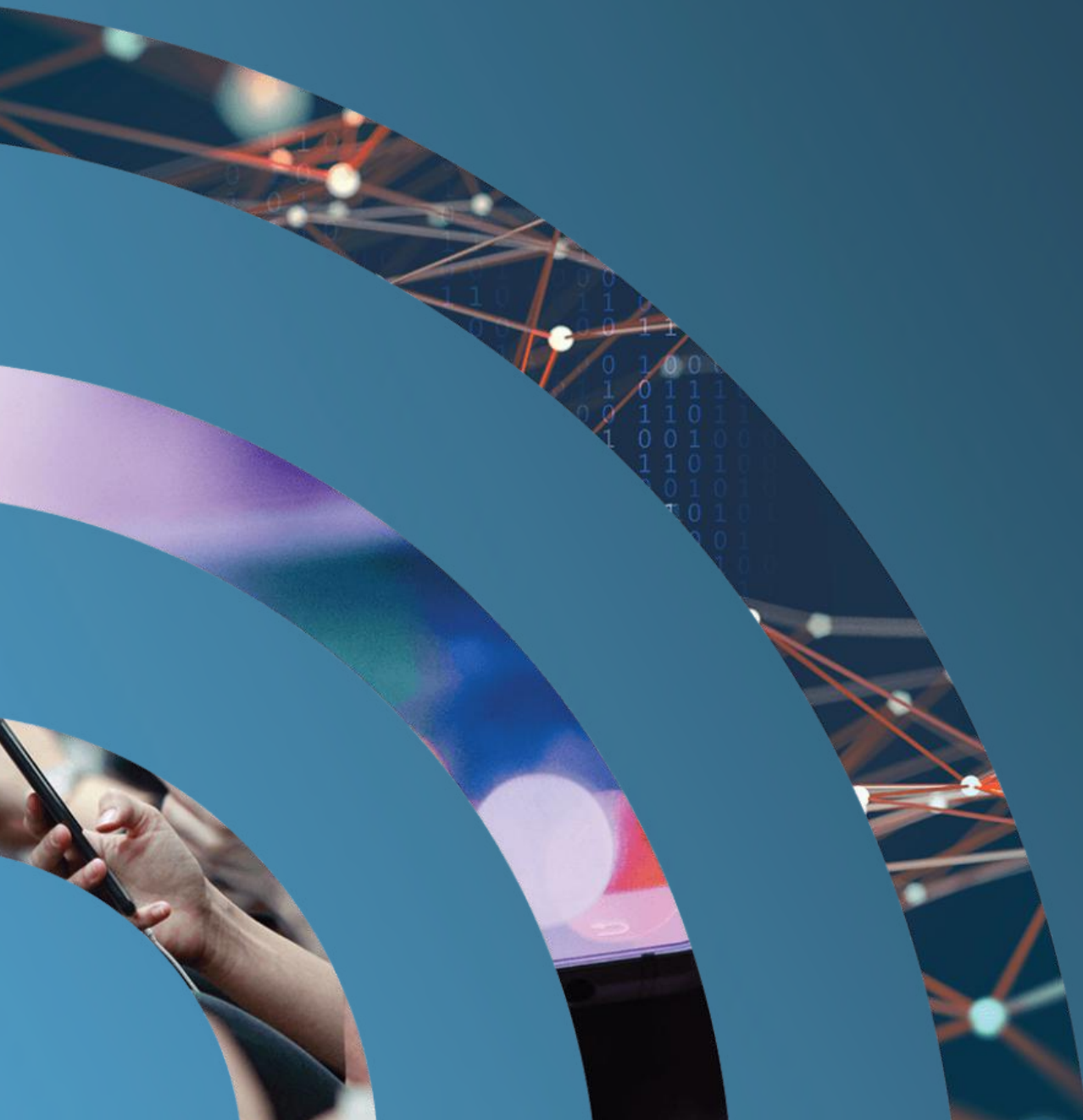


MPIRICAL 

# Discover the next generation of wireless technology training





# Innovating skills training for over two decades

Empirical clients span the entire telecoms ecosystem, from mobile service providers to equipment vendors and government agencies.

