

ELEMENTS

in collaboration with



Happy Finish.



"The Slide" at "The Shard" by Happy Finish

Interactive multi-layer content in 8K



Marcin Siebab, Happy Finish

The unstoppable demands for speed and smooth collaboration

At Happy Finish, everything is possible. The creative superbrains and highly innovative explorers (and discoverers!) of latest technologies have been pushing the envelope – constantly and in every direction. Within just a few years they have delivered reams of solid and utmost exciting proof that not even the sky is the limit.

Topic: Fast, scalable storage for 8K raw workflow

Project: Happy Finish

Partner: XTFX

Location: London (UK)

Challenge: 360°/VR/AR/MR + AI

System used: ELEMENTS ONE

Without a doubt, Happy Finish is the world-leader in creating interactive, virtual content, giving reality an upgrade every day. Founded in 2004 by Stuart Waplington and Creative Directors Rainer Usselman and Chris Roome, Happy Finish has left their humble beginnings of providing retouch and CG services long behind, and followed their true calling: Bringing the most revolutionary and mind-boggling projects to life by utilizing VR (virtual reality), AR (augmented reality) and MR (mixed reality). With a splash of Artificial Intelligence (AI) and machine learning, the visionary creators realize projects ranging from linear 360° films to fully immersive VR games and AR/VR experiences. And they do that extremely successfully with a full-service approach from concept, to creation, to installation and delivery – for pretty much every top brand, agency and artist on earth, including Nike, Ford, Samsung, Honeywell, Dove, ITV, Channel 4, DHL and many more.

Probably the most famous project Happy Finish has finalized recently is “The Slide”, a hyper-realistic 360° VR slide that sends

viewers zooming down a virtual chute wrapped around The Shard, the most iconic building in London – at 100mph!

Just equally impressive and capturing though is the experience Happy Finish has created for the Royal Academy where the viewer is transported into the physical space of a Hamilton painting with the freedom to walk up and inspect the characters.

With “Wear the Rose” for O2 and agency M&C Saatchi, Happy Finish has pushed the boundaries of VR technology further than ever before –and created a groundbreaking combination of virtual reality and 360 real-time CG, combining immersive VR film with a VR game.

These, plus countless more outstanding achievements, have made Happy Finish one of the world’s fastest growing companies of its kind. Headquartered in London (UK), the company has evolved rapidly and operates out of three international studios with entities in Portland (USA) and Mumbai (India) today.

Behind the scenes

When Marcin Siebab joined Happy Finish in 2015 as Global IT Manager, he found the IT infrastructure to be composed of multiple servers, managing 4 different RAID arrays. This set-up was sufficient for the 40 workstations (MAC and Windows), the Resolve Grading Suite and around 30 laptops, conducting retouch, CGI, animation, and VFX for feature films and commercials.

But with the number of requests for VR and AR projects exploding, creating huge amounts of raw data in 4K and 8K, entirely new challenges emerged – and the dated infrastructure wasn't capable of keeping up with the demands.

“Our main goal was to achieve a workflow where all departments can work from the same storage with a minimum bandwidth of 10 Gbit per workstation.”

Marcin Siebab, Global IT Manager Happy Finish

Struggling with bandwidth, replication and latency issues, and loss of storage performance of the dated and under-equipped infrastructure, a fundamental redesign of the entire set-up was inevitable. So Marcin got busy, looking for an all-in-one solution rather than

combination of storage units – and a licensing model that was suitable for the constantly changing environment at Happy Finish.

Upgrading and streamlining – at once

The ability to process all requests of the entire fleet of workstations, and all applications, including the color grading suite Resolve and Nuke editing suites was critical. In addition, running onsite replication as well as pushing Terrabytes of data to private cloud storage was essential when Happy Finish evaluated all options.

“After meeting with the specialists from ELEMENTS, I started seeing them as a partner who will help us on the path to become one of the leaders for VR/AR in the world.”

Marcin Siebab, Global IT Manager Happy Finish

As high bandwidth and the capability of working with RAW footage of 40TB per single project was the highest priority, the experts at Happy Finish decided to replace the entire infrastructure with one ELEMENTS ONE. One of the key problems at the time was the amount of data generated, and ELEMENTS delivered exactly the performance what Happy Finish needed.



Elliot Graves, Happy Finish

“From importing hefty EXR sequences to point clouds and photogrammetry, ELEMENTS is what allow us to focus on pushing the limits of interactive content creation.”

Elliot Graves, Creative and Technical Lead Happy Finish

AR/VR capturing equals massive amounts of raw data

For VR and AR capture, Happy Finish work with the latest 360° cameras and volumetric capture systems – but regardless of the approach, producing AR/VR and 360° projects inevitably leads to generating tremendous amounts of raw footage on a daily basis. Even when working with multi-camera 8K RAW files, ELEMENTS ONE provides ample storage to support all VR/AR and Interactive departments as well as the grading and editing suites during the entire production and post-production process. But even more importantly, ELEMENTS provides copious performance in every regard so that the artists at Happy Finish can work across multiple projects simultaneously, each requiring access to terabytes of data each, allowing them to focus on creativity and content rather than worrying about technical limitations.

Fast and easy installation – perfectly prepared

Equipped with a detailed list of requirement specifications provided by Happy Finish, the professionals at ELEMENTS were able to build the perfect solution, specifically designed for the individual needs of the unique and highly demanding full service agency.

“The installation by ELEMENTS was absolutely amazing - we have received fully functional system that was 100% pre-configured as per our requirements.”

Marcin Siebab, Global IT Manager Happy Finish

Happy Finish has accomplished exactly what they needed: a smooth and straightforward workflow that supports all departments across the entire facility, working concurrently on large-scale projects from one central storage systems that is easily maintained from one central spot.

“ELEMENTS’ ability to cater for all needs is immensely impressive. It gives us the ability for Devs, 3D artists, video teams and production to all work with the same system.”

Elliot Graves, Creative and Technical Lead Happy Finish

Ready to grow even further

Another key element that was important on the list of requirements of Happy Finish was how expandable the storage will be in the future. Since ELEMENTS is easily scalable by simply adding expansions – without the need to shut down the central system or redo the file system – they are now in the position to grow flexibly and spontaneously at any time when needed. And whenever they decide to expand, ELEMENTS’ unique design allows Happy Finish to grow both their storage capacity and the system performance.

“As we do more and more AI projects, we will require another expansion soon - and I know exactly where I need to go.”

Marcin Siebab, Global IT Manager Happy Finish

We are truly proud to count Happy Finish to our customers. Guys, we wish them best of luck in all future endeavours and want you to know: We’re here to help whenever you need us!



Happy Finish