

# GIM INTERVIEWS PAUL BOSMAN, CEO, CYCLOMEDIA TECHNOLOGY BV

## Small Company, Big Ambitions

CycloMedia Technology BV is a privately owned company based in Waardenburg, The Netherlands. The company exploits an in-house developed camera system for capturing urbanised areas from the road. In January 2006 Paul Bosman became CEO. He talked to us about his many ambitious plans.

***What are the main products and services offered by CycloMedia?***

Since the early nineties CycloMedia has built up experience in systematic mapping of urbanised areas on the basis of 360-degree images (so-called cycloramas). These images are captured from the road and at street level using a car as carrier of the camera system, including positioning and navigation for geometrically correct registration. We have surveyed many towns, over 250 in The Netherlands, including Rotterdam, Eindhoven and Helmond, and we are now capturing the country as a whole. We sell content; we have developed our own data-capturing technology but what we bring to market are images captured with that technology, not the technology itself. The technology is an in-house development, and this makes CycloMedia rather unique in the world. Our technology is a spin-off from research that began in the early eighties at Delft University of Technology. In addition to a number of patents, the research also resulted in a PhD for one of the directors of this company. We are sometimes pro-active in capturing images, when we think there is a market for them. Image capture is not our only activity; our main product is solutions for customers, and (potential) customers are becoming increasingly interested in three-dimensional modelling of the urbanised environment for many different applications varying from city planning to fire fighting. And for these our camera technology is perfectly suited. Compared to a technology such as laser scanning, our technology is less expensive and accurate. That is what our customers are telling us. There are so many applications and we focus on making them possible for our customers.

***Although you yourself produce camera systems, this is not your core business. Might it ever become so?***

It could; however, our focus is on geo-data production. We need cameras to produce imagery and we produce these cameras ourselves. Our philosophy is that we should use only proven technology and that is why we aim at developing two to three prototype camera systems annually in order to select the best solution for further development. However, the others are not developed in vain; the solutions are safeguarded for incorporation in future systems. Indeed, we do not produce complete camera systems for the market. Nevertheless, when a certain government organisation wants to buy our camera system for specialised non-commercial applications we are ready to serve and support them and, if necessary, adapt the system to their needs. Although we have a lot of experience in developing cyclorama camera systems, we do not put them on the sales-shelf as a product for other firms to use in the same arena of commercial activity as our own. That way, after all, we would create our own competitors.

***Who are your main customers and how is your customer-base distributed over the continents?***

We focus mainly on the public sector and certain segments within the civil-engineering market, such as road construction. Users of our images and services include municipalities and other government organisations, real-estate agencies and insurance companies. Defence ministries are also interested in our technology. As we are a Dutch firm, we initially focused primarily on the local market within The Netherlands. Many organisations in Europe and the Middle East, public as well as private, see the benefits of CycloMedia for capturing towns and cities, and even entire countries. There is a lot of interest from these countries. We have now covered Belgium within the framework of large-scale base mapping. We have signed a joint co-operation agreement with Saab to focus on the development of innovative camera applications for the Scandinavian market. We have an agent in Switzerland and, in the short term, we are also set to carry out surveys in the UK, Germany and Ireland; this will not be the first time that we survey in the UK. We have chosen gradually to spread our activities outwards from The Netherlands to neighbouring countries. It is never good to expand too rapidly. We will not focus on the consumer market.

***These are very ambitious plansâ€¦***

â€¦ Yes they are; we want to grow. We have a unique technology for sale and many parties and potential clients are enthusiastic about it. So we would like to see the statistics characterising our company rise tenfold within a few years. At the moment we employ about 120 people, of whom 50% are field operators, a large part of the remaining half R&D employees and developers. We have already outgrown our present building and are now in the process of building a new one nearby. This should be ready by the end of 2007. There will be room for around 150 developers - compare that with the ten we had just a couple of years ago! Our car pool, cars are the platform for our

camera system, should expand from fifty to three to four hundred over the coming three years, and this means negotiating with car manufacturers too. Adapting each car to our needs takes a lot of investment and therefore we want standardised solutions that may last for at least two to three years. This puts requirements on the car in terms of the same model being capable of remaining in the market for a long time: just one example of the decisions that have to be made, and a lot of effort goes into this. We have already increased production from a few tenths of a million to many million images annually. The year 2006 was a very intensive one for us, but also very successful.

