# Life Science
# meets Tangity

# Time is changing.
# – Are you?

Now is a pivotal moment for all life science companies. The industry is facing challenges from every direction - The blockbuster model that is no longer successful; new players entering into the market; patients demanding imminent change. The list goes on. Truth of the matter is, the old paradigm is soon to be obsolete. We are experiencing uncertainty in several forms.

Indeed, it is time for change, but how?

As Tangity, we would like to embark with you on a journey exploring three major challenges the life science industry is facing. Each section of the report provides suggestions and best practices on how one may disentangle these difficulties and rise above the competition.

We are Tangity.

A global network of design studios that reshapes the complex status quo with humanized design.

⟶ 01

The overturn of traditional roles and established processes within the healthcare sector and the adaptations required.

⟶ 02

Patients want more. The growing appetite for empowerment, empathy, trust and better user experience around medical offerings and treatments.

⟶ 03

An aging society with rising disability needs, the gradual population shift.

# The overturn of traditional roles and established processes within the healthcare sector and the adaptations required.

# Which one are you?
# - A shepherd or a lamb in the transformation of traditions.

The Covid-19 pandemic surely has caught everybody by surprise, but what are the impacts beyond the known ones?

This phenomenon is a catalyst accelerating digitalization within the healthcare industry, one which was progressing at a rather gentle pace. Currently, more consumers are turning to telehealth along with other digital healthcare platforms. Healthcare providers are proactively adapting to online measures to retain their clients.
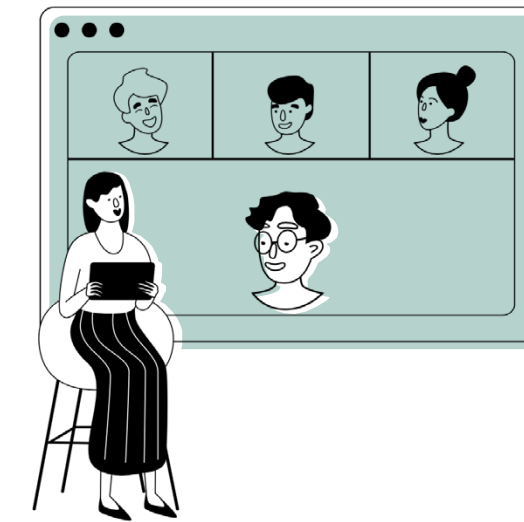
This transformation is not limited to the consumer side of the industry, yet life science companies and professionals are also undergoing similar levels of systemic and structural change. The reason behind this is to sustain their competitive edge and solve upcoming challenges. Within pharmaceutical sales, for example, increasing B2B sales activities are turning to online methods to cope with the situation. Now, there are

several digital B2B marketplaces for the pharmaceutical industry in place that authenticate this change. An end result could be an Amazon equivalent platform for doctors and nurses.

It is more critical than ever to adapt to the digitalized world, to support professionals who face changes in their roles from traditional practitioners to on-demand digitalized service providers. Physicians need support in their everyday practices. Relevant examples are IFAP and Stiko@RKI applications that support doctors' daily practice in Germany[1]. The closer you work with your clients, the stronger the reliance and reciprocal support. In addition, life science and pharmaceutical companies also need to conform to the change internally. The pandemic may be temporary, but the related changes will not be. Organizational changes such as remote work are the new normal. Accordingly, the German

government has already started to consider the regulation of remote work[2]. Life science companies should engage with alternative talents to counter the upcoming challenges.

In the near future, only those who know how to provide real value to the healthcare sector may thrive. As new players swarm into the battlefield, it is critical for established companies to acclimatize to the yet foreseeable shift. Are you prepared to ride the rising tide?



## Accompany your healthcare professionals through change

Adapt to the ongoing digital and role transformation taking place among healthcare providers.

## Start from within outward

Prepare yourself not only externally, but internally as well. Restructure the system.

"The pandemic may be temporary, but the related changes will not be."

