

# How technology-driven experiences can help organisations progress

Entrepreneurs, governments and other organisations can tap new markets and new target groups by offering technology-driven experiences. The first insights have already been obtained. This white paper explains what possibilities technology-driven experiences offer and what is needed to implement them.

The experience economy that took shape at the end of the last century has now entered a new phase. Technological innovations create a virtual environment that brings about such a strong perception that it leads to unique experiences. These experiences have such significant added value for many people that they are willing to pay for them. This added value consists of gaining inspiration, taking in information better, understanding knowledge more clearly and obtaining insights. Within five years, these technology-driven experiences will set standards to such an extent that they will be decisively important for the success of entertainment, education and culture.

# Virtual becomes reality

At the moment, the entertainment industry is leading the way in the development of technology-driven experiences. One example of this is the Disney theme park in Orlando, USA (Pandora – The World of Avatar), which opened in the spring of 2017. There visitors can imagine that they are part of a fantasy world created by Disney. It is no longer a matter of observing another world, but of having a lifelike feeling of being present in that world in person. This is done with the help of virtual reality, which blurs the dividing line between the virtual and the real world. What is more, the park in Orlando is not a one-off - similar amusement parks are under construction in other countries, including China, England, Malaysia, the United Arab Emirates (Abu Dhabi), Russia and Japan.



# Within reach of everyone

This telescoping of the virtual and the real world is made possible by technological innovations that are not reserved exclusively for amusement parks. Thanks to new technology, content can be offered in all sorts of new forms: mobile, in 3D or 4D or even life-size via (holographic) projection, reacting to our movements. As this technology is far simpler than it was five years ago, the production costs have fallen sharply. And the quality is still increasing daily. As a result, this technology is coming within reach of smaller organisations as well and is on the way to becoming a mass-produced item for commercial, educational and cultural applications.

# The value of experience

However, virtual reality is not the ultimate goal of this development. It is just the underlying technology. Its market value is linked to the experience that it gives the target group. The more value the target group attributes to this experience, the more it contributes to achieving the strategic goals of the provider. More and more organisations are focusing on the increasing possibilities that technology-driven experiences have to offer.

# Advantages of technology-driven experiences

Economists are predicting that billions of euros will be spent on the further development of technology-driven experiences. The question is what such experiences deliver. For entrepreneurs and other organisations, there are a variety of advantages:

- New markets
- New target groups
- Higher prices
- Competition factor
- Flexibility

#### New markets

The most important thing is that technology-driven experiences mean a new market. Consumers, governments and companies need experiences that help them to achieve certain goals. These goals may involve consumption, just as a 3D film in a cinema creates a different perception than a film on television. But there is also a commercial demand for perception. Companies, governments and other organisations need an environment that contributes to learning capacity, creativity or meaning.

#### New target groups

Technology-driven experiences appeal to new target groups who are less attracted by the actual service or product. Imagine a library which, with the help of technology, can bring in authors or other celebrities without them having to be present in person. So even an awful environment can be given a new boost thanks to a technology-driven experience.

#### Higher prices

Products and services that touch the right chords in their target groups are more highly valued, so customers are prepared to spend more money on them. Organisations that do this with the help of technology by offering the customer the right experience can charge higher prices. The customer is prepared to pay for this.



#### Competition factor

Technology-driven experiences meet a demand that cannot be fulfilled in any other way. The technological aspect in particular is decisively important here. It enables the organisation to achieve effects that cannot be achieved in any other way. In addition, the technology makes it possible to open up the experience to a wide audience. These properties mean that organisations can create an environment that is totally geared to the audience they want to serve. So creating a technology-driven experience contributes to the ability of organisations to stand out and hence to their power to attract their target groups.

#### Flexibility

Technology-driven experiences are relatively easy to adapt to the changing wishes of target groups. The environment created with the help of technology is admittedly based on technology, but it is less rigid than buildings or upholstered interiors.

#### Independent of place

Technology-driven experiences are also possible from a distance. The proximity of the service or the product is no longer necessary in all cases. So the audience in a concert hall can experience what it is like to join in with the performance from the stage, even through they are not really there. It is also possible to experience attending a concert which is in reality being given on the other side of the world.



# Technology-driven experiences in practice

Technology-driven experiences are increasingly being used in four sectors. Examples are to be found in the following sectors:

- Entertainment
- Culture
- Education
- Healthcare
- Other sectors

#### Experience in entertainment

As we have said, the entertainment industry is leading the way in exploring the possibilities offered by technology-driven experiences. This is due not only to the big amusement parks that attract millions of visitors worldwide, but also to smaller companies that run festivals, concerts or game halls. More and more entrepreneurs are bringing concepts to the market that involve offering a technology-driven experience.

