

WHERE INSTINCT MEETS
SCIENCE...

GEOSPATIAL TECHNOLOGY
BUSINESS INTELLIGENCE
INFORMATION TECHNOLOGY



www.technicalsystems.biz

COMPANY PROFILE



www.facebook.com/techsys

COMPANY INFORMATION

REGISTRATION

BANKERS

LAWYERS

Zimbabwe Office

Company Registration

Company Reg. No: 12138/99

Vat Reg. No: 10098374

Bankers

Steward Bank

Banc ABC

Lawyers

B. T. Chokuda (LLB (UZ), LLM (UCT))

Zambia Office

Company Registration

Company Reg. No: 149092

Bankers

FNB Zambia

Banc ABC

PREAMBLE >>

Technical Systems (Pvt) Ltd is a Geospatial Solutions, Business Intelligent and Analytics (BIA) and Information Technology Solutions (ITS) company that offers solutions to mid-sized and large companies. Our company's mission is simple - not easy, but simple:

"create intelligent solutions for business and get it to them fast..."



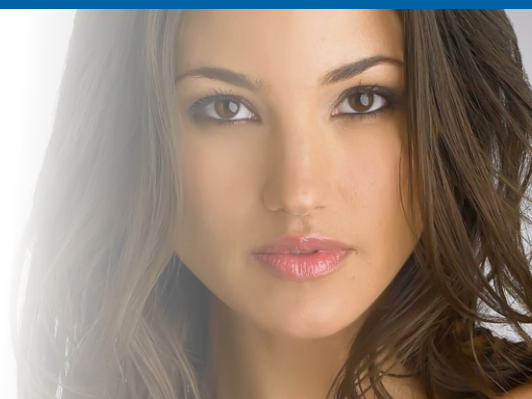
www.facebook.com/techsys

TABLE OF CONTENTS

ABOUT US	04
Introduction › Our Vision › Our Mission › Our Values › Business Scope › Why Us	
PRODUCTS & SERVICES	06
Geographical Information Systems › Business Intelligence › Information Technology	
PRODUCTS & SERVICES	07
The Business Engine › The Solution Matrix	
GEOGRAPHICAL INFORMATION SYSTEMS	08
GIS Consultancy › GeoAnalytics › GeoMarketing › Data Services	
BUSINESS INTELLIGENCE	10
Business Analytics › Data Mining › ETL Services › Knowledge Services	
INFORMATION TECHNOLOGY SOLUTIONS	12
Systems Integration › BI & ERP Solutions › Data Tools › Multi-Plaforms Solutions	
RESOURCES	13
Organogram	
PROFILES	14
Key Team Members	
PORTFOLIO	15
Projects Portfolio	

© Copyright 2013 Technical Systems

Technical Systems reserves all rights, particularly with regard to translations, presentations, reproductions, duplications through photocopying or other means and saving in the form of electronic media.



ABOUT US

INTRODUCTION | OUR VISION | OUR MISSION

Technical Systems (Pvt) Ltd (techsys) is a company which was founded by Lloyd Manyema in 1999. We are currently operating in Zimbabwe and Zambia. We are also opening an office in Sierra Leone. We started off strictly as a Geographical Information Systems (GIS) company. Our purpose is to spatially enable organizational decision making by making use of geospatial technology tools. By making use of such technology, which includes but is not limited to, Geographical Information Systems (GIS) we have **contributed positively** to the overall organizational **performance** of the organisations that have engaged our services. Our client base includes but is not limited to; international organizations; United Nations Children's Fund (UNICEF), Southern Africa Development Corporation (SADC), United Nations Development Programme (UNDP), utility organizations; Econet Wireless, Powertel Communications, Zimbabwe Electricity Supply Authority (ZESA), Rural Electrification Agency (REA), local authorities; non-governmental organisations; African Wildlife Foundation, Action la Faim, government; Ministry of Transport and Communication, and Ministry of Environment and Tourism.

we provide real value



The premise behind our solutions is to **enhance management** and performance of organisations for **quality service delivery**. In short, we have successfully managed to deliver quality services and products timeously.

Contactable references are available for each project we have implemented. We

have the data, technology, infrastructure and personnel to support your business in the implementation of solutions that foster growth.

Our solutions are **affordable and scalable** and reduce costs by enabling departments to share data and applications.

Our software technology also reaches across your organization to embed real-time, live transaction data stored in your data warehouses or just in your enterprise database.

Our solutions grow as your business **grows**. Our objective is to bring technology to the realm of day-to-day business applications.



OUR VISION >>>

To be the most sought after geospatial solutions provider.

OUR MISSION >>>

“Creating intelligent solutions for business-people and get it to them fast”

Techsys helps mid-sized and large companies increase revenues, retain customers, and reduce direct and indirect costs, by pinpointing and redesigning value chain systems and processes by providing business intelligence related technology solutions. We intend to maintain positive relationships with each and every client, and offer cutting edge solutions at the speed of technology.

ABOUT US

OUR VALUES | BUSINESS SCOPE | WHY US

- Professionalism – We do things as per promise and above reproach, being accountable to all stakeholders.
- Innovativeness – To continuously improve the company, its staff, service, and products, while keeping in step with technological trends.
- Excellence – We aspire to do all things excellently and brilliantly through extraordinary effort.
- Reliable, Simple-to-use, Powerful solutions- Providing products that perform well, are relevant to client needs and are dependable.
- Social Responsibility - Being a responsible corporate citizen by contributing to society, working ethically and fairly.

BUSINESS SCOPE >>

Our business purpose is to enable organizational decision making by use of technology in all business operations. By making use of technology, we have contributed positively to the overall business performance of organisations that have engaged our services. Drawing upon expertise in multiple domains, technologies, tools and platforms, we utilise both industry-standard and innovative proprietary methodologies as well as best practices to design, develop and deliver practical solutions for our customers

WHY US >>

Our highly educated and experienced professionals are ready to tackle the most complex challenges medium to large enterprises face today. The talent, experience and accumulated knowledge in proprietary and open source products characterise our ability to:



Transform Business

By offering best-practice implementations and deployment strategies through our highly motivated and experience subject matter experts.



