



# Virtual cities

## How Internet provides new opportunities for government marketing



*Investing in the future by working together for a sustainable and competitive region*



# 1 Executive summary

People do not want to spend a lot of time gathering information on the web, reading large pages of informal text, they instead appreciate visualized information in forms of small movies or images and by doing that customer become satisfied. Cities have a great opportunity to take entrepreneurial role in web 3.0 and to make opportunities for them we want to develop Google Streetview from 2D to 3D. By making users able to enter cities in detail, it is a big opportunity for the cities to promote the city in the web and by advertising in the virtualized city they can they can get a rapid return on their investments. We think that the solution should be able to download by a plug-in, when there is a new development technique applied.

## 2 Problem statement

Nowadays people, in general, rather watch a movie than read a book. People are spoiled by how easy things have become. Therefore, people continuously accept higher standards and have more demands acting as a customer. This has raised the importance of defining customer satisfaction.

In terms of online activity, people do not want spend a lot of time in gathering the information they seek for on a website. People also do not enjoy reading large pages of informal text, they appreciate visualized information in forms of small movies or images.

Web 3.0, an unofficial release of the third phase in the development of the World Wide Web, anticipates to the abovementioned customer needs. Web 3.0 is described as a web based platform consisting of integrated applications, which makes it easier to search for information.

Cities are great organizations to take the entrepreneurial role in the development of web 3.0, because there are many benefits ahead. The new 3D technologies provide opportunities of presenting information in a visual manner, with less legislating issues than pictures. 3D can make users more enthusiastic than plain text does.

A huge, but mostly not recognized problem, is that Google visualized numerous cities in their 2D concept Streetview. Google profits from these virtual cities, while the physical city doesn't. Though, cities should be able to profit from their own virtualization.

## 3 Alternatives

To satisfy users we came up with the idea of new 3D cities. Think about being interested in a city and want to know more about it. With our solution users can visit a virtualized city and see how it looks like in real, not by static pictures. This is also an opportunity for a city to profile itself in a more realistic way and to attract tourists to visit them, offline in real life. There are four good alternatives of why this is an good idea and how to create it.

Alternative 1 - A picture says more than thousand words. To see cities in pictures and as movies instead of reading about them in text is easier for the user and attract them more. It is easier to transmit information by pictures. If a user wants to know more about a specific building or a specific activity in a

city, they can by movies get that information. This is an easier way of gathering information without reading. This alternative is complementary to Google Streetviews, because user cannot click on a building and get information about it, when looking at a city trough Streetview.

Alternative 2- By being able to visit a virtualized city in 3D, it is a big opportunity for a city to attract tourists around the world. By being able to enter a 3D city, the user can navigate around and see how the city really looks like, not by seeing a city trough some static movie. They can also enter buildings to see how they look from the inside. This is not something that Google streetview is offering and because of that we want to develop that by letting the users being able to enter the city in a more realistic way and being able to develop it more. 3D might create a “fake” non realistic interpretation of cities.

Alternative 3 – This solution is an expenditure of alternative 2. By making users able to enter cities in detail, it is a big opportunity for the cities to promote the city and by advertising in the virtualized city, they can also get a quick return on their investments, that the “3D city” costs to build. Think of billboards, clickable buildings were users are redirected to company websites, theatre (which movies are playing) or restaurant (the menu) information.

Alternative 4- The last alternative is an extended version of alternative 3. This alternative focuses on mind and eye control to navigate through the virtualized city. This is a futuristic thought and it needs more research about how to develop it in favourable way. But we think of this as an opportunity for the future, because it becomes more easier and faster for the user to navigate by using thoughts and we also see it as an opportunity for handicapped people to also use this function.

## 4 Conclusion

The starting point of our idea came with the already-existing Google Street View. Briefly, the idea was to further develop the Street View and combine it with 3D, where the purpose was still to photograph cities, only now in 3D. One of the major differences to Google Street View was to now offer the actual cities a possibility to commercialise this in their own favour, compared to today’s method, where Google has all the rights.

Alternative 1 was not an option because it was not what we wanted. The idea was too similar to Street View, and we wished to have a more advanced concept.

Neither alternative 4 was an option, mostly because it is a futuristic concept, and something we could have considered when this sector has developed more.

We ended up with alternative 3, a similar one to number 2, but this alternative is more developed. The essential part of our idea is that we want the cities to profit on their own cities, in contrast to Street View, our source of inspiration. There are numerous of ways of doing so, many of them described in the part about Alternatives. This could be turned in to a public tool – where the municipality has the rights of use, to secure equal rights. There are great possibilities within this project, and in a market where the competition is heavy, new solutions are normally wished a warmly welcome.

## 5 Implementation

The implementation of a virtual city is quite simple actually, because it's an extension of a website of a city. Through a new designed application users at home can visit a city with an alive 3d perspective. The user should only download a plug-in when there is a new development technique applied. This 3d application needs to be allocated and stored on a web server.

## **6 Participants**

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