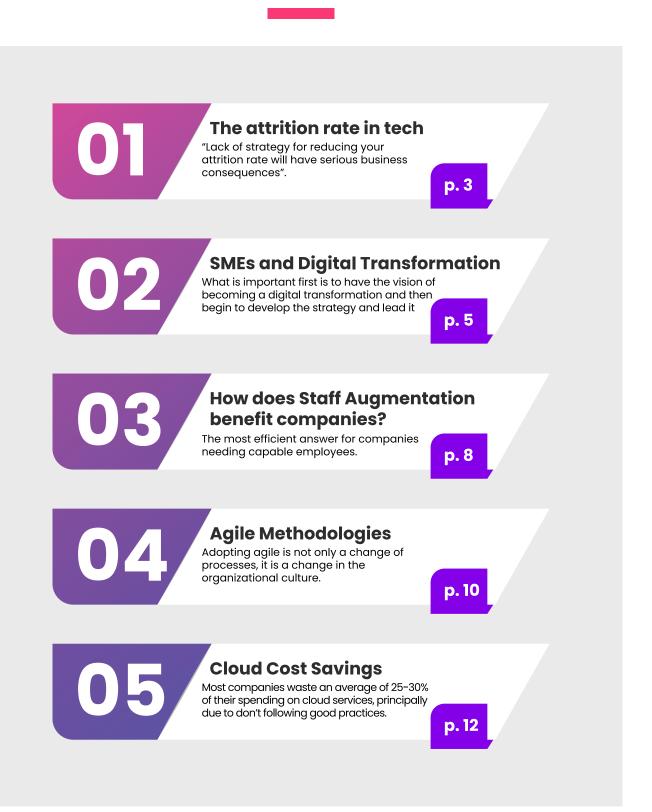# Company Dossier

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The attrition rate in tech

■ *"Lack of strategy for reducing your attrition rate will have serious business consequen- ces".*

■ *"If you don't address high employee turnover, it will have a negative impact on your business".*

by: Charly Neuman

A high attrition rate causes problems in the tech industry.
The employee **turnover rate in the tech sector stands at 13.2%** and is higher than in any other business sector.

What is the attrition rate?
Before we dive deeper into the subject of em- ployee turnover in tech, it's worth explaining how to calculate the attrition rate, so we're all on the same page.

Calculating your attrition rate
Attrition is a reduction in the size of your wor- kforce resulting from employees leaving the organization or retiring. You can calculate it by dividing the number of full-time employees who have left per month by the average num- ber of employees, and multiplying it by 100.

And it doesn't spare anyone... not even "the big guys"
No tech business is immune to turnover, irres- pective of its size or reputation.
Uber – on average, their employees stay with the company for just 1.8 years, despite the generous benefits package and fancy office space that Uber offers
Dropbox – tech workers leave after 2.1 years
Tesla – the average tenure equals 2.1 years
Lack of strategy for reducing your attrition rate will have serious business consequences
If you don't address high employee turnover, it will have a negative impact on your busi- ness. Think about:

■ **Revenue loss** – losing an employee can cost you dearly – literally. Especially if your top performer leaves. Experts on turnover and retention estimate that it costs 150% of the employee's base salary to replace them.

■ **Productivity loss** – on average it takes 43 days to hire a software developer, that's nearly a month and a half of productivity

loss and it doesn't even account for on-boarding. This can cost you as much as $33,251.

- **Creating bottlenecks** – when an employee leaves, they take all their knowledge with them, and you can't put a price tag on that. This knowledge gap must be filled – on average it takes one to two months to bring knowledge workers up to speed. Unavoidably, this will create some bottlenecks unless you ask your best employees to take over some of the tasks and work at excess capacity. Unfortunately, this might lead to…

- **Lower employee morale** – nobody likes to be overworked, and this might have a bad impact on employee motivation. Also, if the departing employee was close to people who stayed with the company, they might become emotional or even resentful and consider quitting.

