Vobling

The Virtual and Augmented Reality Playbook

A beginner's guide on using VR and AR for training, marketing, and new product development

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INTRO:
EXECUTIVE SUMMARY

Extended realities (XR) are revolutionizing the way knowledge and skills are acquired, how stories are told, and the way the world is experienced. With the impact of these new technologies making strides in growth and innovation, more organizations are realizing that another wave of digitization is a key for their survival. XR solutions are defying odds and changing the game, especially in training, sales and marketing, and product development. So how are organizations adopting XR today?

Training
XR is a learning tool that can boost performance, improve efficiency, reduce costs and enable safe training. With a realistic and interactive virtual environment, it can replace traditional methods and instructor-led training with an effective experiential learning experience.

SJ Virtual Training Simulator

Vobling has developed a virtual reality training simulator for SJ, a market-leading train operator in Scandinavia, to enhance their staff's skills and competency on the operational requirements of a physical train. Complete with interactive VR elements and procedural navigation features, it enables employees to get hands-on training in a safe and immersive environment.

INTRO:
EXECUTIVE SUMMARY

Sales and marketing
XR is a powerful engagement engine that provides a more immersive brand experience, shifting from gimmick to a long-term marketing strategy. It is also becoming a business developer's best companion as it brings product visualization, customer research, employee training, personalization, and sales-driving efforts to a whole new level.

Sevina Park Augmented Reality Application

Vobling teamed up with Arthaland, a pioneer developer for premium and sustainable developments, to create an application with augmented reality and 360-view options that features Sevina Park, their latest project, in a precise and engaging way. The AR component displays their townhouses in 3D on a flat surface, showcasing the architectural design per floor, and the 360-degree option leads the user to a virtual walkthrough of the development.

Product development
XR can be utilized as a data acquisition instrument that facilitates ideas and a decision-making environment where theory validations and virtual developments take place. It is able to significantly minimize errors, expenses, and back-and-forth turnovers across stakeholders.

Tobii Virtual Reality Eye Tracking

Vobling collaborated with Tobii, a leading eye-tracking company, to create the world's first virtual reality eye-tracking analytics platform advancing customer research, and enabling researchers to identify human errors before products are built and ideas are implemented. This platform has advanced monitoring features and an eye-tracking tool that can give companies instant access to their customer's unconscious responses, decision-making process, shopping journey, and overall behavior in specific situations.

VOBLING
We are a global virtual and augmented reality agency with offices in Stockholm and Manila. We enable companies around the world to accelerate digital transformation and achieve top-level business goals. Consult with us to know how these technologies can be applied to your business. Reach us at info@vobling.com or http://www.vobling.com/contact/.

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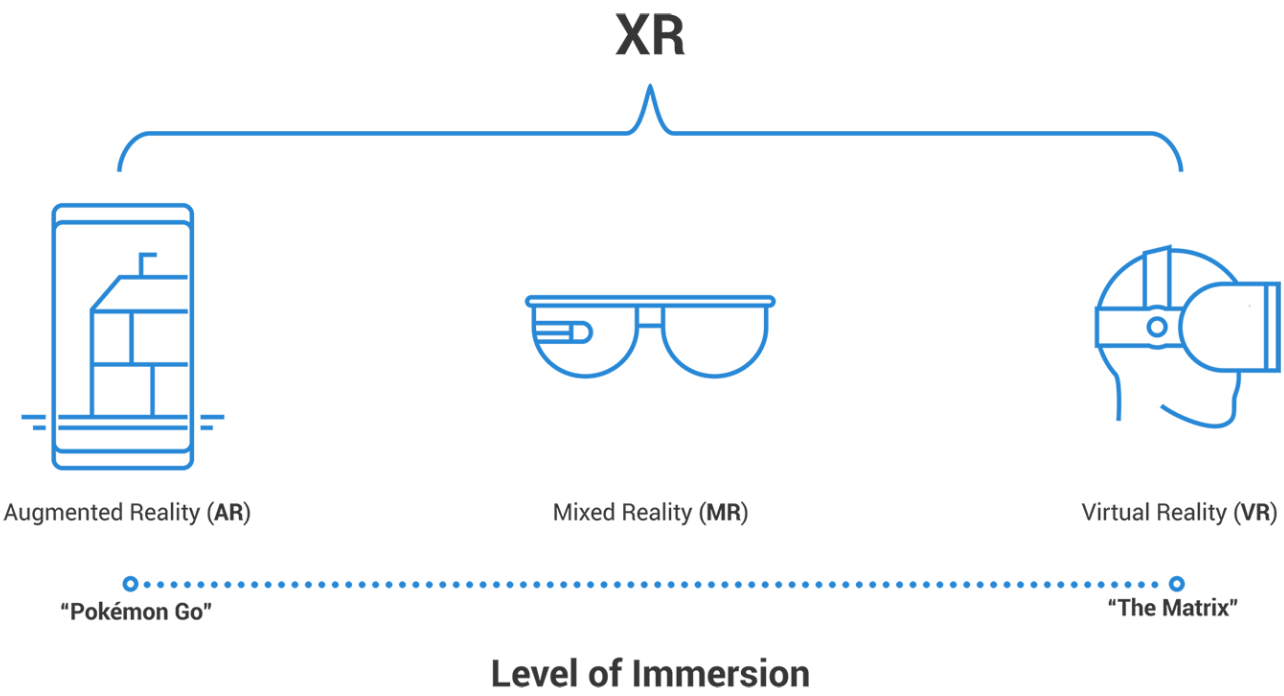
SECTION 1:
WHAT IS VR/AR/XR?

