



VIRTUAL & AUGMENTED REALITY TOOLKIT TO ENGAGE ELDERLY BRAIN  
WITH

INTER-GENERATIONAL UNDERSTANDING

ERASMUS+ PROJECT

## **Intellectual Output 3**

# **An Empowering Guide to Exploiting AR/VR with Seniors**

## **Chapter 3**

# **Marketing Skills: Analysing the Marketing VAR Devices, Existing VAR Companies**

Co-funded by the  
Erasmus+ Programme  
of the European Union



PROJECT NUMBER – 2020-1-ES01-KA204-082270

## Disclaimer

“Funded by the Erasmus+ Program of the European Union. However, European Commission and Spanish National Agency cannot be held responsible for any use which may be made of the information contained therein”.

## Contents

CHAPTER 3 – MARKETING SKILLS: ANALYSING THE MARKETING VAR DEVICES, EXISTING VAR COMPANIES .....	3
3.1. Marketing skills .....	3
3.1.1. Soft skills and hard skills .....	3
3.1.2. Marketing Skills for business owners .....	4
3.2. VR and AR for Marketing .....	6
3.3. Marketing VAR Devices.....	8
3.4. VAR Companies .....	9
3.5. Conclusions.....	12
3.6. References.....	13



# CHAPTER 3 – MARKETING SKILLS: ANALYSING THE MARKETING VAR DEVICES, EXISTING VAR COMPANIES

## 3.1. Marketing skills

### 3.1.1. Soft skills and hard skills

Key marketing skills can be broken down into two categories - soft skills and hard skills. Top marketing **soft skills** (<https://online.champlain.edu/blog/what-skills-do-you-need-for-marketing>):

*Communication* - Being able to express oneself and convey concepts to others in a clear and engaging way.

*Creativity and Problem-Solving* - Creativity and thinking outside the box to find new ways of doing things is one of the trademarks of a successful marketing professional. Marketing requires the ability to tackle problems from new angles and come up with innovative solutions to rising challenges.

*Attention to Detail* - Accuracy is essential, both to ensure that the company's image is maintained, and so that customers are getting the right information.

*Interpersonal Skills* - Working closely with marketing team, colleagues in different departments, clients, and/or vendors. Good interpersonal skills can build strong working relationships with others.

*Leadership* - Taking charge on a specific project, acting as a point person for a vendor or client, or helping junior members of the team in their work.

*Adaptability* - A successful marketer will enjoy a fast-changing environment, and will be able to adapt to tight deadlines, last-minute projects, or changing circumstances with ease.

Top marketing **hard skills** (<https://online.champlain.edu/blog/what-skills-do-you-need-for-marketing>):

*Writing* - a highly sought-after skill, particularly important in marketing, communication is a critical part.

*Data Analysis & Analytics* - Marketing is nothing without measurement. Being comfortable working with data from a variety of sources and campaigns, understanding what's relevant, and using analysis to inform future actions is a key part of a marketer.



*Project Management* - Multiple campaigns, clients, or projects need to have a strong set of project management skills like: being able to work to deadlines, prioritizing work, keeping track of others' contributions.

*Research* - Looking into competitors' marketing campaigns, learning more about a topic relevant to the company's services or products, building out a list of contacts in a specific industry, etc.

*SEO/SEM* - A simple marketer isn't expected to know the ins and outs of paid search and search engine optimization, but knowing - and being able to execute - the basics is important.

*Social Media Marketing* - Knowing how to adapt a brand's voice and messaging to social media and connect authentically with the audience is an essential part of modern marketing.

*Email Marketing* - Email remains an important mode of communication. All marketers should understand the basics of email marketing, including voice and tone, engaging subject lines, and strong calls to action.

*Visual Marketing* - The basics of visual marketing mean for example selecting images for a website or to accompany a social media post. It can also be really useful to know the basics of the Adobe Creative Suite and free design tools such as Adobe Spark or Canva to work more efficiently.

*Website Management* - Being comfortable working in the back end of a website is an important marketing skill. Not necessarily as a developer or web designer. Most marketers, only need to know how to make updates to pages, build out landing pages, and other basic web functions.

### 3.1.2. Marketing Skills for business owners

Ten essential marketing skills all **business owners** should perfect. (<https://www.podium.com/article/marketing-skills/>):

1. **Customer knowledge:** Identifying buying behavior and highlighting pain points for customers can help document product strategy. Market segmentation is used to identify the different types of customers.



