

# Women in Tech 2022

## A BairesDev Report



Many companies are initiating programs to **eliminate the gender imbalance**. While the industry is still far from true gender equality, BairesDev data shows that **we're taking steps forward**. Though the perception of the tech sector being a “bro culture” lingers on, this research provides insight into **how we can change that reality**.



## Key Findings

We've reviewed data coming from an applicants' database covering a **6-year period (2015-2021)** in which BairesDev® received **more than 1 million yearly applications** to both technical and non-technical roles.

- ♀ Female applicants in the tech sector represented an **average 41% of the total** in the 2020-2021 period, a 400% increase from 5 years prior.
- ♀ Women in their 20s are **increasing the female presence** in the tech world, representing around 40% of all total applicants in that age range.
- ♀ Women over 40 years old are increasingly applying to **managerial or leadership roles**.
- ♀ Females applying to **technical roles in the software development industry** are mostly senior professionals focusing on web, mobile, and testing.
- ♀ With 45% of female applicants over the total, **Latin America is leading the way** in the percentage of women that apply to work in our company.
- ♀ Gender-equality initiatives are **helping women progress in the industry**, yet that's happening at a sluggish pace.



# Promising Insights

One of the most common criticisms of the tech sector is how male-dominated the industry is. According to [Women In Tech](#), **only 1 in 5 people working in the tech industry today is a woman**. That's an alarming statistic because it shows that women remain underrepresented in this sector, in spite of decades of progress towards workplace equality. It also reminds us that even with increased visibility surrounding this issue, **there's plenty more we should be doing**.

A good place to start is following the example set by large global corporations. According to [research from Deloitte Global](#), **33% of the workforces in these enterprises will be female in 2022**. This figure represents a 2% increase over 2019, which might seem small but shows progress.

That's nothing to scoff at, given the circumstances affecting the current business landscape, including a major disruption in the form of the COVID-19 crisis that especially impacted [women](#) and [minorities](#). In particular, **51% of women in the global technology, media, and telecommunications workforce feel less optimistic** about their potential for career advancement when compared to pre-pandemic times. What's more worrying, **22% of them are thinking about leaving**

**their careers altogether**, mainly because, as [reported by Hive](#), women's workload in today's offices is 10% greater than that of men's.

So, how did big enterprises continue growing despite these issues? With a combination of **workforce diversity plans and long-standing recruitment**.

As a newer company, **BairesDev has been using these strategies since its inception**. We understand the power of diversity and its undeniable impact on innovation. That's why we are a diverse-born company that only focuses on talent regardless of where it comes from. That mentality led us to **optimize our selection process to guarantee equal opportunities to all candidates**, whoever they are and wherever they are coming from.

Looking into data that reflects the success of this strategy, we've uncovered information that is helping us to untangle the issue of women's representation in tech. Better yet, this data provides us with promising insights that are **allowing us to devise even better hiring strategies**. Hopefully, it can do the same for your own recruitment efforts.



