



Business clusters in the Kortrijk region



DIGITAL IMAGING, COMMUNICATION AND ENTERTAINMENT TECHNOLOGY

ABOUT THE SECTOR

Digital imaging and communication technology companies work to design, develop and integrate software and hardware solutions for applications in a variety of markets including medical imaging, media and entertainment, infrastructure and utilities, traffic and transportation, defence and security, education and training, and audiovisual technologies. The digital imaging technology sector covers all stages of the imaging chain, from image capture and processing to image display, management, analysis and communication.

Home entertainment systems, especially games consoles, have become increasingly popular in recent years, giving rise to a booming industry (with turnovers exceeding those of the movie industry) and leaps in computer software and hardware development. This progress shows no sign of abating and new types of games and hardware appear on the market on a regular basis. The value of games in education and training is also increasingly recognised, so the integration of multimedia tools into everyday life looks like it will continue apace.

3D technologies are also growing and spreading. It is becoming difficult to imagine films, television, online media and even printed publications without photorealistic 3D creations, from monsters in films and cartoons to vehicles and characters in video clips. In commercial and R&D settings, 3D simulations are used for research, design and production purposes, helping researchers and product designers to anticipate problems and develop better products.

Belgium's digital imaging, communication and entertainment technology industries are concentrated in the Kortrijk region. The city of Kortrijk is home to a collaborative, industry supported, state-of-the-art 3D technology centre; the surrounding region boasts a large network of global companies and SMEs specialised in the design, development and integration of imaging and display software and hardware.

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THE KORTRIJK REGION HAS TALENT

UNIVERSITIES

The Kortrijk region has one university and two university colleges that together offer a wide range of stimulating and innovative education programmes designed to keep the digital imaging, entertainment and new media sectors at the forefront of new developments. Our higher education institutions have developed several specialised programmes in close collaboration with the industry:

COURSE	UNIVERSITY OR UNIVERSITY COLLEGE	PROFESSIONAL BACHELOR	MASTER	CONTINUING EDUCATION
AUTOMATION	KATHO www.katho.be	•		
ELECTRONICS	KATHO www.katho.be	•		
ELECTRO TECHNICS	KATHO www.katho.be	•		
SOFTWARE DEVELOPMENT	KATHO www.katho.be	•		
SOFTWARE MANAGEMENT	KATHO www.katho.be	•		
DIGITAL ARTS AND ENTERTAINMENT	HOWEST www.howest.be	•		
MULTIMEDIA AND COMMUNICATION TECHNOLOGY	HOWEST www.howest.be	•		
DIGITAL DESIGN AND MEDIA	HOWEST www.howest.be	•		
APPLICATION DEVELOPMENT	HOWEST www.howest.be	•		
SOFTWARE MANAGEMENT	HOWEST www.howest.be	•		
ELECTRO-MECHANICS	HOWEST www.howest.be		•	
INDUSTRIAL DESIGN	HOWEST www.howest.be		•	
ELECTRO-TECHNIQUES	HOWEST www.howest.be		•	
ELECTRONICS & ICT	HOWEST www.howest.be		•	
ELECTRO-MECHANICS	VIVO www.cvovivo.be			•
ELECTRONICS	VIVO www.cvovivo.be			•
ELECTRONICS	PCVO www.e-pcvo.be			•

RESEARCH & TECHNOLOGY CENTRES

The Kortrijk region hosts 3D Square, a knowledge, research and technology centre which supports progress among local firms and help them to add value in this important industry.

3D SQUARE

3D Square plays an important role in the international gaming industry. This technology, research and collaborative business support centre helps new companies in the gaming industry. It provides advanced expertise in the field of interactive 3D technologies and applications. 3D Square has its own green key studio, a motion capturing system, an audio studio, an editing suite and several multi-purpose spaces.

www.3dsquare.be

Microsoft Imagine Cup 2011 finalists

GAME DESIGN
WINDOWS/XBOX (XNA)
BELGIUM

Game On!

The finalist teams, profiled on the following pages, were given the choice to build their games in one of three Game Design competition tracks: Windows/Xbox (XNA), Web (Silverlight) or Mobile (Zune/Phone). We put them all to the ultimate test: create a game that is not only entertaining but also illustrates the 2011 Theme.

The Game Design competition is seen by industry and students alike as a terrific opportunity for learning and advancement towards an important step in these team's budding careers either as a game developer or as an entrepreneur in the game business.

3-D or 2-D. Multi-level or single player. The structure of the games was up to each finalist team. But the goal was related to one central thing: use technology to help solve the world's toughest problems. Games accessible for folks with disabilities, or that helped children learn about the environment. The Game Design competition made changing the world just a little more fun!