XR, AR, VR, MR, and 360 videos have been used interchangeably to refer to immersive technologies that have been disrupting industries today.



XR: Extended Reality

XR is an umbrella term referring to a spectrum of immersive technologies that pave the way for new realities.

VR: Virtual Reality

Virtual reality pertains to the complete replacement of the physical world. It enables the users to be fully immersed in a computer-simulated environment, using VR devices such as the HTC Vive, Oculus Quest or Google Cardboard.

AR: Augmented Reality

Pokemon Go and social media filters have been excessively used to define AR. As seen on these platforms, this technology involves imposing digital elements over the real-world by using a camera or a smartphone.


SECTION 2:
VR/AR TODAY

STATISTICS ON VR AND AR

230%
increase in performance during training simulations
-UCLA

58%
of consumers use their smartphones while inside the store
-Retail Dive Survey

70%
reduced injuries upon VR training implementation
-Ford

30%
more effective in engagement than mobile advertisements
-Blippar

90%
of big firms (annual $100M-$1B) are now leveraging AR/VR technology
-Deloitte

67%
of media planners and buyers want AR/VR ads in campaigns
-Vibrant Media

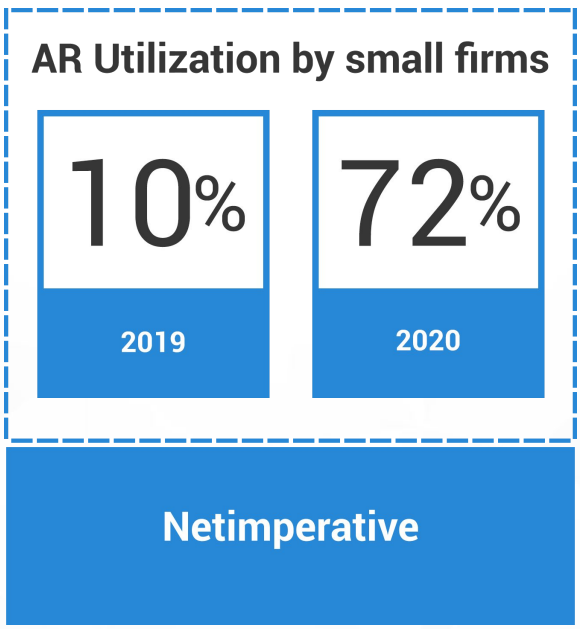
50%
reduced maintenance and operational costs in training
-Honeywell

70%
believe AR can help them learn new personal and professional skills
-ISACA 2016 Survey

STATISTICS ON VR AND AR

According to Dr. Narendra Kini, CEO at Miami Children's Health System, retention level is 80% a year after a VR training, and 20% a week after traditional training.

Netimperative, a digital advertising news website, shared a poll by Purch revealing that 10% of marketers in smaller firms utilize AR, and 72% are planning to in the coming year.