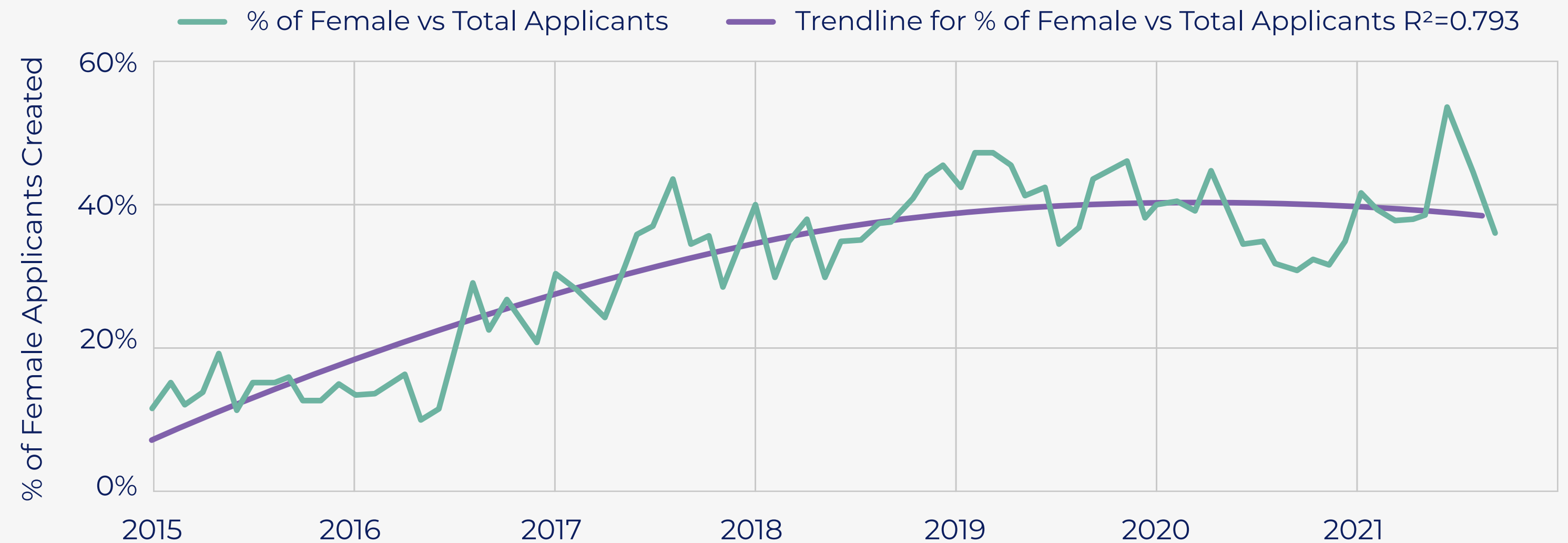
# Some Words About this Data

On average, BairesDev gets **more than 1 million yearly applications** to technical and non-technical positions. Given that candidate volume, the information we get from those applications can be considered a snapshot of the tech industry at a particular point in time. The fluctuations and patterns in those workforce applications suggest deeper trends, especially when it comes to women's representation.

That's why we decided to use the available information from a **6-year period (2015-2021)** to understand the changes surrounding women's applications and ultimate hirings. From there, we can detect particular tendencies and try to understand them by reading the context and the specific circumstances that saw their emergence.

Even when this data comes from one tech solutions company, we believe that it fairly represents what's happening with women across the entire sector. In fact, some of the lessons we gathered from this data can be used to inform diversity-centered recruitment efforts across the industry.

## % Female of Total Applicants



## YOUNG, EDUCATED, AND ON THE RISE

One of the first things that stands out from this analysis is the slow but steady rise in the number of women applying to the tech sector. During the 2015-2020 period, BairesDev got 923,290 applications from women candidates. Back in 2015, when we started tracking this data more closely, the percentage of women applicants related to the total number of ap-

plicants we got was a mere 11%. By the end of 2020, that number rose to 41% and hit a **peak of 52% in mid-2021**.

Normalizing those results and analyzing the average, the percentage of female applicants multiplied by 4 over the last year vs 5 years ago.



That steady increase is directly linked to several measures focused on increasing the concentration of women in our company. They include making changes to our referral program to pay more for any successful hire of a woman candidate, and the institution of our [Giveback program](#), which has seen us partnering with diverse NGOs and NPOs that seek to grow women's representation in the tech sector.

These efforts follow the Deloitte research about large enterprises and underscore the importance of being strategic and constant with initiatives geared toward increasing the number of women in the tech industry. At the very least, **these programs open the doors more widely for women**. At the same time, they connect women with these opportunities and offer visibility and incentives for them to join the workforce and advance their careers.

Our research also shows young women are the ones increasing the female presence in the tech world. As seen in the graphic on the next page, women in their 20s represent around 40% of all applicants in that age range.

Finally, it's worth addressing that slight drop in female applicants during 2021. Generally, that decrease aligns with an overall phenomenon of fewer women returning to work after the COVID-19 pandemic. The reasons for that are multifold.

For one, women suffer from [gender differences in self-perceptions](#) about meeting a position's requirements. Women feel slightly less qualified than men when applying for jobs, especially when it comes to roles typically associated with men.

Additionally, both women and men are reexamining their professional aspirations and careers following the pandemic, [fueling the Great Resignation](#). While this issue isn't exclusively about women, we must account for it because a significant number of women are shifting their priorities, and work is often being deprioritized.

In fact, 56% of women are now focusing on their wellbeing over work, per Microsoft's [Annual Work Trend Index Report](#). A recent Gallup report sheds light on this matter: 34% of women are saying they feel burned out "always" or "very often", a number that speaks for itself and can explain why so many women are thinking about their health first.

