LifeScience Services GmbH

# Leading through Digital Disruption: Strategies for Executives in the 21st Century

*"Everything should be made as simple as possible, but not simpler."*
Albert Einstein.

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# Executive Summary

Generative AI has the potential to disrupt the life sciences industry, offering both competitive advantage and creative destruction.

However, leaders should not fully immerse themselves in the technology. Instead, they should focus on how it will impact their organizations, identify the strategic opportunities, and mitigate the risks.

Regardless of whether your company is in the early stage, pre-commercial, or mature phase, your choices should be centered on three principles.

1. Focus on the limited number of things that will contribute the most to the objectives and strategies.
2. Know the reality of your business; Patients, authorities and competitors.
3. Take full advantage of all the talents and energies of your people.

The objective of the three principles is to improve the three most important areas for life science companies: research and development, value creation, and people.

To successfully navigate digital disruption, leaders need to prioritize the critical objectives that will drive growth and profitability in the digital age. These objectives include improving patient engagement, return on pharmaceutical innovation and upskill digital skills internally.

Leaders must stay in touch with the realities of the digital market, including emerging technologies, changing Patient behaviors and preferences, regulatory landscape and evolving competition.

They must leverage the talents and energies of their people to drive innovation and transformation, through effective communication, delegation of responsibilities, and fostering a culture of collaboration and experimentation.

As much as digital transformation is essential for growth and profitability, it is crucial to remember that humans remain at the center of every business. It is people who create, innovate, and drive change. Therefore, leaders must ensure that their digital transformation strategies prioritize the well-being of their employees and patients.

*Rui Teixeira*
***Co-founder and CEO***

# Key Areas that are Critical for the Success of Life Sciences Companies

Life Sciences companies play a vital role in improving human health and well-being.

To achieve success in this highly competitive field, companies must prioritize three key areas: research and development, value creation, and people.

When it comes to research and development, life science companies must be at the forefront of innovation. This means investing heavily in both basic and applied research to identify new targets and develop novel treatments. Companies that excel in this area are constantly pushing the boundaries of science and technology, and are often the first to bring breakthrough therapies to market.

Value creation is another critical area. While research and development is important, it is also essential to create value for shareholders and investors. This can be achieved through strategic partnerships, licensing agreements, and other business development activities. Companies that excel in this area are able to balance the need for short-term financial gains with the long-term goal of creating sustainable value.

Finally, people are the backbone of any successful company. This includes not only the scientists and researchers who drive innovation, but also the business leaders, sales representatives, and support staff who keep the company running smoothly. Companies that prioritize people invest in their employees through training, career development, and other initiatives, which helps to create a culture of excellence and ensure that the company is able to attract and retain top talent.

In this section, we will explore how each of these areas is critical to the success of a life science company, and provide some examples of companies that excel in each area. By understanding the importance of research and development, value creation, and people, companies can position themselves for long-term success and make a meaningful impact on human health and well-being.

## Research and Development

Research and development (R&D) is the lifeblood of any biotech company. It is the process of discovering and developing new treatments, therapies,

and technologies that can improve human health. Without R&D, life science companies cannot succeed in their mission.

Gilead Sciences has a strong track record of developing innovative treatments for HIV, hepatitis, and other diseases, including tenofovir disoproxil fumarate (TDF), an antiretroviral drug that is used in combination with other drugs to treat HIV, and is now one of the most widely used HIV drugs in the world.

Gilead Sciences invest heavily in R&D, and their efforts have resulted in several breakthrough therapies that have improved the lives of millions of people around the world.

- Invest in both basic and applied research
- Foster a culture of innovation and creativity
- Encourage collaboration between researchers and scientists from different fields
- Be open to new ideas and approaches
- Be willing to take calculated risks in order to achieve breakthroughs
- Stay up-to-date with the latest developments in their field
- Be prepared to adapt their research strategies and priorities in response to new discoveries and changing market conditions

## Value Creation

Value creation is the process of creating value for shareholders, Patients, and society as a whole. For life science companies, value creation is about developing treatments and therapies that are both effective and affordable.