2. **Digital advertising:** Advertising is one of the best lead generation tools. Video production for commercials, pay-per-click (PPC) ads, and a lot of other different ways of advertising. Techniques like the bandwagon effect to show potential customers why everyone else uses the company's products.
3. **Critical thinking and problem-solving:** Modern marketers are ready to handle crises at a moment's notice and can come up with new ways to drive inbound marketing leads. Critical thinking skills help identify what works and what doesn't. Problem-solving skills help adjust focus and identify new content marketing approaches.
4. **Storytelling:** Stories are the reason why we love movies, music, or books so much. They're engaging and they draw you in. In marketing, telling stories is a great way to get customers invested in your business.
5. **Writing skills:** All marketers need to be good at writing. In terms of written content, you want your customers to know exactly what you have to offer.
6. **Search engine optimization (SEO):** SEO is a process where one can improve content in order to drive organic traffic to a website. By optimizing your content, the site will appear higher in the rankings of search engines like Google and Yahoo.
7. **Social media management:** Social media is a powerful tool for visibility. Influencers can help give products and services more clout. One can create viral campaigns that focus on industry trends to drive engagement.
8. **Teamwork:** Marketing is a team effort. Professional marketers work with many different departments including sales and IT to help craft an effective strategy.
9. **Time management:** From targeted email campaigns to social media projects, marketing team members are always managing multiple projects. To make sure nothing falls through the cracks and all deadlines are met, marketers need to manage their time well.
10. **Analytics:** Data is essential to any successful marketing campaign. Data analysis enables marketers to see what types of content and campaigns perform well and what areas need to be improved.

### 3.2. VR and AR for Marketing

There are 11 ways VR and AR stand to impact advertising, marketing and PR (<https://www.forbes.com/sites/forbesagencycouncil/2021/08/31/11-ways-vr-and-ar-stand-to-impact-advertising-marketing-and-pr/?sh=1c3d7a435201>):

1. *More Personalized Ad Experiences.* Both VR and AR technologies open the door to personalized ad experiences that are unique to every individual.
2. *Elevated Social Shopping Experiences.* The time for AR and VR to shine has come. This is the next step for social media marketing, as these innovations can elevate the online shopping experience and entice users.
3. *Virtual Engagements Replacing In-Person Events.* With the advancements in VR technology, this will cross to the event industry and replacing the need for travel while offering true “personal” engagement opportunities.
4. *Immersive PR Outreach to Journalists.* From a PR perspective, VR and AR are creating unprecedented opportunities. Now, events, facilities, properties, travel destinations and more can all offer an opportunity to discover what makes them special without coordinating a visit or trip.
5. *Virtual Experiential Marketing.* With VR, you can imagine yourself driving the car, being a part of the event or having access to a new experience. In the future, this will become more and more the case, ensuring that you will have a more personalized relationship with the brand.
6. *AR/VR Brand Interactions and App Integrations.* Online product listings and reviews can now be considered alongside AR/VR brand interactions. As top tech players such as Google make AR integrations for nearly all apps, it would be unwise to discount this futuristic technology as far-off: It’s here to stay now.
7. *More Targeting of VR/AR Gaming Audiences.* Although VR/AR has the potential to have big audiences in the future, this is the case right now with things such as gaming. In the U.S., experts estimate that nearly 60 million people used VR, and more than 90 million people used AR, a minimum of once a month in 2021.
8. *Continued Adoption of Hybridized Experiences.* Virtual and augmented reality will become more relevant as people continue with hybridized virtual and in-person

experiences in their lives and at work, including group events such as concerts, shows and other experiences.

9. *More Empowered Predecision-Making Processes.* The VR/AR movement allows for a data-driven, scientific approach to strategy as well as to the derived result. AI empowers the predecision-making process by accurately placing consumer sentiment.

10. *Real-World Simulations Accelerating Learning.* A VR company can use technologies that are best designed to accelerate human learning and performance by creating fully immersive experiences that simulate real-world scenarios and true-to-life events.

11. *Novel Approaches To Branding And Acquisition.* As the audience size of VR and AR grows, the existing “technical pipes” of online advertising can quite easily be plugged into VR/AR. So, adoption of AR and a large, growing audience size will supercharge advertising efforts and make this an increasingly legitimate branding/acquisition channel.