SECTION 3:
STRATEGIC BENEFITS OF XR FOR YOUR BUSINESS

WHAT ARE THE BENEFITS?

TRAINING

1. Increased safety in high-risk scenarios

Training in high-consequence industries such as manufacturing, construction, healthcare, energy, and aviation can lead to irreversible damages. According to the Bureau of Labor Statistics, there were 722 workplace deaths in 2015 that resulted from contact with objects or equipment in the U.S. alone. There were also 424 deaths occurring from exposure to harmful substances or situations, a rise of 34 cases from 2014. Thus, the labor pool with a lack of experience relies on conventional 2D training materials that may delay skills acquisition.

VR emerged as a disruptor across these industries to provide an experiential learning experience. It enabled the workforce to receive real-time training within virtual environments, letting them operate in dangerous situations without the consequences of human errors.

2. Decreased time and cost

Virtual simulations of training scenarios can significantly reduce costs while improving the productivity of your workforce. VR tools allow collaborative learning among trainers and employees, even when they are off-site, and eliminate the need to shut down operations and production to facilitate training with equipment.

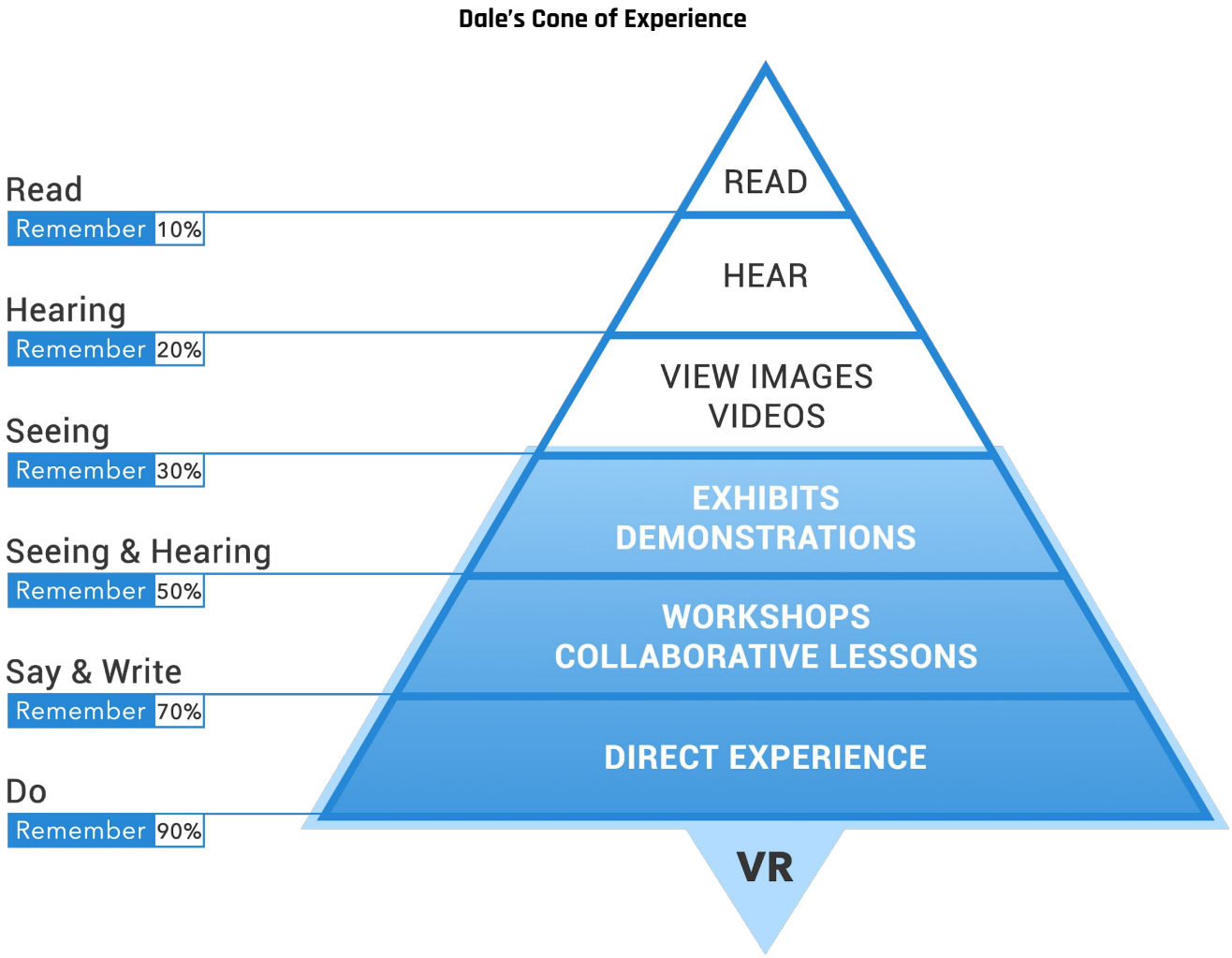
Moreover, it alleviates language and geographical barriers that may prohibit knowledge transfer and staff onboarding. Scenarios may be configured and optimized to become more suitable and accessible to the user.

