Allianz ⑪

Handbook for the
Allianz Finance Workout

Training 7: Digitalization

Basis – In-Depth – Advanced

ALLIANZ SE

Table of contents

Status: June 2023

This handbook serves as a facilitation guide for conducting the Allianz Finance Workout class visits.

For ease of reading, the masculine form is always used in the documents. Females are included.

Dealing with the moderation guide

In this facilitation guide, there are specific instructions for each slide or worksheet. These include:

- Time notes for the respective slide or worksheet for orientation purposes
- Learning objectives of the respective slide or unit
- Interview guide with suggested wording and speaker or presentation notes
- Transitions with suggestions for linking of teaching steps
- Icons for a quick overview of methodology and social forms
- Note fields for personal comments during preparation

Further recurring elements can be found in the legend

- Mirror strokes identify action instructions and describe class activities
- Quotation marks, on the other hand, stand for specific wording suggestions

The bold font stands for key terms that should be mentioned in any case

Allianz Finance Workout – Lecture	Worksheet in the student's book	Slide	Example Class result
Group work	Partner work	Individual work	Info sheet
Class	Film	Notebook entry	

Training 7: Digitalization/Basics

1. Brief Information

Duration min. 2 school hours (90 minutes)

Basics

Unit theme	Digitalization
Contents	• Media usage behavior • Advantages and disadvantages of using the Internet • Internet usage costs • Earning opportunities on the Internet • Privacy
Target group	• 6th to 8th grade (depending on type of school and level of knowledge)
Working documents	• Allianz Finance Workout Facilitation Guide and Animated PDF Presentation • Worksheets for students, task role play, feedback sheet for students

Training 7: Digitalization/Basic

2. Presentation overview

Approx. 2 min. **01**

- Welcome
- Introduction

Approx. 1 min. **02**

- Gaining an overview of the contents

Approx. 7 min. **03-04**

- Reflecting on one's own media use behavior
- Raising awareness for a conscious use of media
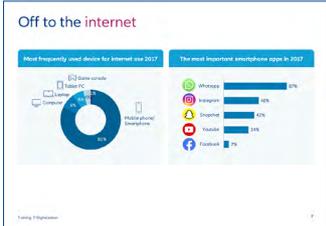
Approx. 5 min. **05-07**

- Media usage behavior in Germany for comparison
- Putting one's own media use into perspective and reflecting on it

Approx. 2 min. **08-09**

- Assessment and review of one's own media usage behavior

Approx. 3 min. **10**

- Anticipating and comprehending possible consequences of spending too much time online
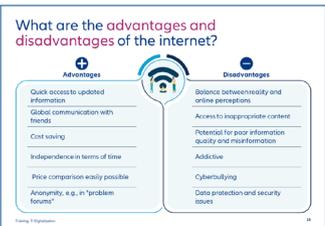
Approx. 5 min. **11-15**

- Weighing the advantages and disadvantages of Internet use
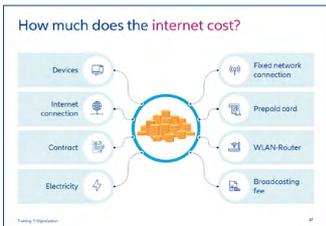
Approx. 5 min. **16-17**

- Identifying and reflecting on hidden costs of Internet use

Approx. 1 min. **18-21**

- Developing awareness that the general terms and conditions must be agreed to when concluding a contract

Approx. 2 min. **22**

- Getting to know and critically reflecting on YouTube as a way to earn money on the Internet

Training 7: Digitalization/Basic

2. Presentation overview

Can you get rich on the internet!? Approx. **8** min. — **23**	• Getting to know and critically reflecting YouTube as earning opportunities offered by the Internet	

Getting to know and critically reflecting YouTube as earning opportunities offered by the Internet

Approx. 8 min. — 23

Creating awareness that, among other things, companies earn money and make profits with personal data

Approx. 3 min. — 24

• Raise awareness of the fact that companies earn money and make profits with personal data, among other things

Approx. 4 min. — 25-28

• Assessing and understanding the value of disclosing personal information

Approx. 2 min. — 29

• Assessing and understanding the value of disclosing personal information

Approx. 3 min. — 30-34

• Personal recommendations for the protection of own data in the internet are developed

Approx. 18 min. — 35-36

• Summary
• Relating old knowledge to new knowledge

Approx. 2 min. — 37

• Giving feedback
• Evaluating teaching unit

Approx. 5 min. — 38

• Conclusion

Approx. 3 min. — 39

Training 7: Digitalization/Basic

3. Overview worksheets

Worksheet 1

Training 7:
Digitalization

Task 1
Together with the person sitting next to you, think about some of the advantages and disadvantages of the Internet. Note these in the pro/con list below.

⊕   ⊖

Task 2
Consider and calculate:
How much does the Internet connection from the "Speed and Surf" provider cost in the first two years?
(optional additional task: How much does the tariff cost per month?)

Anbieter	Tarif	Grund-preis pro Monat (EUR)	Geschw. beim runterladen (Mbit/s)	Geschw. beim hochladen (Mbit/s)	Inklusives Highspeed Volumen (GB)	Einmaliger Anschluss-preis (EUR)	Versand-kosten (EUR)	Kündigungs-frist (Monate)
"Speed and Surf"	Surf Phone Flat Special	15,00*)	16	1	100	60,00²)	9,60	3

Alle Preise inklusive Mehrwertsteuer und ohne Onlinevergünstigungen. Tarife sind nicht überall verfügbar. Bei den Angeboten der Kabelanbieter kommen noch unterschiedlich hohe Kosten für den Kabelanschluss hinzu. Angaben laut Anbieter. Teilweise kommen noch Kosten für die Hardware dazu.
Mängel in den AGB (allgemeine Geschäftsbedingungen): keine, sehr gering, gering, deutlich, sehr deutlich. **Stichtag für AGB-Prüfung: 3. Juli 2017**

1) Ab 13. Monat 30,- Euro monatlich.
2) Für Techniker-Einsatz, wenn kein Telefonanschluss vorhanden ist.

Training 7 – Digitalization – Basic

Worksheet 2

Training 7:
Digitalization

Task 3
As a team, develop answers to the questions below to fit your assigned group topic.
(1. privacy settings, 2. Own device or 3. Handling data of others)

1. What problems can occur with inadequate protection in your field?

2. How can I prevent these problems and protect myself?

3. Finally, pick one idea and turn it into a tweet that you would like to share with other teenagers. Please note that this message should be short and to the point.

Financial Pro: Tips

Before signing a contract, pay attention to the fine print/GTC and choose a contract that suits your usage patterns.	There's nothing free on the Internet – you always pay at least with your data!	Internet is part of life, but don't make it the center of your life!

Training 7 – Digitalization – Basic

Training 7: Digitalization/Basic

3. Overview worksheets

Please tell us what you think!

Teacher

Date: _____

School: _____ , class: _____

Event Topic: _____

A. General satisfaction	Fully applicable 1 2 3 4 5 Does not apply
The students learned something for their daily lives through the event.	☐ ☐ ☐ ☐ ☐
I will continue to explore this topic in class.	☐ ☐ ☐ ☐ ☐
I will recommend the class visit to my colleagues.	☐ ☐ ☐ ☐ ☐
B. Preparation and implementation	Fully applicable 1 2 3 4 5 Does not apply
The previous coordination process was satisfactory.	☐ ☐ ☐ ☐ ☐
Were there any notable incidents during the event?	☐ No ☐ Yes
The Finance Pro was able to engage the students well.	☐ ☐ ☐ ☐ ☐
Did the finance Pro advertise?	☐ No ☐ Yes
C. Evaluation of the event On a scale of 1 to 5, how would you rate the following?	Very good 1 2 3 4 5 Insufficient
Mediated content	☐ ☐ ☐ ☐ ☐
Pedagogical preparation	☐ ☐ ☐ ☐ ☐
Assignments for students Materials used	☐ ☐ ☐ ☐ ☐
D. Overall evaluation of the event	☐ ☐ ☐ ☐ ☐

Overall, how would you rate today's lesson with a school grade?

1 2 3 4 5 6

☐ ☐ ☐ ☐ ☐ ☐

E. Comments and suggestions for improvement

1. What did you particularly like about today's event?

_____

2. What do you think should be improved?

_____

3. Do you have any other comments?

_____

Thank you for the cooperation!

Feedback sheet for teacher

Your opinion is in demand!

Pupils

1. How would you rate today's lesson?

☐	☐	☐	☐	☐	☐
Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6

Statement	Yes	No	Don't know
I enjoyed today's class.			
I now know more about money & finance.			
The materials were varied and easy to understand.			
I would like to participate in another Finance Pro class visit.			

2. The Finance Pro was able to explain difficult questions well.

always often sometimes rarely never

☐	☐	☐	☐	☐
Always	Often	Sometimes	Rarely	Never

3. What did you learn today? What do you remember?

_____

_____

4. That's what I particularly liked about today's class visit:

_____

_____

5. I thought that was less great:

_____

6. About you

I am one boy ☐ one girl and ☐ and ☐ Years old.

Thank you,
that you have participated!

Feedback sheet for students

Training 7: Digitalization/Basic

	Time for this section	Cumulative time
	2 min.	**2** min.

4. Moderation Guide

Slide 1: Welcome

 →

Objective

- Welcome
- Introduction

Interview guide

- The mediator welcomes the class and introduces himself/ herself
    - My name is ...
    - I have been working for ... years at ...
    - I have the following hobbies/interests: ...
    - I'm excited to share an exciting topic with you today

Note to Allianz Finance Workout: The lesson "Digitalization" discusses the use of the Internet. In addition to the benefits, most of which students are aware of, the goal of the lesson is to discuss the advantages and disadvantages of mobile living, as well as to point out important pitfalls and dangers.

In all areas, the unit is limited to explaining basic principles and modes of operation. Since the aim is to impart basic economic education, no specific information is provided on individual product categories, products or services. If questions arise from teachers or students about specific products, please refer them to independent information sources such as the Federal Ministry of Justice and Consumer Protection, Klicksafe.de or information from Stiftung Warentest.

Transition to slide 2

- As you can see, today's training is all about online & finances

Notes

Training 7: Digitalization/Basic

Slide 2: What expects you today

→

Objective

- Getting an overview of the contents

Interview guide

Step 1:

- Who wants to read aloud what to expect in today's unit?

Step 2:

- One student begins reading a content aspect aloud and then passes it on to the next volunteer (method: chain of speech)

Transition to slide 3

- What do you deal with on the internet and what devices do you use for that?
  To find out, let's do a little exercise now

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
5 min.	8 min.

