

## DIAMONDS IN THE ROUGH: A PROPOSAL FOR YOUNG SPANIARDS

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### SUMMARY

Spain is currently one of the countries in Europe with the highest youth unemployment and school dropout rates. Another reality is the existing mismatch between the training offer and its subsequent job placement. This generates a problem of shortage of specific talent, mainly in profiles related to digitalization and renewable energies, which are in high demand in the current business context. The Diamantes en Bruto program allows Repsol to identify young people with concerns, skills and competencies oriented to the energy and digital branches. Focusing on the oil and energy sector, this project achieves its objectives through the use of a complete assessment specifically designed for the target profile by means of three types of tests: predictive tests, role play and group dynamics

**Key words:** young talent, detection, digitalization, sustainability, renewable energies.

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## INDEX

1. Participant profile	67
2. Renewable energies	71
3. Digital transformation	73
4. Bibliography	75



## 1. Participant profile

Pineda and Aliño (1999) define adolescence as the stage between childhood and adulthood, between the ages of ten and nineteen, characterized by major biological, psychological and social changes that in turn generate crises, conflicts and contradictions. In addition to being a period of adaptation to physical changes, it is also a stage of great determination towards greater psychological and social independence.

Some psychosocial aspects integrated in a series of characteristics and behaviors present in adolescence that should be taken into account would be:

- Search for identity.
- Need for independence.
- Group trend.
- Evolution from concrete to abstract thinking.
- Sexual manifestations and behaviors.
- Contradictions in behavioral manifestations and mood swings.
- Conflicted relationships with parents.
- Social vindictive attitude.
- Choice of an occupation and the need for learning and training to perform it.
- Need to formulate and have an answer for a life project.

Delpino and Eresta (2012) in their report of the Spanish League of Public Utility Education (La Liga Española de la Educación de Utilidad Pública), reflect the vital moment through which students are passing and the concerns related to this moment are reflected in the opinion polls of the Youth Institute, which determine their areas of greatest concern in: unemployment, education, housing, economic problems and concerns about personal situations. The Spanish League of Public Utility Education's own study also highlights among the concerns of adolescents in general regarding the future: failure in their studies, loss of friendships, economic hardship, family conflicts and unemployment. In another question which applies to the personal concerns of each one, they reflect as the main concerns: the choice of career, difficulties in studies, dating, the economic situation, the crisis and the family economic situation (Figure 2).

The case study is oriented to adolescents between sixteen and eighteen years of age, who fall within the so-called late adolescence. In this phase, much of the physical growth and development has been completed, and a stage begins where important educational and occupational decisions must be faced. In addition, impulses are better controlled and identity has matured, including the sexual aspect, which brings him closer to becoming a young adult.

<b>INJUVE (15 A 19 AÑOS)</b> <i>Problemas que más preocupan en el plano personal</i>		<b>DATOS PROPIOS</b> <i>Asuntos que preocupan hoy a los jóvenes como él o ella</i>		<b>DATOS PROPIOS</b> <i>Preocupaciones de los jóvenes en general respecto al futuro</i>	
El paro	26,3%	Elección de carrera	25,1%	Fracasar en los estudios	27,2%
La educación	25,6%	Dificultades en los estudios	22%	Perder amistades	12,1%
La vivienda	18,5%	Noviazgos	13,3%	Pasar necesidades económicas	10,5%
Problemas de índole económica	13,5%	Tener dinero para comprar lo que a uno apetece	12,9%	Conflictos en la familia	7,9%
Preocupaciones y situaciones personales	12,8%	La crisis y situación económica de la familia	6,6%	Quedarse en paro	7,3%

Figura 2. Asuntos que preocupan a los jóvenes

Fuente: Delpino y Eresta (2012)

Added to this study are some of the main conclusions of Fontcuberta et al (2021), from the report Jóvenes españoles 2021. Ser Joven en tiempos de pandemia (Being Young in times of pandemic), whose study data are included in Figure 3:

- **Young people concerned about the environment with a greater political commitment, but without considering institutions credible.** This table shows the evolution during the studies carried out since 1994 and the evolution of youth concerns. On the podium stand out: health (81.4%), family (73.6%) and education (68%).
- **Young people recognize the value of education and the importance of educational centers as places for the transmission of values and development.** The main linkage of studies is caused by the probability of finding a job (41%). Still 30% of young people who drop out of school do so for economic reasons.
- **Social networks gain importance and the importance of friendships decreases.** In 2016 for 62% of respondents friends were very important in their

lives in 2020 this percentage is only 49%. Technology is a constant and indispensable element in their social relationships. Some of the benefits of its use according to respondents are: ease of connecting with people with the same interests (6.7 out of 10), and with their friends (6.49). Among the negative aspects are: the possibility of misunderstandings (6.63) and the difficulty in controlling the image projected on social networks (6.14). In addition, 25% of young people admit to having been assaulted, mistreated or bullied through social networks.