Marketing using augmented and virtual reality allows brands to craft experiences, engage consumers and encourage conversions in interesting ways. (<https://www.smartinsights.com/tag/marketing-using-virtual-and-augmented-reality>)

### **Virtual Reality (VR) for marketing**

VR marketing allows companies to bridge the gap between experience and action. You can use VR to offer a digital experience in place of a physical one, which can promote products and services.

As well as promoting existing products, you can also use VR to showcase development. This will help to get customers invested in what you are creating - as well as give you a source of feedback.

Most importantly, VR changes the dynamic between brands and consumers. Rather than using ad blockers or clicking out of ads as quickly as possible, people seek out VR brand experiences. Here, your consumers come to you, rather than you needing to attract them.

### **Augmented Reality (AR) for marketing**

Augmented reality (AR) is an emerging trend in marketing and sales strategies. It allows brands to give customers unique experiences with the convenience of tapping into their mobile devices.

AR gives you another tool when it comes to driving sales and enhancing brand value through mobile devices.

Brands can use AR to allow consumers to try products before they buy them, with augmented shopping experiences becoming increasingly popular. From testing makeup to test driving a possible new car.

<https://www.smartinsights.com/tag/marketing-using-virtual-and-augmented-reality>

### 3.3. Marketing VAR Devices

Virtual Reality Devices Global Market Report 2022 states that the global **virtual reality devices** market is segmented as follows:

- 1) **By Type:** Hand Held Devices, Head Mounted Devices, Gesture Controlled Devices, Others
- 2) **By Application:** Medical and Healthcare, Commercial, Education, Advertising and Marketing, Commerce, Energy and Utilities, Entertainment and Gaming, Designing and Engineering, Logistics, Others
- 3) **By Technology:** Semi and Fully Immersive, Non-Immersive

<https://www.thebusinessresearchcompany.com/report/virtual-reality-devices-global-market-report>

The adoption of AR technology in marketing and advertising to host virtual events, product launches, virtual exhibitions, and online commercials has been gaining traction in the wake of the outbreak of the COVID-19 pandemic (figure 1).

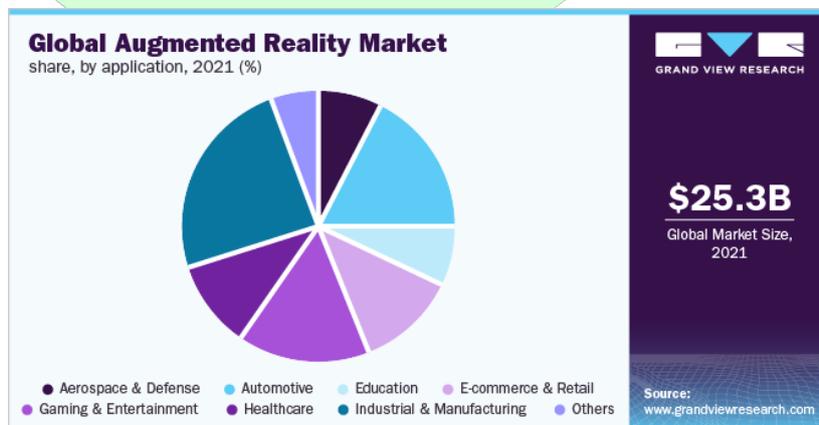


Figure 1. Global Augmented Reality Market

<https://www.grandviewresearch.com/industry-analysis/augmented-reality-market>



### 3.4. VAR Companies

List of the Best AR Companies & VR Developers according to clutch.co (<https://clutch.co/developers/virtual-reality>) (figure 2 and figure 3)