Low employee morale cannot be ignored as it can escalate the problem: one employee resignation can lead to another, and another… Ever heard of the snowball effect?

Like-minded people tend to follow one another – they reinforce each other's viewpoints. According to Robert Cialdini, we frequently base our decisions on other people's actions.,

We treat it as social proof which constitutes a shortcut to deciding how to act. The more employees leave your company, the more will follow.

What are the reasons for the high attrition rate in tech?
The main reasons why tech employees leave their jobs are:

- Seeking higher compensation (71%),
- Looking for better working conditions (47%)
- Searching for more responsibility (32%)
- Seeking more opportunities to express creativity (26%).

The above-mentioned reasons for the high attrition rate in tech can be split into two main categories: having the right skill set to perform the job and having the right culture fit.

Finally…
The high attrition rate in tech is a problem that all businesses battle with. The high employee turnover rate can and should be tackled prior to getting new hires.

Implementing the right mechanisms for tech skills screening such as automated in-stack coding tests, tech interviews, as well as verifying the culture fit is the best strategy for managing attrition. ✦

SMEs and Digital Transformation

"What is important first is to have the vision of becoming a digital transformation and then begin to develop the strategy and lead it, always based on the client, their experience, what they need, and the best way to communicate with them".

by: Mariana Taglioli

Today most people before buying something research it online. Increasingly we interact with our family, friends, co-workers, colleagues, and parents of friends of our children, through digital media, such as mobile applications. And less and less through a traditional phone call, because if we do, it is also through a digital application, using today's man's best friend: the Internet.

And SMEs are using this strategic alliance with the Internet?
Some yes, but there is still a long way to go for many. And what is this path? The path of DIGITAL TRANSFORMATION.

Digital transformation is the process by which SMEs and any type of company manage to adapt to this new economic paradigm: The digital economy.

Now, you must be wondering what are the predecessor paradigms?

It's a good question, as it helps to contextualize this new era. That is why I will begin with a brief description of each of them since the end of the Second World War, following a Western approach.

A- Bretton Woods (BW):
International economic and monetary order is based on the establishment of the dollar standard linked to gold. This meant that the dollar was to be the reference currency for all other currencies, while each ounce of gold was set at a value of 35 dollars. In this way, the Central Banks could exchange gold for dollars and vice versa through the Federal Reserve.
This is how US supremacy was reflected in this new post-World War II world order. Here arise the institutions that support this order, along with the US treasury: the IMF, the World Bank, and the GATT, the predecessor of the WTO.

B- BW system crash:
In the context of global inflation, the trade de-

ficit of the US trade balance, and the Vietnam War emptying the reserves, in 1971 Nixon announces the end of the gold convertibility of the dollar, since it becomes backed by the authority that emitted. There was no longer a metal backing dollar issue. A new international monetary system had arrived. Since the dollar was not linked to gold, currencies began to fluctuate freely in the markets under the supervision of the central banks, which acted (and act) as a monetary authority.

An advantage of this monetary system is the possibility of creating money to introduce stimuli into the economy. On the contrary, the great risk that exists is that, by issuing an excessive amount of money, a country can end up suffering from runaway inflation and end up in ruin.

From then on, no economy prevails in the international system and several events characterize this stage: the oil crisis due to the Yom Kippur war, the devaluation of the dollar in 1980, and the Latin American debt crisis due to the injection of petrodollars, a product of their abundance in OPEC member countries.

C- Globalization and Regionalization:
In this stage, the formation of the great regional economic blocks such as NAFTA, MERCOSUR, and the European Common Market, today the European Union, among others, is consolidated. On the other hand, and consistent with this process, globalization, also called Globalization, is opening up, which refers to a transformation in the interrelation of states and intranational entities in the economic, social, political, monetary, religious, technological, etc.