That's not all. A considerable number of women aren't going back to work because the jobs they held pre-pandemic no longer exist. As reported by the [Washington Post](#), the pandemic hit women particularly hard, mainly because the crisis severely impacted

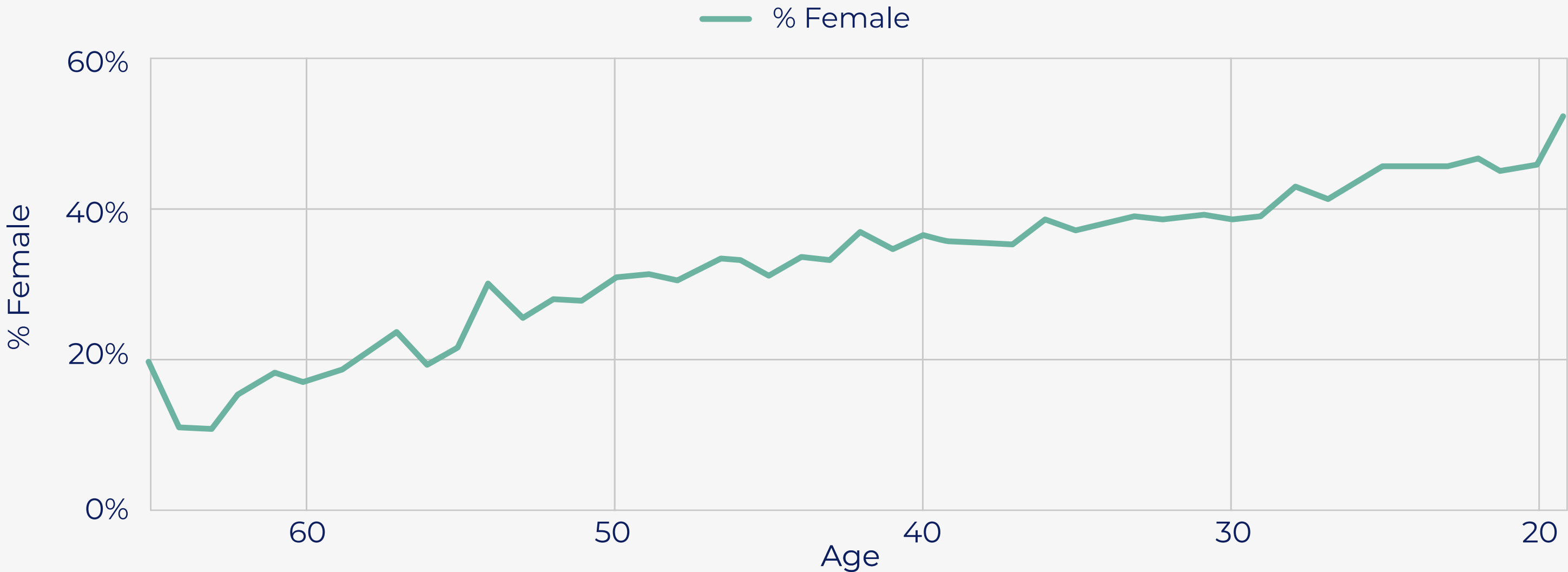
specific sectors where women are overrepresented, such as the retail, restaurant, travel, and hospitality industries. Yet, as the pandemic receded and the economy reopened, those jobs didn't return due to automation, cutting-cost strategies, and the plain disappearance of the companies that were offering them in the first place.

There's also the fact that women tend to leave their work or reduce their hours to take care of household chores and look after their children, saddled with traditional gender roles. This phenomenon has only [deepened during the pandemic](#), driving 5.1 million American mothers out of work, of which 1.3 million remain out of the workforce.

*“Female-focused programs connect women with new opportunities and offer visibility and incentives for them to join the workforce and advance their careers.”*



# % of Female Applicants by Age



That share drops as women age, something most common with women eyeing the last years of their professional careers. Interestingly, though, **women in their 40s make up approximately 37% of the total applicants in their age range**. The implication is that professionals at that age have the seniority to fill managerial and leading positions, roles that are always in demand given the talent shortage that plagues the industry.

