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**DIGITALIZATION AND THE EMERGING PROFESSIONS OF THE FUTURE**

Rapid technological advances require professional profiles capable of adapting to new market demands. As jobs have changed, so have the skills required.

A few years ago, at the World Economic Forum, a striking issue was being raised: 65% of children in the early stages of their school life will have jobs that do not yet exist.

This is so, they stressed, because while many jobs are ceasing to exist, others are emerging and growing along with new technologies, 5G or Artificial Intelligence.

In the same vein, the Observatory for Employment in the Digital Age pointed out that “80% of young Spaniards between 20 and 30 years old who find employment in the near future will have professions that are new born or still in their infancy.”

The digitalisation and robotisation of countless jobs have been an unstoppable trend for years and it is transforming our labour ecosystem, leading to the extinction of many activities and, what is more relevant, giving birth to new professional profiles and testing our skills and ability to adapt to changing spaces.

The Covid-19 pandemic has only accelerated this trend and exacerbated employment disruption. Digitalisation and automation have undoubtedly accelerated as a result of the coronavirus and it is difficult to know how far this irrevocable technological future may go.

**From science fiction to reality**

Just 30 years ago no one outside the fictional literature realm could have suspected that computers would be made so small they would fit into a small smartphone or wristwatch.

The design, programming, manufacture or repair of these devices, which are now used by virtually everyone, requires personnel specialised in professions that did not exist a few decades ago.

No pilots of flying devices called drones that could transport goods, monitor crops or take pictures of a volcano eruption aftermath existed either. Much less did anyone realise that, thanks to 5G robotic technology, we could be operated on by a doctor thousands of kilometres away. And what about autonomous cars and smart homes!

These are just a few examples of scenarios and jobs that have emerged in step with technology, but there are many more, some that are beginning to spread, others that are in their early stages and others that we can’t even dream of yet.

**The most demanded profiles**

The demand for technology-related skills is growing steadily – the European Commission estimates an annual increase of 4% – and the supply is clearly insufficient, as shown by the fact that last year the European market suffered a deficit of 756,000 ICT experts.

According to the talent and technology consultancy Experis, the demand for IT-related profiles in Spain doubles every two years.

Based on Experis’ 2021 Tech Cities report, data analysts and data scientists are among the most sought-after professional profiles today, with demand increasing sevenfold in four years and reaching over 38,000 available positions in 2021.

However, the software engineer is the professional who is the most sought-after by companies, with up to 128,000 of them in demand this year. There is also strong growth in demand for cyber security specialists and system administrators and, to a lesser extent, DevOps experts.

**The employment map**

A very simple, visual and effective way of finding out about the most in-demand digital professions is to consult the [Employment Map](https://mapadelempleo.fundaciontelefonica.com/en), developed by Telefónica Foundation. This interactive tool uses Big Data technology to analyse the labour supply in Spain and shows the professions on the rise as well as the skills most in demand for their performance.

Using the job offers published in [Infojobs](https://www.infojobs.net), [tecnoempleo.com](https://www.tecnoempleo.com) and [ticjob.es](https://ticjob.es) as its source, the Employment Map is able to detect the 23 digital profiles with the highest demand for employment in Spain in real time, sorted by province.

Software Developer is by far the most in-demand technology profession in virtually all regions, followed by System Administrator, Web and Multimedia Developer, Digital Project Manager, ICT Consultant, Full Stack Developer, Frontend Developer, Cybersecurity Specialist, Digital Marketing Specialist and Data/BI Analyst, among others.

**New skills and competences**

In terms of the skills required to work in these positions, JAVA is demanded the most. It is followed by JavaScript, Cloud computing, HTML, Git, Angular, CSS, Spring Framework, SAP Business Suite and Microsoft Azure.

In addition, the Employment Map offers users the opportunity to connect with the [Virtual Career Advisor](https://orientador.fundaciontelefonica.com/en), a tool that provides personalised help and recommendations on how to prepare for working in these new professions

The platform is complemented by [Conecta Empleo](https://en.fundaciontelefonica.com/employability/conecta-empleo/)‘s offer of free online and face-to-face courses. There are courses on Web Design with HTML5, WordPress, Javascript programming, video game design, Growth Hacking to make a digital product successful and Web Analytics, among others.