One example of this is the Comics Station amusement park in Antwerp, which has been using technology-driven experience to reintroduce visitors to famous Belgian cartoon characters such as Suske & Wiske and Lucky Luke since the spring of 2017. Comics Station has ninety displays and twenty projectors to bring visitors into interactive contact with these famous comic heroes.

#### Experience in culture

Cultural perception is gaining ground, as well. Museums are taking the lead here. In the Netherlands, for example, the Rijksmuseum in Amsterdam introduces visitors to twenty works via apps with multimedia tours. Short films and interviews with musicians are used to bring pieces to the attention of visitors in a more diverse manner than simply looking at them. 275,000 works are available on line to be downloaded. The Rijksmuseum aims to open up the entire collection of one million items worldwide in this way, so that visitors can come into contact with and experience the Rijksmuseum in a totally new way. Visitor numbers to the Rijksmuseum are rising steadily and have passed the two million per year mark.

"the entertainment industry is leading the way in exploring the possibilities offered by technology-driven experiences"



#### Experience in education

More and more training providers are using technologydriven experiences to pass on information and offer insight into behavioural skills. Universities are increasingly doing so, with the aim of bringing students into contact with knowledge other than by using texts and the spoken word alone. By enhancing classes using technology-driven experiences, they make it possible to provide the subject matter outside the classroom: digital learning. This goes farther than offering subject matter at a distance. Digital learning enhances information with digital illustrations, infographics and videos. In addition, digital learning is less dependent on classrooms, because information can be exchanged over long distances. A lecturer at the conservatory in Amsterdam now gives digital lessons to a student in China. They both practise a sonata together, with their pianos being digitally harmonised.

#### Experience in healthcare

In healthcare, exchanging medical information between medical specialists is becoming increasingly important. Hospitals are working together more and more on complex treatments, without constantly wanting to seek one another out. Consequently, they are increasingly exchanging information via screens, including X-ray images, so they can consult with dozens of doctors in various healthcare institutions at the same time. The image quality is decisive for the effectiveness of this distance consultation.

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#### Other sectors

Other sectors have also started offering technology-driven experiences, albeit still on a small scale. One example of this is **public transport**. Screens are displayed in buses and metros giving passengers an impression of the area around the vehicle.

There are also **catering facilities** such as hotels and restaurants that take their guests into a virtual world. For example by showing guests from their table how certain dishes are prepared. Hotels provide virtual projections of hotel rooms and amenities for those who are interested.

In the **residential construction sector**, contractors have started to use technology-driven experiences in their marketing. For example, the construction firm BAM designs 3D homes so that those who are interested can gain an impression of the housing on offer on the screen. Presentations are independent of place, so it is also possible to reach potential customers who are not in the immediate vicinity. On the basis of the screen projection, those who are interested can easily indicate what adjustments they would like made to their future home. This saves BAM from having to build show homes that are difficult to adapt to customers' requests.

The **automobile industry** also uses technology-driven experiences. For instance, BMW launched a new model not by demonstrating the car itself, but by projecting the model onto a screen, including infographics. The presentation took place via a webinar, reaching a wide audience. There was no live presentation for motoring journalists.



## Building blocks

For many organisations, processing a technology-driven experience into the service provision is a new activity. There are a great many questions, in particular about the technology required. The following technological building blocks are needed:

- Visuals
- Broadcasting
- Telecom
- Light
- Sound
- Design

#### **Visuals**

By this we mean projectors, screens, displays and the relevant control devices. These are needed to make images and movements visible.

#### **Broadcasting**

Experience is closely linked to interaction between the projected reality and the recipient. One important element of experience, for instance, is that the projected environment can be adapted to the reactions of participants. This means that signals from recipients need to be indicated and communicated. For this, cameras and connections with circuit software are needed.

#### Telecom

Connections that enable contact from a distance between the public and the projection are crucial for technology-driven experiences. In addition, a good telecom environment is important to monitor whether the environment that is created is functioning consistently. Hitches in the technological environment have to be picked up immediately so that intervention is possible straight away.

#### Light

The lighting in an environment where an experience is created is very important, particularly since it is a virtual environment.

#### Sound

The audio quality contributes to the experience. The better the sound quality, the more the audience will feel that they are part of the environment.

#### Design

A technology-driven experience takes place an in environment in keeping with the audience's power of imagination. This requires a specific design, where technological support is easily possible.