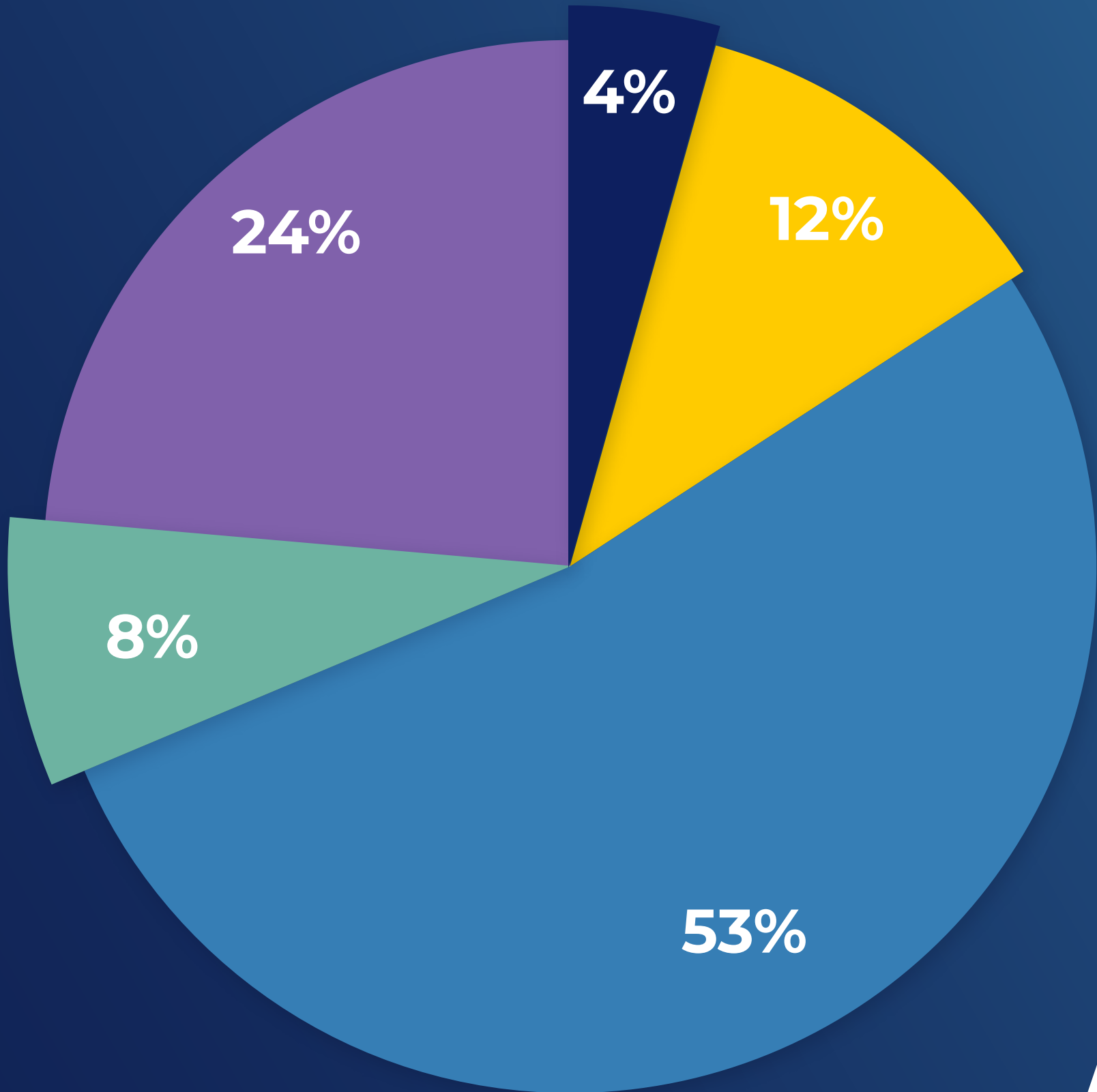
Another possible explanation is that women at that age are going through a career change, a common post-pandemic choice. Numerous positions in the tech industry are multiplying across companies, offering a gateway for people of all ages and backgrounds. We'll expand on this phenomenon later in this report.

Finally, it's also important to analyze the education of women hired by BairesDev. The graph on the next page speaks volumes about that.





# Female Employees Study Level



- College Incomplete & Below | 4.3%
- College Ongoing | 11.5%
- College Bachelor | 52.8%
- Graduate Ongoing | 7.8%
- Graduate School | 23.6%



The graph represents valuable education level data. However, it's worth mentioning that BairesDev doesn't pay much attention to degrees. While certain positions require more qualifications and formal education, we focus on hard and soft skills and experience, regardless of where they came from. With that being said, there are 2 possible ways to read this data.