- **Climate change is considered the main problem in Spain.** According to the report, 80% of the young people surveyed consider environmental protection a priority and 81% believe that their lifestyle is fundamental for the conservation of the planet. For young Spaniards, climate change is the main problem (8.07 out of 10).
- **Technological youth.** The current context has caused the online space to be where life happens and important things take place. Its main use is for relationships and communication and audiovisual entertainment. The most popular activities are: listening to music (73%), watching movies or series (70%), surfing the net (70%) and watching TV (64%).
- **46% of young people believe that their future life will be better than that of their parents, but a similar percentage believes that they will have a lot of difficulty forming a home and being financially self-sufficient.** Forty-nine percent believe they will have a lot of difficulty working at what they like, and 48% will have a lot of difficulty getting adequate housing. More than half (52%) believe that it is very likely that they will have to emigrate in order to be able to work in the future to improve their quality of life or to find jobs with better conditions. It is striking that young people with the worst socioeconomic conditions are the most reluctant to build their future outside Spain.

n	2005 (4000)		2016 (1250)		2020 (1609)	
	Muy importante	Muy + bastante importante	Muy importante	Muy + bastante importante	Muy importante	Muy + bastante importante
Salud	82	97	83	97	81,4	96,4
Familia	80	98	81	97	73,6	94,6
Educación	-	-	-	-	68,0	95,6
Igualdad de género	-	-	-	-	67,4	89,8
Igualdad social	-	-	-	-	58,9	90,2
Medioambiente	-	-	-	-	55,1	89,3
Trabajo	60	92	57	96	50,9	90,7
Vida moral y digna	52	85	53	93	50,6	88,1
Amigos y conocidos	63	95	62	95	49,1	90,7
Tiempo libre y ocio	49	92	47	90	48,6	90,8
Ganar dinero	55	91	49	93	44,1	89,2
Pareja	-	-	48	84	44	77,1
Vida sexual satisfactoria	49	85	39	78	32,8	72,6
Competencia profesional	-	-	-	-	31,6	78,4
Política	7	25	12	41	16,5	54,1
Religión	6	19	5	16	10,6	22,7

Figura 3. Histórico de las preocupaciones de los jóvenes

Fuente: Fontcuberta et al (2021)

With all the information gathered, an empathy map (Figure 4) has been drawn up describing the profile of the student who participates in the Diamonds in the Rough program. This map is intended to allow the reader, through a series of questions related to the student's feelings, to get to know him/her better.





Figura 4. Mapa de empatía candidatos

Fuente: Elaboración propia

## 2. Renewable energies

Renewable energies are defined as those that come from natural sources that produce energy inexhaustibly and indefinitely. In addition to being inexhaustible, they have little or no negative impact on the environment, and are therefore considered clean energies. For example, solar, wind or tidal energy are renewable sources of energy; others, such as forest mass, are also considered renewable because they regenerate naturally over time. It should be noted that renewable energies can be applied and exploited at the local level, helping to reduce the dependence of populations on large energy producers, favoring economic development and job creation (Let's Take Care of the Planet, 2018).

For Twidell and Weir (2006) renewable energy is “energy that is obtained from continuous and recurring energy streams in the natural world”, while for Sorensen (2017) it is any “energy flow that is restored at the same rate at which it is used” or, also, “the use of any energy reservoir that is replenished at a rate comparable to that at which it is extracted”.

Some of the advantages over traditional energies are:

- They contribute to reducing greenhouse gas emissions that cause global warming. They are considered clean energies because they respect the environment.
- They reduce energy production costs, create jobs and reduce dependence on large producers and countries with fuel reserves.
- Production is indefinite as they are inexhaustible and unlimited sources.

In Spain, the main renewable energies are wind energy (51%), hydro (36%) and solar energy (8%). Total production is 44% of the country's energy demand at the close of 2020 (Cuidemos el planeta, 2018).

At Repsol, renewable energies are those obtained from natural sources such as the sun, wind, water or plant or animal biomass, and are therefore inexhaustible and do not produce greenhouse gases. In addition, technological advances have made it possible to reduce production costs, as well as the maintenance costs of logistics centers, making renewable energies more accessible and competitive.

Repsol generates 3,386 MW and has another 2,549 MW under development (Repsol, 2021d). Repsol's main renewable energy sources are offshore and onshore wind, hydro and solar photovoltaic.