The platform “collects information on job offers; detects which ones are repeated the most and are therefore the most demanded; identifies which are the most common technical skills in the offers for each of these professions and indicates which courses–more than 30,000–both free and paid, are necessary to train in these skills. This forces us to redesign the way we teach,” explains [Luis Miguel Olivas](https://twitter.com/luismicrack), Director of Employability at Telefónica Foundation, with regard to how it works.

**Write down the summary of the text.**

**Write an essay in which you justify your choice of a ’’new digital profession’’.**

**THE SUBJUNCTIVE MOOD**

There are two types of Subjunctive: the Synthetical Subjunctive and the Analytical Subjunctive.

* 1. **The Synthetical Subjunctive** is represented by:
     1. the Subjunctive Present;
     2. the Subjunctive Past Tense;
     3. the Subjunctive Past Perfect.
     4. **The Subjunctive Present**:

FORM: the short infinitive of the respective verb (V1)

USE:

From the semantic point of view, it occurs in:

* old English;
* wishes, set of expressions;
* official, elevated style (especially in legal phraseology, journalistic and parliamentary language);
* American English.

From the grammatical point of view, it occurs in:

1. independent clauses:

e.g. *Curse* you!

Long *live* peace!

*Suffice* it to say…

God *save* the Queen!

1. in subordinate *that*-clauses:

- direct object clauses (after such verbs as: *to agree, to insist, to order, to command, to demand, to urge, to recommend, etc.*):

e.g. I insist that we *go* there at once!

- subject clauses (after such phrases as: *it is necessary/ essential/ advisable/ important/ likely/ probable/ possible/ natural/ surprising/ good/ remarkable/ impossible/ odd/ strange/ unusual/ a pity/ a shame*/)

e.g. It is necessary that we *go* there.

-appositive attributive clauses (after such nouns as: *proposal, desire, order, suggestion*, etc.):

e.g. His suggestion that we *go* there, was accepted.

1. in conditional clauses:

e.g. If this *be* true, we should help them.

* + 1. **the Subjunctive Past Tense**:

FORM: the past tense of the respective verb (V2)

!!! In the case of *to be*, the subjunctive past tense is *were* for all persons.

USE:

* in type II conditional clauses:

e.g. If I *were* you, I would buy a laptop.

* in subject clauses (after *it’s time, it’s high time,it’s about time)*:

e.g. It’s time you *went* home.

* in object clauses (after *wish, suppose (that), I’d rather, I’d sooner)*

e.g. I wish I *solved* all the exercises.

* in adverbial clauses of comparison (after *as if, as though)*

e.g. He behaves as if he *were* the manager himself.

* in concessive clauses (after *even if, even though*)

e.g. Even if he *studied* informatics at school, he doesn’t know anything about computers.

!!! Pay attention to the difference between:

It is (high) time she *started* learning how to use the computer! (it is already a little late)

It’s (high) time for her to start learning how to use the computer! (the for-infinitive construction suggests that the right time has come).

* + 1. **the Subjunctive Past Perfect**:

FORM: the past perfect of the respective verb (had+V3)

USE:

* in type III conditional clauses:

e.g. If I *had used* this program, I would have succeeded.

* in object clauses (after *wish, suppose (that), I’d rather, I’d sooner)*

e.g. I wish I *had taken* his advice!

* in adverbial clauses of comparison (after *as if, as though)*

e.g. He behaved as if he *had been* the president!

* in concessive clauses (after *even if, even though*)

e.g. Even if he *had failed* the exam, he would have been with a scholarship in the USA.

**!!!** The construction *would rather/sooner + subjunctive* expresses the speaker’s preference to do something. It is used when the person who speaks is not the subject of the following action:

e.g. I would rather/sooner he *told* me the truth.

(this construction can be replaced by a ’’TO Infinitive’’ construction:

Subject+ would prefer+indirect object+To Infinitive:

e.g. I would prefer him to tell me the truth!)

Whenthe person who speaks is the subject of the following action, the subjunctive is replaced by Short Infinitive:

e.g. I would rather/sooner go there at once.

**!!!** The construction *had better* expresses a threat:

e.g. You *had better* open this document or you will be given a bad mark!

* 1. **The Analytical Subjunctive**:

FORM: a modal verb + the present/perfect infinitive of the verb

USE:

1. SHALL + short infinitive

-in questions in the 1st and 3rd persons:

e.g. *Shall* I *buy* this computer?

-in rhetorical questions, in all persons:

e.g. Who *shall be* there other than our teachers?