***What strategy do you have for extending your pool of human resources?***

Employing people is something that I greatly underestimated during the evolution of my expansion plans. Whatever expansion plans you have, the most important aspect is to find good people. Most importantly, they should have the right educational background and professional skills. Before people can contribute to the company they need to understand all the ins and outs of the core technology.

***So there are more than enough opportunities for people to become involved in CycloMedia?***

We are involved in a very specialised segment of technology and as a company we are not widely known among students and new graduates. To make our company more attractive to young people trained in engineering, geomatics, informatics and so on, and to provide them with the skills they need for development tasks, I would like to establish master classes. This would mean our own people, the good ones, transferring their knowledge of the principles of our technology, and their experience. Our business and expansion plans require also that we recruit people in the countries into which we want to expand. These people too have to be trained by our own. So we need a lot of capacity.

***What are your prospects with respect to the rapidly emerging economies of China and India?***

We realise that China and India offer many opportunities. However, as we see it, going into Asia means taking some giant steps. You need to understand the culture, you need representatives there, and from a logistical point of view it is not easy to transport our systems over long distances. So for the time being we do not plan to carry out projects in Asia and the Southern Hemisphere. Of course, we could buy cars there. But that would mean establishing an agency, and this is too premature a move for the moment. I prefer to take things one small step at a time and reach my goal, rather than big steps and stumbling. And there is still so much to do in our neighbouring countries. Our cars, fully equipped with our camera systems, can reach most European countries in just one day, and that makes sense.

***CycloMedia is at present a relatively small player in the geomatics business, notwithstanding your ambitions. There are a lot of bigger fishes out there looking to take over successful geomatics firms, any eyeing up CycloMedia?***

We have a lot of knowledge and added value in the company and we have already had several offers from large companies who see the landscape of our potential. The company is still privately owned and, although this could change in the future, a take-over is not on our agenda. The private owner allows us to invest all our profit in development and expansion; we are able to finance our growth ourselves despite the fact that our customer-base consists mainly of government institutions and these are well known to be late payers.

***Your background is not in geomatics but in management. What attracted you most in your decision to become marketing and sales manager for CycloMedia in November 2005?***

When I started my job here I felt like a child in a sweet factory. I found a firm with a large pool of knowledge available, and a lot being invested in creating advanced technology. However, the firm was in many respects too technology-driven, rather than being orientated towards manufacturing and marketing. It is often said that The Netherlands is very good in knowledge creation but that the country has some problems turning knowledge into mass products and bringing it to the market, and I think this is true. What this firm was missing was the pivot between advanced technological development on the one side and mass production and market on the other. You could say the firm was not commercially but technology driven. Let me explain further. We are making 1MB-sized images created by sophisticated technology. However, up until a few years ago the technology was difficult to apply in terms of storage, dissemination and graphical processing. So the technology was in advance of the user, and actually the firm did not care much about that.

***What do you consider your main achievements up to now?***

What we have achieved is to look more carefully at the market and listen better to the customer. The majority of the success results from the innovative character of the firm, and that is what we want to conserve. We are growing fast. The developers are closely connected to the research community and try to convert academic knowledge and concepts into products. They have their own budget, and the technology they develop may be applicable only in two, three or four years from now. That is our investment in the future. In the past we made the mistake of telling the customer what to do and how to do it. We do not want to repeat the same mistake. We want to meet the needs of the customer. For this it is also important that you can exactly define your services. That means we cannot make do with just delivering images to our customer but we also have to march alongside our customer, to integrate our images in his working processes. It helps a lot that we have already been active in the Netherlands marketplace for over a decade and possess in-depth knowledge about the core technology.