Improve Business Workflow

By engineering applications to improve daily business workflows through minimising human interactions and enforcing standardisation and validation procedures.



Capacity Building

By ensuring the needed knowledge has been transferred correctly and accurately to improve staff expertise and productivity.



www.facebook.com/techsys

PRODUCTS & SERVICES

GEOGRAPHICAL INFORMATION SYSTEMS | BUSINESS INTELLIGENCE | INFORMATION TECHNOLOGY

In the narrow sense, a Geographical Information System (GIS) is technology tool that links databases and digital maps.

At a more general level, the term GIS refers to the ability to analyse spatial phenomena. Geospatial technologies like GIS are an **important business intelligence** tool for exploiting and presenting the increasing amount of data available in a form that can be understood by business analysts and managers.

GIS transpose data referring to clients, market, assets and corporate data in informative maps that are easy to understand and use.



Business Intelligence (BI) describes "a set of concepts and methods to improve business decision-making by using **fact-based support systems** or a process for increasing the competitive advantage of a business by intelligent use of available data in decision making. Information Technology (IT) is the common platform which is used to deliver GIS and BI and hence our service design that bundles the three areas together (i.e. GIS + BI + IT). Fig 1 shows how the three services are connected. We have coined this, the 'BUSINESS ENGINE'.

THE BUSINESS ENGINE >>>

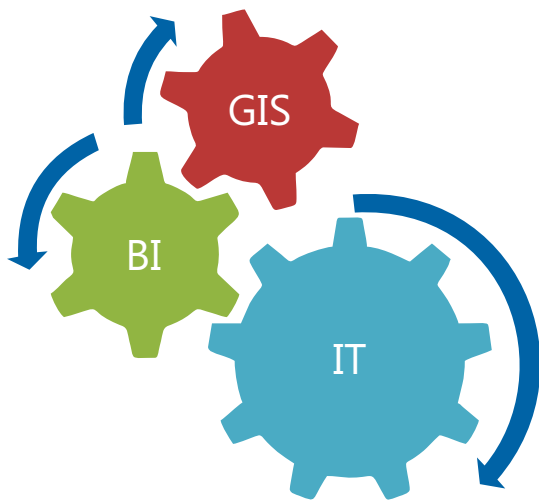


Fig 1: The Business Engine

Advances in technology are rewriting the rules of the game in increasingly rapid cycles. ESRI (the leaders in GIS software) believes that the future success of any business will be determined to a large degree by the competitive advantages of investing in and implementing smart technology. GIS is one of the smart technologies that will give you this competitive advantage. It is encouraging to see our users take the lead in implementing smart GIS technology on projects that will bring value to their organization and improve their bottom line.

GIS adds spatial intelligence, the one true **source of sustainable competitive advantage**, to your organization. In today's fiercely competitive environment, companies must use every advantage to acquire and retain customers, plan market expansion and contraction, locate profitable sites, stay abreast of changing consumer tastes, and act faster than the competition.

All the three services (GIS, BI and IT) are further broken down into four sub-services. A 'SOLUTION MATRIX' incorporating all the services and sub-services is shown in Fig 2. All the sub-services have one or more relationship with the other. Training (capacity development) cuts across all our service areas.

In a nutshell, we advocate for a spatial (geographic) perspective in all our solutions. Industry software leaders like SAP, ORACLE, Microsoft, IBM, etc have added a spatial dimension to almost all their solutions. SAP has added a spatial engine to their analytic and reporting platform, whilst Microsoft has added spatial capability in Excel, SharePoint and they even have a number of dedicated web spatial tools (Bing Maps). ORACLE incorporated a spatial engine (ORACLE Spatial) into their database a long time ago. We are there to make sure that our clients catch up with the rest of the world in terms of being competitive through the use of geospatial technologies. The solution matrix (Fig 2) is designed to meet the aforementioned objective. The common denominator in all our solutions is the spatial dimension which is currently missing in the majority of organisations in Africa. Material is awash on the internet demonstrating how various organisations are using location analytics to gain a competitive advantage. Be it in retail, banking, real estate, telecommunications, manufacturing, mining, or services industries, geospatial technologies have effected draconian changes in the way business is being conducted.