CrashGames

Team Members:
Wannes Vanderstappen, Vincent Van den Heede, Maya Goedert, and Sam Verschraegen

Mentor:
Mike Placok

School:
Campus Kareel de Goedeiaan
Hovest-Hogeschool West-Vlaanderen Departement PSH

PROJECT: Global Green

Global Green is a fun and easy to play cartoon-styled arcade game. In this game, you learn about many global problems while having a lot of fun trying to achieve the highest score for saving the world! In Global Green you save the world by controlling an airplane that delivers valuable resources to areas in need of help. The problems range from pollution and need for medical care, to starvation and drought. You need to make sure that you deliver the right kind of aid package to the right areas and as close to them as possible, as this will get you more points! Your score also depends on many other things like your score multiplier and problems you solved entirely. Besides scoring points, you also learn a lot about the global problems. Before every run, you see a description of the situation in that level. At the end of each run, you will get detailed information about which solutions you used/didn't use to solve these problems, and what the consequences of these actions are (e.g. How much you reduced the global CO2 emission by replacing polluting energy sources with renewable energy). You also get visual information about the problems as the areas change shape when you save them (e.g. Tent camps with medical aid turning into a hospital). The goal in each level is to reach the target score and solve as many problems as possible! Global Green: Saving the world, one package at a time!

Theme/Millennium Development Goal: End Poverty & Hunger, Child Health, Maternal Health, Combat HIV/AIDS, Environmental Sustainability, Global Partnership

Technology Used: XNA Game Studio

Inspiration: There are a lot of games that teach people things like math or a foreign language. Other games are just for fun and amusement. We decided to accept the challenge to create a game that has both of these properties. We took inspiration from other great arcade games, mixed it together with the 2011 Imagine Cup theme and had Global Green as the result!

Future Plans: We will brush up the graphics as much as we can and add some more levels. This way, we will be able to raise awareness of the situation to as much people in the world as we can. The level editor of Global Green enables other people to make levels in other situations, motivating others into making the world a better place.

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THE KORTRIJK REGION DEVELOPS TECHNOLOGY AND ADDS VALUE

LEADING COMPANIES

The Kortrijk region hosts leading companies within the digital imaging, communication and entertainment technology industry. The most important are:

	VALUE CHAIN	PRODUCTS AND SERVICES	MARKETS
BARCO www.barco.com BRUSSEL EXCHANGE: BAR.BR	design > engineering > manufacturing	visualisation solutions such as display monitors, projectors, multi projector displays, video walls, LED solutions, lighting products, image processing software, sensors & sensor processing software, servers and workstations	medical imaging, media & entertainment, infrastructure & utilities, traffic & transportation, defence & security, education & training, industries & processes, virtual reality & 3D
BMS www.visionbms.com	design > engineering > manufacturing	monitoring systems	plastic processing and assembly industry
CISCO VIDEO TECHNOLOGY www.cisco.com	design > engineering > manufacturing	video, IPTV, cable and content delivery products	education, energy, financial services, government, healthcare, manufacturing, media & entertainment, real estate, retail, sports & entertainment, transportation
DAE STUDIOS www.daestudios.be	design > development	games, 3D content and visualisation	entertainment, advertising, education
DNA INTERACTIVE FASHION www.dnainteractiffashion.com	design > development	solutions for virtual 'fitting' of clothes, glasses or accessories	clothing and ready-made clothing
DZINE www.dzine.com	design > engineering > manufacturing	digital signage systems and professional mobile solutions	retail, public services, entertainment, financial services, air traffic & public transport, hospitality, corporate communication, health care, law enforcement, safety surveillance, emergency services, transport & logistics, service & maintenance
ENERGYICT www.energyict.com	design > development	energy information and communication technology solutions	utilities, energy, consumer goods
INDIE GROUP www.indiegrou.be	design > engineering	games, 3D content and visualisation	entertainment, advertising, education
MOBILEMINDS www.mobileminds.be	design > development	next generation of mobile applications for Iphone, Android and other devices	entertainment, advertising
TRIMBLE www.trimble.com NASDAQ:TRMB	design > engineering > manufacturing	transport management solutions such as on-board computers, wireless communication services and web-based back-office applications	traffic & transportation
SKYLINE COMMUNICATIONS www.skyline.be	design > engineering > manufacturing	multi-vendor network management solutions	broadband, satellite and broadcast industry
TELEVIC www.televic.com	design > engineering > manufacturing	communication systems, conference systems, multimedia and e-learning solutions and audio-visual installations	traffic & transportation, healthcare, media & entertainment, education & training
TRAFICON www.traficon.com	design > engineering > manufacturing	video image processing technology for traffic data acquisition, automatic incident detection and intersection management in highway, tunnel, bridge and urban applications	traffic & transportation
UNITRON www.unitron.be	design > development > manufacturing	headend technologies and digital TV accessories, for providing TV distribution to multi-dwelling and residential buildings	broadband, satellite and broadcast industry

WORLD CLASS INNOVATION

The digital imaging, communication and entertainment technology industry in the Kortrijk region has generated various world class products, including the DP2K projector by Barco and the SafeWalk by Traficon.

