

Executive Summary

# Understanding the business opportunity of Augmented, Virtual and Mixed Reality

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Understanding business opportunities of VR, AR and MR.

## Introduction

Augmented, Virtual and Mixed Reality are already embedded in the entertainment industry and are rising above, ready for deployment by the corporate sector. Avanade conducted a survey among IT decision makers in the Netherlands to gain more understanding on the current and future business opportunity of Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR) within businesses. We have worked together with a research agency for conducting the survey, including three weeks of field work among IT decision makers (N= 527) who are involved in innovation and new technologies. The survey, consisting of twelve questions, contained inquiries regarding the use, expectations and current knowledge of VR, AR and MR.

## Key takeaways

- **While 1 out of 2 of companies will give AR/VR/MR a priority this coming year, the focus is more on experimenting (32.5%) and simple application of the technology (27.5%).**
  - The majority (55.4%) states to probably or definitely give priority to VR the coming year.
  - Almost half (49.5%) states to probably or definitely give priority to AR the coming year.
  - A majority (53.3%) will probably or definitely give priority to MR the coming year.
- **Less than half of the respondents (44.6%) is convinced that their organization has the required capacities and skills to apply AR/VR/MR in their corporation.**
  - Sufficient technical knowledge (29.6%) and budget (26%) are considered the biggest requirements to be able to implement the technologies.
  - Experience (38.3%) and knowledge on the possibilities in the market (39.7%) is seen as something they are currently lacking.
- **The majority (59.7%) of the respondents build client facing applications if they're already applying AR/VR/MR technologies. However, increased efficiency is the most achieved result based on the answers given.**
  - They consider raising customer satisfaction (25.6%) and efficiency (20.9%) as biggest advantage of the use of these technologies.
  - Internally focused application on employees (35.8%) is second and internally focused application on the operational management (28.0%) is third.

## Conclusions

Dutch companies are increasingly focused on the business application of VR, AR and MR and are prioritizing investment in these new technologies. However, the research demonstrates that less than half of the organizations (44.6%) have the required capacity and skills to develop and implement AR/VR/MR.

***“Corporations are more familiar with applications from the entertainment industry or consumer driven practices. Ikea and Albert Heijn are great examples, but as an effect many stakeholders expect results and benefits for their clients, overlooking the instant efficiency gain”, says Rob Bakkers, Mixed, Augmented and Virtual Reality Lead at Avanade Netherlands.***

The research also shows that there is a huge gap between the application and expected benefits, and the actual results when it comes to the use of VR/AR/MR within corporations. The rising efficiency due to the use of these new technologies is considered an unexpected benefit.

The research provides a great perspective on the position and potential of these technologies within the corporate environment according to business and IT managers. The results also present new opportunities such as unexpected benefits and results that organizations who are already applying these technologies have seen.

### Experiment vs Development

Applying AR/VR/MR within corporations is still in early adopter phase. The majority of managers (55.4%) states that they are probably going to give priority to VR the coming year. Almost half (49.5%) states they will probably give priority to AR and again a majority (53.3%) will probably give priority to MR. They will mostly focused on experimenting with these technologies (32.5%) and creating relative simple applications (27.5%).

### Customer driven

The survey demonstrates that the majority (59.7%) of the respondents are applying AR/VR/MR through customer facing applications. Internal focused applications for employees (35.8%) is second and internally focused application for operational management (28.0%) is third. Despite the fact that current AR/VR/MR applications are very much focused on the customer and effective operational management, internal focused applications deliver unexpected efficiency benefits. Working more efficient has been the key result achieved by the majority of the organizations (42.6%) that have already implemented these technologies.

### New technology, new business

Corporations consider raising customer satisfaction (25.6%) and efficiency (20.9%) as the biggest advantage of the use of these technologies. However, they consider experience (38.3%) and the knowledge around all possibilities in the market (39.7%) as something they are currently lacking. Commercial advantages such as new business (9.7%) and competitor advantage (7.6%) are considered less important.

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## Making it Happen

Despite the benefits, managers seem to struggle where to start. Bakkers: "Many corporations are still experimenting and do not have a clear image of what is needed to develop and implement VR, AR and MR." Help is needed to close the skill gap and to create the business case for use of applications to serve customers and employees in new transformational ways.

***"Most people think about games when they hear about holograms or mixed reality. But there is so much more you can do with this technology."***

Our own experience with clients and projects confirms that VR, AR and MR increases the efficiency of your workplace, the productivity of employees and improve the customer experience. One example of increased efficiency is when MR supports field workers with complex tasks and additional aid using over the shoulder coaching, ensuring higher quality results with less rework.

Because these technologies are different than the more traditional software technologies a new approach is needed to allow for entire new scenarios and new ways of working, which were not possible before. It's key to start experimenting within a small team to discover possible business cases that will align with your organization's specific business goals to effectively capitalize on the benefits. The following steps will help you get started:

1. **Ideation workshop:** start with a workshop with a group of maximum 12 people responsible for different processes and disciplines in the company. In mixed groups, these people create high-level business cases. The most appealing business cases are selected for follow-up sessions.
2. **Prototype:** create a prototype of the concept to test the different aspects like desirability, feasibility and viability. Vital to the success of a prototype phase is a user centric approach. During the prototype phase we address the following subjects:
  - o **Proof of Concept:** test the desirability of the concept with end users
  - o **Proof of Technology:** test the feasibility of the concept by identifying and validating the most important technical challenges for the prototype.
  - o **Proof of Value:** test the viability of the concept with the business.
3. **Pilot:** start with the development of a real product based on the Minimal Viable Product (MVP) principle. Ask a small test group to work in the field with the first version of the tool. With their feedback, you can continue the development and expand the tool.

We are only just getting started to discover the many options and applications these technologies will offer businesses. Developments are going fast and many companies are already experiencing new business benefits through the power of VR, MR or AR. To stay ahead of the game we advise our clients not only to start, but to experiment constantly to discover new business opportunities.

Do you want Avanade to facilitate the thought process to determine business cases for your company? Contact us and talk to our skilled and experienced professionals to determine new business cases for your company today.

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#### About Avanade

Avanade is the leading provider of innovative digital and cloud-enabling services, business solutions and design-led experiences, delivered through the power of people and the Microsoft ecosystem.

Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation and has 30,000 professionals in 24 countries.

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#### North America

Seattle  
Phone +1 206 239 5600  
[America@avanade.com](mailto:America@avanade.com)

#### South America

Sao Paulo  
[AvanadeBrasil@avanade.com](mailto:AvanadeBrasil@avanade.com)

#### Africa

Pretoria  
Phone +27 12 622 4400  
[SouthAfrica@avanade.com](mailto:SouthAfrica@avanade.com)

#### Asia-Pacific

Australia  
Phone +61 2 9005 5900  
[AsiaPac@avanade.com](mailto:AsiaPac@avanade.com)

#### Europe

London  
Phone +44 0 20 7025 1000  
[Europe@avanade.com](mailto:Europe@avanade.com)

#### Netherlands

Almere  
Phone + 3130 307 4000  
[info-nl@avanade.com](mailto:info-nl@avanade.com)