Role Change. Structural Change. Systematic Change.

# What do we think as Tangity?

With the Covid-19 pandemic and digitalization phenomenom at hand, the future is becoming evermore unpredictable. We, as Tangity, have the perfect design and change expertise to navigate you through the rocky road ahead.



NTT DATA and Chugai Pharmaceutical Co. have been developing a solution based on the concept of improving the process efficiency of medical documentation using AI. For example, by automatically creating clinical trial-related documents from a clinical trial protocol[3].

## 01

### Support your B2B clients

Digitalization is not a one-man job. Reinforce the process of digitalization by including big data & AI to a larger degree. Apart from solving your clients' problems, the gained data will generate valuable insights.

#CRM
#Digitalize
#Client Engagement

## 02

### Design for change within

What lies in the future is unknown. Be agile and flexible with the upcoming change. Keep in mind, the implementation is just as important as the design. Only proper transition guarantees swift transformation.

#Change Management
#Design Systems
#Agile R&D

## 03

### Develop systemic design

Any great design or solution should take into consideration the complexity of the system it lies in. An unfitting genius design is fruitless.

#Sustainable System
#Systems Thinking
#Integrated Design

## 04

### Work experience 2.0

Your employees are your core and heart. Provide them with great work experience. Enable remote work, grant them autonomy and freedom. You will win them all!

#Employee Experience
#Employee Autonomy
#Creative Mindset



NTT DATA's subsidiary, everis, has developed an integrated remote health solution that includes self-triage, virtual consultations, and data analysis management. Its main purpose is to reduce the pressure on professionals during the different phases of a pandemic, and it is now being implemented in Argentina, Colombia, Chile, and Peru[4].

Patients want more. The growing appetite for empowerment, empathy, trust and better user experience around medical offerings and treatments.

# How deep are your "patient-centric" roots?

The term "patient centricity" is gaining importance within life science companies, due to changing treatments and priorities.