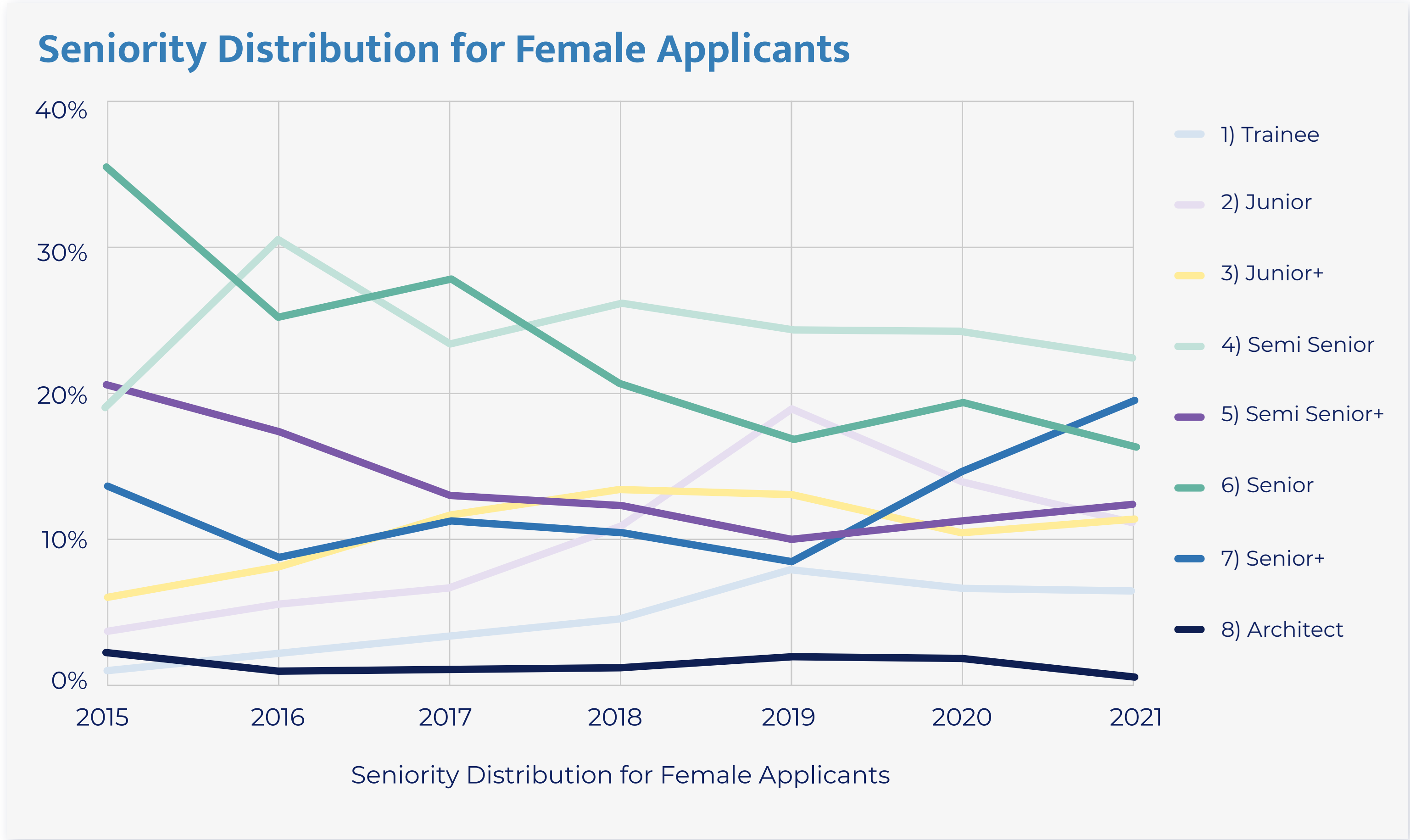
On one hand, **the predominance of highly educated women** (mainly with a bachelor's degree) might be a response to the historic trend in the tech industry of hiring people with degrees in computer science and related fields. On the other hand, data don't specify the field of study for college graduates. That means that these women don't necessarily hold tech-related degrees but specialized in something else to earn their college degrees. Either way, people with college degrees have developed both soft and hard skills that have prepared them for a career in the tech industry.



# Senior Professionals With a Focus on Web, Mobile, and Testing

The data we've gathered also provides a glimpse into what kind of professionals the women are that are applying to work in the tech industry. There are 2 relevant criteria to examine to better understand women's presence in the sector: seniority and the mastery of specific technologies.

As the graphic clearly shows, women applying for jobs at BairesDev are mostly experienced professionals. The vast majority, 71%, of last year's female applicants were at the semi senior, semi senior+, senior, and senior+ levels. There are several possible explanations for this finding.





First and foremost, the pandemic drove a significant workforce shift, displacing countless professionals from one company to another and even from one industry to another. Not surprisingly, many of the most experienced female engineers have taken part in this migration in search of a better fit for their aspirations, which include a better salary, improved work-life balance, new challenges, or even a closer alignment with the role work plays for them.

