

MAPPING COMPANY ASSISTS IN FIGHT AGAINST HIV/AIDS EPIDEMIC

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Unconstrained by customs posts and navigational barriers, infectious diseases can cross boundaries and infiltrate communities with deadly ease. Organisations struggling with the spread of HIV/AIDS have to confront this dilemma every day.

Which communities are hardest hit by infection rates? Is the government providing adequate care? These are some of the questions that need to be answered urgently.

Tshwane is an area where –

- HIV infection rates have climbed by 39% in seven years.
- An estimated 18 000 children do not receive treatment.
- Statistics converted into human terms at the end 2009, suggest that 230 000 people were HIV positive; a rate of 16 000 new infections a year.
- An estimated 44 000 people will die from AIDS in 2010.

And this is just one region. The prevalence of AIDS across South Africa is the largest in the world – 11 per cent of the population or 5.3 million people; a figure which does not account for the 'knock on affect' of HIV/Aids - the affect the infection rate has on families and communities.

To make matters worse, various organisations in the Tshwane area did not co-ordinate their resources until recently. What they needed was a central co-ordinating office and the visual ease of a map to indentify patterns of infection in relation to available resources - a pointer for identifying strengths and weaknesses in the Tshwane region.

This became the rallying point for the 'Compass Project' funded by the Netherlands and run by the Foundation for Professional Development (FPD) in Gauteng. The Foundation co-ordinates and supplies digital maps to the City of Tshwane Mayoral AIDS Council (TMAC), a local civil representative agency formed to curb the spread of one of the world's most deadly afflictions – at all levels of society - in this region of the country.

The project quickly determined that HIV/AIDS organisations, particularly co-ordinators, needed to see, sense and understand where HIV/AIDS was most prevalent, and where resources to counter its spread were most thin, uncoordinated and vulnerable. They recognised that this could be best achieved by using maps.

The Foundation for Professional Development (FPD) is a Private Institution of Higher Education, one of the largest in Africa. Part of their focus is a major AIDS testing and treatment programmes supporting approximately 100 000 patients on treatment. Through their Compass Project ,they provide HIV/AIDS data that can be visualised on maps and easily analysed to support the co-ordination of resources.

The Compass Project channels this map-based information for the City of Tshwane Mayoral Aids Council. The Council, working through partners, or on its own initiative, uses the data to formulate a strategic response to counter the spread of HIV/AIDS.

This is where MapIT, the company that pioneered digital mapping in South Africa, stepped in, offering the Compass Project a tool called MarketScope. This tool had previously been used by businesses to chart demographic trends in the market place. MarketScope pools demographic data and geo-spatial map data, and proved an ideal solution for charting, in map format, the spread of HIV/AIDS in relation to local population counts. Using these maps, planners could also pinpoint the location and adequacy of medical resources earlier established to service communities in specified areas.

For Janine Mitchell, Compass Project Head, the arrival of MarketScope was ideal and timely. MarketScope, she says, "enables the Tshwane community to better understand the current landscape of those affected by HIV/AIDS. It also allows private and civil society to identify service gaps and prevent service duplication..."

In simple terms, this meant not wasting or duplicating scarce resources.

The Compass Project now use MarketScope's strength as a business intelligence tool to identify patterns of HIV/AIDS infection on maps of the Tshwane area, and within these affected areas, the location of medical or community services. It does this by pooling demographic data – mainly population density statistics derived from census and similar data – into a single program that then replicates the statistics into map imagery. It further allocates sets of map co-ordinates to each medical resource in a given area. The result is a detailed map showing both the prevalence of HIV/AIDS and the resources needed to support the affected communities.

According to Mitchell, The Compass Project can now determine how many people a particular centre caters for, and ascertain if these people have sufficient access to the available resources.

For Ray Wilkinson, Managing Director of MapIT, the Compass Project justifies everything that went into the development of the software. "If it gives the Compass Project the ability to examine endless spreadsheets, tables of figures and pie-charts in a visual format that enables them to draw informed conclusions, then it is worth every cent we spent on its development," he says.

"A quick glance at a map to locate resources in affected areas has given our staff quick and easy access to what was once a complex technical process," adds Mitchell. "Moving forward, the Compass Project needs to geo-code more than 460 service providers in the Tshwane area alone, but they can plot national resources right down to street level."

ADDITIONAL NOTES

About The Foundation for Professional Development (FPD):

FPD is currently the largest self funding health sector educational provider in Africa. FPD's VISION is to build a better society through education. FPD annually trains 23 000 health care professionals and managers across Africa, supports treatment to 100 000 people living with AIDS , does 140 000 free AIDS test, organises major health conferences and recruits hundreds of 1st world doctors to fill vacancies in rural Government Hospitals.

About The Compass Project:

The Royal Netherlands Embassy fund the Compass Project. The primary goals of this project are to ascertain:

- **The epidemiological situation of HIV/AIDS in municipalities and communities at this time**
- **The HIV service needs of the HIV/AIDS community**
- **The current level of community HIV services being provided by any service provider active in the community**

The key elements of the project are:

- **Creation of an HIV/AIDS Mapping and Research Centre, in partnership with the University of Tshwane, School of Health Systems and Public Health, to provide accurate mapping of all service providers, epidemiological quantification of the service delivery need and assist to build the capacity of service providers through organisational development in the broader Tshwane area.**
- **Information and resource provision/collaboration to streamline and prevent duplication of information for HIV/AIDS service providers.**

About The City of Tshwane Mayoral AIDS Council (TMAC):

The purpose of this council is to provide strategic vision to the HIV/AIDS response in the City of Tshwane and to develop solutions that the council can implement itself or through partners.

About MapIT:

MapIT operates at the forefront of digital mapping in Sub-Saharan Africa. Working in tandem with shareholders Tele Atlas (a world leading international mapmaker) and local media giant Avusa, the company is Southern Africa's leading supplier of digital map data and enriched geo-spatial content used in the mobile and corporate enterprise markets. MapIT also supplies commerce and industry with applications and data used in asset tracking, fleet management, business and marketing intelligence and web services.