PRODUCTS & SERVICES

THE SOLUTION MATRIX >>>

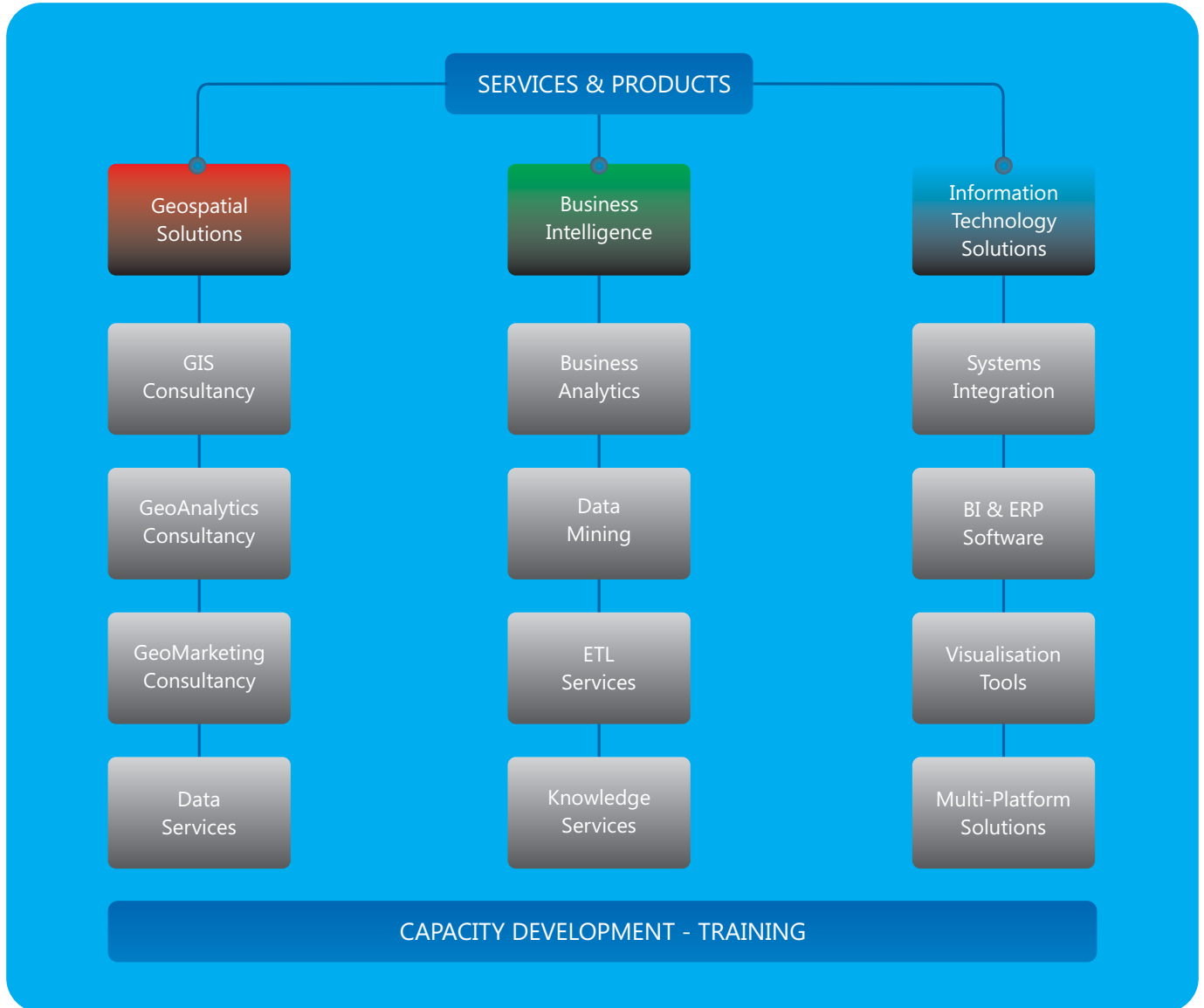


Fig 2: The Solution Matrix

GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

GIS CONSULTANCY | GEOANALYTICS | GEOMARKETING | DATA SERVICES

The GIS industry is ever growing in importance as the world market becomes more acclimated and dependent on [location intelligence](#). Our GIS services cover all the industries viz telecommunications, utilities, financial services, manufacturing, mining, agriculture, tourism, retail etc. We also cover local and national government and NGOs. We believe that delivering the right solutions is function of understanding the clients' business and so what matters most to us is your business not the technology. We offer four services under the GIS business unit.

GIS CONSULTANCY >>>

Designing, developing, and implementing GIS solutions can quickly become the toughest challenge for our clients. Techsys offers [strategic and results-oriented](#) GIS Consulting services from a trusted and experienced team of geospatial professionals. Our clients see many challenges in defining requirements, including: improving operational performance, structuring solutions that leverage their technology investments, and improving business process management – all while reducing costs. Our GIS Consulting services are tailored to address these key needs and help our clients get from issues to solutions quickly. Our approach is quite simple. We review your expected end needs and work backwards assessing workflow, tools, organisation structure, infrastructure, resources and current standard operating procedures. Our skilled team of GIS consultants, software developers and data management professionals apply proven technologies and methods to help clients overcome organisational problems and custom develop a logical and realistic improvement plan. Our delivery process includes:

- **GIS Assessment/User Requirements:** Our GIS architects will work with the clients' core team to identify and define the requirements needed and translate them into Functional Design Specification Documents (FDSD). The FDSD will be used to guide our team in System Design, Development, Configuration and core team training.
- **Data Migration and Cleansing:** Your data is the lifeblood of your business. Improper conversions can result in loss of and/or corrupted data. We realise the importance of your data and make sure that it is accurately converted to the right format. Our data quality and ETL (extract-transform-load) tools ensures that your data is accurately converted before you make the switch.
- **Geodatabase Modelling:** Assisting customers in utilising the technology available by leading vendors in creating more efficient and intelligent GIS system. Configurations are done so that our systems comply with your business behaviour and rules.
- **Solution Development:** Our deployment team assists customers in deploying and operating the system. Our deployment strategy is backed up with maintaining the system to fulfil the customers' desire by providing the needed training that is designed to quickly bring your team up to speed on the new implemented solution.
- **Process Development:** Our consultants assist with business processes development to maximise the strategic and operational value of our clients' GIS systems investment. We will work with you to analyse your current processes and map them to the required GIS solution to ensure that every aspect of your business is covered and assisting you in implementing the future processes.
- **Customer Driven Training:** A training programme designed to speed up end users' buy-in to the system by delivering the needed information to the respective user group.



GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

GEOANALYTICS CONSULTANCY >>>

Our strengths in statistics and mathematics, simulation, modelling, and optimization provide the analytical horsepower to address **complex business and strategy problems** using GIS tools. We provide meaningful visual representations of market and economic data and its spatial relationship to your business operations. Using GIS, we incorporate proprietary performance metrics along with demographic and economic information and our proprietary spatial databases. Using selected primary, secondary, census, or client-provided data, our GIS team can create a series of color-coded thematic maps to **highlight business opportunities**. Each map is customized, presenting the data by market, trade area, or other area-specific geography.

These maps provide an effective visualization and immediate understanding of **strategic business opportunities**. GIS takes the numbers and data from the rows and columns in databases and spreadsheets and puts them on a map. Placing your data on a map highlights where you have customers in your business catchment area and identifies what their demographic profile is. It allows you to view, understand, question, interpret, analyze, and visualize your data in ways simply not possible in rows and columns of a spreadsheet.



GIS, a Tool That Means Business

Approximately 80 percent of all business data are related to location. Businesses manage a world of information about sales, customers, inventory, demographic profiles, mailing lists, and so much more. No matter what industry you are in, business success means making **wiser decisions faster than your competition**. Being able to understand the market and obtain information quickly so you can take fast action is key. The intuitive power of maps often reveals trends, patterns, and opportunities that may not be detected in tabular data alone. Maps are the **key to success** in business.

