CHALLENGE COVID-19

How our customers remain profitable despite Covid-19

Version 1.0 **I** December 2020

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PREFACE

Finding solutions quickly together

Unprecedented, historical, outstanding - the descriptions are many. But, undeniably, the Covid19 pandemic is hitting businesses worldwide in ways no one would have imagined before 2020. The health protection measures no longer allow for many things previously taken for granted: travel, events, product presentations, face-to-face teaching, meetings, and conferences.... in short: Everything where people meet and get close to each other has to be cancelled. Or organised differently.

Depending on how the respective business model is affected, companies fight for their existence and must pull out all the stops to maintain profitability. Those who have already begun to use digital possibilities - or who now have a competent partner who can quickly implement them - can consider themselves lucky.

Here we show some examples of how clients have managed to master the crisis creatively and with foresight. They have relied on the digitalisation of their processes - online teaching, virtual events or effective decentralised working from home.

We, the entire tecRacer team, are pleased that we could and can support these and many other companies with our experience. Together we can find solutions even in this exceptional situation and stand by our customers as a reliable partner.

Contact us!

MANAGING DIRECTOR - TECRACER GROUP

SVEN RAMUSCHKAT

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THREE CROSSES FOR TIMELY MOVE TO THE CLOUD

Into the cloud in time for Corona
Almost half a year before the first Corona restrictions, STR8 began to move the IT infrastructure to the cloud with the support of tecRacer. The agency also clearly formulated the requirements for design and set-up: virtual events must be possible in the AWS Cloud, always in compliance with the compliance guidelines. After all, the high availability of IT is essential to be able to scale all virtual events. Furthermore, since STR8's apps are to be offered in the Apple App Store, tecRacer must fulfil all the requirements, such as provisioning an IPv6 load balancer.

Fortunately, the company already has its event software in AWS: ray.seven
STR8 also systematically conquered networked reality early on with its event software. ray.seven (www.rayseven.de) is hosted in Amazon Web Services (AWS). What began as an exhibition stand management tool and participant management solution has been further developed into a comprehensive solution for virtual events - the whole thing "made in Germany" by event people for event people. Even now, the agency can provide this complete service under pandemic conditions and offer clients an overview and control of participants; leads, exhibition stands, workshops and staff. The size of the project is irrelevant.

Business model despite Corona through a timely move to the cloud
Thanks to the timely move to the cloud, STR8's business model with virtual events continues to work. tecRacer supports the operation of the infrastructure and is the central service provider for all Managed Services Provider (MSP) services: Backup, Patching, Monitoring and IT Service Desk. STR8 managing director Stephanie Beckers is pleased with their forward-looking action: "The fact is: I made three crosses that we decided to move to the cloud at the end of 2019. First, with our old server structure, we would not have been able to transform our business so quickly. That's the only reason we can implement virtual events so quickly. For this, we need scalability. Especially with virtual events with live streams, many website visitors are recorded at the same time. We can implement all that with the current solution."

STR8, agency for planned events, www.str8.de
offers possibility and live marketing solutions under the motto "Listen, create & inspire". With creative strategies, the agency simultaneously generates a high entertainment factor with long-term memory value. In joint brainstorming sessions with STR8's ideas and the client's wishes, the agency team develops the best concept and shows alternative ways. STR8 focuses on planning and organising events and live communication - with a flair for technologies and future topics, even in times of Corona.

STR8 MANAGING DIRECTOR

STEPHANIE BECKERS

"The fact is: I made three crosses that we decided to move to the cloud at the end of 2019. First, with our old server structure, we would have needed more time to transform our business. That's the only reason we can implement virtual events so quickly. For this, we need scalability. Especially with virtual events with live streams, many website visitors are recorded at the same time. We can implement all that with the current solution."

STR8 - www.str8.de -, agency for planned events, offers planning and organisation of events and live communication under the motto "Listen, create & inspire". Then the pandemic hits the event industry with full force. Events and the industries involved in them are particularly affected, sometimes existentially, by hygiene regulations and sudden bans. But STR8, fortunately, had a good sense for new horizons even before the pandemic.

RAPID MIGRATION TO ONLINE LEARNING WITH THE HELP OF TECRACER

Before Corona: migration of Adobe Connect-based online meetings to AWS
Diploma University already operated an online campus, which was complemented by virtual
learning spaces and online sessions via Adobe Connect. Diploma College initially used the Adobe Connect meeting cluster, mainly on Sundays. This cluster was migrated from a classic data centre by tecRacer to AWS (Amazon Web Services) in January 2020. Previously, there had been recurring problems with the performance and availability of the cluster. Adobe Connect offers various options for online collaboration and for participating in remote sessions.

