

5DT (Fifth Dimension Technologies) Corporate Overview

1.0 Introduction

5DT (Fifth Dimension Technologies) is a high technology company specializing in Virtual Reality [VR]. 5DT develops, produces and distributes VR hardware, software and systems. 5DT also develops turnkey VR systems for clients.

5DT's main focus is Training Simulators (Virtual Reality), Training Systems (Computer Based Training - CBT) and Virtual Reality Peripherals. Most of the 5DT systems and products may be customized to suit the requirements of a user.

At 5DT we believe that:

"Virtual Reality is not intended to replace reality-based training; instead, it is a powerful training medium to prepare the trainee for reality-based training."

We also believe that:

"If a picture says more than a thousand words, a virtual reality experience says more than a million."

Virtual Reality is the ultimate training medium.

The Virtual Reality industry has been plagued by hype. This led to unrealistically high expectations by prospective users, and generally gave the industry a bad name when these expectations could not be met. With this in mind, we coined our company slogan:

5DT - Virtual Reality for the Real World!SM

Our Mission is to provide solid solutions that work well.

We strive to be low on hype, and high on results. Instead of promising prospective customers the world, we have adopted a '**Technology Demonstrator**' approach. If a client approaches us for a training solution, and we do not have a suitable product that would match the training needs of the client directly, we demonstrate similar products to the client. This helps us to determine the exact training needs of the client. We then normally propose the development of a '**Technology Demonstrator**'. With such a demonstrator we try to provide the client with a system that addresses the most important and critical issues of the required training solution. We normally develop the **Tech Demo** at a fraction of the cost of the final solution. The **Tech Demos** have proven to be very useful for our clients to visualize their solutions in advance, and also to demonstrate the proposed solution to their superiors or board members that have to make the final buying decision. The **Tech Demo** is also an ideal specification development tool.

We fully realize that:

"It is easy to promise; much more difficult to demonstrate".

We therefore try to base our promises on technologies that we have mastered.

5DT developed their own **Software Development Kit [5DT SDK]**. The 5DT SDK is a comprehensive set of C++ class libraries that contain components for building Virtual Reality applications. This fully-documented SDK enables 5DT developers to share and re-use developed code. Using the 5DT SDK, technology demonstrators and full training solutions may be developed much faster than before.

Virtual Reality is our passion! Whilst doing everything documented in this document, we also strive to enjoy what we are doing.

2.0 Personnel

5DT consists of a small group (16 persons) of highly talented, qualified and motivated individuals. 5DT's potential and capabilities are based on a solid knowledge and deep understanding of Mathematics, Physics, Engineering, Computer Science and Business.

5DT's Development Group consists of Electronics Engineers, Computer Scientists, Artists and Educationalists.

The Development Group is supported by Management-, Admin- and Manufacturing Teams.

3.0 Product Portfolio

5DT has a wide range of products, including **VR Hardware**, **VR Training Simulators** and **Computer Based Training (CBT) Systems**.

VR Hardware include products like the:

- 5DT Data Glove Series (6 different products)
- 5DT Head Mounted Display
- 5DT Virtual Binoculars
- 5DT Space Controller
- 5DT 3DOF Orientation Tracker

VR Training Simulators and CBT Systems include training and visualization solutions in the following fields:

- Automotive
- Aviation
- Defense
- High Voltage
- Industrial
- Medical
- Mining
- Virtual Landscapes
- Visualization

5DT also distributes a wide range of VR Hardware and Software products.

For more information, please visit www.5dt.com, and click on **Products**.

4.0 Software Skills Portfolio

5DT's **Software Development Kit (5DT SDK)** forms the core of 5DT's software development efforts. Using the 5DT SDK, technology demonstrators and full training solutions may be developed much faster than before.

