

Realizing value using immersive technologies

Leadership programme



SUSTAINABLE
DEVELOPMENT
GOALS

1. Introduction

Immersive experiences, digital content made for the use in XR (Extended Reality) technologies—comprising Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR)) blend the physical and virtual worlds. They are transformative, offering users deeply engaging and interactive environments. These technologies create the sensation of being fully present in a simulated or enhanced real-world environment, which has significant implications across various fields.

In education, XR enhances learning by allowing students to engage with complex subjects in a hands-on, experiential manner. For instance, medical students can practice surgeries in a risk-free virtual space, while history students can explore ancient civilizations in VR, making abstract or distant concepts more tangible and understandable.

For training and simulation in industries, immersive XR experiences reduce operational risks and costs by offering realistic, yet safe, environments to practice high-stakes tasks. For instance, pilots or engineers can simulate emergencies, refining their skills without real-world consequences.

Beyond learning, XR also fosters empathy and emotional connections. By allowing users to step into others' perspectives—such as walking in the shoes of a refugee or navigating life with a disability—XR can drive more profound emotional engagement and social awareness than traditional media.

In entertainment and marketing, XR creates immersive storytelling and branded experiences that captivate audiences, making the technology a powerful tool for enhancing user engagement, creativity, and interaction across diverse sectors.



Examples of application domains for immersive technologies

2. Purpose of the programme

This programme is designed to help organizations in understanding the added value of the use of XR technologies and develop a strategy and innovation approach in realizing sustainable value from these technologies in the context of people, planet and/or profit. The programme focuses on the opportunities of XR as a next step and part of a broader digital strategy of the organization.

1. Gain new insights in the opportunities of Immersive Experiences

XR technologies are developing fast. During the programme you can try out some of these technologies and you will be inspired with examples from our ecosystem of partners.



Trying out some of the latest technologies during the programme

2. Apply insights to your own organization

Participants can bring their own XR innovation challenge or opportunity to work on during the programme. Throughout the programme there are several exercises and reflection sessions, where participants receive coaching and peer feedback on their project or idea. At the end of the 4 days, programme participants create a short pitch presentation with an action plan including learnings they take back to their organization. During the get back session participants are asked to present initial results, such as a POC of the project they are working on. Between module 4 and the get back session the ECDA team will explore the possibility to connect your XR innovation challenge with a (team of) students, who can be involved in developing a proof of concept and/or continue the development with involvement of partners in the ecosystem of ECDA.

3. Join a learning community

The programme is part of building a community of early adopters, changemakers and innovators in the use of XR technologies and is powered by the South Holland Immersive Network (SHINE). You will be able to learn from industry peers, academics and XR startups. After the programme you will become part of the XR learning community, where you will be invited to follow up events and where you can continue the learning with student projects and working with the Immersive Xperience Lab at the Erasmus Centre for Data Analytics (ECDA). This lab aims to play an important role in leveraging XR for the Sustainable Development Goals (SDGs), scientific research, and societal impact.



Open versus Customized

The programme is offered in two possible set-ups:

- (1) Open programme: enrolment with participants from different backgrounds (with variety of examples)
- (2) Customized programme: enrolment with participants from one organization or one domain (such as education, health, public infrastructure etc.) with examples from the specific domain.

This brochure further focuses on the upcoming scheduled open programme.

3. Learning objectives of the programme

The programme has five learning objectives:

- Inspire participants into the potential use and impact of Immersive Technologies and Immersive Experiences (in short XR and IX) across several domains and use cases.
- Create understanding in how to build a digital XR strategy and realize value from the use of immersive technologies.
- Develop a critical perspective, understand dilemmas and risks in the use of these technologies.
- Create understanding in the technology stack, the relationship and synergies with a company's IT, data and AI capabilities.
- Create understanding in organizational transformation & experimentation approaches in the use of XR.

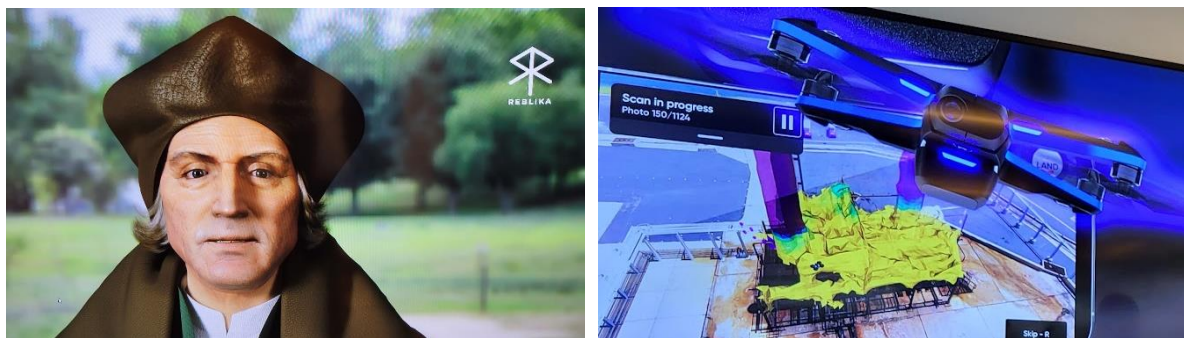


4. Unique elements of the programme

The programme is developed and offered by academics and experts on digital strategy, innovation, and immersive technologies. It offers the following unique elements:

