# Chapter 01 Case study

**Global innovation through the mobility of ideas and talent**

**Dr Áron Perényi, Swinburne University of Technology**

Zinemath cPlc is a born global technology start-up. It has investors from Italy and talent acquired from Australia and targets the US market. Its revolutionary approach to developing virtual reality (VR) and augmented reality (AR) technology for use in cinematography, real-time broadcasting and medical visualisation is opening up new business opportunities and potentially revolutionising operations across multiple industries from broadcasting to health care and education.

**Global innovation**

Global movement of ideas is as old as global trade itself, and the two are definitely related. A good example of this is the technology transfer facilitated by the Silk Road. In ancient times, Chinese silk was transported to Egypt. During the Middle Ages, this intercontinental trade route was responsible for the transfer of technologies and ideas between Asia and Europe. In the absence of long-haul flights, and with limited tools of navigation and propulsion for seafaring, the American side of the Pacific was not accessible. (Although Maori reached all the way to the islands of Aotearoa, and Chinese explorers may have arrived at the shores of Australia much earlier, these great efforts did not yield permanent trade routes.)

By means of this trade route, people travelled, learned and transferred knowledge across different parts of the world. An envoy of the Byzantine emperor, Justinian, smuggled silk worm eggs out of China, hidden in bamboo sticks, to start silk production in the Middle East in the 6th century. Marco Polo, the Italian merchant born in Venice, travelled to China and brought back many things like noodles in the 13th/14th centuries. The Ottoman Empire acquired the secrets of gunpowder around the 14th century, and a Hungarian military engineer designed and built the first cannon for the emperor of Byzantium in the 15th century, revolutionising warfare. This later enabled the Ottoman Empire to conquer large parts of Europe (including Hungary). Porcelain (originally called ‘china’) production sprung up in Meissen, Germany, in the 18th century after engineers were able to re-create the production process and find local resources. These are examples of how ideas travel around the world by means of trade and the movement of people. Nowadays, in the modern global innovation system, international education, collaboration, recruitment and entrepreneurship drive the exchange and sharing of ideas and other resources necessary to devise new technologies and products, and access markets.

Systems of innovation are described by the concept of the ripple helix, which identifies the source of complex technological innovation as an outcome of collaboration between universities (research institutes), governments and industry (businesses). These ‘interactions’ manifest by transferring intangible and tangible resources, such as knowledge, ideas, people, time on task and money. For example, governments provide grant funding to universities, on the condition of working together to help them innovate. Businesses may directly contract universities to conduct research for them, or help them to collect ideas and recruit talent through collaboration with students (class projects, internships, events). And finally, governments provide funding for the higher education sector and for research institutes to provide research and development services supporting public good, and to train the next generation of experts and professionals to enable them to contribute to the economic and social development of the country.

**Global talent and mobility**

In the 21st century, innovation has become a global phenomenon, and with the global mobility of people, the global mobility of ideas has also emerged. Dr Ferenc Birloni, born in Hungary, completed a Masters in electrical engineering in Budapest, studied as an exchange student at UTS in Sydney and earned his PhD in mathematical engineering and information physics at the University of Tokyo. Ferenc moved to Australia in 2008 to work as a consultant for a rail, engineering and consultancy company, to grow the business unit for ICT and electrical engineering solutions. Throughout his career, beyond his technical skills in electrical engineering and IT, Ferenc developed his skills as a technology and business development manager, and has become a serial entrepreneur, participating in multiple start-ups.

**Zinemath cPlc**

In 2015, Ferenc was chief technology officer (CTO) of Zinemath cPlc, an already existing technology start-up located in Budapest. Zinemath was established as a specialist provider of virtual production platforms to the film, production and broadcast industries. The company has developed zLense, a world-first depth-mapping camera that captures 3D data and scenery in real-time and adds a depth layer to the footage. The zLense technology processes spatial information in real time, making new and real 3D compositing methods possible, enabling film production teams to create stunning 3D effects and use state-of-the-art computer-generated imagery (CGI) in live television or pre-recorded formats. The zLense technology enables live broadcast of unique simulated and AR environments, generating and combining dynamic VR and AR effects in live broadcast of studio production.