Slide 3: Your media usage behavior

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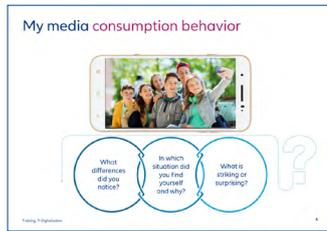
Objective

- Reflecting on one's own media usage behavior
- Raising awareness for a conscious use of media

Interview guide

Step 1:

- If necessary, the mediator will discuss what media are in advance and provide an explanation of terms: The term "medium" is a Latin term and means "center". It is understood to be a "mediator" of content, which can be, for example, a magazine that conveys information, or the language itself, through which we communicate with each other. Media usage behavior refers to what media you use and for what purpose you do so

Step 2:

- For this, each of you will think of a typical pose that represents your very personal interaction with media. Afterwards, you will present your poses to the class
- Students consider an appropriate, individual pose for their media use behavior
- If necessary, the mediator explains the word pose with the help of an example (e.g., body posture one assumes while talking on a smartphone)

Step 3:

- Afterwards, the individual students per small group mime the pose they have thought up and present it to the entire class. This is followed by a description and interpretation of each pose by the class
- I'm curious to see which situation you guys decided on. Who of you would like to come forward to show us and explain your pose?
- The mediator asks about five students to come forward to see and discuss as many different poses as possible in parallel
- I'll count down from three and then give the command "Freeze", after which you remain in your pose: Freeze Frame)

Transition to slide 4

- Students present their poses to the class

 →

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
2 min.	10 min.

Slide 4: Your media usage behavior

→

Objective

- Reflection on one's own media usage behavior
- Raising awareness for a conscious use of media

Interview guide

- The five students remain in their pose. The classmates guess what the situation is
- Subsequently, the media usage behavior of the young people is analyzed and reflected on the Basics of the following impulse questions:
  - In which situation did you present yourselves and why did you choose exactly this situation?
  - What are the differences between the poses?
  - What else stands out?
- Students make assumptions
- The meidator adds if necessary and then summarizes the discussion

Transition to slide 5-7

- We've now learned more about your media use. Let's compare your results with those of other young people
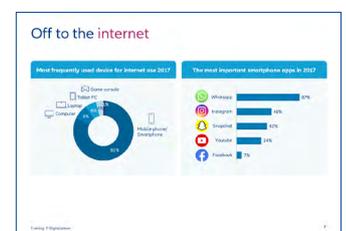
→

Notes

Training 7: Digitalization/Basic

Slide 5-7: The most important devices and apps
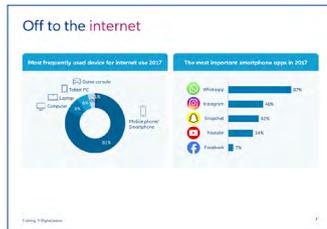
Objective

- Comparison of media usage behavior in Germany
- Putting one's own media use into perspective and reflecting on it

Interview guide

Note: Elements of the slide are animated and build up successively.
- Which devices do you think were most commonly used by young people aged 12-19 to use the internet in Germany in 2017?
- Give students room to speak and make guesses before the solution is shown
- Students then describe and interpret the statistics. They compare the behavior of the young people with their own media use behavior and talk about possible differences

The Mediator concludes:
- The statistics clearly show that smartphones are the most frequently used devices: Four out of five Internet users say they go online most often with their smartphone. The JIM study of 2017 also presented an additional difference between girls and boys. While girls prefer the smartphone for Internet use, the computer often plays a greater role for boys. The reason is mainly online games
- What do you guys think, how does it look for apps? Which ones are probably high on the list for young people all over Germany?
- Give students room to speak and share ideas before the solution is shown

The mediator summarizes and adds:
- By far the most important apps from the young people's point of view are instant messengers, this is largely on a par with WhatsApp (which is named by 87 percent as one of the three most important apps) and Instagram (48%). Snapchat follows in third place with 42 percent, closely followed by YouTube (34%). Only 7 percent still mention Facebook in this context, meaning that the world's largest social network is now mentioned less frequently than gaming apps (16%).
Note to mediator: Although the technical access channels for online use have changed significantly in recent years, parameters such as frequency of use, duration of use, and focus on content have remained unchanged. Communication apps continue to top the popularity scale. What all these social media platforms have in common is that the user himself determines whether he/she is an active or passive user of the platform.

Transition to slide 8-9

- We now know which devices young people use to go online and which apps are primarily used. However, many people find it difficult to estimate how much time they actually spend online.

Notes

Training 7: Digitalization/Basic

Slide 8-9: How long are you online?

→ ### Objective

- Assessment and review of own media usage behavior

Interview guide

Note: Elements of the slide are animated and build up successively.

Step 1:

- How long do you think teenagers spend online on average on a weekday?

Step 2:

- Students vote by show of hands on how long teens spend online on average during the week

Step 3:

- The mediator displays the correct result, answer C. The students compare the result with their own assessment. The mediator then summarizes

- As you can see, young people spend an average of 221 minutes a day on the Internet on a weekday (Mon-Fri). Who of you can calculate that in hours?

The Finance resolves:

- That's right, that's 3 hours and 41 minutes

Note to mediator: While girls were still ahead in 2016 (206 vs. 194 minutes), in 2017 boys had a higher usage of 227 minutes than girls (215 minutes).

Transition to slide 10

- However, when you spend a lot of time on the web, there is little time for other things

→

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
3 min.	20 min.

Slide 10: Play: Fun that is addictive!

Objective

- Anticipating and understanding possible consequences of spending too much time online

Interview guide

- At least, that's how the boy feels in the short film we're about to watch together

- The mediator shows the Klicksafe film "Where do you live?" (length: 01:00 minute). He then asks the students for their opinions

- Note to mediator: Please focus the interpretation on the topic of "being online" in general and not on online games

- What is this film about?

- Now give the students room to speak

- Have you ever felt the same way or do you know someone who has?

- Now give the students room to speak

- Note to mediator: The average gaming time of 12- to 19-year-olds, based on all gaming options (computer, console, online, tablet, and mobile), is 84 minutes per day during the week (109 minutes on weekends), according to their own estimates. Boys play for 124 minutes, three times as long as girls (42 minutes) On weekends: Girls: 51 min, boys: 163 min. 14- to 15-year-olds play digital games the longest.

- Finally, the mediator summarizes:

    – The Internet offers many ways to pass the time, but it should not be as important as friendships or contact with family. It's the healthy balance that counts

Transition to slide 11-15

- Sure, the Internet has its bad sides, but let's be honest, it wouldn't work without it
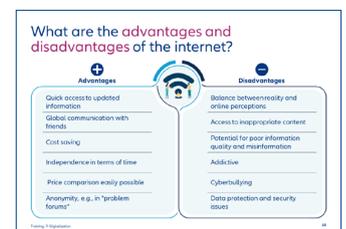
Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
5 min.	25 min.

Slide 11-15: Advantages and disadvantages of the internet

Objective

- Weighing the advantages and disadvantages of Internet use

Interview guide

Note: Elements of the slide are animated and build up successively.

Step 1:

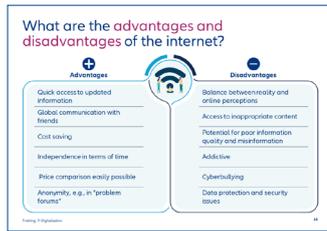- Let's consider what advantages the Internet offers to you. Consult with the person sitting next to you and write down the advantages and disadvantages on your worksheet (Task 1, page 1)

Step 2:

- I'm excited to see what benefits you guys come up with
- Students share their ideas with the class
- The mediator then shows the answer choices and summarizes

Step 3:

- The Internet has many positive sides: It helps us with many things in everyday life. You can find an incredible amount of information and expand your knowledge. In addition, you can always check, for example, which movies are currently playing in theaters, where your favorite band is performing, what the soccer score is at the moment, or what's on TV. Shopping is also much faster and it is more convenient than having to go to the store. But not everything about the Internet is positive. What disadvantages can you think of regarding Internet use?
- Students share their ideas with the class
- The mediator then shows the answer choices and summarizes
- As we've noted, you should always use media in moderation, as you do with many other things in life (e.g., work, hobbies)

Step 4:

- On the next slide, slide 15, the Allianz Finance Workout Tip "Internet is part of life, but don't make it the center of your life!" appears

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Transition to slide 16-17

- We are in your class today as Finance Proes, so the unit will focus on how Digitalization relate to each other
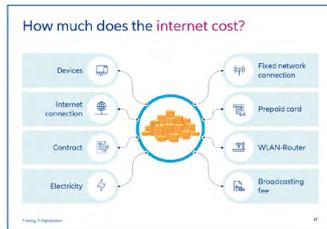- At first glance, the Internet often appears to be free of charge. Let's take a closer look at this today

Notes

Training 7: Digitalization/Basic

Slide 16-17: How much does the internet cost?

→

Objective

- Identifying and reflecting on unconscious costs of Internet use

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Interview guide

Note: Elements of the slide are animated and build up successively.

Step 1:

- Imagine you are moving into your own/new apartment. What do you have to do to use the Internet for the first time? What costs are incurred before and during Internet use?

Step 2:

- Students name terms and the mediator notes them on the board

Step 3:

- The mediator resolves, supplements if necessary and explains cost points of the Internet use
- We have now seen that there are many hidden costs associated with supposedly free Internet use

Optional (depending on the proficiency level of the class):

- Why don't you estimate what the average value of these items is per month?
- The mediator resolves and points out that the values given are average values
- I did some preliminary research and came up with the following averages
- On average, about 56 euros per person in a 3-person household:
  - Internet/landline connection: 20-60€ per month → we have calculated with 30 euros/3 persons = 10 euros
  - Electricity (3-person household) approx. 77,30€/3 = 25 Euro (Source: Federal Network Agency)
  - Broadcasting fees 17,50€/3 = 6 Euro per month and apartment
  - Prepaid card: from 10 euros per card
  - Excluding smartphone/device and router (these could also be added on a proportional Basics, but are also dependent on life cycle)

Transition to slide 18-21

- So that adds up to quite a bit. To understand even better what we pay monthly for the use of the Internet, I have brought you various Internet tariffs

→

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
10 min.	40 min.

Slide 18-21: How expensive is surfing?

→

Objective

- Developing awareness that GTC must be agreed to when concluding a contract

- Raising awareness of subscription traps

Interview guide

Note: Elements of the slide are animated and build up successively.