- Try out and be inspired by immersive experiences and (tech) demos. The Immersive Experience Lab at ECDA plays an important role in the programme, but the programme also features a site visit to an off-campus immersive experience. Many partners from the (regional) SHINE XR ecosystem join in sharing best practices and inspirational use cases.
- Participants work in small teams and apply learnings to their own immersive technology project.
- It inspires participants through peer-learning and an outside-in perspective.

Due to the setup, the programme is also interesting for international audiences.



Digital human/avatar (©Reblika) and Drone technology for object scanning (©360Fabriek)

5. Who should attend?

We recommend organizations to join the programme with a diverse team. The ideal team composition consists of the following roles:

- Content designers & developers
- Innovation leads
- Digital experts
- Business / policy maker (internal customer)

To create optimal synergy in joining the programme we invite an internal sponsor from every team to join during the kick-off dinner and during the final pitch session. This helps to create support for continuing the developed ideas during the programme within the organization after the programme ends.

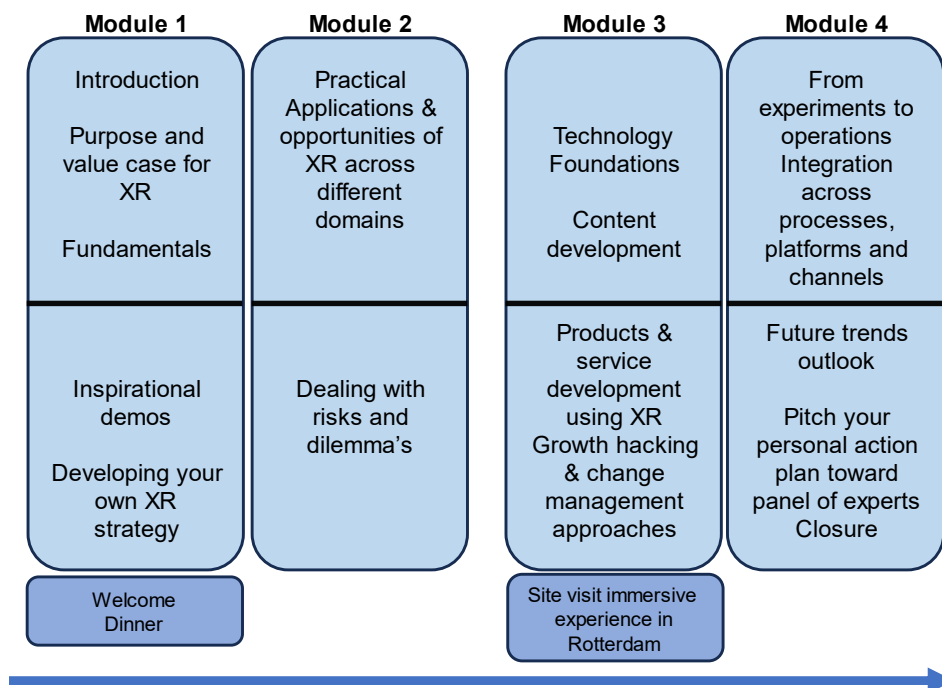
The programme is also open to Individuals as a frontrunner in their organization.

Given the potential opportunities XR offers we especially encourage teams and individuals from the following industries to join the programme:

- Educational institutes
- Retail industry (production, trade, wholesale, retail, instore solution providers)
- Transport, logistics, warehousing, mobility, supply chain orchestration
- Health (hospitals, medical devices, insurers, healthcare providers)
- Government (cities, province, Ministries) responsible for policy making, planning, city management
- Culture and creative sector (e.g. museums)

6. Programme Design

The pilot edition of this programme starts on January 30, 2025¹. The programme is organized by the Erasmus Centre for Data Analytics and SHINE, the XR community in the region of Rotterdam. The programme is hosted in the Erasmus Data Collaboratory | House of AI, Erasmus University Rotterdam. The programme structure is as follows:



The detailed schedule is described below:

¹ Depending on number of registrations (minimal class size 15 participants)