Novo Nordisk, a specialist in diabetes care, develops innovative and affordable treatments through investments in research and development, as well as strategic partnerships that contribute to growth. This strategy has enabled Novo Nordisk to achieve short-term financial gains while pursuing the long-term goal of creating sustainable value.

- Develop affordable treatments and therapies that are both effective and accessible to patients.
- Pursue strategic partnerships and business development activities to create value for shareholders and investors.

- Foster a culture of innovation and creativity that encourages the development of new ideas and approaches.

## People

People are the most valuable asset of any company, and this is especially true in the case of life science companies. Life science companies must attract and retain top talent in order to succeed.

Amgen, provides its employees with opportunities for growth and development and has a strong focus on employee well-being. They offer a comprehensive benefits package and prioritize work-life balance, which helps to create a supportive and engaged workforce.

Amgen is a biotechnology company that is committed to unlocking the potential of biology for patients suffering from serious illnesses. Their mission is to serve patients by transforming the promise of science and biotechnology into therapies that have the power to restore health or extend life.

Amgen is also committed to sustainability and reducing their environmental impact, and has set ambitious goals for reducing greenhouse gas emissions, conserving water, and minimizing waste.

- Offer employees opportunities for growth and development
- Prioritize work-life balance and employee well-being
- Foster a supportive and engaged workforce through a comprehensive benefits package
- Emphasize sustainability and reduce environmental impact

## Conclusion

Research and development, value creation, and people are the three most important areas for life science companies.

By prioritizing these areas, biotech companies can achieve their mission of improving human health and well-being.

Gilead Sciences, Novo Nordisk, and Genentech are just a few examples of biotech companies that excel in these areas, and they should serve as models for others to follow.

# Three principles to use as a guide for organizational purpose and direction.

The three principles described hereafter are inspire by Mr. John E. Pepper's speech from 1981 at the Procter & Gamble Year-End Meeting in Cincinnati[1].

Mr Pepper is a former CEO of P&G. Under his leadership, the company had one of the most prolific times in its history, not only in terms of revenue but also with people engagement.

Despite being 40 years old, we believe it still reflects the reality of the vast majority of companies. Mr. Pepper's three (simple) principles approach is the best example of the focused and prioritized mindset leaders must adopt to guide their organization towards achieving its goals.

We have summarized each principle and created a checklist to recap each action by principle.

## Principle #1

*« There are only a limited number of things that we, as individuals, or our organizations can consistently focus on over time. Therefore, it is important to ensure that the things we do concentrate on are the most important. »*

The company's objectives are set for the long-term, and plans should be made to achieve this vision. While plans can change due to unforeseen circumstances, such as the recent pandemic and political instability in Eastern Europe, the objectives should remain unchanged.

When objectives and the means to achieve them are mixed, it can lead to inefficiency. We may end up investing time and effort into a project or aspect of a project that, even if successfully completed, will not make a significant contribution to the desired results.

## Check list Principle #1

Make thinking about the objectives a systematic ritual. For example, consider discussing them at the beginning of every internal meeting.

- ☐ Think personally about the objectives and your contribution towards achieving them.

Plans may evolve, but goals should remain until achieved.

[1] https://migroup.com/blog/former-pg-ceo-john-peppers-three-principles-to-achieving-good-results-in-business

- ☐ Create imaginative and specific plans to meet the objectives.

Objectives should be visible throughout the organization as an operating tool.

- ☐ Consider using posters, screen savers, internal marketing documents, and other similar media.

## Principle #2

*« Know the reality of your business, do not get enclosed in an ivory tower. »*

It is amazing that, as good as we are, and as long as we have been in most of our businesses, there are still such important facts to be discovered that are important to improving our therapies and businesses.

Conduct Development and Launch phases simultaneously.

Focus group interviews are important because they enable to ask deeper, smarter questions about the differences between what they believe is good and what patients and practitioners actually need. You can gain valuable insights into the needs and desires of patients, healthcare professionals. Gathering such collaborative evidence generates better scientific quality which are highly appreciated by PAYERS.

Enabling collaboration with healthcare systems as early as possible, by considering rolling reviews which can be considered outside of public health emergency.