-in TAG-questions:

e.g. Let’s print these documents, *shall* we?

1. SHOULD + short infinitive:

- in questions and sentences that begin with HOW and WH-:

e.g. I don’t see why he *shouldn’t enter* data into the computer.

-after such verbs as: *insist, order, demand, request, propose, expect, advise, recommend, suggest* + THAT:

e.g. Experts recommend that we *should use* inkjet printers.

- after IT IS + ADJ. + THAT:

e.g. It is vital that new technology *should emerge*.

-in purpose clauses:

e.g. This firm advertises these printers so that every company *should buy* from them.

-in direct object clauses, after verbs expressing fear such as *to be afraid, to be terrified, to fear*:

e.g. He was afraid lest he *should fail* the exam.

-in temporal clauses:

e.g. They decided to stop buying these software packages till they *should get* more money.

-in concessive clauses after *though, although*, *however, whatever, no matter*:

e.g. No matter what he *should say* about computer graphics, don’t contradict him.

1. MAY/MIGHT + short infinitive

-in exclamations expressing a desire or a wish:

e.g. *May* you *win* this contest!

-in purpose clauses, when the verb in the main clause is in the present, past, future or imperative:

e.g. Learn more so that you *may win* this contest!

-after IT IS/WAS + POSSIBLE

e.g. It is possible that this device *may give* the users unlimited computer power.

-in concessive clauses, after *though, although*, *however, whatever, no matter*:

e.g. However tired he *may be*, he must solve these exercises.

1. WILL/CAN + short infinitive:

-in purpose clauses, if the verb in the main clause is in the present:

e.g. The teacher explains us the way dot-matrix printer work so that everybody *will/can use* them.

1. WOULD/COULD + short infinitive:

- in purpose clauses, if the verb in the main clause is in the past:

e.g. The teacher explained us the way dot-matrix printer worked so that everybody *would/could use* them.

**EXERCISES:**

**Complete the second sentence so that it has a similar meaning to the first sentence using the word in capital letters:**

1. I don’t enjoy playing games on the computer. I prefer breaking codes.

WOULD RATHER

I…. than play games on the computer.

1. You are wasting your time on trifles when you have to learn for your exams.

HAD BETTER

You… and not waste your time on trifles.

1. It’s a pity this smart phone is so expensive.

WISH

I… so expensive.

1. It is essential for him to work for Apple.

THAT

It is essential … for Apple.

1. I think the prices for antiviruses should go down.

TIME

It’s …… .

1. He behaves like Billy Gates!

AS IF

He acts………. Billy Gates!

1. My friend doesn’t like informatics. She prefers studying literature.

WOULD SOONER

My friend… than informatics.

1. I regret I didn’t study informatics at school.

WISH

I… informatics at school.

**Identify the mistake in each sentence and rewrite the sentence in the correct form:**

1. It’s high time he buys a new antivirus.

2. I wish I introduced all the data into the computer! But the time was over!

3. He wouldn’t check his email if he was you.

4. He talks as if he was you.

5. I would rather you debug the computer.

6. It is important that scientists create smart houses.

7. The teacher treats me as if I am a hacker!

8. If only he learns more!

9. So to be it!

10. If they have studied more, they wouldn’t have failed the informatics exam.

**Put the verbs in the brackets in the right form, using the Synthetical Subjunctive whenever necessary:**

1. He wishes he … ( to improve) his skills as a programmer last winter.

2. Her father insisted she… (to write) a program.

3. It’s a pity you… (to do) such things to cheat your customers!

4. The boss would rather you …(to create) a new programming language when you were in Paris.

5. Even if the work … (to be) twice as difficult, our colleague would do it.

6. Our boss insisted that we … (to connect) all the peripherals to the computer.

7. His suggestion that we … (to load) data was immediately accepted.

8. He talks as if we … (to be) pleased to work together on this new processor.

9. In the present, she wishes we … (to work) on this network together.

10. Our friends would sooner we … (to solve) this software problem.

**Finish the following sentences using the Subjunctive whenever necessary:**

1. He behaves as if………………………………………….

2. If only you………………………………………………..

3. I wish you…………………………………………………

4. It’s time they……………………………………………..

5. Supposing the programmer……………………………….

6. He suggests we……………………………………………..

7. I’d rather you…………………………………………………

8. It is strange that he…………………………………………….

9. If they were you,………………………………………………..

10. It’s high time he……………………………………………………