Module	Topic	Subtopics	Date / Time
1a	Welcome Introduction	<ul style="list-style-type: none"> • Get to know each other • What is the added value and purpose of Immersive technologies? • Crash course Immersive Thinking (first person and spatial experience) • Developing a digital strategy 	30-1-2025 900-1230
1b	Demos Develop your strategy	<ul style="list-style-type: none"> • Inspirational demos AR & VR use cases • In-class activity: How to link immersive tec to your own strategy 	30-1-2025 1330-1730
	Welcome dinner	<ul style="list-style-type: none"> • Welcome dinner including internal sponsors 	30-1-2025 1800-2100
2a	Applications and opportunities	<ul style="list-style-type: none"> • Welcome and recap module 1 • Examples and guest speakers (tech / startups) from different domain-specific use cases and opportunities, including process, education/training, interaction and PR/promotion with examples from education, retail, healthcare, public/ art and logistics. 	31-1-2025 900-1230
2b	Risks and dilemma's	<ul style="list-style-type: none"> • Dealing with Immersive Tech risks and dilemmas, including ethics, user privacy, sustainability, health, digital inclusion, hacking • Discussion in groups 	31-1-2025 1330-1730
3a	Technology foundations	<ul style="list-style-type: none"> • Welcome and recap module 1-2 • Building the technology foundation, managing content creation and development. • Immersive Environments & Data Visualization: Linking data and (gen)AI to Immersive technology • Immersive Tech landscape and solutions 	6-2-2025 900-1230
3b	Products and service development approaches	<ul style="list-style-type: none"> • Products & Service development using Immersive Tech • Setting up a structure for experimentation & innovation • Growth hacking & change management approach • Exploring the impacts on customers/employees' behaviour 	6-2-2025 13:30-17:30
	Visit to immersive experience	<ul style="list-style-type: none"> • Visit to immersive experience • Dinner 	6-2-2025 18:00-21:00
4a	From experiments to scaling and implementation	<ul style="list-style-type: none"> • Welcome and recap module 3 • Moving from experiments to operations • Integration across processes, platforms and channels • Guest lecture -experiences from practice • In-class exercise: Developing an actionable implementation plan 	7-2-2025 09:00-12:30
4b	Future Trends Action plan pitches	<ul style="list-style-type: none"> • Future trends outlook – by inspirational speaker • Pitch Session: Pitch your personal Action plan toward panel of experts • Closing event, certificate hand-out, drinks and bites 	7-2-2025 13:30-17:30

7. Key Faculty, Speakers and Partners



Prof. Ting Li is the Professor of Digital Business at Rotterdam School of Management (RSM), Erasmus University. She is the founding member and the Academic Director of Digital Business Practice of the Erasmus Centre for Data Analytics. Ting Li is an expert in Digital Strategy, Ecommerce, Social Media Analytics, Mobile Marketing, Business Analytics, Online Advertising, and Pricing and Revenue Management. She has been a Visiting Professor at the Wharton School of Business, Temple University, Arizona State University, City University of Hong Kong, and Tsinghua University. In 2017, she was named by Poets & Quants as one of the Top 40 Professors Under 40 Worldwide.



Prof. Yvonne van Everdingen is Professor of Marketing and Innovation at Rotterdam School of Management, Erasmus University. Professor Van Everdingen leads the expert practice on Immersive Technologies of the Erasmus Centre for Data Analytics. She is member of the Special Interest Group Virtual Reality (SIG VR) at the Erasmus Behavioral Lab. Her research interests include the international adoption and diffusion of new products, the use of new technologies, such as virtual reality and augmented reality, for the development and marketing of new products, and the marketing of refurbished products



Associate Prof. Vivian H.H. Chen Dr. Vivian H.H. Chen is an associate professor in Department of Media and Communication at Erasmus University Rotterdam. She is an expert in utilizing immersive technology for positive social outcomes. Her research areas centre around social interaction in virtual communities, impacts of communication technology such as video games, Virtual Reality, Artificial Intelligence for social and personal well-being. Dr. Chen has published extensively in well-known academic journals and highly reputable conference proceedings cross disciplines. She is currently serving as associate editor of two prominent media journals.



Prof. Elmar Eisemann is a professor at TU Delft, heading the Computer Graphics and Visualization Group. Before, he was an associate professor at Telecom ParisTech (until 2012) and a senior scientist heading a research group in the Cluster of Excellence (Saarland University / MPI Informatik) (until 2009). His interests include real-time and perceptual rendering, visualization, alternative representations, shadow algorithms, global illumination, and GPU acceleration techniques



Prof. Pablo Cesar leads the Distributed and Interactive Systems (DIS) group at Centrum Wiskunde & Informatica, CWI, (The National Research Institute for Mathematics and Computer Science in the Netherlands). He is Professor ("Human-Centered Multimedia Systems Chair) at TU Delft, in the Multimedia Computing group. His research combines human-computer interaction and multimedia systems, and focuses on modelling and controlling complex collections of media objects (including real-time media and sensor data) that are distributed in time and space.