With the demands for finer and deeper empowerment surging, patients are becoming more selective. This affects the expected results from healthcare providers. Life science companies should reach out directly to their end-customers with accommodating values to differentiate themselves. This will help you thrive in the long-term. So, how do we really get there?
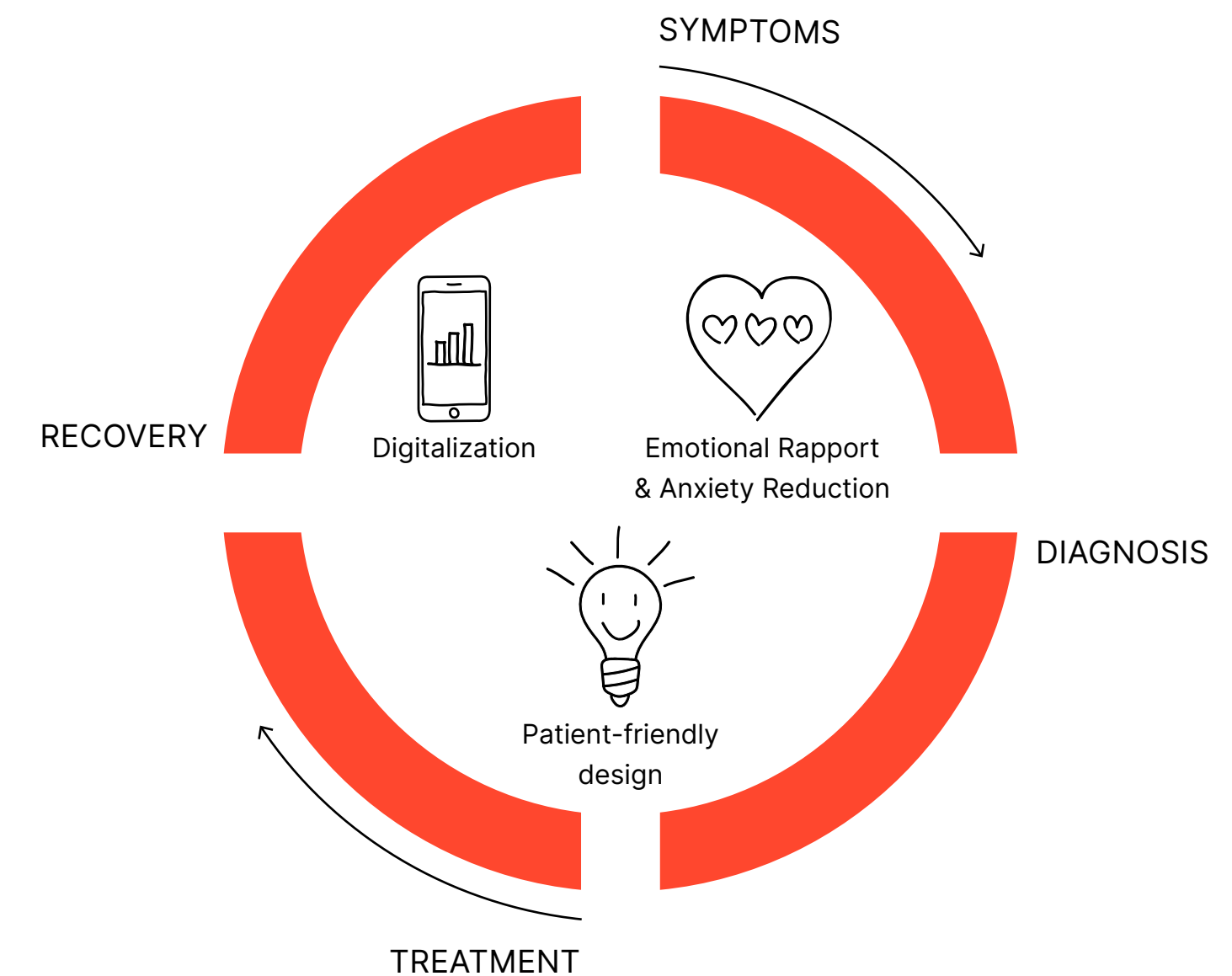
The core is to build value around and beyond existing products, to accompany end-customers considerately through their dreadful patient journeys, delighting them with additional benefits. This is what leads to a longstanding relationship that is built on trust. An example is the Propeller App from Propeller Health that gathers individual asthma data of a patient's inhaler and provides personalized AI support to increase patient adherence[5]. The respective sensor is even compatible with different inhalers such as the GSK Ellipta inhaler, leading to synergy for all players[6].

Establishing emotional rapport is of crucial essence as well. It is no longer merely about the recovery itself, but the experience of the recovery. It is important to show empathy by alleviating patients' stress and enforcing gratification across pre-, during- and post-treatment. The optimized breast cancer screening program by Baylor Clinic in cooperation with Siemens Healthineers illustrates this concept precisely. By redefining the patient journey with the help of advanced technology, the clinic is able to shorten the stressful fourteen days process on average to one day[7]. Furthermore, it includes shortened waiting time upon arrival, standardized assistance for aftermath planning, as well as empathetic care from technologists throughout the entire process. As a result, this greatly reduces the fear and anxiety experienced by the patient throughout the journey, which could increase the willingness to participate.

The added value of existing products needs to be designed considering the holistic patient journey, targeting outstanding pain points. In turn, this unlocks additional customers, increases sales, and enhances trust.



SYMPTOMS

DIAGNOSIS

TREATMENT

RECOVERY

Digitalization

Emotional Rapport & Anxiety Reduction

Patient-friendly design

"It is no longer merely about the recovery itself, but the experience of the recovery."

Patient Empowerment. Emotional Rapport. Trust.

# What do we think as Tangity?

The business paradigm in the life science industry is shifting from inside-out to outside-in. End-customers and patients now have a bigger say. Tangity will amplify your understandings of them. Our mission is to help you come up with intuitive engagement methods that have never crossed your mind before.



