hospitality sector shows a large overlap with the food industry and the recreation and tourism sector. On the whole, the hospitality sector is developing towards offering the consumer more convenience and safe and healthy food. The innovation themes of experience concepts, convenience food, and advanced cooking equipment have a major impact on change within the hospitality sector. This strong connection in terms of innovation with the food industry and the recreation and tourism industry calls for strong relations with those industries in order to accelerate co-develop innovation.

Some innovation themes are underexposed and deserve more attention from the hospitality sector. Home automation, spatial concepts and advanced service robots are clearly blind spots. Their impact is underestimated while their time of influence is perceived too futuristic. This conclusion is quite generic: topical innovation themes are perceived as having the largest impact on the hospitality sector, while the impact of more medium and long term innovations are perceived as low. Considering the logical short-term view of business people, there is a task for a sectoral organisation like the Dutch Board for the Hotel and Catering Industry to look out for developments on the medium and long-term. At the time when those innovation themes become topical they can prepare the business people within the sector.

The overview of innovation themes and innovation areas also enables a further development of the innovation database. By searching top-down, several innovation concepts within innovation themes and innovation areas can be identified. In this way, the database can be filled up further with relevant innovation concepts. Possible focuses include the major innovation themes, which have the largest impact or adding blind spots like the non-occurring themes of home automation, spatial concepts and advanced service robots, which deserve some attention.

For the further development of innovation on a whole, a sectoral organisation like the Dutch Board for the Hotel and Catering Industry should focus on the level of innovation areas. This level corresponds to the strategic level of a sectoral organisation, on which projects can be initiated and/or knowledge can be transferred to business people within the hospitality sector.

Sources and References

The innovation platform of the Dutch hospitality sector can be found at www.horecainnovatie.nl (only in Dutch)