Through this process, intranational actors become transnational, that is, they cross state borders, currencies become international, such as the euro, and international trade is strengthened, generating volumes never seen before and opening the way to the computer revolution, thanks to the wonderful human invention, the Internet.
This paradigm continues over time and mutates itself, democratizing itself more and more, giving rise, for example, to democratization and monetary decentralization through cryptocurrencies (we will see later how it unravels, is the game over coming?).

And unleashing this new era of the digital economy: this new era of doing business, adapting to new consumption patterns. Take advantage of the millions of people connected to the internet and see how to do business, generate money, and take advantage of this global connectivity.

What is digital transformation?
Let's go back to the digital transformation, what does it refer to? It is the process through which technology is incorporated, procedures are digitized, teams are prepared to work digitally and the business model is modified, with the logic of the digital economy, to improve the performance of the organization.

This process was accelerated and strengthened after the covid 19 pandemic, due to the fact that people around the world were forced to stay inside their homes. But the world had to be continue generating, so the forced and obligatory medium was the remote mode, and to be able to access it, this transformation was necessary, yes or yes.

So the Digital Transformation is important in the first place, because if it is not implemented, there is a risk of being left out of the market, as happened to BlockBuster with the Streaming platforms for example, and secondly because it brings with it greater productivity and greater cost-effectiveness.

This golden rule of this new paradigm applies to digital businesses and also to companies whose business is traditional, that is, offline. They must take advantage of digital tools to grow strategically.

So digital transformation refers to, on the one hand, transforming traditional company technologies such as CRM and automating processes. And on the other, to incorporate new digital technologies, such as social networks, «big data» and «Analytics», artificial intelligence, work in the cloud, bots, augmented reality, and other technologies.

For this, the organization must transform 3 areas:

1- The business model, that is, transform it to adapt to the digital economy.
2- The user experience: Offering an improvement in the product and/or service by integrating all the channels of arrival at them
3- The operations of the organization to achieve digital transformation, that is:
    A- processes
    B- people. Here the role of the CEO stands out, who must manage to generate a strategic digital vision for the company and then develop a digital strategy and share it with the members of the company.
    C- Internal teams.

To conclude
In summary, what is important first is to have the vision of becoming a digital transformation and then begin to develop the strategy and lead it, always based on the client, their experience, what they need, and the best way to communicate with them. In this strategy, the role of the CEO is paramount, training himself and his teams, accompanying each member of the organization in this learning, and giving them all the necessary tools to do so.

Then, we highlight that the user experience, of the client, is what will mark the need to transform our value offer for him. In other words, this experience will determine, if necessary, readapt our products and services, either by developing a new digital version or by adding new channels, processes, and digital tools to the traditional product or service. And all this always measuring the digital infrastructure necessary to be able to face this transformation process, in order to adapt our organization to this new global economic paradigm: the era of the digital economy. ✦

How does Staff Augmentation benefit companies?

"Staff Augmentation is the most efficient answer for companies needing capable employees in order to broaden and strengthen their provided services".

by: Vladimir Lejbowicz

In our modernity, short-distanced by NTiCs, most companies seek a remote hiring solution that also meets their quality staff standards while adding new value and wisdom to their personnel. Staff Augmentation is becoming a key development model in IT industries. This fact is no secret to companies around the world. Many business outsourcing plans have prospered in this context but Staff Augmentation has been prooving to have one of the highest performance when it comes to goal achievements.

We are going to approach the topic again in our blog, focusing on what type of projects and developments are highly qualified for staff augmentation. We will also focus on different types of staff augmentations, along with their pros/cons.

Technology x Remoteness has allowed the possibility of sourcing ideal business partners and mining top talent globally. No matter the need or business location, businesses can now insert external IT solutions for most complex projects in their funnel.

Growing companies working on special projects eventually require expansion in human resources to accommodate quick turnarounds and extra funding. Staff Augmentation, meaning the use of outside personnel on a temporary or permanent basis to increase the capacity of your team (complementing the skills and knowledge of it), is the most efficient answer for companies needing capable employees in order to broaden and strengthen their provided services. Staff Augmentation is the promptest and most efficient solution for companies needing capable employees in order to broaden and strengthen their respected services. Cost, time, and talent quality all benefits the scaling company.