Step 1:

- What do you notice? Who has ever dealt with such data?

- Students describe and interpret the table

- There are many providers with different rates for Internet use. The prices of the various providers differ. There is always a base price. As you can see in the table, there is quite a big price difference of almost 30€ between the cheapest (19.99€) and the most expensive (49.95€) provider. However, a one-time connection fee and shipping costs still have to be paid for both

- The mediator explains aspects of the spreadsheet, if applicable, and ensures that the content has been understood

Step 2:

- We will now focus on the first provider, Speed & Surf. What does the Internet cost per month for the first two years? Calculate the cost together with the person sitting next to you

- For this purpose, the mediator fades in the slide. The students should now independently realize to also pay attention to the first footnote of the advertisement: "From 13th month 30€ monthly"

- Students calculate in writing in partner work. The result is then presented on the blackboard

Step 3:

- The mediator solves the problem and, if necessary, recalculates the example on the blackboard/ smartboard together with the students: (**12x15+12x30+60+9,60) = 609,60€ p.a. (monthly: 609,60/24=25,40€)**

- The mediator displays and explains the Allianz Finance Workout tip "Before signing a contract, pay attention to the small print/the terms and conditions and choose a contract that suits your usage behavior!"

Transition to slide 22

- Using the Internet costs money. On the other hand, nowadays you can also earn money with the Internet. How does it work? What do you know about it?

→

Notes

Training 7: Digitalization/Basic

Slide 22: On the internet you get rich!?

Objective

- Getting to know and critically reflecting on YouTube as a way of earning money on the Internet

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Interview guide

- Let's approach this topic step by step. I have brought you a few headlines from newspapers and the internet. Who can read the headlines out loud once for all of us?

- A student reads the three headlines

- What do you say about the pictured statements from newspaper articles and the internet?

- Give students space to speak

Transition to slide 23

- One term that often comes up quickly when talking about making money on the Internet is YouTube. Anna will first explain to us whether making money on the Internet is really that easy. She has her own YouTube channel. More on this from herself:

  – The mediator plays part 1 of the video (length: 0:52 minutes)

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
8 min.	50 min.

Slide 23: Can you get rich on the internet!?

→

Objective

- YouTube as a way to earn money on the Internet

Interview guide

Step 1:

- What do you think, does YouTube make you "super rich" and "super famous"?
- Students make assumptions and express their opinions
- Anna is an expert. Let's have her explain in more detail how making money with YouTube works and how she is doing it
- The mediator plays part 2 of the video (length: 2:29 minutes)

Step 2:

- The mediator concludes
- So for a successful career with YouTube, you also need more than you would think at first glance. Similar to other jobs, you need a lot of discipline and stamina, a certain special and expert knowledge, good ideas and much more. Moreover, similar to musicians or other artists, you need a bit of luck to win fans in the first place in order to be able to turn your hobby into a profession

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Transition to slide 24

- As we have heard, you can make money on the Internet, but YouTube represents only one of the numerous possibilities
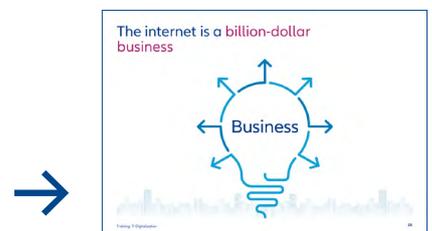
→

Notes

Training 7: Digitalization/Basic

Slide 24: Earning opportunities on the internet

The internet is a billion-dollar business

Business

→
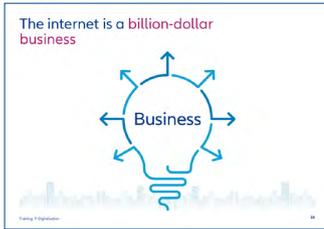
Objective

- Raising awareness that companies earn money, among other things, with personal data

Interview guide

Note: Elements of the slide are animated and build up successively.

Step 1:

- Which other companies are also making money online?
- Give students space to speak

Step 2:

- I'm excited to see what companies you came up with
- Students share their ideas with the class

Transition to slide 25-28

- I too have been thinking about this issue and have come up with the following companies

How businesses make money on the internet

Amazon/Ebay
Apple
Facebook/Instagram
Google
Netflix/Amazon Prime
Rewe, Zalando, Etc.
Snapchat/Whatsapp
Spotify/Deezer

User data
Means of communication
Media News/Communication
Products/Hardware
Search engine service
Advertising

→

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
4 min.	57 min.

Slide 25-28: Earning opportunities on the internet

→
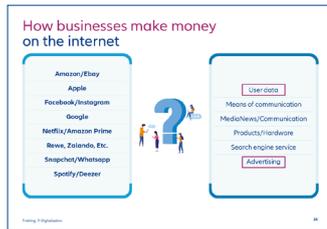
Objective

- Raising awareness that companies earn money and make profits, among other things, with personal data

---

Interview guide

Note: Elements of the slide are animated and build up successively

Step 1:
- The mediator shows possible answers

Step 2:

- Now let's look at how these companies make money on the Internet. To do this, let's match the terms on the right to the appropriate companies on the left

- Students first consider the assignment by themselves, then individual students are called upon to express their guesses

- The mediator resolves, fades in the correct solutions and summarizes

- As you can see, many of the companies earn money on the Internet in different ways and have various focuses; it is noticeable that most companies secure an additional source of income through advertising and the use of customer data

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Transition to slide 29

- Companies therefore also use your data to make money on the Internet

→

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
2 min.	59 min.

Slide 29: My data as currency

→

Destination

- Being able to assess and comprehend the value of disclosing personal data

---

Interview guide

Step 1:

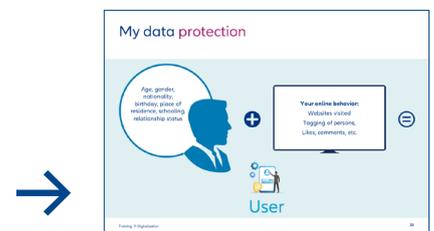- The mediator shows possible answers

Step 2:

- Why is your data on the web so in demand and important to many companies? What exactly is your data used for and how exactly does data as a currency work?

- Students make assumptions

Transition to slide 30-34

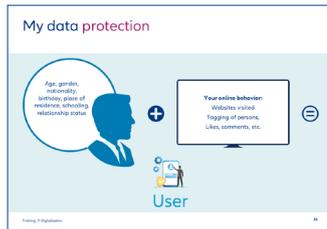- Let's take a look together at why your personal data is so important to businesses

→

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
3 min.	62 min.

Slide 30-34: My data as currency

Objective

- Being able to assess and comprehend the value of disclosing personal data

Interview guide

Step 1:

- Who can explain in their own words how our personal data functions as currency, using the example of an online mail order business?

The mediator will explain if necessary:

- The online mail order company pays to place advertising for one or several of its products on your browser page. The special thing about this ad is that the online mail order company has watched you closely beforehand during your last purchase. Every time you make a purchase online, a lot of your data is collected, such as location, age, preferences, shopping habits, etc., Afterwards, the company can advertise new products to personally suit you, which you will probably like just as much and perhaps make another purchase. (See more at: http://www.tivi.de/mediathek/logo-erklaert-896480/the-company-facebook-2676814/)

Step 2: Mediator reflects

On the Internet, be it on a computer, smartphone or tablet, every click collects a lot of data about you and

your behavior on the web. The more data is known from you, the more transparent you become for companies. That means they don't have to ask you what you like, they already know! Their advertising can therefore be tailored specifically to you and they can target more sales. With the traces/footprints left behind on the web - your data - you help companies to be more successful and sell more of their products. Thus, your data is worth its weight in gold for many companies

- The mediator shows and explains the Allianz Finance Workout Tip "Nothing is free on the Internet – you always pay at least with your data!

Transition to slide 35-36/Part 1

- What happens to our data doesn't sound reassuring

Notes

Training 7: Digitalization/Basic

Slide 35-36/Part 1: How can I protect myself

→

Objective

- Developing personal recommendations for action to protect own data in the internet

---

Interview guide

Note: Elements of the slide are animated and build up successively

Step 1:

- To find out what you can do to protect your data, you will work for the next ten minutes together in small groups (maximum five students). The small groups each deal with one of these three topics: **Privacy settings, Own device, handling data of others**
- The mediator divides the class into small groups and explains the term privacy settings, if applicable: This refers to the settings on your smartphone that protect your personal data, e.g., disable automatic location tracking for apps that do not necessarily have to work with this function

Step 2:

- In small groups, answer the following questions for your respective topic:
  1. What problems can result from insufficient protection?
  2. How can I prevent these problems and protect myself?
  3. Finally, pick one idea and formulate a tweet from it that you would like to share with other young persons. Make sure that this message should be short and concise, it should consist of 140 characters at most
- Students record the tweets in writing

Transition to slide 35-36/Part 2

- Now I'm curious to hear what you came up with

Notes

Training 7: Digitalization/Basic

Time for this section	Cumulative time
18 min.	80 min.

Slide 35-36/Part 2: How can I protect myself

→

Objective

- Developing personal recommendations on how to protect own data in the internet

---

Interview guide

Step 3:

- After ten minutes, the mediator ends the group work
- Afterwards, the individual groups present their results. Seven minutes are available for this
- Sample solutions for the mediator:
  - Privacy settings: 1. Visibility & misuse of your data; 2.In "Settings", "Privacy" tab, choose who can see your data; only use apps that encrypt data.
  - Own device: 1. Location tracking through the use of apps or WLAN Connection setup 2. Check which app accesses the personal location and revoke permission if necessary; switch off WLAN if connection is not required
  - Handling third-party data: 1. Pictures, movies and info of others are posted on the net without permission; 2. Protect the personal rights of others, everyone has the right to their own words/images, only pass on data with permission
    More information at: http://www.klicksafe.de/themen/datenschutz/privatsphaere/wie-kann- i-protect-my-data-on-the-internet/
- The mediator then summarizes
- You already know quite a lot and have very good ideas on how to better protect data. It's important to regularly check your settings and be more intentional when online.

Transition to slide 37

- And now the most important things again at a glance

Notes

Training 7: Digitalization/Basic

Slide 37: Allianz Finance Workout Tips

→
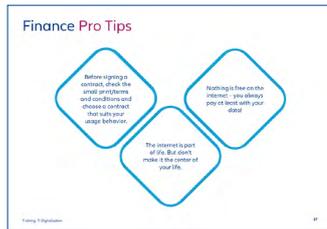
Objective

• Summary

• Relating old knowledge to new knowledge

Interview guide

Step 1:

• The mediator shows the Allianz Finance Workout Tips

• Who would like to read the first tip out loud for all of us?