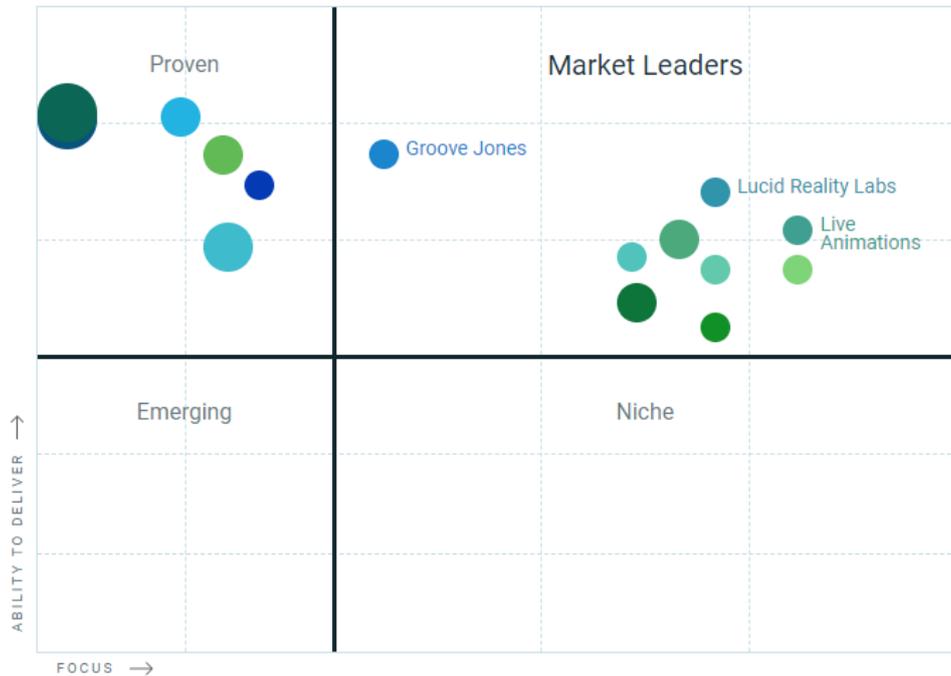


Figure 2. Market Leaders in VR and AR

### Clutch Leaders Matrix

Rollover to see company insights or click a company below for more details.

- 1 Groove Jones
- 2 Lucid Reality Labs
- 3 Live Animations
- 4 N-iX Game & VR Studio
- 5 nomtek
- 6 Saritasa
- 7 Onix-Systems
- 8 Bit Space Development Ltd.
- 9 YORD STUDIO
- 10 Treeview
- 11 CitrusBits
- 12 iTechArt Group
- 13 Innowise Group
- 14 4Experience
- 15 FFFACE.ME

Figure 3. Clutch Leaders Matrix



The 10 most innovative augmented reality and virtual reality companies of 2022 (<https://www.fastcompany.com/90715451/most-innovative-companies-augmented-reality-virtual-reality-2022>), and the reasons they are in this ranking.

#### 1. SNAP

For advancing practical uses of AR. Snap is No. 15 on Fast Company's list of the World's 50 Most Innovative Companies.

#### 2. NVIDIA

For creating an "Omniverse" for developers. Enabling that openness may be the long game of Nvidia's new innovative Omniverse platform, which allows developers from different companies using different tools to quickly share and sync 3D graphics using a Pixar-developed open standard called Universal Scene Description (USD).

#### 3. NIANTIC

For allowing AR to bloom. Niantic pioneered AR gaming with its innovative Pokémon Go, which encouraged players to go outside and capture Pokémon hidden within the real world. Also, Niantic developed a less cold and dorky metaverse: the Naturalverse. Niantic made some important strides in 2021 toward enabling other developers to build their own AR experiences using the company's Lightship development platform via an Augmented Reality Development Kit (ARDK).

#### 4. SIGHTCALL

For adding a new layer to remote assistance service calls. SightCall's augmented reality tool lets customer service reps offer real-time video assistance—with overlaid digital graphics—to faraway customers. Customers point their cameras at problem areas, then SightCall uses AR and artificial intelligence to guide them through the steps needed to solve their problem. Some high-profile companies are now using SightCall's product to connect with customers, including L'Oréal, Kraft Heinz, GE Healthcare, and Jaguar Land Rover.

#### 5. APPLIEDVR

For using VR to manage pain. With its innovative EaseVRx device, digital therapeutics startup AppliedVR has developed a series of two- to 16-minute virtual reality experiences that help people with chronic lower back problems deal with pain.

## 6. GOOGLE

For annotating indoor spaces. Google Maps now lets you see augmented reality place markers and directions through your phone to help you navigate complex indoor environments, such as labyrinthine subway stations, airports, and shopping malls.