Our clients choose us not only for our ability to create quality content, but for our innovative approach to training delivery and methodology.

Whether it's designing a custom learning package, branded academy, or suite of microlearning to integrate seamlessly into your team's daily workflows, we can create a solution that's right for you.

Clients we've worked with include:

**T-Mobile**

**aws**

**VIAXI**

**vodafone**

**Virgin media O2**

**ERICSSON**

**CISCO**

**BT**



# Over 100 Technology courses and counting!

5G 4G Legacy Multi Complementary

Our catalogue includes a wide range of topics covering a spectrum of technical levels -- with each course carefully broken down into interactive learning modules and courseware.

**Looking for 5G training? Look no further...**

We work closely with professional bodies across the telecoms sphere to develop our course content in line with industry standards. Our catalogue includes courses exploring the most cutting-edge 5G and next-generation technology topics.

And with new courses added regularly, keeping up with new technologies couldn't be easier!

## Popular 5G Courses

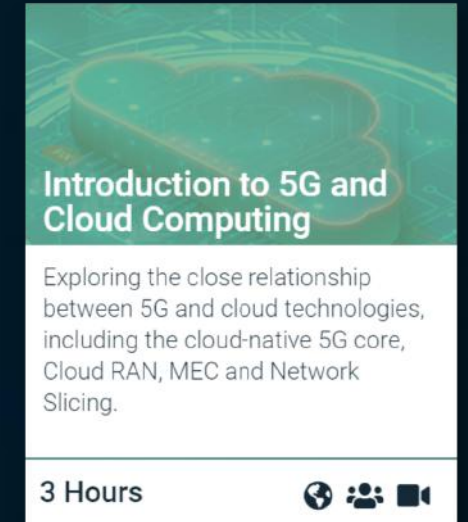


**Introduction to 5G**

This course offers a high level synopsis of 5G, encompassing key aspects such as driving factors, deployment methods, architecture, operation and use cases.

3 Hours

Icons: globe, group of people, video camera




**Introduction to 5G and Cloud Computing**

Exploring the close relationship between 5G and cloud technologies, including the cloud-native 5G core, Cloud RAN, MEC and Network Slicing.

3 Hours

Icons: globe, group of people, video camera

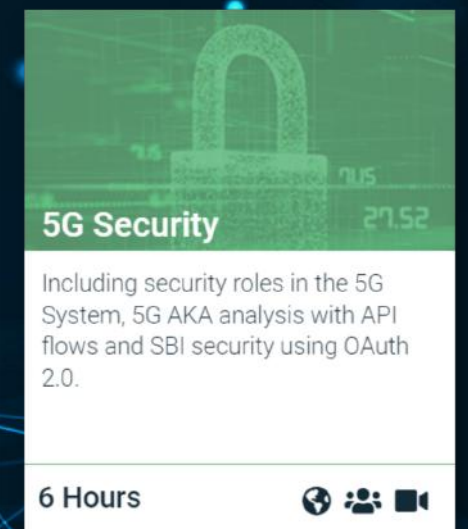


**5G System Engineering**

Mpirical's 5G System Engineering course has been updated and is now available for Live delivery.

12 Hours

Icons: globe, group of people, video camera



**5G Security**

Including security roles in the 5G System, 5G AKA analysis with API flows and SBI security using OAuth 2.0.

6 Hours

Icons: globe, group of people, video camera

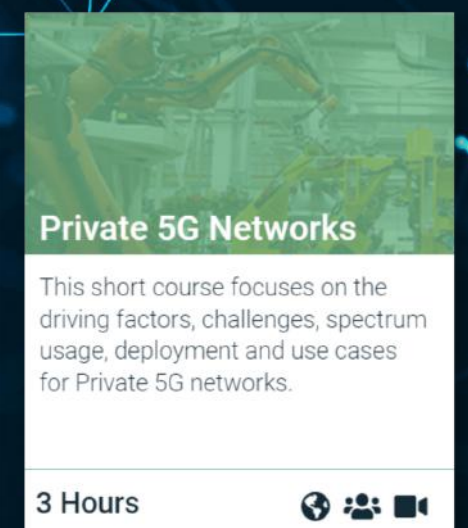


**5G Network Slicing**

Exploring key aspects such as driving factors, NESTs, architectural requirements, slice definition, orchestration, slice utilization and security.