The dominance of female professionals with high seniority in 2021 applications also reflects the process of women gaining seniority within their industries. The year 2020 was taxing for everyone, especially companies that had to quickly adopt new digital technologies and accelerate their digital transformations. Many female professionals working on those projects likely arrived at a higher seniority level as a result of the experiences of that intense year.

“ *The dominance of female professionals with high seniority in 2021 applications also reflects the process of women gaining seniority within their industries.* ”

A possibility involves the profiles that better serve BairesDev projects. Given the scope of the work we do with our clients, we focus on engineers with proven capabilities to tackle diverse tech challenges. While we have internal upskilling programs for more junior engineers, our work pushes us to seek a higher experience level, leading to more applicants, including women, at that level.

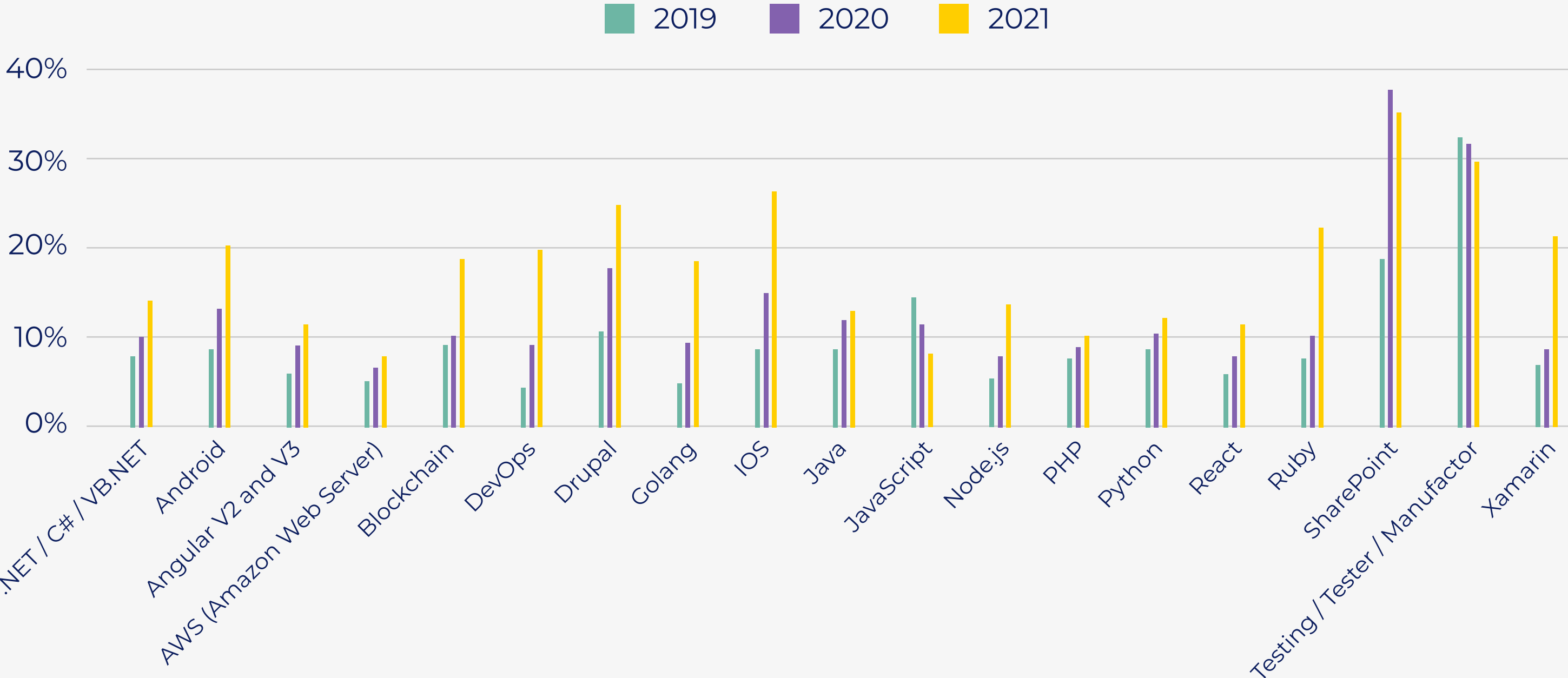
The bottom line is that the number of women applying for high-seniority positions has increased. This finding exemplifies how women are amassing experience in the sector and how they are looking for exciting, new opportunities within the industry.

As mentioned above, the other criterion worth looking at is the types of technologies women are focusing on to further their careers. The graphic on the next page represents the specific technology specialties of women applying for technical positions at BairesDev.