Recruiting and onboarding new members to an organization usually equates to a long and

expensive process. Many small and medium sized businesses require reachable solutions in terms of budget and time. IT Staff Augmentation Companies have at hand a trustful and varied network of freelance developers that can provide a wide spectrum of skills and knowledge to your team, expanding the horizons of possibilities.

There is a Staff Augmentation Service for Each Project.
When hiring a Personnel & Staff Augmentation Service, it's important to have defined project goals so inserted resources are precisely specialized in the area required. There is a specific Augmentation service for every business and for each project subject. It is important to set specific goals that want to be reached so that staff hired is precisely specialized in the area needed. This facilitates:

- Finding the best-qualified workers for your needs
- Shortening recruiting effort timeline
- Inserting high-performing assets into your team
- Molding contracts based on tasks, projects, objectives, periods, etc.

Furthermore, outsourced employment models represent a significant cost reduction in relation to infrastructure & technology, recruitment, payroll, and project implementation. Augmentation is a contract based that can be as long or short as required. Once the task is over, the contract ends.

Why Do Companies Hire Staff Augmentation Services?
 Companies seeking Staff Augmentation benefits are usually in need or bracing for a provisional increase in demand. Companies could also require trained personnel to perform specific tasks for a determined period of time and/or to make their business more agile by buil-

ding teams that seize flexible labor as a means to accountability, productivity, and fulfilling objectives. Businesses that may be coming to a crossroads of budgets and scaling, require immediate solutions with immediate needs or roles filled. Traditional methods are not always the answer in these cases, leading companies to affordable and equal talent opportunities like Staff Augmentation.

When a company decides to hire an external workforce, such as a Development Team, there is always an underlying fear that third-party IT developers might not fully grasp business/project goals in comparison to internal assets. However, when hiring a Staff Augmentation Service Agency, the process usually begins by deep diving into project goals and processes. At that point, an extensive search through a network of experts located all over the world is conducted to ensure the ideal resource is provided to the client.

Outsourcing any work to a third party is a risk at any level, but with a great process and understanding, outsourcing companies are able to merge goals and inherit the needs of companies. IT outsourcing is projected to grow 22% over the next 5 years. We companies are prepared and equipped to make great outsourcing decisions and continue growth in their respective markets.

To close, this ample universe of qualified workers is nearly impossible to obtain for small and medium-sized businesses, and this is why experienced professionals gather to solve companies' issues with tailor-founded IT developers. These teams of IT graduates serve their clients by providing deep searches of professionals, providing budgeting, following up on progress, payroll and career plan, time tracking, performance evaluations, engineering mentoring, and other tasks that we will be explaining in future posts in this blog. ✦

Agile Methodologies

"Adopting agile is not only a change of processes, it is a change in the organizational culture, the key in this methodology is people and the collaboration between them.".

by: Vladimir Lejbowicz

Agile is an iterative approach to software development and project management. This methodology allows teams to deliver value to customers in a more agile and effective way, and to improve the quality of deliverables. Its strengths lie in the way it works. Teams are multifunctional and self-organized and collaborate in a dynamic of small steps, where plans and results are constantly evaluated. This new way of approaching projects allows greater adaptability to changes and a better response to problems.

This methodology is based on 4 values and 12 principles, detailed in what is called the Agile Manifesto, a guide that stipulates the do's and don'ts of software development.