DP2K-32B A.K.A. 'THE BRIGHTEST DIGITAL CINEMA PROJECTOR ON THE PLANET'



© Barco

Digital cinema pioneer Barco has achieved a notable Guinness World Record. Its DP2K-32B digital cinema projector, already recognised as 'the brightest projector on the planet', can now officially claim this title after succeeding in a world record attempt. With a measured and now confirmed brightness of over 43,000 centre lumens in colour-calibrated mode, the record-holding Barco DP2K-32B projects perfect 3D images even on the largest screens. This first in digital cinema gives moviegoers all over the world the ultimate viewing experience.

www.barco.com

SAFEWALK



© Traficon

Traficon is a Wevelgem-based company which specialises in manufacturing video detection systems for traffic registration and analysis. This SME designed the SafeWalk, an intelligent pedestrian detector. Not only does the detector improve the safety of pedestrians at traffic lights by optimising the pedestrian phase of the lights, but it is also better for the environment by minimising the time cars have to wait at the lights with their engines running.

A sensor placed just above ground level detects any pedestrians who want to cross the road; this information is used to control the traffic lights and the duration of the pedestrian phase. The SafeWalk uses a unique combination of 3D stereovision and intelligent video detection technology.

www.traficon.com

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THE KORTRIJK REGION OFFERS INDUSTRY CONTACTS

The Kortrijk region offers numerous opportunities to network within the digital imaging, communication and entertainment technology sectors:

MULTI-MANIA

Kortrijk Xpo hosts Multi-Mania, Europe's largest, free multimedia conference where international guest speakers present the latest trends in the fields of new media and interactive 3D.

www.multi-mania.be

THE STUDIOS

The Studios is an accelerator for the new media industry. It is a place for start-up companies in media and communication technology (MCT), digital arts and entertainment (DAE) and industrial product design (IPD). Within the accelerator these start-ups receive unprecedented support for their businesses within a vibrant and cross-disciplinary, fertile environment. The Studios mixes industry experts with young talent who together come up with innovative and viable ideas for the ever-growing sector. The Studios is also available for temporary creative labs.

www.thestudios.be

4 | ADDED VALUE OF DESIGN

The Kortrijk region is Flanders' top design centre and has also become a leading player within Europe's network of design regions and cities. Since it first launched the international exhibition Interieur back in 1968, the region has gained the reputation as an international meeting point for contemporary creativity in the field of housing and design.

In the last decade the region has become a highly ranked centre for training in product development and industrial design – a unique position within the education sector in Flanders.

Manufacturers located in the Kortrijk region have come to realise that beautiful and elegant design gives products a major advantage that goes beyond simple aesthetics. Good design also contributes to a better quality of life. Cadman-Touch by LVD and the Axio Mobility by Televic are excellent examples of how companies in the Kortrijk region have used design to develop innovative products in the fields of digital imaging and entertainment technology.



CADMAN-TOUCH

LVD manufactures machines for working sheet metal. But the company has now developed the latest generation in machine operation systems. With Cadman-Touch you can forget about complicated manuals and horrendous panels of buttons. All an operator needs is a large touch screen and a single emergency button. Offering tight lines and a timeless design, Cadman-Touch is setting the trend in the industry.

www.lvdgroup.com

AXIO MOBILITY

Social services also need to keep up with the times, so Televic Healthcare in Izegem developed Axio Mobility, an application for smartphones. Axio Mobility helps hospitals, supported housing and care homes to work faster and more efficiently. Users can have an alarm system loaded onto a smartphone so nurses and carers can take calls, including alarm calls, wherever they are in the building. The app combines several communication systems (WiFi, GPRS, SMS) that would be unreliable to use on their own and which do not require the institution to install any new infrastructure.

www.televic.com



© Televic



This brochure has been developed by the Regional Development Agency Leiedal. Leiedal came into being in 1960 on the initiative of the municipalities of the Kortrijk region (Flanders, Belgium). In the past five decades, Leiedal developed into a multifaceted intermunicipal cooperation that supports the broad socioeconomic and spatial development of the region. Locally driven development forms the key factor.
Leiedal, 2012