Herbert Butterfield, in his book “The Origins of Modern Science”, noted that “… of all forms of mental activity, the most difficult to induce even in the minds of the young, is the art of handling the same bundle of data as before, but placing it in a new system of relations with one another. It is easy to teach someone a new fact”, he said, “but it needs a light from heaven to enable a teacher to break the old framework to which the student has been accustomed.” This statement describes a challenge that we face extensively. How can we overcome this challenge?

In these and in all ways, we and our people need to stay in touch with reality. Good ideas to connect stakeholders with the field is to attend field visits, symposiums, and trade shows. Each of these methods offers unique benefits that can help employees stay up-to-date with the latest developments in the industry and be more motivated and focused on creating innovative solutions for patients.

Contacts outside of the office are vital to keeping a fresh view of what’s important to Patients.

### Check list Principle #2

- ☐ Conduct Development and Launch phases simultaneously
- ☐ Consider rolling reviews with Patients, Healthcare Professionals and PAYERS to enable collaboration as early as possible
- ☐ Attend field visits, symposiums, and trade shows to stay up-to-date with the latest developments in the industry and be more motivated and focused on creating innovative solutions for patients.

## Principle #3

*« Take full advantage of all the talents and energies of our people – the people reporting to us, staff groups, peers, agencies, whoever is involved in making our business succeed. »*

Genentech has a strong culture of collaboration, and its employees are encouraged to work together across departments and teams to achieve common goals. In addition, Genentech invests heavily in employee development and training, offering a wide range of programs to help its employees grow and develop in their careers. This focus on employee engagement has helped the company maintain a competitive edge in the biotech industry and attract and retain top talent.

To create a strong company culture, it is important to promote collaboration and incentives for employees to work together across different teams. This can help the organization maintain a competitive edge in the industry and attract and retain top talent.

By delegating more and enabling network collaboration among people from appropriate disciplines, you can build a more effective and efficient organization. This fosters innovation and a faster response to changing market conditions.

Finally, by recognizing and rewarding results that contribute the most to the objectives, you provide a clear message to the organization on what is important and boost motivation among employees.

### Check list Principle #3

- ☐ Promote collaboration and incentives for employees to work together across different teams
- ☐ Delegate more and enable network collaboration among people from appropriate disciplines
- ☐ Personally champion, recognize and reward results that contribute the most to the objectives
- ☐ Listen well
- ☐ Encourage people to propose and do what they believe is right after objective consideration of other points of view

So, how many boxes did you tick in total? The more, the better.

**If you ticked only a few, it looks like you are in the need of a 🐐 #GOATConsultants!**

## The importance of Key Objectives

Objectives are essential for companies because it provides direction and focus. By defining clear objectives, companies can ensure that they are working towards a common goal and that everyone is aligned.

Companies are constantly seeking new ways to innovate and improve patient outcomes. To achieve success, there are three key objectives that companies should pursue: return on pharmaceutical innovation, improving patient engagement, and upskilling digital skills internally.

These objectives are essential for the growth and sustainability of companies in the life sciences industry.

### Return on Pharmaceutical Innovation

Pharmaceutical innovation is at the forefront of medical progress. Companies must invest heavily in research and development to find new treatments and cures for diseases. Successful R&D outcomes enable financial stability and sufficient funds for further investment.

However, this investment comes with significant risk. If not evaluated effectively, it can cause companies to disappear due to lack of revenue (or funding) and innovation. Positive return on investment and research and development are profoundly linked together.

### Improving Patient Engagement

Patients often face significant barriers to accessing healthcare, including cost, geographic location, and lack of information. Patient-centric digital services can help overcome these barriers by providing easy access to information and resources. Granting access to therapies and funding is a great strategy to improve patient outcomes and build trust.

Many companies, including Pfizer and Novartis, have implemented patient access programs to help patients access their medications and treatments. By providing these resources, they are demonstrating their commitment

to improving patient outcomes and building long-term relationships with their patients.

Improving patient engagement is critical to the growth and sustainability of companies in the life sciences industry.

### Upskilling Digital Skills Internally

Digital technology is playing an increasingly important role in areas such as patient analytics programs. Tools like machine learning have become pivotal in supporting the correct analysis and understanding of results. Rolling out training programs is essential to remain competitive.