The company was founded in 2012 by three Hungarian film and media entrepreneurs: Norbert Komenczi, a producer, and Botond Csizi and Gergő Soós, developers. The founders actively sought collaboration opportunities with other businesses in the industry, attracting funding from CenTech Hungarian Venture Capital Fund, as well as some minor capital investments (Colabs Plc, Seed Co-Investment Ltd, StreamNovation Ltd and Solid Ltd), and a major enabler of capital injection by specialist investor, Docler Holding. European venture capital investments are growing (though only half the average size of those in the United States) and Brussels is preparing legislation that will further increase small to medium-sized enterprise (SME) access to venture capital, cutting red tape and fees and expanding assets in which venture capital funds can invest to include even smaller companies. In 2016, €2.5 billion was invested in seed and early-stage investments across Europe, a major increase since 2012 according to Invest Europe, the association representing Europe’s private equity, venture capital and infrastructure sectors and investors.

Zinemath grew quickly between 2012 and 2015, doubling its research staff. After the arrival of Ferenc in mid-2015, the product portfolio of zLense was diversified into zStudio (3D AR visual plug-in for integration with studio systems, providing real-time AR composite), zTrack (a state-of-the-art camera-tracking solution vital to create VR content rendering) and zKey (a depth-based image segmentation solution). Collaboration with SZTAKI (the Hungarian Academy of Sciences Institute for Computer Science and Control), Budapest University of Technology and international partners was also developed.

Ferenc’s appointment brought clarity to the company’s strategic direction. The diversification and collaboration efforts of 2015–17 were aimed at developing marketable products through prototyping and linking with potential high-profile end users to generate new revenue streams. This expectation was driven by the new investor, Docler Holding, and its owner György Gattyán. András Somkuti, the chairman of Gattyán Group, had his eyes on the global film and television industries, with a total annual market of €1600 billion, and actively encouraged Zinemath’s participation in international events and trade shows, in Europe and beyond.

The additional research capacity and efforts to find new collaborations led management to venture into the health and medical industries. This was a milestone, and enabled Zinemath to win one of the largest technology development grants provided by the EU, with a total value of HUF1799 million (approximately €6 million), in July 2017. The project was granted EU funding (in the Hungarian Economic Development and Innovation Operational Programme) from the Structural and Cohesion Funds (European Regional Development Funding and European Social Fund) in order to contribute to support the Research, Technology Development and Innovation (RTDI) projects of Hungarian SMEs. The grant is funding the development of the zMed product line, aiming to use AR technologies in medical imaging and rehabilitation, and improving doctor–patient relationships and medical practitioner education, in collaboration with the Medical School of the University of Pécs and SZTAKI. As a result, Zinemath’s research and development capacity has significantly increased.

**Zinemath milestones/timeline**

February 2012: founded by three Hungarian entrepreneurs, with registered capital of HUF5 million (€17 000)

2012–13: registered capital increased to HUF16 million (€55 000), investors: CenTech Hungarian Venture Capital Fund, Colabs Plc, Seed Co-Investment Ltd, StreamNovation Ltd and Solid Ltd

February 2014: major capital investment provided by Docler Holding, acquiring majority control of Zinemath

June 2015: appointment of new CTO, Dr Ferenc Birloni

April 2017: received Best of Show innovation award at National Association of Broadcasters (NAB), Las Vegas

April 2017: showcased at the NAB exhibition in Las Vegas

July 2017: received major EU-funded National Development Plan grant with a total value of HUF1799 million (€6 million) to develop collaborative interdisciplinary research solutions with the health and medical industries

April 2018: Dr Ferenc Birloni left company

September 2018: technology development operations for the grant program in full swing

**The role of international exhibitions and global networking in the social media age**

Trade shows and exhibitions have historically been an opportunity for organisations to showcase their new products and technologies, to meet representatives from other organisations, and for the formal and informal exchange of ideas and talent. Of course, in the age of the internet, email, VoIP, chat and social media, this may seem like an expensive and redundant way of networking. And yet, trade shows and exhibitions are as popular as ever, demonstrating the importance of creating personal connections and networks.