GEOMARKETING CONSULTANCY >>>

"Marketing is no longer an art, it is a science"

Our key focus is the geographic analysis and visualization of business data in order to make sense of trends and relationships, leading to more effective and intelligent business decisions. This unique integration enables us to provide our clients with innovative, value-add solutions and enriched market intelligence. Geo-Marketing means using geographic information in the process of planning and implementation of marketing activities. Geo-Marketing takes a deep look at peculiarities of a specific geographic area and tries to incorporate the conclusions into the design of a marketing activity by tailoring it to the very needs of this area. Geomarketing is more important than ever. In today's global markets, it's vital to quickly take advantage of any open niches and stay one step ahead of competitors. Managing markets efficiently and tapping new potential are the keys to boosting turn-over. This is exactly what a geomarketing approach allows you to do. Organisations of all type whether focusing B2B and/or B2C markets can profit from a geomarketing approach in sales, marketing and expansion planning.

> What can Geo-Marketing do for you?

There is a geographic dimension to virtually every marketing problem. Visual display of data through color-coded maps is a powerful marketing tool. Using selected primary, secondary, data or client-provided data, we can create a series of color-coded geographic maps to illustrate marketing opportunities. Each map is customized, presenting the data by market, trade area, or other area-specific geography. Geo-maps provide an easy way to see and understand spatial relationships. The following is a list of market-related areas that we can assist in.

- Competitor analyses
- Business catchment area analysis
- Customer analytics
- Demographic studies
- Psychographics & Lifestyle analysis
- Geo-merchandising
- Risk analysis
- Market analysis
- Market research
- Turnover planning
- Sales territory analyses
- Sales territory balancing
- Served/Underserved clients
- Service areas
- 4Ps analysis
- Service territories
- Site analyses
- Target market analyses

BUSINESS INTELLIGENCE

BUSINESS ANALYTICS | DATA MINING | ETL SERVICES | KNOWLEDGE SERVICES

DATA SERVICES »»

Technical Systems is a supplier of spatial data covering Zimbabwe from the national boundary up to individual property stands. These data sets are indispensable for use by private and public organisations, government, NGOs and civilians. The data sets can be customized and packaged according to your requirements. We can also collect and map any data you might need.

We aim to make the countries in which we operate the most mapped countries in Africa and by so doing **contribute** immensely to their socio-economic **development** by availing data for decision makers at different institutional levels. Investors who are interested in data for any specific business area e.g. tourism, mining, agriculture, manufacturing, banking, insurance, real estate, energy, telecommunications, education, health and other sectors can approach us for help. We will **strengthen** their investment portfolios and ward off any risks by helping them make fact (data) based decisions rather than rely on gut feelings. Consult our data catalog for more details on the various data sets we sell and other data services we offer.

BUSINESS INTELLIGENCE

Business intelligence (BI) is a set of theories, methodologies, processes, architectures, and technologies that transform raw data into meaningful and useful information for business purposes. BI can handle large amounts of information to help identify and develop new opportunities. Making use of new opportunities and implementing an effective strategy can provide a competitive market advantage and long-term profitability.

BUSINESS ANALYTICS »»

Business Analytics (BA) involves the application of various technologies, tools and methodologies for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning. The focus is on developing new understanding of business performance based on data and statistical methods. BA makes use of data, statistical and quantitative analysis, exploratory and predictive modeling, and fact-based management to drive decision-making. We have the technology and skills to transform your current business operations and give you an insight into the future of your business. The business domains we cover include: retail sales analytics, financial services analytics, risk and credit analytics, marketing analytics, behavioural analytics, cohort analytics, fraud analytics, pricing analytics, telecommunications, supply chain analytics, transportation and logistical analytics.

DATA MINING »»

“The indispensable solution to understand, analyse and predict”

Data Mining is a broad term often used to describe the process of using database technology, modelling techniques, statistical analysis, and machine learning to analyse large amounts of data in an automated fashion to discover hidden patterns and predictive information in the data. By building highly complex and sophisticated statistical and mathematical models, organizations can gain new insight into their activities.

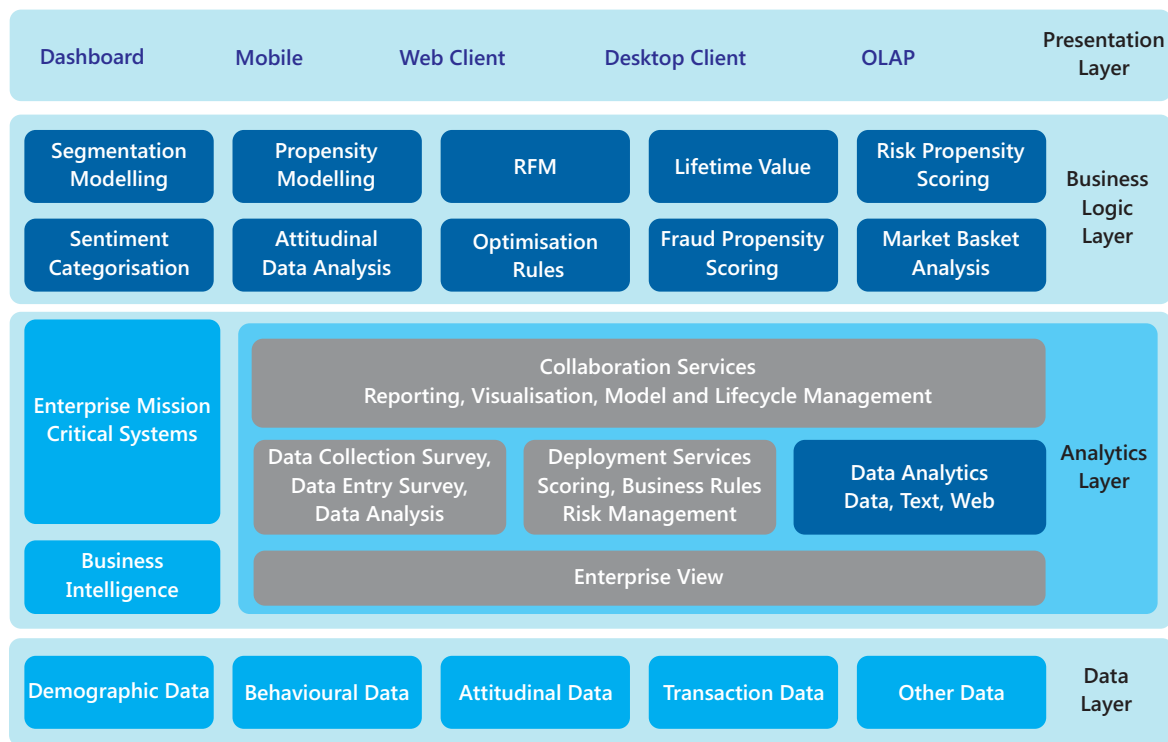
By integrating data mining with GeoAnalytics and GeoMarketing, we help you to develop the best possible understanding of your business data, improve the analysis of an activity and simulate future performance. The aim is to consolidate and give operational meaning to the information available within company databases: customer data, sales transactions, logistics, sales channels, market segments, resource allocation and competitors.