4 Hours

Icons: globe, group of people, video camera



**Private 5G Networks**

This short course focuses on the driving factors, challenges, spectrum usage, deployment and use cases for Private 5G networks.

3 Hours

Icons: globe, group of people, video camera





# Live Onsite

This traditional approach delivers technical training in a classroom environment at your place of work.

Suited to classes of approximately 12 people, our instructors will use your network analysis and service assurance tools to reinforce technical concepts and aid applied learning.

The most interactive form of training, students have the opportunity to ask questions throughout the session, ensuring optimal engagement and learner focus.



Pre-course access to courseware ensures everyone starts on the same level



Instructor led & fully interactive to answer your specific questions



Full post-course report identifies student engagement and further training needs

NetX  
access included





# OnlineAnytime

A cost-effective training solution delivering the same level of quality as our instructor-led methods, our OnlineAnytime content includes learning that can be accessed from anywhere at any time, providing a fully on-demand experience.

Choose from single courses or all-inclusive packages of training to suit your needs.

Courses include interactive features, downloadable reference documents, access to applied learning tools, intuitive learning management system, and trainer support.



Self paced learning  
that can be accessed  
from the comfort of  
your browser



Module-specific  
quizzes to benchmark  
understanding



Available as individual  
courses or as part of an  
all-access package





# LiveOnline

A flexible alternative to a physical classroom setting, our LiveOnline courses use virtual classroom technology to facilitate remote learning, meaning you get all the benefits of the classroom without the cost or environmental impact of travel.

Best suited for teams and enterprises, this method is ideal for groups wishing to focus on a particular technology subject or for ad-hoc training to support current projects.



Learning is delivered across consecutive days to maintain consistent engagement



Full course report after training identifies student engagement and further training



Pre-course test session available to ensure good connectivity and audio setup



# Certified training you can **trust**

Our commitment to developing quality training is backed by our adherence to rigorous certification standards. We work closely with professional bodies to create content aligned to 3GPP, endorsed by the ITP, and certified by CPD.

This means our students are getting the most up-to-date, accurate, and relevant industry training available -- and earning professional development credits in the process.

- ✓ **Independently certified**
- ✓ **Regularly reviewed**
- ✓ **Recognised by industry bodies**





# Unleash limitless potential with limitless learning

Licences start from as little as \$3 per person per day\*

**Hundreds of hours of on-demand learning with one easy subscription!**

## 5G and Essential Technologies Package



Focused learning paths to keep you on track



Microlearning for quick content consumption



Certificates and CPD credits



12 months unlimited access



Single Sign On



Content delivered by industry experts



Immersive learning with NetX

Our most popular option, this package gives you access to more than 70 courses (that's over 330 hours of content!) as well as new courses released during your license period at no extra cost.

**Suitable for individuals, teams, and enterprises. Contact us for a custom quote of 10+ licenses.**



\*Based on a team of 10 licences for 12 months. Pricing and exchange rate accurate as of January 2023.





MPIRICAL

LearningZone



Welcome Active

Your Latest Course Activity:

- 5G V2X for Automotive 54%
- 5G and Autonomous Vehicles 0%
- MMTC and 5G 5%

Your Latest Badge(s):

CPD Level 2

July 2022

June 2022

Days Active: July

| M  | T  | W  | T  | F  | S  | S  |
|----|----|----|----|----|----|----|
|    |    |    |    |    | 1  | 2  |
| 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 |    |    |    |    |    |    |

Welcome

Courses

Quizzes

Resume Training

What's New?