3. Performance boost

With a deeper level of immersion and interaction, organizations found that using virtual reality in training can prolong knowledge retention and increase performance levels. According to Dr. Narendra Kini, CEO at Miami Children's Health System, the retention level a year after a VR training session can reach 80 percent, compared to 20 percent retention after a week with traditional training.

Also, UCLA's study discovered that there had been a 230% lift in the surgical performance of Osso VR users. Results suggested that students who were taught within an interactive virtual environment become more competent and independent after the study. The results indicated that virtual reality can match, and even surpass, the outcome of real-world training.

The XR Effect



The Dale's Cone of Experience provides further support of the notion that experiential learning experiences can increase knowledge retention and skills acquisition. Extended realities offer new learning methods that align with the 'learning by doing' concept, increasing the likelihood of performance and effectiveness. Thus, companies should explore virtual and augmented reality solutions for their training programs to acquire optimal results.

SALES AND MARKETING

Previously, brands have been using virtual and augmented reality to integrate an 'innovative gimmick' into their marketing campaigns. The novelty of these technologies was the selling point for those who want to obtain a viral-worthy event.

Usage of XR technologies has now grown into a long-term strategy for brands who want to elevate their customer's experience, innovate their products, and become a top-of-mind option of their target market.

1. **A Whole New Level of Storytelling**

Your brand's stories are not only told but also experienced with new realities. VR and AR can be vehicles for high-end experiences and story-telling that stand out from other forms of advertising. It outperforms digital formats that lead to low engagement and adblocker downloads and provides a next-level experience that can drive conversions.

2. **Product Visualization**

XR technologies can give a whole new level of 'try-before-you-buy' practice and bring an engaging and accurate presentation of the product to the consumer - regardless of the product's size, complexity, and the customer's location.

3. **Engagement**

According to Blippar, augmented reality gains 30% higher engagement compared to a regular advertisement. Immersive technologies can be powerful engines for your awareness and engagement goals, as it leaves a lasting impact on your target market.

4. **Store Traffic**

Virtual and augmented reality can be effective decision-making tools for the customer, as these can showcase the product information in a personalized and engaging way with the use of a mobile phone. Purchase intent can be taken and nurtured through informative visualization, even in the comfort of the buyer's home. This can lead to an increase in store traffic, and even sales within online platforms.

PRODUCT DEVELOPMENT

Immersive technologies go beyond visualization and can be developed into a powerful decision-making tool, speeding up the entire product life cycle. XR enables higher interactivity, functionality, and data application compared to real-world development, that would streamline product optimization from design to experience.

1. **Rapid Iterations**

With the automated and interactive features of extended realities, the technology significantly reduces errors that occur during production phases. It allows ideas to be implemented in a virtual environment, tweaked in real-time, and introduced to the real world once validated and polished across internal teams.

2. **Reduced Time to Market**

Virtual prototyping allows a quicker route for building, testing, and iterating a product. Stakeholders and customers can obtain instant access to the product through prototypes, and development units are able to make better informed decisions before mass production.

3. **Eliminate Prototype Shipping**

Digital twins, the virtual simulations of products, can be accessed from any part of the world, allowing teams across borders to collaborate effectively. With this capability, an organization can draw in a broad range of stakeholders to evaluate in-progress assets in a natural and efficient way.