Application Areas

- Market analysis and management
- Target marketing, customer relationship management (CRM), market basket analysis, cross selling, market segmentation
- Risk analysis and management, Fraud detection and detection of unusual patterns (outliers)
- Forecasting, customer retention, improved underwriting, quality control, and competitive analysis
- Web mining, text mining, database mining and spatial data mining

BUSINESS INTELLIGENCE

ANALYTICAL TOPOLOGY >>>



BUSINESS INTELLIGENCE

BI technologies provide historical, current and predictive views of business operations. Common functions of business intelligence technologies are reporting, online analytical processing, analytics, data mining, process mining, complex event processing, business performance management, benchmarking, text mining, predictive analytics and prescriptive analytics.

ETL SERVICES >>>

ETL is an acronym that stands for; extract, transform and load. ETL processes are data intensive, complex, and costly. We have various tools (proprietary and open source) that we use to help clients in their ETL processes. Our ETL workflow includes: (a) the identification of relevant information at the source side; (b) the extraction of this information; (c) the transportation of this information from the sources to an intermediate place called Data Staging Area (DSA); (d) the customization and integration of the information coming from multiple sources into a common format; (e) the cleaning of the resulting data set, on the basis of database and business rules; and (f) the propagation of the homogenized and cleansed data to the data warehouse and/or data marts. The list below shows other ETL related services that we offer:

- [Data Quality Analysis](#)
- [Data Integration](#)
- [Data Warehousing](#)

KNOWLEDGE SERVICES >>>

Knowledge services are systems that provide content-based (data, information, knowledge) outputs. The outputs can be on different media (CD, web, paper, etc). We developed the first of its kind interactive CD atlases for UNICEF. The focus was on the NGOs intervention database for the WASH, Nutrition, Food and Agriculture sectors (clusters). The CD shows “who is doing what and where” and is used for programme planning, targeting and monitoring and evaluation by implementation partners. We have the expertise and technology to package any content into your preferred format and platform.

INFORMATION TECHNOLOGY SOLUTIONS

SYSTEMS INTEGRATION | BI & ERP SOLUTIONS | VISUALISATION TOOLS | MULTI-PLATFORMS

SYSTEMS INTEGRATION >>>

A well-known nightmare for any organisation is systems integration. Systems integration is getting more complex to the point where companies are looking for integrating GIS with every system within the organisation for better visualisation, management, and operation. Our highly trained team in GIS sees the GIS integration nightmare as a challenge to meet. Working tightly together with customers to establish best results in GIS integrations allows us to meet the customers' business requirements. We can work with existing commercial and open source BI and ERP platforms like Penhaho, SAS, SAP, IBM ICONOS, ORACLE, OpenERP, etc . Banking, CRM, Insurance, Asset Management, Telecommunications, and other business domains can be easily integrated with GIS. The good news is that GIS database (Geodatabases) are supported by all the famous DBMS such as ORACLE, MS SQL, IBM Dbase, IBM Informix, Postgresql, and MySQL. This implies that your current business operational data can be simply combined or linked with spatial data and analysed effortlessly. We can take advantage of your existing DBMS and use ETL tools to add spatial data to facilitate analyses without having to spend large investments in new DBMS. Data also be extracted from your data warehouse or data marts and analysed directly using GIS tools. We provide complete integrated solutions through cooperation with domain experts, scientists, and other Information Technology specialists using .NET, Java, ActionScript, Python, C, PHP and other programming software. Real-time systems such as SCADA can also be integrated with GIS platforms.

BI & ERP SOLUTIONS >>>

Our focus is on the customisation and deployment of BI and ERP tools. We work with both proprietary (ORACLE) and open source ERP and BI platforms. For proprietary ERPs like SAP, we can assist businesses in setting up the built-in spatial extensions to facilitate spatial analytics of your rich enterprise databases. We also work with open source BI and ERP platforms like Penhaho and OpenERP. We can embed GIS or spatial analytics in these platforms through software coding and can develop classes that can extend the functionality of these tools.

DATA VISUALIZATION TOOLS >>>

Our focus is on the development and deployment of data and information visualisation tools. The tools include dashboards, interactive reports, and infographics. These tools are indispensable in varying business applications ranging from executive KPI-based systems to reporting systems that monitor the day-to-day running of business operations.



MULTI-PLATFORM SOLUTIONS >>>

We specialise in developing applications for a multi-spectrum of platforms - mobile, web, cloud & touch solutions.