• One student reads aloud and passes to the next student (Method: chain of speech)

Transition to slide 38/feedback sheet

• Finally, I would like to know how you liked today's lesson
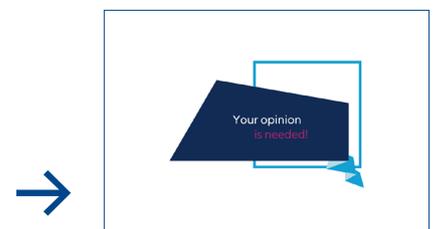
→

Notes

Training 7: Digitalization/Basic

Slide 38: Your opinion is needed

→
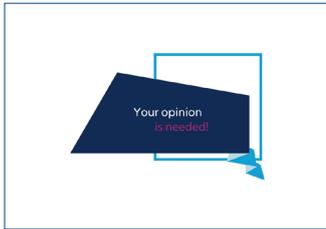
Objective

- Giving feedback
- Evaluating teaching unit

Interview guide

- The mediator discusses the feedback sheet with the students and answers questions
- Students complete the feedback sheet and return the detached feedback sheet to the mediator
- Thank you very much for your great cooperation!

Transition to slide 39

- Then the mediator says goodbye to the class
- That's it for today

More sources...

→

Notes

Time for this section	Cumulative time
3 min.	90 min.

Slide 39: Further sources

Objective

• Conclusion

Interview guide

• I hope you had as much fun today as I did

• Many thanks to your teacher for the class time and support

• Thank you very much for your great cooperation! If you enjoyed it, you can ask your teacher to invite us again soon

Tips for the end of the lesson

• Discuss with the teacher if they or their colleagues are interested in further sessions

• Actively ask the teacher for their comments or suggestions for improvement

Notes

Training 7: Digitalization/In-depth

1. Brief Information

Duration for consolidation and Advanced at least 2 school hours (2x 45 minutes)

In-depth

Unit theme	Digitalization
Contents	• Copyright & Streaming • Music piracy and economic consequences • Role play: Talkshow – All about the music
Target group	• 6th to 8th grade (depending on type of school and level of knowledge)
Working documents	• Allianz Finance Workout Facilitation Guide and Animated PDF Presentation • Worksheets for students, task role play, feedback sheet for students • Feedback sheet for the teacher for the evaluation of the teaching unit

Training 7: Digitalization/In-depth

2. Presentation overview

- Welcome
- Introduction

Approx. 2 min.   **01**

- Getting to know the concept of copyright

Approx. 2 min.   **02-04**

- Understanding the concepts of authorship and copyright
- Understanding that intellectual property has value

Approx. 5 min.   **05-08**

- Explaining the term streaming

Approx. 2 min.   **09-10**

- Learn about and reflect on the economic effects of music streaming

Approx. 2 min.   **11**

- Get to know different protagonists of the streaming market

Approx. 3 min.   **12-15**

- Recognizing that illegal downloads can be prosecuted
- Anticipating and discussing legal consequences of illegal actions

Approx. 2 min.   **16-17**

- Reflection on forbidden as well as legal aspects in dealing with the Internet

Approx. 5 min.   **18-26**

- Discussing the value of music from the perspective of different interest groups

Approx. 1 min.   **27**

- Discussing the value of music from the perspective of different interest groups

Approx. 2 min.   **28**

Training 7: Digitalization/In-depth

2. Presentation overview

Talk show: Around the music

Questions

What is your opinion on the topic "Should music be made available for free or paid download"?

Would you risk downloading music illegally? Why?

What is the best way to take everyone's needs into account?

| Approx. 5 min. | **29** |

- Discussing the value of music from the perspective of different interest groups

Players and observers: Now it's everyone's turn!

What is the problem?

Which talk show guest did you support and why?

What solution did the talk show participants find that everyone agrees with?

Emma
Emily Rock
Daniel Platte
Helmut Market
Harry Streife

| Approx. 10 min. | **30-31** |

- Presenting and discussing the position from the point of view of the various interest groups

Finance Pro: Tips

Don't think only in the short term. With an illegal download you save in the moment, but all fines find their way back to you

There's a lot of work behind music and movies. Would you give away your masterpiece to anyone?

On the internet, there are rules and laws that everyone must abide by, otherwise there are consequences and penalties.

| Approx. 3 min. | **32** |

- Summary
- Relating old knowledge to new knowledge

3. Overview worksheets

Training 7
Digitalization

Task 1

With your group, read through your assigned role and then work through the questions below in preparation for the talk show.

Emma

I am Emma. I am a big fan of Emily Rock. My favorite way to listen to their songs for free is via the Internet. On the road, I always have her music on my smartphone. I don't get any pocket money from my parents, and I don't have any money saved up. I also don't understand why I should pay money to download songs to my smartphone when I can listen to them for free on the internet via streaming.

Emily

I'm Emily Rock. Recently I won in a casting show and already released my first music album. My biggest wish is to be able to work with music to earn a lot of money and live off it. However, when more and more fans are downloading the songs illegally, or streaming them on the internet, I don't get paid – or get paid very little so I may have to get a second job. But I don't really have time for that.

Daniel Platte

I am Daniel Platte. I was on the jury of the casting show that Emily won, and I wrote her winning song. In my music studio we produced her first album. From every sold song or album, I get a certain share. I am concerned that fewer and fewer music listeners are spending money on music and only listening to it online or obtaining it illegally. I may have to close my music studio soon.

Helmut Market

I am Helmut Market. I am the owner of a music store and sell albums from various artists in my store. Lately, sales figures have dropped sharply. More and more music listeners download their songs on the internet and no longer come to my store. I've already had to lay off both of my employees, and I'm worried that soon I'll have to close my store.

Questions

? What is your opinion on "Should music and movies be made available for free or as a paid service"?

? Would you risk downloading music or movies illegally? Why?

? How can everyone's needs best be addressed?

Training 7: Digitalization – Advanced

Worksheet

Please tell us what you think!

Teacher

Date: _____

School: _____ , class: _____

Event Topic: _____

A. General satisfaction	Fully applicable 1 2 3 4 5				Does not apply
The students learned something for their daily lives through the event.	☐	☐	☐	☐	☐
I will continue to explore this topic in class.	☐	☐	☐	☐	☐
I will recommend the class visit to my colleagues.	☐	☐	☐	☐	☐

B. Preparation and implementation	Fully applicable 1 2 3 4 5				Does not apply
The previous coordination process was satisfactory.	☐	☐	☐	☐	☐
Were there any notable incidents during the event?	☐ No	☐ Yes			
The Finance Pro was able to engage the students well.	☐	☐	☐	☐	☐
Did the finance Pro advertise?	☐ No	☐ Yes			

C. Evaluation of the event					
On a scale of 1 to 5, how would you rate the following?	Very good 1 2 3 4 5				Insufficient
Mediated content	☐	☐	☐	☐	☐
Pedagogical preparation	☐	☐	☐	☐	☐
Assignments for students Materials used	☐	☐	☐	☐	☐
D. Overall evaluation of the event	☐	☐	☐	☐	☐

Overall, how would you rate today's lesson with a school grade?

1 2 3 4 5 6
☐ ☐ ☐ ☐ ☐ ☐

E. Comments and suggestions for improvement

1. What did you particularly like about today's event?
_____

2. What do you think should be improved?
_____

3. Do you have any other comments?
_____

Thank you for the cooperation!

Feedback sheet for teacher

Your opinion is in demand!

Pupils

1. How would you rate today's lesson?

☐	☐	☐	☐	☐	☐
Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6

Statement	Yes	No	Don't know
I enjoyed today's class.			
I now know more about money & finance.			
The materials were varied and easy to understand.			
I would like to participate in another Finance Pro class visit.			

2. The Finance Pro was able to explain difficult questions well.

always often sometimes rarely never

☐	☐	☐	☐	☐
Always	Often	Sometimes	Rarely	Never

3. What did you learn today? What do you remember?
_____
_____

4. That's what I particularly liked about today's class visit:
_____
_____

5. I thought that was less great:
_____

6. About you

I am one boy ☐ one girl and ☐ and ☐ Years old.

Thank you, that you have participated!

Feedback sheet for students

Training 7: Digitalization/In-depth

Time for this section	Cumulative time
2 min.	2 min.

4. Moderation guide

Slide 1: Welcome

→

Objective

- Welcome
- Introduction

Interview guide

- The mediator welcomes the class and introduces himself/ herself
    - My name is …
    - I have been working for … years at …
    - I have the following hobbies/interests: …
    - I'm excited to share an exciting topic with you today

> **Note to mediator:** The lesson "Digitalization" discusses the use of the Internet. In addition to the benefits, most of which students are aware of, the goal of the lesson is to discuss the advantages and disadvantages of mobile living, as well as to point out important pitfalls and dangers.
>
> In all areas, the unit is limited to explaining basic principles and modes of operation. Since the aim is to impart basic economic education, no specific information is provided on individual product categories, products or services. If questions arise from teachers or students about specific products, please refer them to independent information sources such as the Federal Ministry of Justice and Consumer Protection, Klicksafe.de or information from Stiftung Warentest.

You are all digital natives* and have grown up with the versatile possibilities that computers and the World Wide Web bring with them. You're probably online several times a day, watching videos, listening to music, playing games, or chatting, posting, and liking on social networks.

*Digital natives refers to the generation that is familiar with digital technologies because they grew up with them.
*Digital immigrants refers to the generation that has only come into contact with digital technologies in adulthood.
- Native or migrant on the World Wide Web

Transition to slide 2-4

- That's why we start right away with a question about copyright and streaming

Notes

Training 7: Digitalization/In-depth

Slide 2-4: When do I infringe copyright?

→ **Objective**

- Getting to know the concept of copyright

Interview guide

Step 1:

- There is a movie on a website that is not yet in theaters. Am I allowed to watch this or am I in breach of copyright?
- The mediator shows the three answer choices and asks a student to read them aloud
- Please think about it and decide on an answer
- Students vote by a show of hands

Step 2:

- The mediator will display the correct answer. Correct answer: B
- The mediator discusses the result with the class
- We have seen that you have different opinions. The issue of streaming is not entirely clear from a legal point of view. But there doesn't seem to be a hunt for streaming users yet, as there is with P2P file-sharing networks
  Note to mediator: P2P file sharing refers to a network of two or more equally authorized computers that provide each other with functions, services and files. Depending on the shared content and copyright law, users of peer-to-peer clients can quickly slip into illegality, as private uploading and downloading of copyrighted content is prohibited.