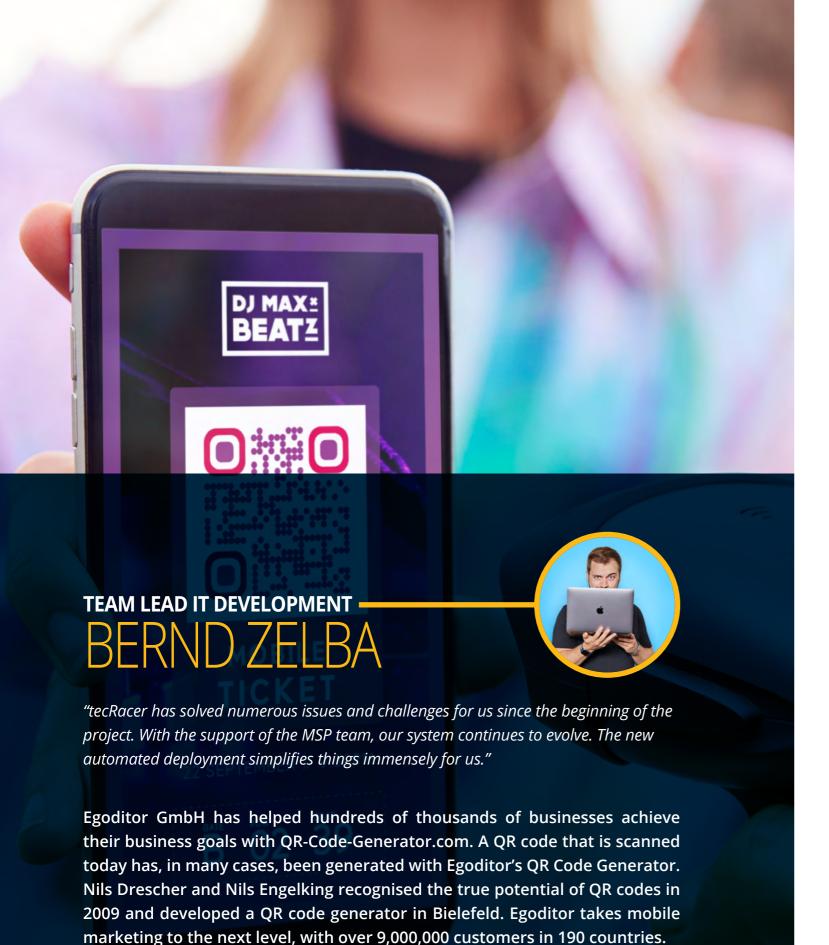**Building the Adobe Connect cluster for more users in Corona times**
Due to the restrictions due to the pandemic, the demands suddenly increased: Instead of about 1,400 users before, who mainly used the online campus on Sundays, there were now up to 2,000 students online at peak times. In addition, more users switched on their webcam, increasing the overall bandwidth and processor power demand. During the week, the Bernd Blindow Schools, among others, now use the Adobe Meeting Cluster, as regular school operations had to be suspended due to the shutdown. After consultation with Prof. Dr. Andreas Blindow, the cluster was scaled up. The Diploma Hochschule now has an Adobe Connect Cluster licence for six servers. This cluster allows meetings for a total of 1,900 users simultaneously.

Online teaching without technical difficulties
Managing Director Prof. Dr. Andreas Blindow was relieved: "tecRacer reacted very quickly to the new requirements and provided very proactive and professional support so that online teaching could also be carried out for the Blindow schools without any technical difficulties. tecRacer supported us with the cloud possibilities of AWS to ensure teaching operations even under sudden higher loads. The Adobe Connect Cluster was able to be adapted very quickly to the new situation in terms of sizing."

tecRacer takes over managed service for the entire environment
tecRacer has taken over managed service for the entire environment for the Bernd Blindow Group. With many years of experience in numerous AWS projects, tecRacer takes care of the ongoing management of the entire infrastructure and optimises costs. As an AWS Managed Service Partner, tecRacer applies proven methods and thus reduces operating expenses and risk for the customer. Routine activities such as patch management, backup services or change requests are automated and monitored accordingly. Due to the systematic relief of infrastructure management through AWS Managed Service, the Bernd Blindow Group can concentrate on its core competencies.