The 4 values
1. Individuals and Interactions Over Processes and Tools
2. Working Software Over Comprehensive Documentation
3. Customer Collaboration Over Contract Negotiation
4. Responding to Change Over Following a Plan

The 12 principles
#1 Satisfy Customers Through Early & Continuous Delivery
#2 Welcome Changing Requirements Even Late in the Project
#3 Deliver Value Frequently
#4 Collaboration between the business stakeholders and developers throughout the project
#5 Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
#6 The Most Effective Way of Communication is Face-to-face
#7 Working software is the primary measure of progress.
#8 Maintain a Sustainable Working Pace
#9 Attention to technical detail and design enhances agility

#10 Simplicity-the art of maximizing the amount of work not done- is essential.
#11 Self-organizing teams encourage great architecture, requirements, and designs
#12 Regularly Reflect and Adjust Your Way of Work to Boost Effectiveness

The main reason why organizations choose Agile is because of the quick response capacity to changes requested by the customer or because the market or the situation warrants it. But adopting agile is not only a change of processes, it is a change in the organizational culture, the key in this methodology is people and the collaboration between them. Teamwork and customer work are fundamental pillars, accompanied by shared values and a clear vision of expectations in terms of quality, speed, and the definition of "successful delivery".

There are several types of agile methodologies created from their values and principles. If they have something in common is the approach to adaptability and constant improvement during the project´s development. The main characteristic of these models is the formation of collaborative teams and their communication flow, they are small, self-organized, and aligned with each other with a joint vision.

The most common ones are:
- Agile Scrum development methodology
- Lean Software Development
- Kanban
- Extreme Programming (XP)
- Dynamic Systems Development Method (DSDM)

What are some of the benefits of the agile development methodology?

▶ Better quality product:
By having a dynamic of constant evaluation in all phases of the projects, together with customer active participation in the development process, the teams learn and improve continuously, thus achieving a better quality of the final product.

▶ Customer satisfaction:
Customers are involved at all stages: early deliveries, development, and detail correction. The combination of transparency and involvement throughout the project leads to higher customer satisfaction.

▶ Flexibility:
Because the models are iterative and incremental, changes at each step of the project are easier to make and teams can adapt better and faster. This dynamic gives them greater flexibility, by dividing projects into small steps it is easier to implement changes and give constant feedback.

▶ Transparency and control:
Two aspects of this methodology that feed each other. Throughout the entire development process, there is a constant exchange between the client and the team, every small or large advance is reported by the latter and can be evaluated by the client, thus generating transparency that enriches the final result of the product. The members of the development team, in addition to receiving the client's opinions and requirements, can offer suggestions, recommend changes or improvements and give constant feedback. Working in such a close way allows clients to have more control over their projects, which usually results in greater satisfaction at the end of the project.

▶ Continuous improvement and risk prediction:
Continuous improvement is one of the principles of these methodologies. Working with iterative methods and constant feedback, hand in hand with frequent testing, allows teams to continuously improve both the processes within the project and the operational part of their way of working.

The combination of iterative dynamics and clarity in the visibility of the progress of the projects, favors the prediction of risks and the elaboration of plans to mitigate them. ✦

Cloud Cost Savings:
Tips and Strategies

"Most companies waste an average of 25-30% of their spending on cloud services, principally due to don't following good practices".

*by: Benjamin Valiente

Cloud computing is the technology area that has grown faster than other technologies in the last decade, as well, is the technology with more innovations than any other. Hundreds of new services come out annually, and thousands of updates are frequently pushed to the existing services.

With all that innovation and excellent services coming out within such a short time frame, usually, IT is running after the carrot to implement and reduce the technology gap in their companies, and in some cases forgetting to follow a clear costs strategy that helps the company to leverage all the benefits provided by the cloud.

Most companies waste an average of 25-30% of their spending on cloud services, principally due to don't following good practices, being tied to long-term reserving contracts, the architecture design, or implementation decisions.

I used to think that "everything in this life has a solution", and cloud computing costs aren't the exception, even if we got critical environments up and running.

Cost-savings strategies

▶ Savings starts with planning and designing: When you're starting with cloud computing services could be breath-taking to jump into planning costs and usage of your services, but it could be easier than it looks, the tip is " just keep it simple".