Maarten Reijgersberg is the founder of creative agency RAUWcc, speaker, guest lecturer and super connector. His vision on technology and communication inspires and innovates. He is a creative, practical thinker who continuously pushes the boundaries of the communications profession.



Jan Verwoerd is founder of 360Fabriek, an Immersive Media Studio based in Rotterdam and an expert in creating photorealistic 3D models for e-commerce and cultural heritage.



Harmen van Sprang, a visionary speaker, author, researcher, and lecturer, is foremost a pioneering social entrepreneur. Harmen has been instrumental in founding several forward-thinking organizations and initiatives such as the international oriented 'Sharing Cities Alliance' foundation. With his 'Next Reality' network, Harmen unites leaders from both the public and private sectors in the Netherlands and abroad, delving into the vast potential and addressing the intricate challenges posed by transformative technologies like Extended Reality (XR) and Artificial Intelligence (AI).



Martijn van Schaik is the Founder and Head of Strategy at Broken Egg, a consultancy agency that collaborates with top cultural institutions and global brands to create immersive storytelling experiences. With clients such as the Belvedere Vienna Museum, Rijksmuseum, Château de Chambord, and brands like Walmart and Pepsi, Martijn has transformed how audiences engage with culture. As a cultural XR mentor for WeAreMuseum and Ithra (Aramco), he combines strategic insight and creative innovation to ensure the right technology and narrative come together to craft memorable, impactful digital experiences.



Pieter van Boheemen is an expert in societal impact of emerging technologies. He works as manager of the AI & Ethics innovation programme of the Rotterdam University of Applied Sciences. At the Dutch National AI Coalition he chairs the working group on Human centred Artificial Intelligence. He also directs the Post-X Society foundation, focussing on democratic societal transitions. And at the University of Applied Philosophy he teaches in responsible innovation. Previously he worked for the Rathenau Instituut thinktank, Waag FutureLab and as entrepreneur started several companies.



Natasja Paulssen started her augmented reality agency Dutch Rose Media as one of the early birds at the start of 2011. The goal being to explore new concepts using this AR technology to capture ‘the internet coming out of the computer and taking place in the world around us.’ To create more immersive stories, she needed a way to create digitized human beings. And hence 4DR Studios was founded, the only volumetric capture stage in The Netherlands in 2019. Now she and her team are working on bringing soul to digital for living history, entertainment, fan engagement and training.



Dr. Sabrina Siregar is a cardiothoracic surgeon at the Department of Cardiothoracic Surgery, Erasmus Medical Center in Rotterdam. She uses Virtual Reality on daily base to improve preoperative planning of complex thoracic surgical cases. She helps the local research team to develop new and improve current technologies related to Virtual Reality and Augmented Reality applied in surgical care. She is a certified robotic surgeon and has a specific interest in robotic surgery.



Frederike Manders is Immersive Experience Programme Manager of the Erasmus Centre for Data Analytics. In this role she provides advisory support to ErasmusX and ECDA, concerning immersive tech content and programs. This includes guiding experiments at the intersection of immersive technology and education. Frederike is CEO of MaMaProducties.



Mariëtte van Huijstee, PhD, is Coordinator at the Rathenau Instituut. She leads Rathenau’s activities around XR, such as the Rathenau Scan on Immersive Technologies. She leads a team of researchers that focuses on the impact of technology on our society and the social responsibility of technology companies. Her team's work includes research into the societal consequences of the dominant position of multinational platform companies, the societal impact of new technologies such as immersive technology and designing the digital society of the future.

Programme partners & expert speakers



More partners and speakers will be announced via the website [Leadership Programme Realizing Value Using Immersive Technology \(XR\) - Erasmus Centre for Data Analytics \(eur.nl\)](https://www.erasmusmc.nl/leadership-programme-realizing-value-using-immersive-technology-xr-erasmus-centre-for-data-analytics)

8. Programme Fees and class size

The programme fee for the open enrolment of this leadership programme is **4.000 euro (excl. VAT) pp**. Teams with 3 or more persons receive a discount of 10 %. This fee includes:

- access to the online learning environment and materials
- four lunches and 2 dinner sessions

Minimum class size is 15 people, maximum class size is 25 people.

Fees for customized programs are discussed, based on a proposal of the required programme design.

9. Information and registration

Information on the programme including new dates:

For more information:



Programme Lead

Frederike Manders

Immersive Xperience Lab programme manager ECDA

Email: f.c.manders@rsm.nl



Dr. Marcel van Oosterhout

Executive Director

Erasmus Centre for Data Analytics

Email: moosterhout@rsm.nl

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