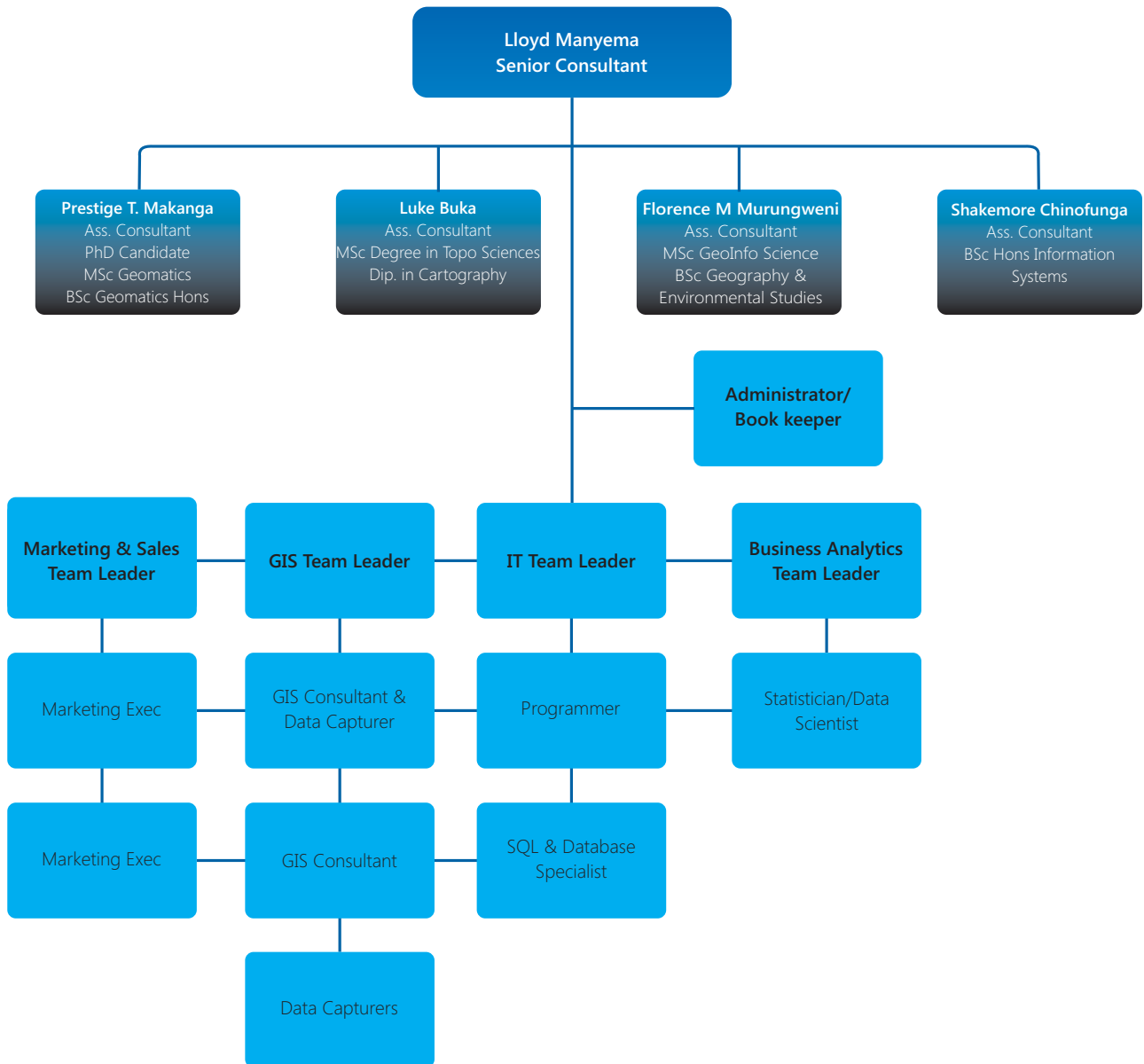
Applications areas include;

- Health services
- Agriculture services
- Financial services
- Real Estate
- Government services
- Enterprise systems
- Telecommunications
- Education services
- Humanitarian services

RESOURCES

THE ORGANOGRAM >>>

We have the most capable and experienced consultants to handle any project. Their total experiences is more than thirty years. We support our clients through our highly trained and experienced professionals. We also engage outside consultants for specialised business areas in which we might lack expertise and experience. The premise behind this is to make sure that the client gets maximum value through our solutions. Below is an organogram that summaries the key personnel at our disposal.



PROFILE: KEY TEAM MEMBERS

LLOYD MANYEMA >>>

GIS & Information Management Consultant

- Masters in Engineering Degree - Geomatics
- Bachelor of Science Engineering in Surveying and GeoInformatics

Extensive 14 years of experience in GIS and Information Management, Databases, Software Development, Project Management, GPS, Web GIS, Open Source and Proprietary Systems, GIS Analysis, Mapping, Domain and Requirements Analysis, Research, Knowledge Products Development and User training. Lloyd developed the first of its kind interactive CD atlases for 4Ws mapping for UNICEF and received an “Outstanding Product” rating from the client. He has then gone on to develop the same product for the Cambodian and Sierra Leonean government through UNICEF. His GIS experience cuts across all the business domains; from humanitarian to banking, telecommunications and anything in-between. He has successfully implemented more than 20 GIS related projects. His ability to comprehend any business case and transpose it into a GIS application is his most outstanding skill.

PRESTIGE T. MAKANGA >>>

GIS Consultant

- PhD Candidate (Canada)
- Masters in Engineering Degree - Geomatics
- Bachelor of Science Honours in Surveying and Geomatics

Prestige has a passion for GIS and its application in public health and other application areas. His strengths are in GIS analysis, information management, systems requirements engineering and architecture design. His prowess is in Web-GIS, spatial data and the Volunteered Geographic Information (VGI) phenomenon. He has amassed research skills and he is currently studying for a PhD with a Canadian university. He has written a number of papers and publications. He is also currently leading research on Spatial Data Infrastructure and their role in supporting decision making processes in Zimbabwe. Prestige is also the co-leader of the Research committee in the Surveying and Geomatics division of the Midlands State University. He started working for Technical Systems in 2006 after completing his first degree and has accumulated a lot of experience and expertise in GIS.

FLORENCE M. MURUNGWENI >>>

GIS Consultant

- Master of Science Degree in Geo-Information Science
- Bachelor of Science in Geography and Environmental Studies

Florence has over 11 years' experience in GIS with distinct skills and practice in applications of modern technologies GIS applied to population and settlement, HIV and AIDS, Disaster Management, Agriculture, Surveying and Cadastral Mapping, Mining, Natural Resources Management and Environmental Management, Environmental Policy, Environmental Education and Pollution as well as Climate change issues. She has worked in both government and the private sector of developed and developing world. Her specialty in designing course outlines started with NAVTEQ (NOKIA) Company, in the Netherlands where as a Regional Quality Assistant she developed, created and edited QUEST projects manuals to be used for field data collection by field officers. Successfully completed an EU funded research at Forestry Commission (Zimbabwe) where she critically analyzed some tools (models) that are used in assessing forest growth.