The NAB show is an annual event, started in 2008 in Las Vegas, bringing together businesses and people from a wide range of related industries including broadcast television, radio, production, post production, news gathering, streaming, cable television, satellite television, film restoration, data storage, data management, weather forecasting, computer-generated imagery, connected media and cybersecurity. Zinemath’s research and development team received the Best of Show innovation award for its ground-breaking development of the zLense at the 2017 NAB show. The award gave Ferenc an opportunity to showcase the progress his team had made in terms of technology development, producing a working prototype for the exhibition and providing assurance to investors that their money was being put to good use. This was a strong basis for continuing the work, and facilitated investors’ commitment to apply for grant funding, which the organisation received in the same year.

**Technology development: initial stage and opportunities created for new ideas**

Zinemath’s original scope was to develop VR and AR applications for real-time live studio broadcasting. In a commercial entertainment context, this enabled a streamlining of requirements for shooting live media broadcasts without excessive studio equipment. The technology development grant funding received in 2017 opened several new opportunities for the technology development team in the area of application of AR for medical technology. Applications can be used in medical education, by means of simulations, and further opportunities may also emerge.

**References**

[www.doclerholding.com/en/about/companies/43/](http://www.doclerholding.com/en/about/companies/43/)

[www.doclerholding.hu/en/about/companies/41/](http://www.doclerholding.hu/en/about/companies/41/)

[www.linkedin.com/company/zinemath/](http://www.linkedin.com/company/zinemath/)

[www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=228274724](http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=228274724)

[www.doclerholding.com/static/press/Forbes-Hungary-2017-Gattyan-Gyorgy.pdf](http://www.doclerholding.com/static/press/Forbes-Hungary-2017-Gattyan-Gyorgy.pdf)

[www.youtube.com/user/zinemath](http://www.youtube.com/user/zinemath)

[www.investeurope.eu/news-opinion/opinion/blog/2017/time-to-think-big-in-european-vc/](http://www.investeurope.eu/news-opinion/opinion/blog/2017/time-to-think-big-in-european-vc/)

[www.linkedin.com/in/ferenc-birloni-dr-b85b396/?originalSubdomain=au](http://www.linkedin.com/in/ferenc-birloni-dr-b85b396/?originalSubdomain=au)

<https://europa.eu/youreurope/business/funding-grants/access-to-finance/>

<http://zinemath.com/>

<http://zlense.com/>

<http://www.nabshow.com/>

<http://hvg.hu/gazdasag/20140306_Ez_akkorat_fog_szolni_mint_annak_idejen>

<http://businessonline.prim.hu/cikk/123615/>

<http://nkfih.gov.hu/palyazatok/europai-unios-forrasbol/versenykepessegi-kivalosagi-egyuttmukodesek>

<https://computerworld.hu/uzlet/a-zinemath-zrt-be-fektetett-a-docler-144539.html>.

1. a. Dr. Ferenc Birloni, CTO of Zinemath, successfully drove the company’s diversification and technology development efforts. It is now time to generate revenue. How would you recommend expanding into the global market to the new management of Zinemath? How would you suggest they identify and realise the potential revenue streams globally?

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2. b. The owner and chairman of the largest investor in Zinemath have a portfolio of online content provider businesses. How would you recommend linking the newly developed medical product line, zMed, with their strategic investment portfolio in online content provision, globally? What opportunities do you think the Asia-Pacific region holds for them?

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3. c. Zinemath has grown substantially since its foundation in 2012, and with EU funding might have a shot at conquering global markets. How would you recommend the founders seek further investment to build their capabilities using their global networks?

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4. d. How would you recommend the new CTO goes about technology development, with the opportunities opening up in the Asia-Pacific region, in terms of talent, markets and collaboration opportunities?