MANAGING DIRECTOR, BÜCKEBURG
PROF. DR. ANDREAS BLINDOW

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Teaching operation even under sudden higher loads. The Adobe Connect
Cluster could be adapted in sizing to the new situation very quickly."

The Blindow Schools, an association of several schools and colleges in locations nationwide, were suddenly unable to run face-to-face classes due to contact restrictions against the Corona pandemic. Fortunately, there was already online learning on a smaller scale before, but now all schools had to be converted to online teaching at once. This required integration with the appropriate tools for online learning. For the online campus, scalable learning clusters had to be built quickly to meet the Corona challenges.

TECRACER DEVELOPS INFRASTRUCTURE AND DEPLOYMENT FURTHER

Since 2015, tecRacer and its Managed Services MSP team have supported Egoditor GmbH in Bielefeld. With their development, QR-Code-Generator.com, they have over 9 million customers in 190 countries. tecRacer adapted the entire IT infrastructure to current conditions, including the IT service desk and incident management. In addition, change requests are carried out on the web server infrastructure. In regular coordination meetings with Egoditor, tecRacer continuously develops the infrastructure. In times of pandemics, the need for automated software distribution increases.

After the first lockdown conversion of the deployment
In May 2020, after the strict restrictions from March and April were relaxed, Egoditor additionally awarded tecRacer the contract to rebuild its deployment to make release and deployment management even more efficient. The goal is to use a variety of AWS Managed Services with the software distribution and simplify it in a cloud-native way. They are to be automated as extensively as possible to achieve a high delivery rate during distribution.

Reliably automated distribution
tecRacer advised Egoditor on building the deployment pipelines via AWS Code Service - AWS Codepipeline, AWS CodeDeploy, AWS Codecommit and AWS Codebuild - and implemented them. Via the AWS Code Services, new revisions of the WebApplication are deployed in short cycles to the participating web servers. The servers' configurations were permanently adapted to the new requirements, versioned and automated with a configuration management tool. In this way, the software can be reliably distributed automatically. Bernd Zelba, Team Lead IT Development: "tecRacer has solved numerous issues and challenges for us since the beginning of the project. With the support of the MSP team, our system continues to evolve. The automated deployment simplifies the whole thing immensely."

Simplified deployment for the new API version
tecRacer also supports Egoditor in simplifying the deployment of the new API version, i.e. the new version of a programming interface. This involves two pipelines that can be deployed separately: a backend API and a client. These adjustments were necessary for the deployment to have been significantly more complicated.

TEAM LEAD IT DEVELOPMENT

BERND ZELBA

"tecRacer has solved numerous issues and challenges for us since the beginning of the project. With the support of the MSP team, our system continues to evolve. The new automated deployment simplifies things immensely for us."

Egoditor GmbH has helped hundreds of thousands of businesses achieve their business goals with QR-Code-Generator.com. A QR code that is scanned today has, in many cases, been generated with Egoditor's QR Code Generator. Nils Drescher and Nils Engelking recognised the true potential of QR codes in 2009 and developed a QR code generator in Bielefeld. Egoditor takes mobile marketing to the next level, with over 9,000,000 customers in 190 countries.

TECRACER BRINGS THE JAF INTERNATIONAL SERVICES GMBH QUICKLY INTO THE HOME OFFICE

JAF International Services GmbH
is one of the leading wholesalers of wood and wood products in Central Europe. The company, which employs almost 3,000 people across Europe, supplies more than 30,000 customers with over 83,000 articles. More than 20,000 products of the assortment are permanently stored in more than 245,000 square metres of space.

Suddenly home office instead of a handshake
The local timber trade, founded over 70 years ago by Josef and Antonia Frischeis in Stockerau, Lower Austria, has long since developed into an international company with 59 locations in 18 Central European countries. The company is still owner-managed; decisions are made quickly and independently in-house. On its website, the JAF group advertises handshake quality. When restrictions to prevent the spread of the Corona virus meant that the good old handshake had to be replaced by distance, a quick transition to decentralised working and digital meetings was required.