Transition to slide 5-8

- We are now going to look together at the definition of "copyright" and what consequences are associated with it

→

Notes

Training 7: Digitalization/In-depth

Time for this section	Cumulative time
5 min.	9 min.

Slide 5-8: The rights of artists and producers

Objective

- Understanding the concepts of creator and copyright
- Understanding that intellectual property has a value

Interview guide

Note: Elements of the slide are animated and build up successively

Step 1:

- The mediator fades in the first question
- "Who or what is an originator?"
- Students reply If necessary, the mediator explains and fades in the definition

Step 2:

- The mediator now fades in the second question
- "What is the purpose of copyright?"
- Students make assumptions
- The mediator explains
- When someone is the author of a work, whether composing music, painting a picture, writing a book or making a film, then he or she is the intellectual owner of this work. Whoever creates something should also decide on its uses and be remunerated. To this end, Germany has the Copyright Act, which protects these individuals and their intellectual property
- The mediator finally fades in the definition and summarizes again
- No one is invisible on the internet. The risk of being punished for acting illegally is great. When you download something to your computer, it can always be traced by the IP address. The IP address is practically the computer's business card, which it always leaves behind without noticing when you are on the net
- The mediator shows the Allianz Finance Workout Tip "Remember: Copyright infringements can lead to high costs." and explains it

---

Transition to slide 9-10

- I'm interested, do you stream too?

Notes

Training 7: Digitalization/In-depth

Slide 9-10: What is streaming

→
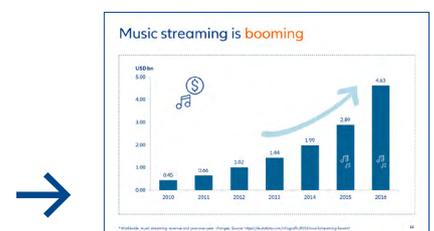
Objective

- Explaining the term streaming

Interview guide

- On which portals and what do you stream?
- Giving students space to speak
- The mediator now displays in the question
- "What is streaming?"
- Students make assumptions
- The mediator asks one/two students to describe the term streaming in their own words If necessary, he or she adds to the explanations. Finally, he fades in the definition and asks a student to read it aloud
- **Note to mediator:** Depending on the knowledge level of the class, this slide can be skipped or covered more quickly

---

Transition to slide 11

- Music and movies are readily available on the Internet. How do you guys think streaming will affect the economy? (Depending on the grade level, the term "economics" should be explained in more detail if necessary)
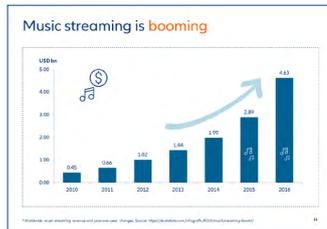
→

Notes

Training 7: Digitalization/In-depth

Slide 11: Music streaming

→

Objective

- Learning about and reflecting on the economic impact of music streaming

Interview guide

Step 1:

- Who of you can explain what this graphic shows?
- Students make assumptions

Step 2:

- The mediator explains the chart and summarizes

- Revenue from music streaming increased by 60 percent last year. According to the IFPI*, half of the total revenue in the global music market was generated digitally in 2016. The physical music market accounted for around one third of sales. Spotify and Co. are now the industry's most important drawing card, which in 2016, despite the declining sales of downloads and physical recordings, achieved record growth. IFPI chief Frances Moore stressed that there is no doubt that streaming is the big driving force behind the growth of the music industry. As our infographic shows, the streaming business has actually grown more than tenfold in the last six years.

* In Germany, the digital share has also grown and is now at 38%, while the physical share such as CD, DVD, vinyl albums is 62%.
* IFPI =International Federation of the Phonographic Industry
Source: https://de.statista.com/infografik/9154/musikstreaming-boomt/

Transition to slide 12-15

- The chart has shown that music streaming is booming

→

Notes

Training 7: Digitalization/In-depth

Time for this section	Cumulative time
3 min.	16 min.

Slide 12-15: Streaming – Who earns how much

→
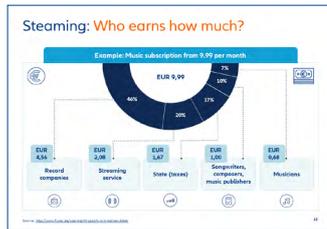
Objective

- Getting to know different protagonists of the streaming market

---

Interview guide

Step 1:

- Who makes money from the paid account of a streaming service anyway?
- The mediator leaves room for students to speak
- Students come up with the following five groups: Record company, streaming service, songwriter/composer, musician, state
- The mediator resolves and shows the five protagonists

Step 2:

- Finally, the mediator summarizes by addressing individual protagonists and discussing them with the students
- Why do you think the record companies get the lion's share of the music subscription?
- And what about the artists, on the other hand?
- The mediator will address contractual terms of record labels, if applicable, as well as marketing, merchandise, touring, etc, for artists.

Step 3

- How do recording artists make money?
- Students give their assessments
- The mediator resolves
- Per physical sale of a recording, which costs 15.90€ in the store, an artist will earn on average 1.58€. That's more than he or she receives via a streaming service. In comparison, this sounds like a small share at first glance, but due to the high sales/download figures, well-known artists earn a lot of money with it, while unknown artists have a harder time making a good living with it. Surely, the TOP 10 earners of the music business earn most of their money through their tours. According to Forbes, among the top 10 are: 2. Bruce Springsteen, 3. Jay-Z , 5. Kanye West, 7. Paul Simon, and 10. Bob Dylan

---

Transition to slide 16-17

- More and more people are paying for a streaming service. Even though the artist's share looks small at first glance, he or she receives at least a certain amount per album/song Despite many quite affordable music providers, music piracy is very common
- Let's take a closer look at the next graph in that context
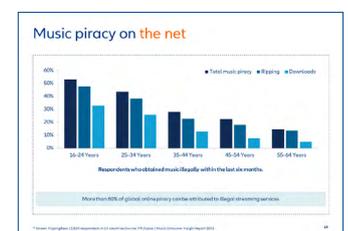
Notes

Training 7: Digitalization/In-depth

Slide 16-17: Music piracy on the net

→
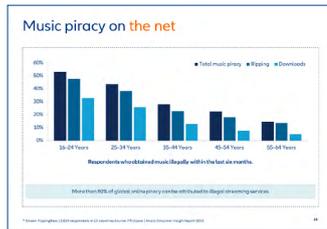
Objective

- Recognizing that illegal downloads may be subject to criminal prosecution
- Anticipating and discussing legal consequences of illegal actions

Interview guide

Step 1:

- The mediator asks the students to briefly describe the depicted situation in their own words

Step 2:
- The mediator points out the economic consequences of music piracy and concludes with the Allianz Finance Workout Tip: "Don't think too short-term: An illegal download saves money only at first sight, it will cost you dearly in the end!"

Transition to slide 18-26

- Many things are possible on the web, but not everything is allowed. Now I am curious how you decide

→

Notes

Training 7: Digitalization/In-depth

Slide 18-26: Behavior on the internet

→
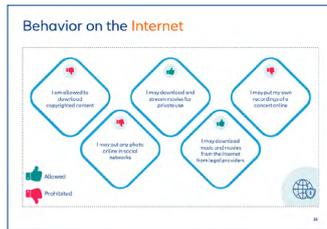
Objective

- Reflection on what is forbidden and what is allowed when dealing with the Internet

Interview guide

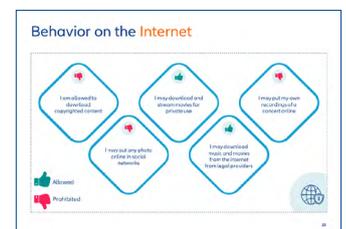Note: Elements of the slide are animated and build up successively

Step 1:

- Here you can see many different statements about the Internet. Now consider briefly by yourselves which statement is permitted and which is forbidden

Step 2:

- The students assign the terms one after the other to the category "Permitted" or "Prohibited"

- The mediator displays the result and clarifies any unanswered questions about the assignment

- Finally, he/she fades in the Allianz Finance Workout Tip: "Even on the Internet, there are rules and laws that everyone must abide by, otherwise there will be consequences and penalties," and explains further

Transition to slide 27

- We've seen that musicians make significantly less money via downloads than they used to through the sale of recorded music

→

Notes

Training 7: Digitalization/In-depth

Slide 27: Talk show: All about music

→

Objective

- Discussing the "value of music" from the perspective of the various stakeholders on the subject

---

Interview guide

- Streaming services are earning heavily and this has changed the business model in the music industry. Different groups in the music industry have different attitudes about how music is financially compensated

- What interest groups can you think of around music?

- Students make assumptions. The mediator then leads on to the role play

---

Transition to slide 28

- We are doing a role play and are inviting one person from the music industry at a time to a talk show and together they discuss the "value of music" from their point of view

→

Notes

Training 7: Digitalization/In-depth

Slide 28: Talk show: all about music

Objective

- Discussing the "value of music" from the perspective of the various stakeholders on the subject

Interview guide

- We'll divide the class into four groups

- The mediator divides the class into four groups. He/She asks the students to read through the role description of the respective person

- When you get into character, please think about what your person's opinion is and what they might say later in the discussion

- To get the discussion going, the mediator takes on the role of police officer Harry Streife

> **Role:**
> Harry Streife is a member of the special cybercrime unit at the police. As a representative of the law, it is his duty as a police officer to ensure that the applicable laws are observed. In recent years, especially more and more children and teenagers illegally download data from the Internet, although there are already strict rules and penalties. He wonders what enforceable rules need to be created to prevent illegal movie and music downloads on the Internet.

- Note to mediator: Should the class be very comfortable with the topic, the role of the police officer Harry Streife can optionally be given to a fifth group of students

Transition to slide 29

- I will now explain how you should proceed

Notes

Training 7: Digitalization/In-depth

Slide 29: Talk show: All about music

Objective

- Discussing the "value of music" from the perspective of the various stakeholders on the subject

Interview guide

Step 1:

- The mediator shows the slide with the questions. He/ She asks students to answer them together as a group first
- Please jot down bullet points for your answers on your worksheet, task 1. You can use the answers later when you perform the talk show. You have five minutes to do this
- The groups have about five minutes to prepare for the talk show based on the questions

Step 2:

- They then designate a group spokesperson to participate in the talk show and represent their character's interests

Transition to slide 30-31

- Now I'm going to ask the speakers from each group to come to the front, joining the talk show

Notes

Training 7: Digitalization/In-depth

Slide 30-31: Talk show: All about music

Objective

- Presenting and discussing a point of view from the perspective of different stakeholders

---

Interview guide

Note: Elements of the slide are animated and build up successively

Step 1:

- Before the talk show starts, the mediator asks the rest of the class to observe the participants and take notes in order to answer the questions, which are are faded in

Step 2:

- The mediator opens the panel by introducing himself as police officer Harry Streife. He/ She asks each participant to briefly introduce themselves by name and role. He/ She then moderates the discussion round and, if necessary, provides impulses. To do this, he/ she should use the questions that students received during the preparation phase:

  - Do you think music should be made available for download for free or against a fee?