WHERE INSTINCT MEETS SCIENCE...

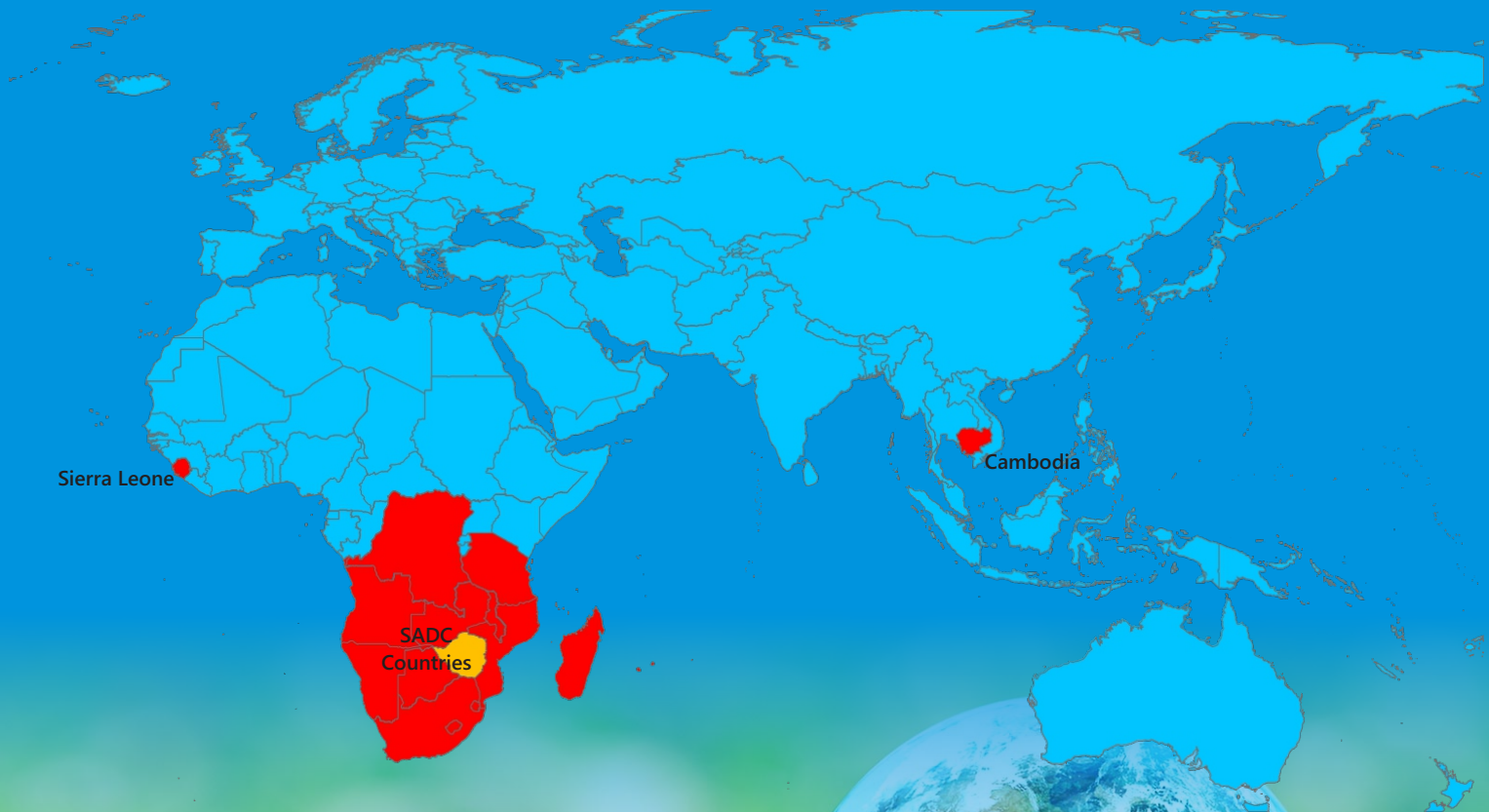
GEOSPATIAL TECHNOLOGY
BUSINESS INTELLIGENCE
INFORMATION TECHNOLOGY



PROJECTS PORTFOLIO

www.techsys.com >>>

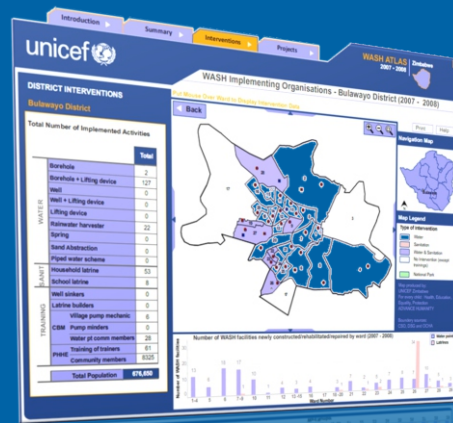
We have been in business for more than fourteen (14) years during which we have dealt with a cocktail of challenges. We have been involved in a number of projects of varying scope and size spanning various spatial technology domains. We have data-captured, developed software, trained users and advised clients. This section highlight a few out of many successful projects we have been involved in. All the projects highlighted can be demonstrated on request. The map below highlights the spatial catchment area of our work. Currently, we are involved in what will become the biggest GIS project hitherto in Zimbabwe. It is an implementation involving all the business units within Econet Wireless Zimbabwe (EWZ). The system will accommodate more than 400 users and is based on the service oriented architecture (SOA).



MAP KEY

-  Head Office
-  Projects Coverage
-  Other Countries

EXHIBIT THREE & FOUR



THE CLIENT...