# % Female Applicants by Technology



The first and most evident conclusion we can draw from this data is that women are mostly applying to positions related to SharePoint and testing. In fact, women are applying for SharePoint and testing positions 3 times as much as they are applying for positions involving other technologies. That’s the case even considering a decrease in the number of overall applications in 2021.

The decrease in those percentages had naturally to do with the increase in the number of applicants with knowledge of other technologies, especially mobile development. The increase of almost 13% in Xamarin applications as well as the 8% and 9% jumps in Android and iOS applications respectively indicates that women are finding mobile development be the best career choice.

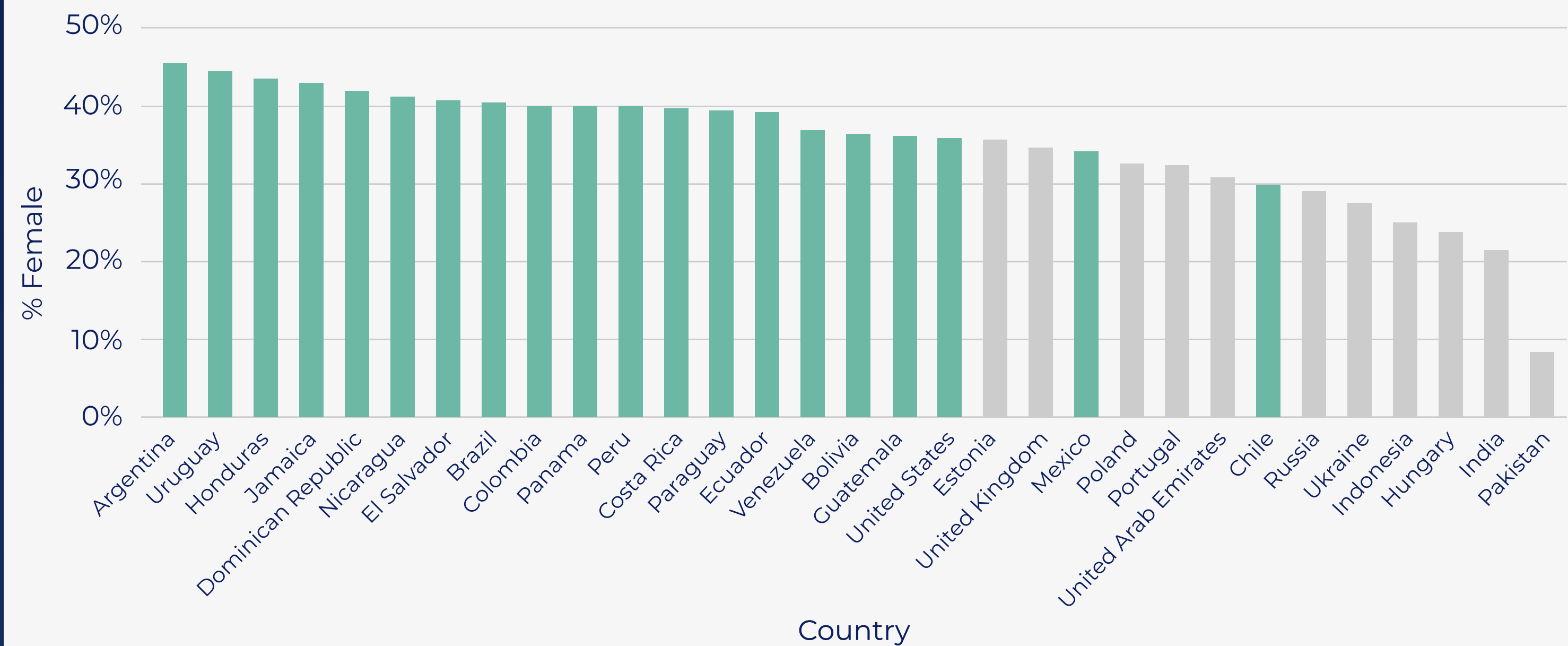
Other technologies and practices that stood out during 2021 include blockchain and DevOps, both of which are hot in today’s market, which explains the increase in applications. Finally, it’s worth mentioning the 12% increase in Ruby applications in 2021, which is consistent with the steady growth in demand for web developers.

Overall, the technology data reveals consistency between applicant interest and the needs of companies in the software and tech industries.



# A Region Leading the Way

% Female Applicants by Country



To close, we present a graph representing female applicants throughout the world in 2020 (the most recent data available).