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# Chapter 01 Case study Key

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[www.doclerholding.com/en/about/companies/43/](http://www.doclerholding.com/en/about/companies/43/)

[www.doclerholding.hu/en/about/companies/41/](http://www.doclerholding.hu/en/about/companies/41/)

[www.linkedin.com/company/zinemath/](http://www.linkedin.com/company/zinemath/)

[www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=228274724](http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=228274724)

[www.doclerholding.com/static/press/Forbes-Hungary-2017-Gattyan-Gyorgy.pdf](http://www.doclerholding.com/static/press/Forbes-Hungary-2017-Gattyan-Gyorgy.pdf)

[www.youtube.com/user/zinemath](http://www.youtube.com/user/zinemath)

[www.investeurope.eu/news-opinion/opinion/blog/2017/time-to-think-big-in-european-vc/](http://www.investeurope.eu/news-opinion/opinion/blog/2017/time-to-think-big-in-european-vc/)

[www.linkedin.com/in/ferenc-birloni-dr-b85b396/?originalSubdomain=au](http://www.linkedin.com/in/ferenc-birloni-dr-b85b396/?originalSubdomain=au)

<https://europa.eu/youreurope/business/funding-grants/access-to-finance/>

<http://zinemath.com/>

<http://zlense.com/>

<http://www.nabshow.com/>

<http://hvg.hu/gazdasag/20140306_Ez_akkorat_fog_szolni_mint_annak_idejen>

<http://businessonline.prim.hu/cikk/123615/>

<http://nkfih.gov.hu/palyazatok/europai-unios-forrasbol/versenykepessegi-kivalosagi-egyuttmukodesek>

<https://computerworld.hu/uzlet/a-zinemath-zrt-be-fektetett-a-docler-144539.html>.

1. a. Dr. Ferenc Birloni, CTO of Zinemath, successfully drove the company’s diversification and technology development efforts. It is now time to generate revenue. How would you recommend expanding into the global market to the new management of Zinemath? How would you suggest they identify and realise the potential revenue streams globally?

Ans:

* Conduct a systematic analysis of potential use cases
* Identify preferred global locations to enter
* Seek collaboration opportunities with partners who can utilise the technology. With the emergence of AR use in Asia, entertainment giants like Sony and Pixar may be very keen on collaboration.

Blooms: Evaluation

Difficulty: Medium

Learning Objective: 1.1 Explain the process and drivers of globalisation and the opportunities and challenges it creates for business.

Topic: What is Globalisation?

2. b. The owner and chairman of the largest investor in Zinemath have a portfolio of online content provider businesses. How would you recommend linking the newly developed medical product line, zMed, with their strategic investment portfolio in online content provision, globally? What opportunities do you think the Asia-Pacific region holds for them?

Ans:

* Video conferencing and telephony augmentation
* Low cost cinematography and television solutions for large movie industries, for example, India and Thailand
* Remote medical services—virtual doctor–patient interaction

Blooms: Evaluation

Difficulty: Medium

Learning Objective: 1.2 Illustrate how the global economy has changed over the past 50 years.

Topic: Drivers of Globalisation

3. c. Zinemath has grown substantially since its foundation in 2012, and with EU funding might have a shot at conquering global markets. How would you recommend the founders seek further investment to build their capabilities using their global networks?

Ans:

* Technology focused private investors, such as venture capital sources from, for example, China
* Stock exchange introductions in Shanghai, Singapore, Sydney or Tokyo
* Further government support for technology development in the APAC region, in exchange for relocating the company for example

Blooms: Evaluation

Difficulty: Medium

Learning Objective: 1.2 Illustrate how the global economy has changed over the past 50 years.

Topic: Drivers of Globalisation

4. d. How would you recommend the new CTO goes about technology development, with the opportunities opening up in the Asia-Pacific region, in terms of talent, markets and collaboration opportunities?

Ans:

* Presence at Asian trade shows
* Trade missions and visits in Asia-Pacific countries
* Targeted networking through business associations and government agencies interested in investment and trade promotion

Blooms: Evaluation

Difficulty: Medium

Learning Objective: 1.2 Illustrate how the global economy has changed over the past 50 years.

Topic: Drivers of Globalisation

# Chapter 01 Case study Summary

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| Category | # of Questions |
| Blooms: Evaluation | 4 |
| Difficulty: Medium | 4 |
| Learning Objective: 1.1 Explain the process and drivers of globalisation and the opportunities and challenges it creates for business. | 1 |
| Learning Objective: 1.2 Illustrate how the global economy has changed over the past 50 years. | 3 |
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| Topic: What is Globalisation? | 1 |