It is also more affordable and quicker to upskill talent internally, rather than seeking outside help.

External contributors, such as consultants and interim managers, can be a great solution when there is an immediate need to fill a skills gap.

Roche has implemented a digital upskilling program for its employees, providing training in areas such as data analysis and artificial intelligence. By investing in digital upskilling, Roche has improved its digital capabilities and maintained a competitive advantage.

### Conclusion

Return on pharmaceutical innovation, improving patient engagement, and upskilling digital skills internally are key objectives for companies in the life sciences industry. Companies that prioritize these objectives can achieve significant growth and success. Pfizer, Novartis, and Roche are just a few examples of companies that have excelled in these areas and reaped the rewards.

## A Holistic Approach to Achieve Digital Transformation

According to Boston Consulting Group, only about 30% of companies successfully navigate a digital transformation. This task becomes even more challenging in the midst of uncertainty, which is the new reality, because new behaviors and expectations take shape and evolve rapidly.

Digital transformation is a critical component for the success of biotech startups. However, it can be a daunting task, especially for companies in highly regulated industries such as biotech. Here is a guide for taking a holistic approach to digital transformation for biotech startups:

## Step 1: Assess Your Current State

Before embarking on a digital transformation journey, it's important to assess your current state. Identify the areas where you need to improve and the technologies and processes that can help you achieve your goals. Consider factors such as compliance and security requirements, as well as the needs of your customers and stakeholders.

## Step 2: Define Your Vision and Goals

Create a clear vision for the future of your company and set measurable goals that will guide your digital transformation. Consider the needs of all stakeholders, including customers, employees, and investors. Make sure your goals are realistic, achievable, and aligned with your overall business strategy.

## Step 3: Build the Right Team

Invest in building a team with the right skills and expertise to drive your digital transformation. This includes not only technical expertise but also soft skills such as collaboration, creativity, and adaptability. Consider partnering with external experts and vendors who can provide additional support and guidance.

## Step 4: Prioritize and Plan

Identify the most critical areas for transformation and prioritize them based on their impact on your business goals. Develop a detailed plan for each area, including timelines, budgets, and milestones. Make sure to involve all stakeholders in the planning process to ensure buy-in and alignment.

## Step 5: Execute and Monitor

Execute your plan in a phased approach, focusing on incremental improvements and quick wins. Monitor progress and adjust your plan as needed based on feedback and results. Celebrate successes and learn from failures to continuously improve your digital transformation journey.

By taking a holistic approach to digital transformation, biotech startups can build the capabilities and culture needed to succeed in a rapidly changing industry.

### Checklist to Achieve Digital Transformation

- ☐ Conduct an audit of the company's current technology and infrastructure to identify gaps and areas that need improvement.
- ☐ Form a dedicated team tasked with overseeing the digital transformation process. This team should include experts in technology, data analytics, and project management.
- ☐ Move all company data, documents, and processes to a cloud-based system to enable easy access and collaboration.
- ☐ Upgrade the company's IT infrastructure to improve network capacity, security, and reliability.
- ☐ Automate administrative processes such as invoicing, HR, and procurement using digital tools such as Robotic Process Automation (RPA) and workflow automation.
- ☐ Develop a data analytics strategy that includes capturing, storing, analyzing, and visualizing data to gain insights and inform decision-making.
- ☐ Conduct training sessions for the employees with the new digital tools and processes.

## Path to Artificial Intelligence at Scale

Once companies have achieved digital transformation and become truly digital, the next step is to implement Artificial Intelligence.

The objectives of implementing Artificial Intelligence are to improve efficiency and reduce administrative burden.

To begin implementing Artificial Intelligence, follow these steps:

### Identifying use cases

Identify areas where AI can be applied to improve efficiency and reduce administrative burden. For example, AI can be used to analyze clinical trial data, identify disease patterns, and improve patient outcomes.

### Partnering with AI vendors

Identify and partner with AI vendors who can provide the necessary technology and expertise to implement AI at scale.

### Pilot test AI applications

Conduct pilot tests of AI applications to ensure they are effective and meet the company's needs.