With respect to the competition in the renewable energy sector and that are present at a national level, the following companies, their main sources of renewable energy and their generation capacity stand out:

- Iberdrola. It has been the benchmark company in terms of its commitment to renewable energies for more than two decades. Today it is a global benchmark and is leading the energy transition towards a low-emission economy. Its investment plans until 2030 aim to reach 95,000 MW of production. Iberdrola currently has a generation capacity of 34,800 MW. Its main renewable energy sources are onshore and offshore wind power and solar energy (Iberdrola, 2021).
- Endesa. It belongs to the Italian energy group Enel, whose company Enel Green Power is in charge of the renewable energy area and is the world leader in terms of production, reaching 49,000 MW in 2020. Its renewable energy sources are hydropower with 27,830 MW, wind power with 15,430 MW and solar power with 6,600 MW (Enel Green Power, 2021).
- Naturgy. It is a multinational energy company that stands out for being a leader in the gas sector and a benchmark in the electricity sector. Its strategy is to promote sustainable innovation where, in addition, it coincides with Repsol and the common goal of having zero emissions in 2050. Naturgy's growth plan involves an investment of 8,700 euros, during the period 2021-2025, focused on attractive countries, with stable regulation and a solid currency. It currently produces 4,600 MW and aims to

reach 14,000 MW by 2025. Its main renewable energy sources are hydro with 2,100 MW, onshore wind with 2,000 MW and solar with 400 MW (Naturgy, 2021).

- Siemens Gamesa. It is one of the leading manufacturers of wind turbines. Its business model is focused on Onshore, which is the manufacture and installation of onshore wind turbines, where it has more than 40 years of experience. It is estimated that they have installed more than 94,600 MW worldwide. There is also the Offshore business, which focuses on the manufacture and installation of offshore wind turbines, and whose figures amount to 15,000 MW installed worldwide. In addition, worldwide forecasts estimate the installation of 55,000 MW per year until 2025 and 65,000 in 2030 for the Onshore business and more than 180,000 MW in the Offshore business for the period 2020-2030 (Siemens Gamesa, 2021).
- Grenergy. Founded in 2007 by 5 people, Grenergy produces 100% renewable electricity on a large scale. It currently has 470 MW installed and another 6,294 MW under development. Its growth strategy aims to reach 25,000 MW by 2023. Its renewable energy sources are onshore wind and solar (Grenergy, 2021).
- Audax Renovables. Founded in 2000, Audax Renovables is the energy leader in the SME segment. It has a generation capacity of 2,498 MW and presence in Europe and Latin America. Its renewable energy sources are onshore wind and solar (Audax Renovables, 2021).
- Solaria. It started in 2002 and since then it has become a leading company in the development and generation of photovoltaic solar energy. It is currently capable of generating more than 2,000 MW and with the goal of reaching 6,200 MW by 2025 and 18,000 MW by 2030 (Solaria, 2021).

In this research, renewable energy will be all energy that comes from natural resources, that is inexhaustible and that has no impact on the environment.

### 3. Digital transformation

Digital transformation in companies is a relatively new concept that goes hand in hand with the development of new technologies and the use of these technologies as a search for competitive advantage. Martínez (2016) defines it as the application of digital capabilities to processes, products and assets to improve efficiency, customer value, manage risk and discover new profit opportunities. Other authors such as del Val (2016) relate it directly to the concept of Industry 4.0 as an industrial revolution caused by the increase in information technologies, mainly IT and software. And other authors identify it not only with its technological attribute, but also dependent on organizational and social elements (Reis et al, 2018).

For Repsol, digital transformation is a set of all the above definitions, as they identify it as the tool that relies on people and technology as a way to improve and competitive advantage by designing digital products and services, mainly through Big Data, IoT, omni-channeling, robotization or blockchain. They consider the transformation as a very important step in their

challenge towards decarbonization, so much so that, in 2021 they prepare their own dossier in which they develop each element that is part of this process and expose their data (figure 5). Because its corporate strategy focuses, among other elements, on digitalization and innovation, as a lever for energy transition and sustainability on the road to its goal of decarbonization.



Figura 5. Transformación digital en datos

Fuente: Repsol (2021b)

Repsol faces its digital transformation based on seven main values: improving its reliability and safety in operations, End to End planning and intelligent programming, excellent development of its operations and digitized processes, creation and implementation of digitally optimized assets, omnichannel to improve customer experience, implementation of new business models and becoming an Agile organization. To achieve these values, it has opened its own research center for new technological solutions called Repsol Technology (Repsol, 2021b).

All these elements are incorporated and developed by teams of people highly specialized in different branches such as: data analytics, UX&Design, blockchain, omnichannel, agile, software robotics, cloud competence center, cybersecurity and hardware robotics. These are the main profiles that guide Repsol to achieve its objectives and, therefore, one of the most important lines in which to detect talent.

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