## 7. AVEGANT

For making a giant tech leap toward miniaturizing smart glasses. AR glasses face some significant technology hurdles. So far no tech company has managed to fit the displays, sensors, processors, and battery into a form factor small enough and light enough to be worn for extended periods. The small Menlo Park, California-based component supplier Avegant, however, may have cleared one important hurdle by miniaturizing the light engines that produce digital imagery within the lenses of AR glasses.

## 8. HTC VIVE

For creating a VR headset immersive enough for enterprise use. The Vive Focus 3 is HTC's third try at a stand-alone virtual reality headset, and the company nailed it. The innovative headset's 5K high-resolution graphics, tight head tracking, and 120-degree field of view make it easily superior to the consumer VR headsets currently on the market. VRMADA, for example, will use the Focus 3 to deliver the VR training simulations it creates for its clients, which include Cisco and British Airways.

## 9. 3DAR

For letting viewers unlock new ways to experience VR in film. The VR production studio 3dar has become known for pushing the boundaries of VR as a storytelling tool. In 2021, it followed up its impressive Gloomy Eyes short, which won best VR piece at South by Southwest in 2019, with an even more groundbreaking animated piece called Paper Birds. The truly groundbreaking aspect of Paper Birds is in its interactivity. You're invited to use the hand tracking in the Oculus Quest headset to paint brushstrokes of stars in the void of space, conduct music, and unlock portals. Paper Birds premiered at Tribeca Film Festival 2021. The Academy of International Extended Reality (AIXR) gave Paper Birds the award for VR Film of the Year at its fifth annual VR Awards in December.

## 10. RESOLUTION GAMES

For taking the VR gaming throne with Demeo. Though Resolution Games could have easily used VR to make Demeo an action role-playing game, it chose the slower pace of

a board game genre that recalls physical games like Dungeons & Dragons. One of the reasons for the game's success is that it pulled people together (either in person or virtually) to play Demeo and socialize.

### 3.5. Conclusions

The virtual reality devices market consists of sales of virtual reality devices and related services. The VR devices use advanced computer technology called virtual reality to create a simulated environment. The VR devices such as head mounted display (HMD) devices, gesture tracking devices (GTD), projectors and display walls (PDW) enable the users to get immersed in a real environment and interact with 3D worlds. Some of the virtual reality devices include Oculus Rift - VR headset, HTC Vive - VR, Sony - PSVR, Samsung Gear VR - mobile VR headset with controller, and Google Cardboard - mobile VR headset by Google..

Rising demand for virtual reality devices in changing the traditional way of imparting safety trainings to employees is expected to drive the virtual reality devices market. Virtual Reality provides an effective and safe training environment for the employees in an organization. Traditional training method fail to recreate real time crisis scenarios while VR trainings create the real time crisis scenarios which helps a person to respond in a similar way to that of real time situations, thus providing effective and safe training to staff. It has resulted in fewer mistakes and better information recall than traditional trainings. For example, some companies use virtual reality which simulates real-life situations to train their staff in a more receptive and effective way than training theoretically.

Marketing skills are improved by using VR and AR technologies. Also, marketing using augmented and virtual reality allows brands to craft experiences, engage consumers and encourage conversions in interesting ways.

### 3.6. References

<https://clutch.co/developers/virtual-reality>

<https://online.champlain.edu/blog/what-skills-do-you-need-for-marketing>

<https://www.fastcompany.com/90715451/most-innovative-companies-augmented-reality-virtual-reality-2022>

<https://www.forbes.com/sites/forbesagencycouncil/2021/08/31/11-ways-vr-and-ar-stand-to-impact-advertising-marketing-and-pr/?sh=1c3d7a435201>

<https://www.grandviewresearch.com/industry-analysis/augmented-reality-market>

<https://www.podium.com/article/marketing-skills/>

<https://www.smartinsights.com/tag/marketing-using-virtual-and-augmented-reality>

<https://www.thebusinessresearchcompany.com/report/virtual-reality-devices-global-market-report>

Barcelona, Spain (2022)

© Copyright VARTES partnership 2020-2022 (grant no. 2020-1-ES01-KA204-082270)

Creative Commons (CC) license: everyone is welcome to share, use and build upon our work.



“Funded by the Erasmus+ Program of the European Union. However, European Commission and Spanish National Agency cannot be held responsible for any use which may be made of the information contained therein”.