5DT personnel has a working knowledge and development experience of the following software:

Operating Systems:

- Windows 95/98/ME/NT/2000/XP {Microsoft}
- Linux {Red Hat}
- Unix {Irix}
- Windows CE {Microsoft}

Programming Languages:

- Visual C++ (also Win32 and MFC programming) {Microsoft}
- Visual Basic {Microsoft}

Modeling:

- 3-D Studio MAX {Autodesk}

Bitmap Editors:

- Photoshop {Adobe}

Virtual Landscape Development:

- TerrainPro (Development of OpenFlight compatible virtual landscapes) {Terrex}
- 5DT Landscape Development Kit [5DT LDK]

C++ Class Libraries:

- 5DT Software Development Kit [5DT SDK]
- VTree Pro {CG²}

Virtual Instruments:

- VAPS {Virtual Prototypes Inc.}

Geographical Information Systems:

- ER Mapper {Earth Resource Mapping}

Renderers:

- DirectX {Microsoft}
- OpenGL {Microsoft}
- RenderWare {Criterion Software}

Scenario Managers:

- STAGE {Virtual Prototypes Inc.}

Simulation Packages:

- FlightSim {Virtual Prototypes Inc.}
- HeliSim {Virtual Prototypes Inc.}

5.0 Hardware Skills Portfolio

5DT has the following **Specific** Hardware Design and Development skills:

- Serial Interfaces (RS 232)
- Fiber Optics
- Programmable Integrated Circuits (PICs)
- Printed Circuit Board (PCB) Design
- Design and Development of Custom Controllers for Simulators
- 8031/8051 Microprocessors
- Productization
- Rapid prototype development using laser lithography (The 5DT HMD shell and 5DT Virtual Binoculars shell were developed using this technology)

6.0 Networked Simulator Standards Portfolio

5DT personnel has a working knowledge and development experience of the following networked simulator standards:

- High Level Architecture [HLA]

5DT also has its own internal networking protocol for Networked Simulators.

7.0 Display Systems Portfolio

5DT personnel has a working knowledge and development experience of the following Display Systems:

- Head Mounted Displays [HMDs] (Fully immersive as well as transparent [see-thru]).
- Single- and Multi-monitor Displays.
- Single- and Multi-projector Displays (Front- as well as Back projection).

8.0 Technology Base

The following unique technologies or components form the core of 5DT's development potential:

- **5DT Software Development Kit (5DT SDK)**
Using the 5DT SDK, technology demonstrators and full training solutions may be developed very rapidly.
- **5DT Flexure Measurement Technology**
5DT's fiber optic flexure measurement technology forms the basis of the 5DT Data Glove Series.

9.0 Development Platform

5DT's preferred development platform is the Intel Pentium 4 Central Processing Unit (CPU) with the NVIDIA GeForce 4 Graphics Processor Unit (GPU), operating under Windows XP.

10.0 Quality Assurance (ISO 9001)

5DT embarked on the road towards ISO 9001 (version 2000) certification. Our objective is to be ISO 9001 certified before the middle of 2003.

11.0 Customers

5DT's biggest customers to date are:

- European Aeronautics Defence and Space Company [EADS]
(Formerly known as Daimler-Chrysler Aerospace)
- ESKOM (Fifth biggest utility company in the world)
- SASOL (Petrochemical)
- Anglo American (Mining)
- De Beers (Diamonds)
- Denel Aviation
- Kentron
- Sony

12.0 Business Form

5DT is a privately held group. 5DT Inc. is a Delaware, USA, Corporation, whilst 5DT (Fifth Dimension Technologies) is a South African Private Company [(Pty) Ltd].

13.0 Further Information

For more information about 5DT (Fifth Dimension Technologies), please visit our web site at:

www.5DT.com

or contact us at the contact points below (section 14.0).

14.0 Contact Information

Our preferred medium of communication is via e-mail.

Dedicated contact e-mail addresses are as follows:

Category	US and Americas	Rest of World
General Information and Questions	info.us@5dt.com	info@5dt.com
Order Inquiries	sales.us@5dt.com	sales@5dt.com
Product Support	support.us@5dt.com	support@5dt.com

If you wish to speak to someone in person, or want to arrange a demonstration at one of our offices, please use the following information:

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* Daylight savings time is observed.

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