Moveband is an NTT Docomo developed digital wristband that measures the body condition of a person. The measured data is accessible and manageable via its designated WM application in Japan[8].

## 01

## Challenge the status quo

Scrutinize your current portfolio, strategies, and success measures. Refine them to move closer to your end-customers. No excuses!

#Business Modeling
#Long Term KPIs
#Chief Patient Officer

## 02

## Listen to the feedback

Proactively engage with professionals and end-customers to identify emotional and rational needs within the holistic patient journey. They will be truly grateful!

#Patient Journey Mapping
#Design Thinking
#Feedback

## 03

## Design for expansion

Infuse the feedback in the expansion of your existing products. Design the whole patient experience instead of just the product. The end result could be intangible, tangible, B2B, or B2C. Let your creativity roam free!

#Service Design
#CX
#UX & UI For Trust

## 04

## Collaboration 2.0

Seek out for necessary alliances that ramp up your technology capability, patient knowledge and design creativity.

#Open Innovation
#Alliance
#Systemic View

## Have you ever thought of...

...offering digital therapeutic applications that could strengthen or even replace your current offerings?

The Digital Healthcare Act in Germany (Digitales Versorgungsgesetz) allows the prescription of a digital application as a mean for recovery of patients[9].

#DVG

# An aging society with rising disability needs, the gradual population shift.

# Would you like to dive into an uncharted blue ocean?

We are aging. As we age, an extensive portion of our population will become 'senior', and at times with aging comes disability. Disabled people consist of the largest minority of the global population, covering more than 1 billion people as of now[10]. But why doesn't the life science industry focus as much on this immense group of people?

Temporary or permanent physical and mental impairments deserve more inclusions from medications and treatments than the status quo. A fine twist of your core offerings may open up a vast expanse of undeveloped blue ocean that enables your brand to satisfy both existing and new customers with frictionless experiences.

Far-reaching accessibility is the greatest stepping stone that will lead you into the blue ocean. This includes exhaustive usability of your products together with the simplification of complicated workflows in treatments. GSK demonstrated this by reshaping the packaging of their nonsteroidal anti-inflammatory drug, Voltaren (Diclofenac), ensuring that the packaging could easily be held and opened by people suffering from dexterity or osteoarthritis conditions[11].

Accessing the blue ocean is only the start, the key to reveling in it lies in the beauty of comprehensive assistance. Both senior and disabled populations need special attention and support in their usual routines.
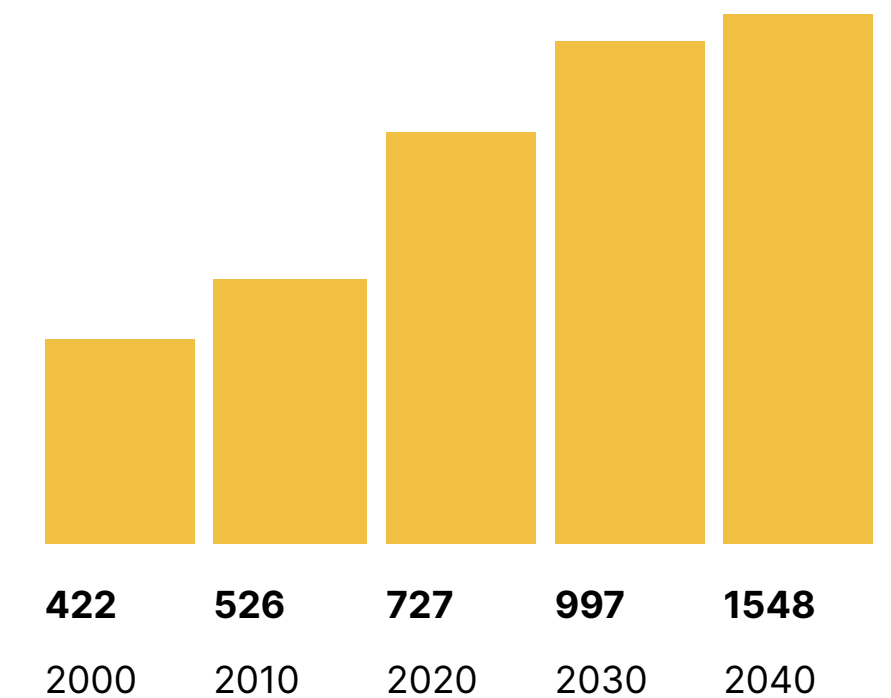
A well designed smart medical home device may make daily doctor's visits obsolete. What is worth mentioning here is the KardiaMobile ECG (or EKG) reader and its mobile application developed by AliveCor. It is a band-aid sized sensor pad that measures your ECG within simply 30 seconds of finger contact, even under restless body conditions[12].

