En los países nórdicos es ya común apoyarse en modelos en RV a la hora de tomar decisiones urbanísticas. Las posibilidades de interacción con los modelos, y de representación de la realidad futura, nos permiten "caminar" por la ciudad que proyectamos para evaluar la conveniencia de nuestros proyectos.

Creemos que es importante resaltar las diferencias entre las herramientas de presentación (animaciones o vídeos 3D) y herramientas que permiten interactuar con los modelos (RV). Las primeras permiten un mejor texturado e iluminación (los cálculos no se realizan en tiempo real, sino que están precalculado), pero está mejor calidad se realiza a costa de no permitir al usuario "ver" lo que le interesa, y necesitan unos elevados tiempo de cálculos de renderizado, haciéndolos menos ágiles que los modelos en RV.

El resultado es que estas herramientas dejan de ser herramientas de "presentación" para integrarse totalmente en el proceso de trabajo, incluso desde las etapas más tempranas. Se demuestran fundamentales a la hora de permitir el trabajo de equipos multidisciplinares, cuyas discusiones, ideas y propuestas se realizan en torno al modelo de Realidad Virtual, convirtiéndose el modelo en una herramienta clave para la toma de decisiones durante el proyecto.

Como ejemplos prácticos se mostraran dos proyectos realizados por ViaSys Oy, la compañía Finlandesa de ViaNova, desarrolladora de nuestro módulo de realidad virtual Novapoint Virtual Map:

El primer proyecto se realizó en el año 2000, en la ciudad de Lohja. Se realizaron tres modelos: la ciudad en el pasado (1938) usando planos e imágenes de la época.
en el presente (2000):

Con este proyecto pretendemos mostrar la utilidad de la RV para la toma de decisiones a la hora de posibilitar un urbanismo más integral.

y tras el plan urbanístico (2020):

El segundo proyecto se realizó en la bahía de Vuosari. Incluye el puerto y las infraestructuras logísticas y de acceso, así como áreas urbanas adyacentes. Posiblemente sea uno de los modelos en Realidad Virtual más grandes existentes en la actualidad, para este proyecto existen modelos que simulan incluso el fondo marino y la draga prevista de la bahía, que se han utilizado para entrenamiento de capitanes de barco.
The most modern cargo harbour in the Baltic is being built in the Vuosaari section of Helsinki. Cargo traffic will move there from the West and North harbours in 2008. The project is being conducted by the Port of Helsinki, the Finnish Road Administration, the Finnish Maritime Administration and the Finnish Rail Administration.

Construction plans include convenient land and sea traffic connections for the Vuosaari Harbour. Up-to-date equipment will ensure that harbour operations are efficient. Once the harbour has moved away from the city centre, the West and North Harbour areas will be available for housing and business use. The business park to be built adjacent to the Vuosaari Harbour will create thousands of new jobs.

A harbour for cargo traffic

The Vuosaari Harbour will be built on a 150-hectare area where it replaces a former shipyard. There will also be a 50-hectare business park adjacent to the harbour. The new harbour replaces the West and North harbours, which would not have enough capacity to handle increasing volumes of cargo in the future.

The Vuosaari Harbour will serve both RoRo vessels loaded through the stern gate and LoLo vessels loaded with a crane. Passenger ship traffic through the South and West harbours continues as before.

Vuosaari is to become a modern harbour designed for unitized cargo traffic, which in essence means containers, trailer trucks, trailers and rolltrailers. In some cases the cargo will stay in the harbour for just a few hours. The calculated capacity of the Vuosaari Harbour is 12 million tonnes of unitized general cargo per year.

The internal harbour organization and port technology will be designed according to state-of-the-art information. Combining two harbours results in more efficient use of machines and equipment. A large, integrated harbour allows for competition among companies providing port and logistics services.

The Vuosaari Harbour and its transport connections are being built to serve the whole country. A third of Finland's foreign trade passes through the Port of Helsinki, in terms of value. Constructing the new harbour will ensure the Port of Helsinki's operations long into the future and will also prepare for growth in foreign trade.
The harbour's cornerstone was laid on 7 January 2003 and clearing work got under way in late winter. Clearing will be completed in late summer and autumn after young birds have left their nests.

The planning of land transport connections was completed in May. The north western part of the harbour area is presently being dredged. The construction of transport connections began with excavation work between the rail yard and Porvarinlahti Bay in early August.

On completion of the new harbour, operations of the North and West harbours will move to Vuosaari. This will free the city centre areas so far occupied by the harbours for housing and office use. On the Helsinki general plan these areas are projected to have new housing for 20,000 people.

To ease traffic congestion in the city centre and on the inbound routes, heavy truck traffic generated by the harbour will be directed away from the city centre. The most marked reduction in traffic will take place on Ring Road I, Läänsiväylä, and the streets of the city centre. Traffic on Ring Road III will increase to some extent.

The objective is to direct land traffic created by the harbour increasingly onto railways. To minimize the impact on the environment and the population, most of the railway from Kerava's Savio to the harbour will be constructed in a tunnel running at times at a depth of dozens of meters.

The total cost of the project is about EUR470 million according to the price level in May 2002. This includes EUR260.6 million for the harbour and EUR207.6 million for traffic connections. The Port of Helsinki will finance the harbour itself. It will also cover half the costs of traffic connections, with the Finnish state providing the other half.

Tunnels will account for 61% of the costs of land traffic connections. This includes 54% of the costs of the harbour road and 65% of the costs of the harbour track.

<table>
<thead>
<tr>
<th>Project</th>
<th>EURm (VAT 0)</th>
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<tbody>
<tr>
<td>Harbour</td>
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<tr>
<td>Traffic connections</td>
<td>207.4</td>
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<td>Fairway</td>
<td>17</td>
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<td>Road</td>
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<td>Porvarinlahti road tunnel</td>
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<tr>
<td>Labbacka railway tunnel</td>
<td>5.5</td>
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<tr>
<td>Savio railway tunnel</td>
<td>79.5</td>
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</tbody>
</table>
A marine quarter of the city for 22,000 people

The areas next to the West Harbour - Ruoholahti, Jätkäsaari and Munkkisaari - will become a modern, marine, distinctive part of the city. Some of Ruoholahti has already been built; construction is under way in Munkkisaari. The area freed by the current harbour on Jätkäsaari can accommodate new housing for 10,000 people. The area is also expected to generate 10,000 new jobs.

The Jätkäsaari area has been planned with a new type of urban mobility culture in mind. Cars will be needed less when people use convenient public transportation, getting around by metro, bus and tram or by using car pools. Fewer parking spaces will need to be built and bicycle and pedestrian routes will receive attention.

The seashore will remain a continuous stretch of parkland for the enjoyment of all city residents. A recreational route along the shoreline will wind from the Hietalahti waterfront to Munkkisaari, and from there on to the Merikatu street and Kaivopuisto. Tentative plans include restaurants and cultural activities in Hietalahti.

The North Harbour to become a dynamic part of the city

The North harbour area will become part of the cityscape. Parks and buildings for residential and business use will replace the current containers and ships. The area can accommodate over 10,000 new inhabitants and is projected to have office and business facilities for as many as 6,000 employees.

A new Metro station to be built near the Kulosaari bridge will make getting around and travelling to and from work easier. Other facilities to be constructed in the area include schools, daycare centres and a service home for the elderly. Construction can be started once the Vuosaari Harbour has started operations in 2007 or 2008.

A five-kilometre stretch of the shoreline will be left as parkland, with the recreational greenbelt along the shore extending from Merihaka to Arabianranta.