  - Would you risk downloading music illegally? Give reasons for your answer

  - How can the needs of all stakeholders be best addressed?

- The mediator thanks the panel, asks the observers for their feedback, and leads a class discussion about the interests of the various participants in the groups. He/She asks the observers to share their impressions and notes taken during the talk show and to share them with the class

- Finally, the mediator blends in the Allianz Finance Workout Tip "There's a lot of work that goes into music and movies. Would you give away your number one hit to everyone?" and explains it

---

Transition to slide 32

- And now the most important things again at a glance

Notes

Training 7: Digitalization/In-depth

Time for this section	Cumulative time
3 min.	44 min.

Slide 32: Allianz Finance Workout Tips

Finance Pro: Tips

→ **Objective**

- Summary and securing of results

Interview guide

- The mediator shows the Allianz Finance Workout Tips
- Who would like to read the first tip for all of us?
- One student reads and then passes to the next volunteer (speech chain)
- Thank you very much for your great cooperation!

Transition to slide 32

- Then the mediator says goodbye to the class
- That's it for today

Finance Pro: Tips

→

Notes

Training 7: Digitalization/In-depth

Slide 33: Conclusion

→
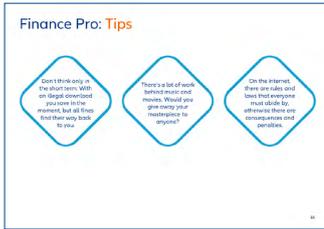
Objective

- Conclusion

Interview guide

- I hope you enjoyed it as much as I did
- Many thanks to your teacher for the class time and support
- If you enjoyed it, you can ask your teacher to invite us again soon

Tips for the end of the lesson

- Discuss with the teacher whether they or their colleagues are interested in further lessons
- Actively ask the teacher for their comments or suggestions for improvement

Notes

Training 7: Digitalization/Advanced

1. Brief Information

Duration for consolidation and Advanced at least 2 school lessons (2x 45 minutes)

Advanced

Unit theme	Digitalization
Contents	• Internet of things • Cybercrime • Recommended actions Data protection
Target group	• 6th to 9th grade (depending on type of school and level of knowledge)
Working documents	• Allianz Finance Workout Facilitation Guide and Animated PDF Presentation • Worksheets for students, task role play, feedback sheet for students • Feedback sheet for the teacher for the evaluation of the teaching unit
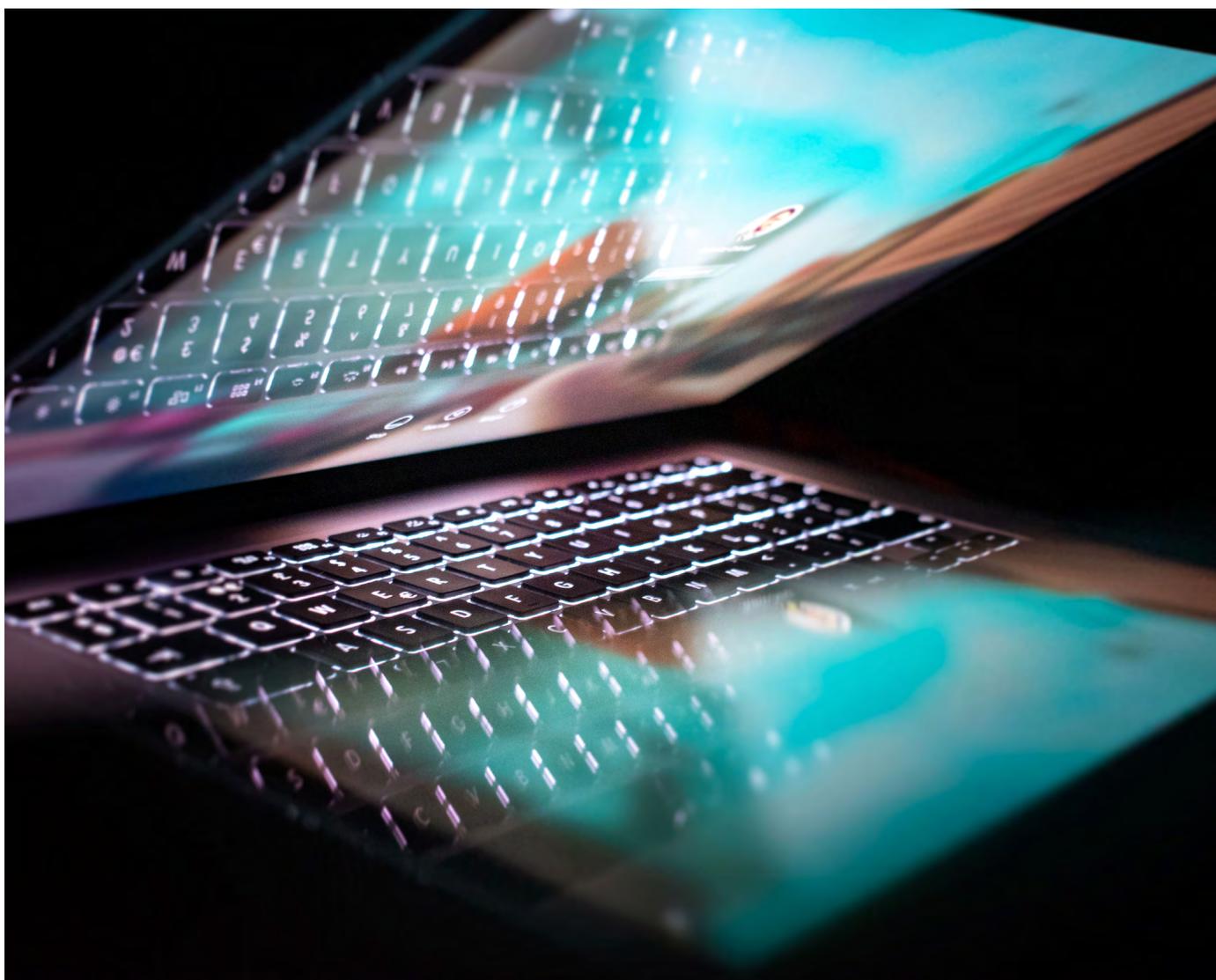
Training 7: Digitalization/Advanced

2. Presentation overview

Approx. 1 min.	**33**

- Following up on consolidation
- Activating prior knowledge

Approx. 2 min.	**34**

- Dealing with the increasing interconnectedness of devices with the Internet
- Getting to know the term Internet of Things

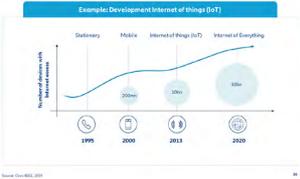|	
Approx. 4 min.	**35**

- Getting to know the term Internet of Things

Approx. 2 min.	**36**

- Getting to know facts and figures on the Internet of Things
- Describing and evaluating statistics

Approx. 2 min.	**37**

- Getting to know facts and figures about the Internet of Things
- Describing and evaluating statistics

Approx. 2 min.	**38**

- Discussing examples of technological developments of the last decades
- Reflecting on technological development
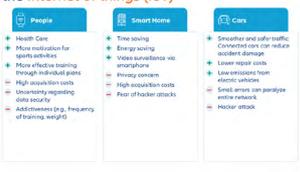

Approx. 15 min.	**39**

- Developing an awareness of the advantages and disadvantages of the Internet of Things
- Disclosure of personal data

Approx. 2 min.	**40-42**

- Completing and securing work results

Approx. 3 min.	**43**

- Recognizing economic value and potential
- Developing awareness of the advantages and disadvantages associated with it

Approx. 2 min.	**44-45**

- Being able to assess negative consequences
- Describing and evaluating statistics

Training 7: Digitalization/Advanced

2. Presentation overview

When is my password secure?

Approx. 3 min.   **46-47**

- Raising awareness that online safety is indispensable

Check your password

Approx. 3 min.   **48**

- Know how to create a secure password

Safe online — Example: Password – Key

Optional   **49**

- Knowing how a pass word key functions
- Creating a passport word

Safe online

Approx. 2 min.   **50-51**

- Raising awareness of the various possibilities for safety on the Internet

Finance Pro Tips

Approx. 1 min.   **52**

- Summary and securing results

More sources…

Approx. 1 min.   **53**

- Conclusion

Training 7: Digitalization/Advanced

3. Overview worksheets

Task 1

What advantages and disadvantages can internet of things or social media bring to your life? What about AI? Write below.

Groups: 1. People – 2. Smart Home – 3. Cars – 4. Cities – 5. Companies/Factories/Workers

⊕

⊖

....
....
....
....
....

Task 2

Safety online. Use the password key and encrypt the word: **School Free**

Example password key

a	#	3	D	Z	3	?	b	8	e	Y	6
Start–Zeichen			ABC	DEF	GHI	JKL	MNO	PQRS	TUV	WXYZ	

Result: ....

Financially Fit: Tips

It is better to be safe than sorry: Update your passwords regularly, use 2-factor verification and check your settings and virus protection!	Being online is great, but it also has risks: If criminals get hold of confidential data, it can cost you a lot! Take care of your data! Good data protection is necessary!	Weigh the pros and cons of different services. For some services you don't pay money, you pay with your data.
There's a lot of work behind music and movies. Would you give away all your number-1-hits for free?	Social media is fun! Keep your circles tight and be safe when meeting new friends. When in doubt, always ask a trusted adult like parents.	There are rules and laws on the internet too that everyone must follow, there are consequences to misbehaving online.