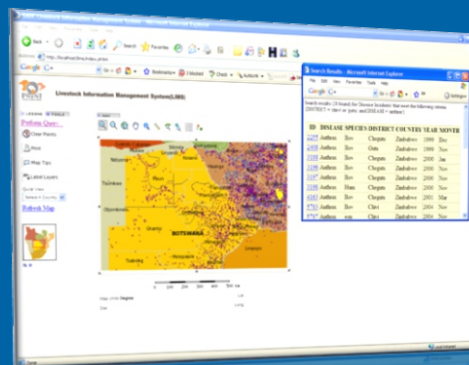
UNICEF - Zimbabwe

THE CHALLENGE...

To strengthen its coordination role, UNICEF started in 2005 with the development of sector-specific planning tools, such as the WASH, Nutrition, Education and Multi-Sector Atlas. These Atlases presents a clear overview of 'who is doing what where' and is aimed to improve evidence-based planning and programming as well as coordination of the different interventions areas. Technical Systems has been engaged by UNICEF since 2008 to date to create the interactive map atlases

THE SOLUTION...

- XML NGO and Intervention Database Development
- Content: Analysis and Mapping, Charting and Importing
- Country to Ward-Level Interaction Design
- GIS Functionality and Interactive through Software Programming
- Packaging the Atlases for Distribution to NGO partners and other Stakeholders



THE CLIENT...

Southern Africa Development Community - SADC

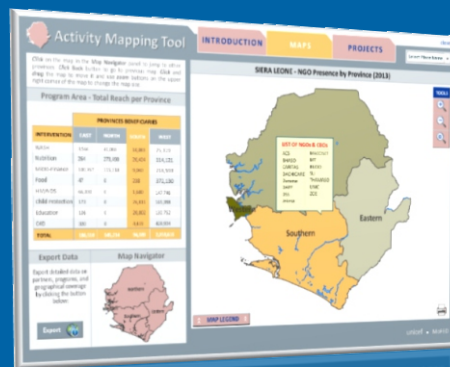
THE CHALLENGE...

The development of a Livestock Information Management Systems with PRINT unit. The expected results of this consultancy included the assessment report of the web mapping technologies frequently used. The second part of the project entailed the design, development and implementation of Web Mapping Tool compatible with the current on-line disease database for mapping and querying the livestock disease database.

THE SOLUTION...

- WebGIS Software Tools Assessment
- GPS Livestock Disease Incidence Data Cleaning & Formatting
- Livestock Demographic Data Cleaning
- GPS Livestock Disease Incidence Mapping
- SADC Countries map editing
- WebGIS Livestock Information Management System

EXHIBIT FIVE & SIX



THE CLIENT...

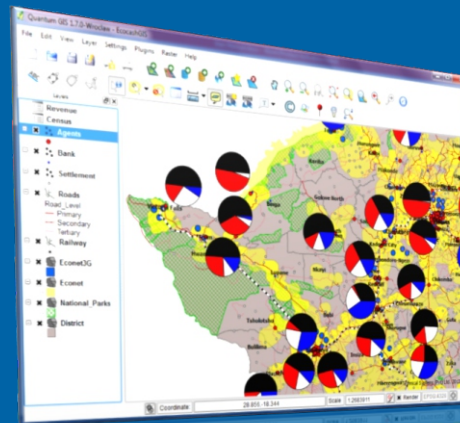
Sierra Leone Government - UNICEF

THE CHALLENGE...

To develop an Activity Mapping Tool in order to create a visual overview of the interventions of NGOs and CBOs in the country, with an initial focus on the Human Development Pillar in the Government's Agenda for Prosperity. The mandate is to develop interactive maps and finally create a website managed by the Government of Sierra Leone.

THE SOLUTION...

Developed two products that serve the same purpose; an Interactivity 3Ws Atlas on a CD and a WebGIS solution. Albeit the solutions were developed using different technologies, functionally they meet the set out object viz mapping all the NGOs and CBOs partners to assist governments in coordinating their activities. Extensive training was also done to make sure that key people in government can update the two products.



THE CLIENT...

Econet Services (Econet Wireless Zimbabwe)

THE CHALLENGE...

To develop a GIS solution to harness the power of geography as part of a business intelligence (BI) solution and therefore give EcoCash a competitive advantage in the financial business.

THE SOLUTION...

Developed a solution based on a client/server architecture that geographically maps key business assets (agents, banks, network coverage, etc). A comprehensive geodatabase with supporting data sets that includes demographics, administrative areas, settlements, schools, etc. was developed. Functionality, from simple agent queries to revenue analytics was developed. Various users were then trained based on their use cases. Ecocash agents were mapped using mobile phones by agent officers.

EXHIBIT SEVEN & EIGHT



THE CLIENT...

Econet Wireless, UNICEF, Powertel, Rural Electrification Agency, ZESA, Afrcan Wildlife Foundation (AWF), UNDP

THE CHALLENGE...

To supply spatial and non-spatial data to various clients. The data was for use in different business areas and was to be supplied in specific proprietary data format.

THE SOLUTION...

Technical Systems is a supplier of spatial data covering Zimbabwe from the national boundary up to individual property stands. The supplied data sets were customized and packaged according to clients' requirements. We also field-collected and mapped other data sets as required by the clients. In some cases, we uploaded the data sets into the clients' DBMS or legacy software environment.

OTHER CLIENTS INCLUDE:


- ➔ Zimbabwe Tourism Authority (ZTA)
- ➔ UNICEF - Capacity Building Trainings
- ➔ PowerTel Communications
- ➔ Zimbabwe Electricity Supply Authority
- ➔ Government of Zimbabwe
- ➔ African Wildlife Foundation (AWF)
- ➔ UNDP
- ➔ Action la Faim (ACF)
- ➔ UNAIDS
- ➔ Data for Development (Netherlands)
- ➔ Rural Electrification Agency (REA)
- ➔ Poulation Services Zimbabwe (PSZ)
- ➔ SWIFT
- ➔ Innscor
- ➔ Government of Botswana



GEOSPATIAL TECHNOLOGY › BUSINESS INTELLIGENCE › INFORMATION TECHNOLOGY


www.technicalsystems.biz



 P. O. Box 32687
Lusaka, Zambia

 +260 959 554 929

 reception@technicalsystems.biz

 P. O. Box Bw7600
Borrowdale, Harare, Zimbabwe

 +263 773 725 423

 info@technicalsystems.biz



www.facebook.com/techsys