It shows that **Latin America leads the way in the percentage of women that apply to work in our company**. Other regions known for their tech hubs (mainly Ukraine/Eastern Europe and India/South Asia) trail behind significantly, with only about half the proportion of female applicants compared to leading Latin American countries (chiefly, Argentina and Uruguay).



Overall, the average percentage of women applicants is around 35% but there are a few cases worth looking into. Big Latin American countries or those with established tech hubs (such as Argentina, Brazil, Colombia, or even Uruguay) surpass that average, implying that various initiatives within both the private and public sectors seeking to increase the female presence in STEM-related fields are working.

Other factors are contributing to that outcome. For example, many companies in developed countries take advantage of favorable currency exchanges to regularly scout Latin America for tech talent.

This practice has turned the field into a very well-paid alternative for all sorts of professionals. Additionally, BairesDev has key support roles spread across Latin America, which might influence these numbers, albeit not in a decisive way.

The biggest surprise from this finding is the presence of other countries with an above-average percentage of women applicants, including Honduras, Jamaica, Nicaragua, and El Salvador. This outcome is the result of several conditions, including the affordability of tech talent, cultural similarities, time zone alignment with the U.S. (America's biggest tech market), and the high English proficiency of professionals living there.

“*Latin American countries with established tech hubs surpass the female presence in the applicant pool average, implying that initiatives looking to increase women's presence in STEM-related fields are working.*”



“These programs surely have an impact on the number of women getting into the tech industry, whose rise is one of the biggest opportunities these countries have to recover from the negative economic effects of the pandemic.”



More importantly, the tech sector in the Caribbean region is initiating [certain initiatives](#) focused on reducing the gender gap and helping women thrive. These programs surely have an impact on the number of women getting into the tech industry, whose rise is one of the biggest opportunities these countries have to recover from the negative economic effects of the pandemic.

Finally, we see examples of countries like Ukraine and India. Though a renowned tech powerhouse and an established player in the tech industry, Ukraine still trails in the proportion of women in its tech workforce. A [recent PWC report](#) found that while gender equality initiatives are in place across many companies in Central and Eastern Europe (CEE), these companies fail to monitor and analyze gender-based metrics, leading to poor implementation and subpar results.

India, on the other hand, is making progress towards gender equality, albeit at a slower pace than Latin America. In fact, in 2020, [more than 1 in 3 employees](#) in the Indian tech sector were women, an improvement of 20% in approximately 15 years. However, this progress is being delayed by sociocultural factors, mainly those related to racism, caste, and sexuality perspectives deeply rooted in Indian society.



# Upcoming Challenges

The data presented here hints at a shift in the workforce. While still not enough to grant gender parity in the tech sector, the movement toward a greater concentration of women is a step toward achieving it. BairesDev is seeing more women applicants, who are generally younger, more educated, and skilled in technologies relevant to today's tech industry. Additionally, older women are slowly but steadily joining the sector, though the reasons for this shift are more complex and require further research.

The evidence in this data suggests that public and private initiatives in bridging the gap between male and female talent in the tech workplace are providing new opportunities and interesting results across the board. While certain regions still trail behind (due to, mainly, inherent traits of their societies), the truth is that most companies are taking strides forward in seeking and hiring female talent in tech.

However, as the Eastern European example demonstrates, these initiatives must operate on a deeper level to truly make long-lasting changes in how the tech sector sees and appreciates women professionals. It's not a matter of developing "complementary

social initiatives" but, rather, of adopting diversity and inclusion practices as a core business strategy. In other words, women-focused initiatives must go beyond partnerships with third parties as part of a specific campaign: businesses must embrace a diversity mindset to reimagine their operations and transform them into sustainable diversity initiatives.

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Additionally, it's worth pointing out that women are still vastly underrepresented in leadership and managerial positions. That's why it's very important to not just consider the number of women employed but also about the quality of the jobs they are getting within tech companies. Adopting the diversity mindset mentioned above can help in changing the attitude towards women and management.

The main takeaway here is that while women in the industry are making progress, it is happening at a sluggish pace. Deepening gender-equality efforts and sustaining them over time, investing in women's development, and deconstructing the notions surrounding the tech industry are all necessary tasks on the sector's to-do list.

The approach to women's representation in tech should be global. Society as a whole must play its part to reduce the gender gap in this and other industries. In that context, companies should provide more internal opportunities but also consider key alliances with external stakeholders that focus on this cause to create a more sustainable and integral change in society. That's the only way to end the male-female disparity which, though getting smaller, still makes itself seen and felt.







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