Training 7: Digitalization – Extension

Worksheet

Training 7: Digitalization/Advanced

4. Moderation guide

Slide 33: Welcome

 →

Objective

- Following up on consolidation
- Activating prior knowledge

Interview guide

- The mediator welcomes the class and introduces himself or herself
  - My name is …
  - I have been working for … years at …
  - I have the following hobbies/interests: …
 - I'm excited to share an exciting topic with you today

> **Note to mediator:** The lesson "Digitalization" discusses the use of the Internet. In addition to the benefits, most of which students are aware of, the goal of the lesson is to raise awareness of important pitfalls and dangers when using the Internet. On the topics discussed does not give an assessment, but tries to enlighten neutrally. The topics covered in this unit (e.g., copyright, legal and illegal downloads, Internet of Things, cybercrime, password security) are current at the time of printing. Today you are discussing the consolidation/extension with students.
>
> In all areas, the unit is limited to explaining basic principles and modes of operation. Since the aim is to impart basic economic education, no specific information is provided on individual product categories, products or services. If questions arise from teachers or students about specific products, please refer them to independent information sources such as the Federal Ministry of Justice and Consumer Protection, Klicksafe.de or information from Stiftung Warentest.

- Most of us use the smartphone nowadays not only for making phone calls or taking pictures. Most of us are also online with the smartphone and chat with friends, listen to music, check news, look for the easiest way to get from A to B. Some also shop online or do their banking online

---

Transition to slide 34

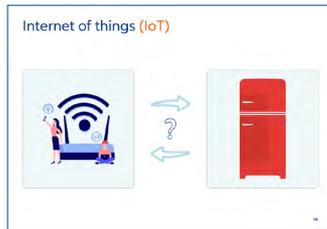- Please take a close look at the next slide. What do you see in this picture?
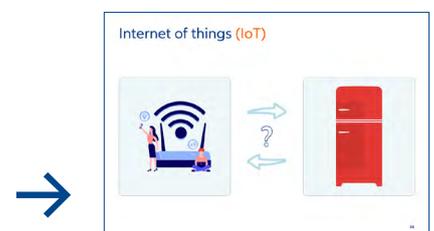
→

Notes

Training 7: Digitalization/Advanced

Slide 34: Internet of things

→

Objective

- To deal with the increasing interconnectivity of devices with the Internet
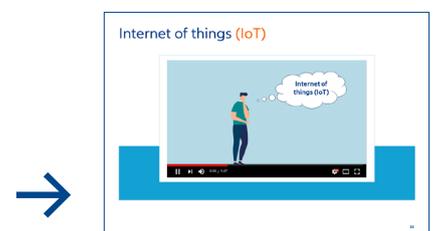- Getting to know the term Internet of Things

---

Interview guide

- Students make assumptions and name the Internet and refrigerator
- What do the two terms have to do with each other?
- Students consider the connection between the two items and come up with the interconnectedness of the refrigerator and the Internet
- Do you know of other everyday examples where things are connected to the Internet and are in constant dialogue with each other?
- The students express themselves and come up with the topic of smart home, if necessary with the help of the mediator:
- There is the possibility to control many things via the smartphone/tablet, such as when should the coffee machine turn on? At what time should the robot vacuum cleaner clean the apartment?
  Or what foods are missing from the fridge and need to be restocked?
  The trend towards the so-called "smart home," i.e., the interconnectivity of Internet and devices in the house (e.g., lamps, blinds, heating, garage door, etc.) and the specific remote control of functions, is also spreading continuously.

Transition to slide 35

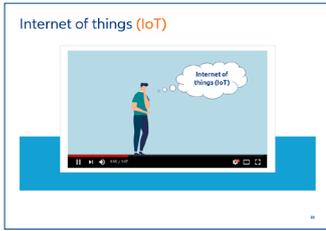- In the Internet of Things, everything communicates with everything else

→

Notes

Training 7: Digitalization/Advanced

Slide 35: Internet of things

→

Objective

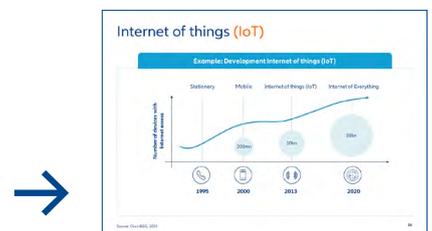- Getting to know the term Internet of Things

---

Interview guide

- Let's take a closer look
- To clarify the term Internet of Things, the mediator plays the movie "Internet of Things IoT"
- Duration of the film: 3:11 minutes
- We heard a lot about the Internet of Things in the film. Which of you can summarize again in your own words what the term means?
- Give students space to speak

Transition to slide 36

- So that you can understand even more precisely how the Internet of Things has developed, we have brought you an interesting graphic

→

Notes

Training 7: Digitalization/Advanced

Slide 36: Internet of things
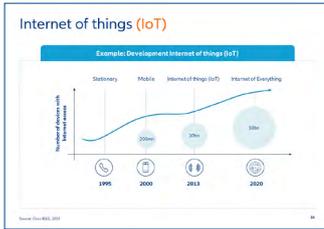
→

Objective

- Getting to know facts and figures about the Internet of Things
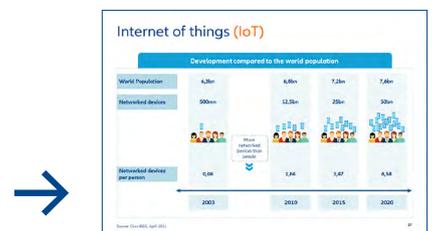- Describing and evaluating statistics

---

Interview guide

- The number of devices with Internet access has developed rapidly in just a few years. Who can explain in their own words what the graphic shows?

- Have a student explain the graph. The mediator supplements if necessary

---

Transition to slide 37

- The Internet of Things has evolved rapidly, and we'll take a look at that now in the next graphic

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Notes

Training 7: Digitalization/Advanced

Slide 37: Internet of things
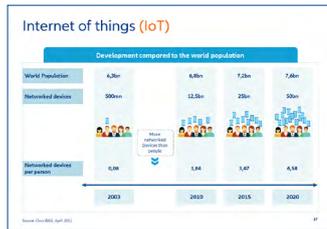
Objective

- Getting to know facts and figures about the Internet of Things

- Describing and evaluating statistics

Interview guide

- Which do you guess has evolved faster: the number of people on the planet or the number of connected devices?

- Students make assumptions. The mediator asks another student to explain the graph and adds to it if necessary

- In 2003, the world population was at 6.3 billion and there were 500 million devices connected to the Internet. If we divide the number of networked devices by the world population, this results in less than one device (0.08) per person. According to the definition of the Cisco IBSG, the Internet of Things did not yet exist in 2003 because the number of networked objects was relatively small. One reason for this was that today's ubiquitous devices like smartphones were just being introduced at the time

- The explosive growth in smartphones and tablets led to the number of Internet-connected devices growing to 2.5 billion by 2010, while the global population grew to 6.8 billion. This was the point at which the number of networked devices per person reached a value of more than 1 (1.84 to be precise) for the first time in history

- Looking ahead, Cisco IBSG predicts that 50 billion devices will be connected to the Internet by 2020. The world population will then be 7.6 billion. It is important to note that these estimations do not even take into account the rapid advances in Internet or device technology. The above figures are based on the data provided to us by facts known to be correct today. Example "Internet of Everything": Smart City = entire cities are networked (traffic, electricity, etc.)

Transition to slide 38

- Let's take a look back. Filmmakers have always been very creative and have come up with many things for science fiction movies that are now part of our everyday lives
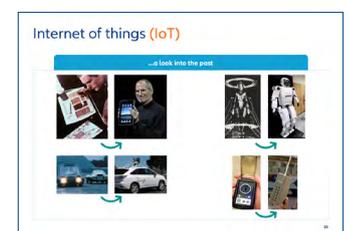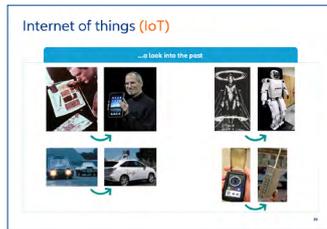

Notes

Training 7: Digitalization/Advanced

Time for this section	Cumulative time
2 min.	13 min.

Slide 38: Internet of things

→

Objective

- Discussing examples of technological developments over the past decades
- Reflecting technological development

- -

Interview guide

- Which object do you recognize? What could that be, or which of these exist today?
- Students make assumptions
- The mediator resolves and briefly discusses the individual films

Note to mediator: If time is short, only one film can be singled out as an example

- **"Metropolis" (1927):** Correct prediction: Androids. The films of the German director Fritz Lang enjoyed worldwide fame in the 1920s – probably also because of of its visionary content. This includes the humanoid robot "Machine Man," one of the first cinematic depictions of an android, a robot confusingly similar to humans

- **"A Space Odyssey" (1968):** Correct prediction: Tablet computer. Once again, the inventive talent of filmmakers can be observed in this case. Stanley Kubrick, author and director of the space classic "A Space Odyssey," was just as visionary as Apple guru Steve Jobs. Already 40 years before the invention of the iPad, his film features a kind of tablet computer (top left)

- A device that looks a bit like a cross between a razor and a pocket radio. It is a "communicator" that already anticipated in the late 1960s today's ubiquitous wireless telephony between people: the cell phone

- **"Total Recall" (1990):** Correct prediction: self-driving cars. This movie by director Paul Verhoeven shows a firework of inventions – but most of them are not yet realized. One idea that has already become a reality is an automobile which operates without a human driver (bottom left). Contrary to the movie setting, these vehicles are not yet approved for everyday use but that should only be a matter of time

- Here you can see a self-driving car using Google technology. Already before that, self-driving cars appeared in films, but only as special designs for the (super) hero: for example, in Batman (1989) and the TV series "Knight Rider" (1982 to 1986)

  Source: http://www.n-tv.de/mediathek/bilderserien/wissen/Filme-die-die-Zukunft-richtig-vorhersagten-article16616101.html

- -

Transition to slide 39

- Interconnectivity is now quite advanced. To make it all work, we have to feed a lot of things with our data
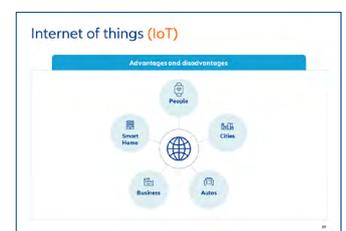
→

Notes

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Training 7: Digitalization/Advanced

Slide 39: Internet of things

Objective

- Developing awareness of the advantages and disadvantages of the Internet of Things
- Disclosure of personal data

---

Interview guide

- You can certainly imagine that the Internet of Things being used in the various areas can have very different effects. You will now investigate and work on this in groups. Use the worksheet and complete task 1

- Then, a spokesperson from your group will present your findings to the class. You will have ten minutes to do this

- Note to mediator: Depending on the level of proficiency of the class the mediator can forgo the subject matters "Cities" as well as "Companies/Factories.". These areas can be discussed with the teacher in the follow-up if necessary

- The mediator divides the class into three/five groups. Please think together about the pros and cons for each IoT area

- Groups have about ten minutes to think about the pros and cons of their area. They will use the worksheet to prepare. After ten minutes, the mediator ends the group work and asks each speaker to present the group result

- The speakers describe their work results one after the other. In this context, the mediator asks for feedback from the class after each presentation:

  - What do the others think?
  - Have the pros and cons been fully thought through?
  - Would you like to add something?
  - Give students space to make their case

Transition to slide 40-42

- I have also been thinking about the different areas
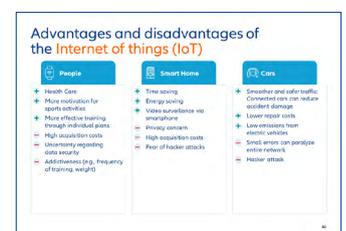
Notes

Training 7: Digitalization/Advanced

Slide 40-42: Advantages and disadvantages of the internet of things

→

Objective

- Completing and consolidating work results

Interview guide

- The mediator fades in the slides on the pros and cons, giving students the opportunity to complete or add to their work results

- He/She summarizes following the slides and then fades in the Allinaz Finance Workout Tip

- "Weigh advantages and disadvantages of your own interconnectivity with devices!"