4. **Lower Production Costs**

With the above benefits, virtual and augmented realities prove to be an effective product development tool that can reduce expenses of the complex build-test-iterate loop of a product cycle. Development, shipping, evaluation and rebuilding are all simulated inside the virtual environment.

SECTION 4:
XR IN ACTION

HOW TO SUCCEED WITH XR

TRAINING

1. **Employee Training**

VR has been referred to as "the ultimate empathy machine", allowing users to learn soft skills and correct responses in specific situations, even unfamiliar ones. It is used for client-customer interactions, health and safety training, and even therapy sessions. A great example would be the virtual firefighting simulator that we developed for the Vy Group. This projects aims to train their employees on using fire extinguishers and tactics for putting out flames.

2. **High-risk Training**

Extended realities have solved the prevalent issues within high-risk training such as irreversible damages, time-consuming process and considerable spend. Today, companies within aviation, manufacturing, and construction are incorporating this technology to ensure safety and raise performance at a lower cost.

To name a few examples, flight academies use VR simulations for pilot training without putting passengers and the airplane at risk. VR training programs for construction replicated hazardous scenarios for threat identification, scaffolding training, and ironworker training. Similarly, medical institutions are also diving into VR and AR for high-end interactive visualization of scenarios that may cause serious damage to a patient.

3. **Employee Onboarding and Testing**

The tedious knowledge transfer process, high turnover rates, and the disconnect between teams are only a few issues that are continuously threatening an organization's performance and success. Using virtual simulations can eliminate these issues and enhance new hire orientation, job training, and team assimilation.

SALES AND MARKETING

1. Experiential Marketing

Various studies have shown that millennials fueled the 'experience economy'. Eventbrite, a global platform for live experiences, found in their nationwide research that 78% of millennials are likely to spend more on experiences rather than a product. This gives an opportunity for immersive realities to heighten real-world experiences, and leave a lasting brand impression towards the younger demographic. Our award-winning 360-video for Löfbergs Lila provides an example for this, where we captured the reality of an emerging generation of farmers and brought this experience to viewers all over the world.

2. Drive Sales

VR and AR experiences are able to boost purchase intent as they enable engaging demonstrations of the brand's offers. An example would be Vobling's collaboration with O'Leary's, a chain of sports bar restaurants in the style of a Bostonian neighborhood bar. The team has developed a virtual showroom for them that replicates their concept, environment, entertainment and overall experience to influence the purchase decisions of franchisees.

3. Increase Convenience

Try-before-you-buy practices have evolved from bulky brochures and insistent salespeople to an engaging and personalized product presentation with augmented reality. Brands can now bring their stories to customers in the comfort of their homes. Our sister company, Sayduck, partnered with Pixels.com to allow the marketplace's customers to virtually visualize and customize their products in 3D using their mobile devices. This AR component enables an accurate demonstration of the product, reducing the likelihood of mismatch between product attributes and customer expectations.

4. Track Data

AR and VR platforms offer a major opportunity for data acquisition on the customer's persona and purchasing behavior. Traditional success metrics acquired from VR/AR executions are application downloads, unique users, completion rate, interactions, customer sentiment, social shares, brand affinity and of course, sales. However, VR allows more advanced and sophisticated analytics features such as eye-tracking, to help brands delve further into consumer insights.

FINAL THOUGHTS

From the realm of science-fiction, immersive realities are now transforming organizations to improve their overall efficiency at lower costs. With data-backed creative ideas and proper execution, VR/AR developments can have a massive impact not just on the operational processes, but also on the value that companies acquire from their customers and employees. Whether it's creating an outstanding workforce, driving customer purchases, or launching an innovative product, these technologies can let you get ahead, and stay ahead.

Already have a VR/AR project in mind? Speak with us and learn more about how you can leverage immersive technologies to accomplish your business objectives. Contact us at info@vobling.com or send a message at http://www.vobling.com/contact/

Let's Talk!

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About this guide:
The Virtual and Augmented Reality Playbook is an e-book that aims to provide all industry leaders, game-changers and innovators across the globe a better understanding of the strategic benefits of VR and AR for companies in training, marketing, and product development. It intends to encourage everyone to maximize the potential of immersive technologies in achieving business goals and enabling digital transformation.

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