- Start by breaking down the costs into three main resources: Compute, Network, and Storage.
- Plan the compute you will use in your environments: Persistent computing, temporary compute, or hybrid computing.
- Design your solution having these aspects in mind: Scalability, flexibility, and business continuity.
- Use the cloud service calculator to estima-

te your initial costs, i.e. AWS Pricing Calculator or Microsoft Azure Pricing Calculator
- Choose the right cost model you will be using in your environments. i.e. AWS has several types of plans: Pay-As-You-Go, Reserved Instances, Savings Plan, and Spot Instances.

If you already have services running in the cloud, that doesn't mean you couldn't take advantage of the planning or design steps. As I mentioned at the beginning of this article, cloud computing is evolving and publishing new services almost every day, and that's why is important to have a clear and understandable plan and design for the existing or future services.

▶ Assess correctly your services:
Cloud providers usually offer different types of saving plans, and to take advantage of those, it's really important to have visibility of what resources you're running or you'll run in the future.

- Start doing an assessment of your current resources.
- Tag your existing resources. i.e. Tagging AWS resources
- Use your billing to rectify your initial assessment

Never assume you already know you're resources, always double-check your billing, and do continuous assessments of your environments.

▶ Use cloud cost-savings benefits:
When we talk about cost-savings in cloud computing, the first thing that comes to mind is to reduce the amount of resources we're running or downsizing existing resources, and although this is a good strategy to save some costs, it's not the definitive solution.

There are several myths that we use to demystify with the clients that we work on. First, cloud computing is not more expensive than on-premise environments anymore, and second, downsizing resources or eliminating idle resources is not a sustainable cost-saving strategy.

To really take advantage of cloud computing benefits, we should be aware that there's no wroten recipe to follow, but there are some strategies well documented that can help us to achieve this.

- Budget Control - everything should start at this point. Every company that it's working with cloud computing should start by having a clear budget for cloud services, and ensure that teams are aware of this budget. i.e. In AWS Cost Managements, you could create a Budget, and alerts are sent whenever the budget limit is exceeded.

- Resource sizing - as I mentioned, resizing is not the final solution, but ensuring that we're using the correct amount of compute, storage, and networking, it's crucial to make smart commitments with the cloud service provider. Reduce overprovisioned resources, delete unused or idle resources, and start using autoscaling solutions for those where you know that the amount of resources should be flexible.

- Use the cloud costs models - cloud services are evolving every day, and that's good for us as customers because that evolution is transformed into flexible cost models that help us to reduce fixed service costs. AWS and Microsoft Azure have different cost models such as Pay-As-You-Go, Prepaid/Fixed Subscriptions, Reserved Instances, Savings Plans, Bring your own license, and a long etc. Ensure that you're using the model that better fits your needs.

▶ Optimize and monitor spending as a continuous process:
Optimization and monitoring are two topics

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usually intended for compute, databases, or other types of resources not related to costs, but in cloud computing services, optimizing and monitoring costs should be part of a continuous procedure.

AWS has the Cost Management console, from which you could view and manage your AWS costs in real-time. Features like AWS Budgets help to create and monitor a fixed budget for all your accounts, or specifically for your Reserved Instances or Savings Plans, or AWS Cost Anomaly Detection which continuously monitors your current usage and costs to catch any spike in your current services.

There are several solutions of third-party cost management solutions that you may want to consider in your planning:
- CloudZero
- Komiser
- CloudHealth by VMware

▶ Leverage knowledge from experts:
Is well known that most cloud providers usually don't offer all the advisory on the saving-costs topic, and commonly companies found them selfs involved in a hopeless situation where they're trying to find the final solution to their costs situation.

Tecbeats could lead your company to take advantage of all the benefits of having services in the cloud. With our expertise and advisory, we could lead you to leverage these tools and give you the opportunity to start saving, optimizing and automating your costs.

As Tecbeats, we're a growing team of development experts and thought leaders—full of personality, minus the ego. We wear many hats and dedicate ourselves to helping companies like yours grow. ✦

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