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#### Success factors

Ensuring the right building blocks is the starting point for the actual creation of an environment for a technology-driven experience. Various success factors apply here. The extent to which you bear these in mind will partly determine your success.

- Knowledge of the experience needed
- Priority as regards technology
- Reliability
- Expert coordination of the design
- Security

#### Experience needed

First of of all, an organisation needs to work out what are the experience needs of its target group. These differ depending on the sector and the organisation. When working this out, the organisation should also look at the added value. How big is the new audience that is open to the technology-driven experience? What revenue model is possible for this interest?

# "The environment that creates the experience requires widely differing technologies that are properly aligned with one another."

#### Priority as regards technology

The technology must be the basis for the environment that creates the required experience. However, many entrepreneurs begin by producing a design. The risk is that this design is not always suitable for the available technology. It is the technology that determines the opportunities and the boundaries of the environment. The design of this environment needs to be adapted to this.

#### Reliability

Dependable equipment is crucial for meeting the expectations of the target group. So the technology must be close to one hundred per cent reliable. Monitors that break down, interaction that doesn't happen - these are failure factors that wipe out any experience for the target group. Whereas the experience is precisely the distinguishing factor that adds value for the target group.

#### Coordinating the design

The environment that creates the experience requires widely differing technologies that are properly aligned with one another. That calls for expertise covering the entire design of the technological environment. Fragmentation of the various tools and technologies leads to a difficult construction with a high level of unreliability. This means a real risk of a high failure rate and high costs.

#### Security

Security is a hidden factor that has a major impact on the technological environment in which the experience takes place. Mainly because it involves a highly electronic environment that makes substantial demands on security. Organisations have to be able to guarantee this security at all times when offering this facility to their public.

## Supply and demand

The technology-driven experiences sector is a developing market. Both the demand and the providers have not yet been clearly charted. On the demand side, the need for technology-driven experiences is mainly beneath the surface. Especially in existing organisations that are facing the question of how to attract new customers or provide added value for existing products and services. On the supply side, no major parties have yet come forward with a total range. Catalogues with technologies and designs are not yet available. There are no quality labels, no quality standards and virtually no track records from suppliers.

Experts are to be found mainly in large technology companies that can construct a technology-driven environment because they understand what the organisation needs.

For more questions, please contact Panasonic Experience Team in the Benelux.

+31 (0) 207 95 66 25 (NL) +32 (0) 2 792 04 56 (BE)





### Experience economy

The experience economy took shape towards the end of the last century. The emphasis was increasingly placed on the environment in which services and products were offered, for example with the help of design. The thinking behind this was that the environment impacts on the way in which customers experience and ultimately value products and services. This gave rise to a market for the creation of an environment which influences the assessment of customers. In their worldwide bestseller, authors Joseph Pine and James Gilmore showed in 1999 how much functional added value can result from an environment in which a service or a product is offered.

The success of an organisation is increasingly determined by the extent to which a context can be created to which products and services are geared."

# Context design strategy

The context in which products and services are brought onto the market has become more important than the products/services themselves. The value added by this context is determined by the assumptions and expectations of the target group, according to Toshihiko Miura, professor at the Faculty of Commerce of Chuo University in Japan. The targeted creation of a context that responds to this perception of the target group lies at the heart of what Miura describes as context design strategy. He calls on producers to stop thinking in terms of products and services, but to think rather in terms of context. The success of an organisation is increasingly determined by the extent to which a context can be created to which products and services are geared.

## **Experience in Comics Station**

Comics Station, an indoor amusement park in Antwerp, opened in 2017. Visitors meet famous Belgian cartoon characters in an interactive environment. They can choose from over 60 attractions and activities set in in six different zones in the park.

To purchase the technological resources needed, Comics Station opted for one supplier: Panasonic. This was an alternative to working with a variety of different suppliers and specialists in individual subsectors.

This choice was made in the interests of effectiveness and efficiency. One sound supplier can better understand and respond to Comics Station's needs than a range of different suppliers.

The one-shop stop had the following advantages for Comics Station:

- Financial advantage of around 20% compared with standard purchases from various suppliers owing to the leasing possibilities offered by Panasonic.
- Volume discount up to 15%.
- Technical support included in the transaction worth EUR 20,000 40,000.
- Possibility for Comics Station to bring in its own teams for the implementation, reducing costs by a good 50%.
- Use of tried and tested software platforms: saving over 30%
- Considerable time savings in the transaction as a whole.
- Fast, adequate integration between the facilities.
- Customised integration.
- Less risk of disruptions and failure by working with one party that is familiar with and masters all the technological resources and the software involved.