### Implement AI at scale

Roll out AI applications across the company to improve efficiency, reduce administrative burden, and gain a competitive advantage.

### What are the Key Considerations to implement Artificial Intelligence?

- Develop a generative AI strategy owned by the C-suite
- Identify what innovations become possible when every employee has access to generative AI
- Determine how generative AI will change how employees' roles are defined and how they are managed
- Contend with the fact that generative AI models may produce false or biased output
- Identify the company's "golden" use cases for generative AI
- Work with technology teams to make strategic choices about whether to fine-tune existing LLMs or to train a custom model
- Assess the timing of investing in generative AI
- Determine how roles will evolve with the adoption of generative AI
- Develop a strategic workforce plan to ensure that the company has the right people and management in place to stay competitive and make the most out of their AI investments
- Establish policies that help employees use generative AI safely and that limit its use to cases for which its performance is within well-established guardrails
- Train employees how to use generative AI within the scope of their expertise

## Dos and Don'ts of Scaling AI

While many companies have invested in artificial intelligence (AI), few have unlocked its full potential.

A research from BCG shows that only 11% of companies have released significant value, and most have failed to scale AI beyond pilots. However, companies that invest more in digital put more resources into AI, and even small seed investments can generate up to 6% more revenue.

Winners prioritize high-impact use cases, make data and technology accessible, recognize the importance of aligned leadership and employees who build and leverage AI, and act fast. A modular data and digital platform serves as the technical foundation for data accessibility and allows for rapid release cycles of AI use cases. AI leaders recognize that putting the right people in the right roles is a critical foundation for success.

## Winners Strategy

- Prioritize the highest-impact use cases and scale them quickly to maximize value.
- Make data and technology accessible across the organization, avoiding siloed and incompatible tech stacks and standalone databases that impede scaling.
- Recognize the importance of aligned leadership and employees who build and leverage AI, and they support staff who promote collaboration and end-to-end agile product delivery.
- Speed of implementation is critical. Companies that can execute an idea within 5 to 7 months are twice as successful as those who take longer.

## Losers strategy

- Lack of mature digital foundation
- Selectively explored AI use cases
- Failed to reimagine the way to work with data
- Missed to redefine human-AI interaction.
- Three areas that define AI maturity: AI use cases, AI capabilities, and the company’s digital foundation.

## What actions should be taken to implement a winning strategy?

- Implement a systematic approach that prioritizes scaling of use cases based on value.
- Build use cases using a consistent agile execution model that allows for accelerated scaling.
- Align the use cases with the company's key results and objectives.

## People are the key foundation for AI at scale.

- Emphasize both human and technological capabilities.
- Implement collaboration between business units and functions.
- Provide a roadmap to achieve the company's vision.

- Establish a creative learning environment that encourages the daily use of AI solutions.
- Create an organizational and trustworthy environment where teams can make decisions, generate new ideas for leveraging AI, and take risks.

Even small investments in AI can be lucrative. However, making AI work requires focus and discipline, as well as a consideration of human skills in addition to technology. A well-planned approach to building the necessary digital foundation and capabilities for scaling up AI use cases can serve as a powerful and profitable accelerator.

## Conclusion

We hope this white paper has provided valuable insights into the challenges faced by executives in the digital age. It highlights the importance of adapting to new technologies and embracing digital disruption to stay ahead of the competition.

Businesses need to be agile and flexible in response to the rapidly changing digital landscape, constantly evaluating and updating business strategies to stay relevant in the market.

Innovation is key in driving growth and competitive advantage, and businesses can leverage emerging technologies such as artificial intelligence and the Internet of Things to create new products, services, and business models.

Digital transformation plays a critical role in enabling businesses to succeed in the digital age, requiring a clear digital strategy, strong leadership, and a culture of innovation. Customer-centricity is also important, and businesses can use digital tools and technologies to better understand Patient needs and preferences in order to deliver personalized therapies.

Finally, businesses need strong cybersecurity measures in place to protect against increasing cyber threats.

By embracing these principles, businesses can stay ahead of the competition and thrive in the digital economy.

# Disclaimer



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