Remember, this twist in products is certainly not limited to physical design but digital enhancement as well.

Just like the butterfly effect, a flap of your products' wings may trigger a tornado storming through the ever-expanding ocean.

GLOBAL POPULATION
AGE 65+ (IN MIO)[14]

| 422 | 526 | 727 | 997 | 1548 |
|------|------|------|------|------|
| 2000 | 2010 | 2020 | 2030 | 2040 |

In countries with life expectancies above 70 years, people spend Ø 8 years with disabilities[13].

"A fine twist of your core offerings may open up a vast expanse of undeveloped blue ocean."

Access. Assistance. Adherence. Inclusion.

# What do we think as Tangity?

Profits in the red ocean are shrinking and competition is growingly tense. We would like to sail across the blue ocean with you by giving your products the midas touch. All hand hoy and set sail!
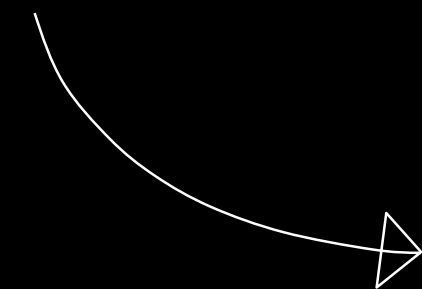


Sota, NTT DATA's adorable virtual assistant that is capable of interacting with other devices (including medical devices) using IoT to bring forth assistance, easy monitoring, and entertainment for elderly people[15].

## 01

### Embrace every persona

Account for elderly or impaired personas in core offerings. Early integration may reveal barriers to access or required assistance.

#Persona Modelling
#No Bias
#Sensitive UX Research

## 02

### (Clinical) Trial & error

Open up clinical trials and usability testing for every persona. Consider reframing testing tasks to grant minorities more access. Win with new insights!

#1:1 Usability Testing
#Lean Development
#Iterate

## 03

### Design for all

Consider all minorities when designing, think of users with different cultural and economical backgrounds. The more parties you consider the more intuitive your products will be.

#Inclusive Design Principles
#Human-Centered Product Design
#Inclusion Of Diversity

## 04

### Think out of the pill box

(Fin)tech and retail players are pros in lucid presentations. Learn from them!
But don't neglect the respective contexts.

#Cross-Industry Learning
#Tone & Voice
#Context



AIDA is a UNESCO recognized support kit with a tailored application designed by Tangity that leverages AI to analyze behavioral and cognitive patterns of children with autism, providing care-givers with suggestions about their needs[16].

# We are problem framers and solvers, creating ready-to-use solutions.

We combine a human-centered design approach and expertise in creating digital experiences with the leading-edge technologies of NTT DATA.

## Tangity

**NTT DATA**

Innovation & Design

Business Analysis

Backend Development

Cloud Computing & CMS Platform

OUR OFFERINGS

Business Design
Service Design
UI & UX Design
UI & UX Consulting
Visual Design
Product Design
User Research
CX Strategy
Innovation Enablement
Organization Transformation

### 16 studios
NTT DATA Design Network

### 12 countries
NTT DATA Design Network

### 550+ designers
NTT DATA Design Network

# We humanize complexity

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