Transition to slide 43

- There is enormous economic potential in the intelligent interconnectivity of machines and objects with the Internet

→

Notes

Training 7: Digitalization/Advanced

Slide 43: Internet of things – Economic advantage
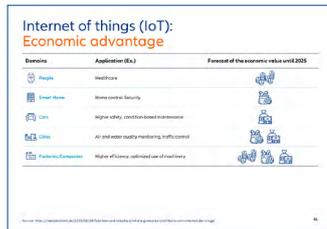
Objective

- Recognizing economic value and potential
- Developing awareness of what advantages and disadvantages are associated with it

Interview guide

- A well-known management consulting company (McKinsey) has attempted to measure the welfare effect (simplified: the benefit/profit) of the Internet of Things. According to their calculations, a combined total of up to $11.1 trillion in value could be created worldwide by 2025. However, this figure can only be achieved if the interoperability* of the IOT systems is established and when the existing data are used effectively. This figure therefore only indicates the theoretically achievable maximum value.

  *Ability of independent, heterogeneous systems to work together as seamlessly as possible to exchange or provide information to the user in an efficient and usable manner.

- What do you think are the advantages or disadvantages of networking IoT systems?

  – Giving students space to speak and discuss

  – The mediator also steers the discussion (depending on grade level and prior knowledge) towards areas of environment/sustainability as well as the world of work and society

- Sample discussion topics: (optional)

- Does digitization cost jobs in the company or will it create new ones?

- Job loss – lower income – costs for social system – further training/lifelong learning

- Will digitalization lead us to a smart green world where everyone benefits from technological progress and the environment is preserved? Or are we heading for a digital growth economy in which money and power are concentrated in the hands of a few and we will reach our planet's natural limits even faster?

- In theory, a sustainable lifestyle is becoming more and more easily achievable with the help of digital tools. At the same time, there is the risk that we will consume even more with a clear conscience - and thus consume more and more resources even faster.

- Is digitalization changing our guiding principles for individuality, mobility, prosperity and consumption of natural resources?

Transition to slide 44-45

- The Internet of Things offers many advantages to all of us. But of course there are also disadvantages as this graphic shows
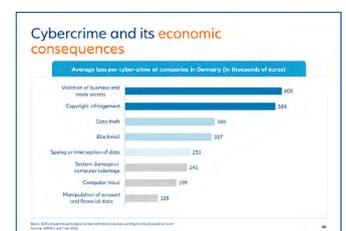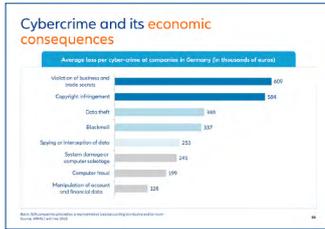

Notes

Training 7: Digitalization/Advanced

Time for this section	Cumulative time
2 min.	35 min.

Slide 44-45: Cybercrime and its economic consequences

Objective

- Being able to assess negative consequences
- Describing and evaluating statistics

Interview guide

- We have seen companies benefit as a consequence of many innovations of the IoT. On the other hand, the interconnected world also offers great potential to cunning criminals

- Who can explain in their own words what cybercrime is all about?
  - Students express themselves

- The mediator supplements if necessary: According to the Federal Criminal Police Office (BKA), cybercrime refers to all crimes committed either making use of information and communication technology (ICT) or being directed at it. Examples include computer sabotage, phishing emails, information theft, identity theft, and subscription traps. As an industrialized country, Germany is often affected more frequently than other countries. According to the BKA, there were around 83,000 cases in Germany in 2016, which caused damage amounting to over 51 billion euros
  Source: https://www.bka.de/DE/AktuelleInformationen/StatistikenLagebilder/Lagebilder/Cybercrime/cybercrime_node.html

- As you can see from the statistics, data theft and hacker attacks can be very expensive for companies
  - The mediator now displays the Allianz Finance Workout Tip: "Interconnectivity is nice, but it also presents dangers: If criminals get hold of networked data, it can cost you or your company dearly. Good data protection is thus imperative!"

Transition to slide 46-47

- Unfortunately, cybercrime is widespread and can affect anyone. It is not only large companies that come under the scrutiny of hackers; private individuals like you and me can also be affected

Notes

Training 7: Digitalization/Advanced

Slide 46-47: When is my password secure

Objective

- Raising awareness of the fact that security on the Internet is indispensable

---

Interview guide

- Why is it often easy for criminals to infiltrate systems and obtain (private) data?
  - Students express themselves
  - The mediator chooses the word 'Password' from all terms that were mentioned, like outdated system, no software update, no firewall, easy to crack password
- When do you think a password is really secure?
  - Students express themselves and name some ideas
  - The mediator adds and fades in the next slide
- Now I would be interested to know who in the class …
  - … has a password with special characters
  - … changes their password at regular intervals … always uses the same password
- The mediator asks for a vote by show of hands

Transition to slide 48

- At first glance, it seems quite difficult to pay attention to all these requirements and to also remember the password at the same time. The following homepage offers a possibility to check the security of a personal password

Notes

Slide 48: Check your password

→

Objective

• Knowing how to create a secure password

Interview guide

• Here you can see how long it takes to decrypt a password and thus how secure or insecure your method of protecting your data is

• Since we unfortunately cannot test this live right now, I have already tested an example in advance. (Start123 = 6 hours)

Transition to slide 49

• A secure password is often long and not easy to memorize. So-called password keys offer a good possibility. Have you ever heard of it?

→

Notes

Training 7: Digitalization/Advanced

Slide 49: Safe on the net

→

Objective

- Knowing how a password key functions
- Creating a password

Interview guide

- To understand how such a key works, let's try this out using an example word. Using the key, you will now work individually to convert the word HOLIDAYS into a secure password
- The mediator now asks the students to code the word as follows:
- Write down the first 4 start characters of the example. Then you use the key to convert the individual letters of HOLIDAYS into the numbers, letters and characters that the key tells you
- The students encrypt the password
- What password did you get? Result: a#3DeZ?Yb3e3?
- How long do you think it takes to crack the unencrypted password versus the encrypted one?
- Students make assumptions
- With the help of a computer, it would take a hacker (currently) about 9 minutes to decrypt the unencrypted word HOLIDAYS and (currently) 162 million years for the encrypted variant

---

Transition to slide 50-51

- If your passwords do not yet comply with the recommended security rules, it is best to change them as soon as possible to avoid becoming a victim of data theft

→

Notes

Training 7: Digitalization/Advanced

Time for this section	Cumulative time
2 min.	43 min.

Slide 50-51: Safe on the net

Objective

- Raising awareness of different ways to stay safe online

Interview guide

- In addition to secure passwords, however, you should pay attention to other things on the internet to keep your data safe. For the next two minutes, think with your neighbor about what additional steps everyone can take to protect their privacy

- The teams develop ideas and then share them with the class

- The mediator fades in the slide. He/ She asks four students to read out one of the aspects each

- Give students space to speak

- The mediator fades in the Allianz Finance Workout Tip: "It's better to be safe than sorry. Update your secure password regularly and check settings as well as virus protection!"

Transition to slide 52

- And now the most important things again at a glance

Notes

Training 7: Digitalization/Advanced

Slide 52: Allianz Finance Workout Tips

→

Objective

- Summary and securing of results

Interview guide

- The mediator shows the Allianz Finance Workout Tips and asks a student to read them aloud

- One student reads and then passes to the next volunteer if necessary

- Thank you very much for your great cooperation!

Transition to slide 53

- That's it for today. If you would like to know more about the topic, we have brought you some interesting information material

→

Notes

Time for this section	Cumulative time
1 min.	45 min.

Slide 53: Conclusion and further sources

→

Objective

- Conclusion

Interview guide

- I hope you had as much fun today as I did
- Many thanks to your teacher for the class time and support
- If you enjoyed it, you can ask your teacher to invite us again soon

Tips for the end of the lesson

- Discuss with the teacher if they or their colleagues are interested in further sessions
- Actively ask the teacher for their comments or suggestions for improvement

Notes

Additional sources for teachers and students

Teachers

http://www.bild.de/ratgeber/2011/oekologie/reist-um-die-welt-17730624.bild.html

http://www.bmu.de/bildungsservice/aktuell/6807.php

http://www.facebook.com/WiwoGreenEconomy

http://www.faz.net/artikel/C30189/der-weg-der-dorade-ein-fisch-auf-reisen-30439180.html

http://www.germanwatch.org/corp/it-unt.pdf

http://www.greenpeace-magazin.de/index.php?id=2593

http://www.nachhaltigkeitsrat.de (e.g., brochure on "The Sustainable Shopping Basket")

http://www.plant-for-the-planet.org/de/

http://www.spiegel.de/wirtschaft/unternehmen/0,1518,785217,00.html

http://www.spiegel.de/wissenschaft/technik/0,1518,794843,00.html

http://www.storyofstuff.com/

http://www.test.de/unternehmen/schule_unterricht/

http://www.umweltbildung.de

http://www.verbraucherzentrale.de/

http://www.wdr.de/tv/quarks/sendungsbeitraege/2009/1124/001_klimarettung2.jsp

http://www.wiwo.de/finanzen/rohstoffe-teurer-stoff/5155420.html

Students

http://www.bmu-kids.de/

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