Connecting cloud and networks in diverse regions
First, a hybrid cloud network architecture was built across multiple regions. Local computing capacity is linked with location-independent IT in the cloud. tecRacer received the order for the private connection of the on-prem networks to the AWS cloud. Existing Active Directory systems can thus be integrated into the user authentication for the meeting and collaboration tool AWS Chime. The AWS Directory Services were connected to the existing Active Directory (AD) via the AWS AD Connector to authenticate the meeting users for AWS Chime. With Lightweight Directory Access Protocols (LDAPs), the user authentication of AWS Chime with the on-prem Active Directory is mapped securely and encrypted. Expanding the on-prem data centre to a hybrid cloud setup opens up further possibilities for digitalisation in the AWS Cloud.

Digital collaboration and communication with AWS Chime
The challenge was to enable employees to work from home quickly and securely. User authentication and access to the data in the cloud are one thing; ensuring communication within the teams was equally important. A collaboration platform based on AWS Chime was set up for this purpose. tecRacer provided support in setting up the home office solutions and the digital meeting capacities. As a result, meetings, chats and phone calls can be held in a single, secure application. There is no need to jump between applications. Scaling for more capacity is handled automatically by AWS.

MANAGER EDV

ROBERT KLAUSNER

"tecRacer has supported us in setting up and using the cloud possibilities of AWS in the best possible way. Now our data and our employees are optimally networked via Amazon Chime."

JAF International Services GmbH is one of the leading wholesalers of wood and wood products in Central Europe. The company supplies more than 30,000 customers with over 83,000 different articles. More than 20,000 products of the assortment are permanently stored in more than 245,000 square metres of space. To enable the almost 3,000 employees across Europe to work during the restrictions of the pandemic, tecRacer helped with cloud-based IT and the establishment of a communication platform.

TECRACER OFFERS INTEGRATION OF AWS CHIME IN CONFERENCE SYSTEMS

For this, tecRacer has designed two versions - one with the Angular framework and one with React. The interface can be called up directly on the web, is reactive, and can be used both on mobile and desktop. Therefore, installing a component on the device is not necessary. Both conferences that are moderated and spontaneous meetings without moderation are supported. Different views of the participants with video images and screen sharing are possible.

Services of the Virtual Conference System
To facilitate the creation and administration of meetings and the assignment of rights to participants, tecRacer provides various VCS services. These micro-services connect the data regarding meetings, brands and participants of the central system of the respective customer with AWS Chime. The core of the VCS is a join method that allows moderators to create a Chime meeting at any time by calling the meeting. Multiple moderators for a session are easily possible. For example, if the meeting already exists, the moderator is added to the continuing meeting. If a moderator still needs to create a meeting, the participant first enters a waiting room. If a participant leaves the meeting and returns by calling the URL, their status is restored, even if they use a different device the second time. This intelligent re-entry facilitates participation - unless the moderator had previously "kicked" him out of the meeting. If a Chime meeting ends, it can be reopened at any time by a moderator using the existing URL.

VCS with extension to include role concept for AWS Chime
In the standard configuration, there are the roles "Moderator", "Speaker", and "Participant". Moderators may create and end a meeting and allow or prohibit the use of microphones and webcams for participants and speakers. They may also exclude participants or speakers, kicking them out of the video conferences. Speakers may contribute speech and video on their own. Participants may contribute speech and video if the moderator has given permission. The role of a user influences the sorting within the list of participants.

The VCS from tecRacer extends AWS Chime with a role concept that specifies the roles. The Virtual Conference System allows dynamic events through a few commands. In this way, video, speech or the raising of hands can be allowed - or prevented - individually for each participant.

Using tags, costs and resources can be structured and easily controlled. These tags are supplied with the meeting. This way, the central system provides an overview of the AWS costs for each individually created meeting. Since VCS uses the data of the central system, the services do not need an administration interface. This saves time and money when implementing a project.

TECRACER GROUP VIRTUAL CONFERENCE SYSTEM

Due to contact restrictions to contain the pandemic, there is a real boom in video conferencing. This is where tecRacer's Virtual Conference System VCS comes into its own: the in-house development enables the integration of AWS Chime as a real-time communication component in existing communication and conference systems. The participants' lists and the conferences are automatically created from the conference system. The data for the session and the participants are thus always synchronised. In addition, the branding of a meeting automatically adapts to the respective interface.

Two essential components: Interface and VCS User Interface
The tecRacer Video Conference System (VCS) consists of two main components. On the one hand, a user interface enables the display and control of the video conference for participants, speakers and moderators, for example. On the other hand, the user interface can be customised according to the client's wishes. It directly uses AWS Chime Services for the VCS services.

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