NetX

Network Procedures

Call Flows

Glossary

My Badges

My Certificates

Technology Blog

Telecoms Bytes

5G API Builder

BLOG - RedCap

With the finalization of 3GPP Release 17 comes the standardization of RedCap (Reduced Capabilities) devices, sometimes called "NB-IoT". The concept of RedCap relates to the specific use-cases that don't fall clearly in one of the original 5G service types of eMBB (Enhanced Mobile Broadband)...

# Rethink the way you learn

## The LearningZone

Your gateway to skills development, the LearningZone is Mpirical's intuitive learning platform where you can find all your training resources. Easy to access, it's packed with features to help you make the most of your experience, including role-specific learning paths, interactive courses, personalized reminders, blogs, manager reports and much more!

Beat your personal best or show off your skills with shareable badges!





# Step inside the mobile network with NetX

The tool that lets you marry theory with application

Apply your learning and get under the skin of your network. Featuring a fully interactive 3GPP-based network map, narrated call flows and detailed network procedures, NetX is essential for enhanced understanding of the telecoms network and how technologies and equipment interwork.

## What can you do with NetX?

- ✓ View and analyze protocol stacks
- ✓ Search and isolate network functions
- ✓ Customize your view to focus on different technologies
- ✓ Explore step by step narrated call flows
- ✓ Watch video overviews on network procedures
- ✓ Use it alongside your training to aid understanding

“

NetX is a great interactive map that explodes into finer detail when you drill down on a technology

-Student review





# Enter the wireless world with NetXplore

Our newest interactive learning application, NetXplore is the key to helping you learn how wireless technologies work, what they're used for, and how they're deployed in a modern day setting. Within this virtual world, you can explore how 5G enables common use cases such as V2X, healthcare, agriculture, and much more.

**Unlock the power of NetXplore with commercial training for your non-technical staff...**

With our introductory and commercially-focused content, your teams will learn about wireless technology at a foundational level, gain a better understanding of how it links into your products as well as useful insight that translates to better service for your customers.

**We have packages of beginner and commercial training ideal for apprentices and new employees, sales, marketing, retail, administrative, and customer support roles within telecoms.**

**Go beyond the boundaries of traditional learning and see technology come to life!**



Want to learn more? Scan the QR code to try the lite version for free on our website or contact us for a demo: [enquiries@mpirical.com](mailto:enquiries@mpirical.com)







“

The custom solutions provided by Mpirical helped our team navigate the complexities of 5G deployment.

-Enterprise client, North America

# Create your future success story

At Mpirical, we believe your success is our success. That's why we offer end-to-end support and unique learning experiences that cater to business needs and encourage employees to maximize their potential.

In addition to our turnkey solutions, we can also partner with you to create custom enterprise packages and resources to support your learning objectives including:

Branded learning academies

Custom learning engagement strategies

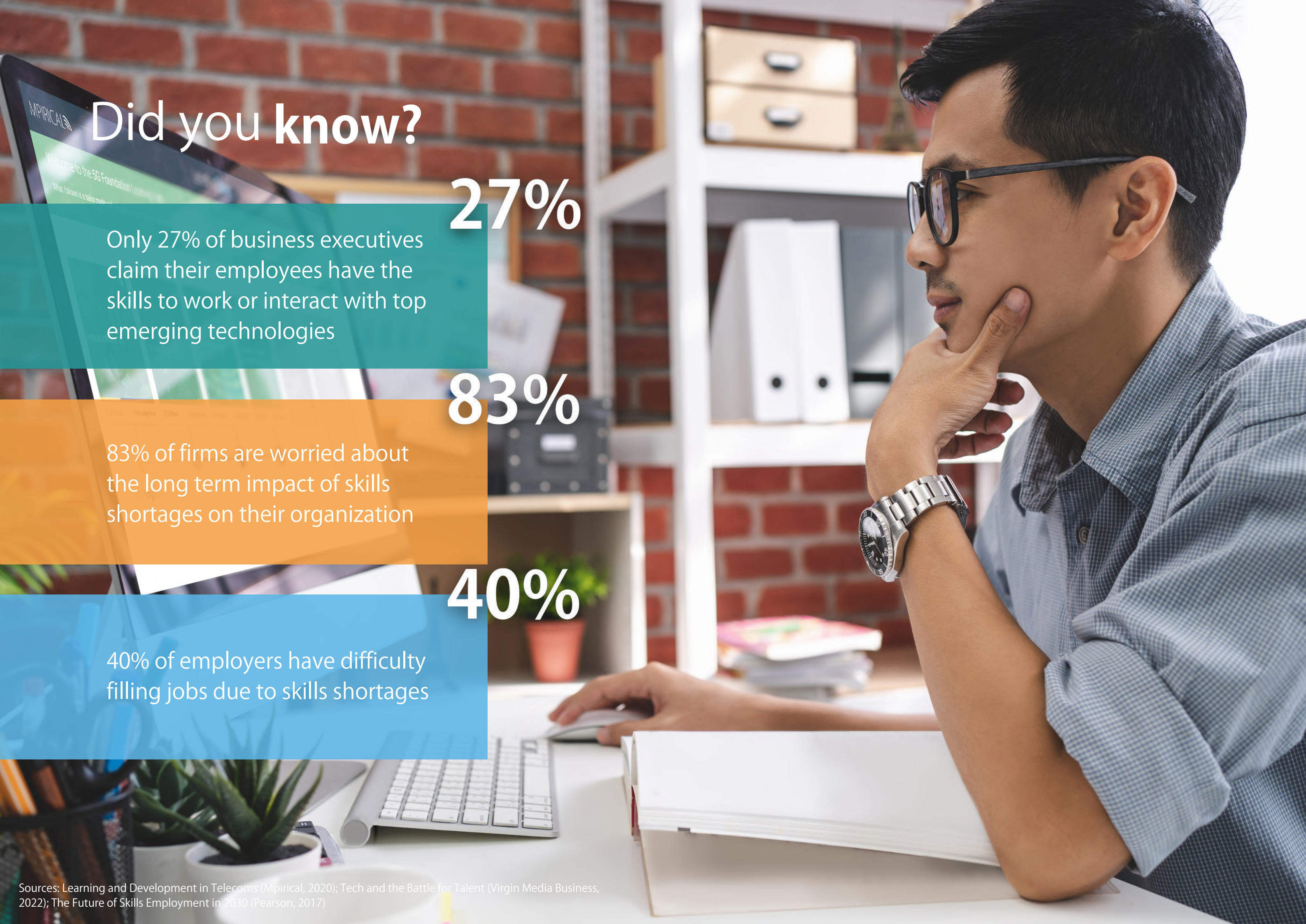
Multi language & accessibility options

Platform integration and Single Sign On

Custom NetX built to mimic your network

Custom courses and learning paths





# Did you know?

27%

Only 27% of business executives claim their employees have the skills to work or interact with top emerging technologies

83%

83% of firms are worried about the long term impact of skills shortages on their organization

40%

40% of employers have difficulty filling jobs due to skills shortages



# Did you know?

## 99%

99% of students say Mpirical training meets or exceeds their learning needs

## 88%

88% of users agree that Mpirical has increased their skills confidence

## 96%

96% of employees have been able to apply the knowledge and skills gained with Mpirical training to their role



# Investment in **training** is investment in your **business**

The post-pandemic workforce landscape has changed, leaving organizations with an urgent need to fill skills gaps. With this challenge comes new opportunities to leverage existing talent by investing in training to upskill and cross-skill existing staff.

Not only does upskilling cost less than hiring new talent, but it can also improve employee retention rates and overall workplace satisfaction.


Mpirical can help your business fill skills gaps, increase efficiency, and contribute to a happier workforce. Want to learn how?

Contact our Learning Engagement Team for a training needs consultation: +44 (0) 7492 877947.





# Talk to us about your training needs today

 +44 (0) 1542 844669

 [enquiries@mpirical.com](mailto:enquiries@mpirical.com)

 [www.mpirical.com](http://www.mpirical.com)

MPIRICAL 

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