



# Innovation Pioneers

**THIS BRIEFING PAPER INCLUDES KEY TAKEAWAYS FROM TANK MEETING NR 56, THE FIRST PHYSICAL MEETING IN 2021, HOSTED BY TELEDYNE FLIR ON “HOW TO MOVE FOCUS FROM HARDWARE TO SOFTWARE SOLUTIONS”.**

The Tank Meeting took place on September 22nd, 2021 at Teledyne FLIR in Täby.

## **PARTICIPATING INITIATOR COMPANIES & ORGANIZATIONS**

Alfa-Laval, Castellum, Googol, Innovation Pioneers, Lindab, RISE Research Institutes of Sweden, Swedish Match, Swedish Public Employment Service, Teledyne FLIR, Vasakronan, White Arkitekter

## **PURPOSE**

The first physical Tank Meeting of 2021 was focused on the strategic transformation of a hardware-first offering to a full-service offering. Adding a software offering to an existing hardware product adds complexity not only in terms of product, marketing and logistics, but also from an organisational perspective. Teledyne FLIR is currently in the middle of this transformation and invited the participants to co-create possible solutions to complete this transformation successfully. Teledyne FLIR shared some insights into their products and their journey so far, using the Business Model Canvas to showcase the gaps that are yet to be solved. The session was not only an opportunity for Teledyne FLIR to collect ideas from the members, it was also an interactive learning experience for members facing the same challenge.

## **ABOUT THE HOST - TELEDYNE FLIR**

Teledyne FLIR designs, develops, manufactures, markets, and distributes technologies that enhance perception and awareness. They bring innovative sensing solutions into daily life through our thermal imaging, visible-light imaging, video analytics, measurement and diagnostic, and advanced threat detection systems.

Teledyne FLIR offers a diversified portfolio that serves a number of applications in government & defense, industrial, and commercial markets. Their products help first responders and military personnel protect and save lives, promote efficiency within the trades, and innovate consumer-facing technologies. Teledyne FLIR strives to strengthen public safety and well-being, increase energy and time efficiency, and contribute to healthy and intelligent communities.



Teledyne FLIR is a long-time member of Innovation Pioneers and was formerly known as FLIR, before joining forces with Teledyne in May 2021.

## TELEDYNE OVERVIEW

Employees: 16 000  
Revenue: \$5B





**Instrumentation**

Monitoring and control instruments for marine, environmental, scientific, industrial, and defense applications as well as harsh environment interconnect products



**Digital Imaging**

Research laboratories for a range of new technologies, as well as development and production efforts in digital imaging products for government applications. Included are infrared detectors, cameras, and opto-mechanical assemblies.



**Aerospace & Defense Electronics**

Complex electronic components and subsystems for communication products, including defense electronics, data acquisition and communications equipment for air transport and business aircraft.



**Engineered Systems**

Systems engineering and integration, advanced technology application, software development, and manufacturing solutions to space, military, environmental, energy, chemical, biological and nuclear systems, and missile defense requirements

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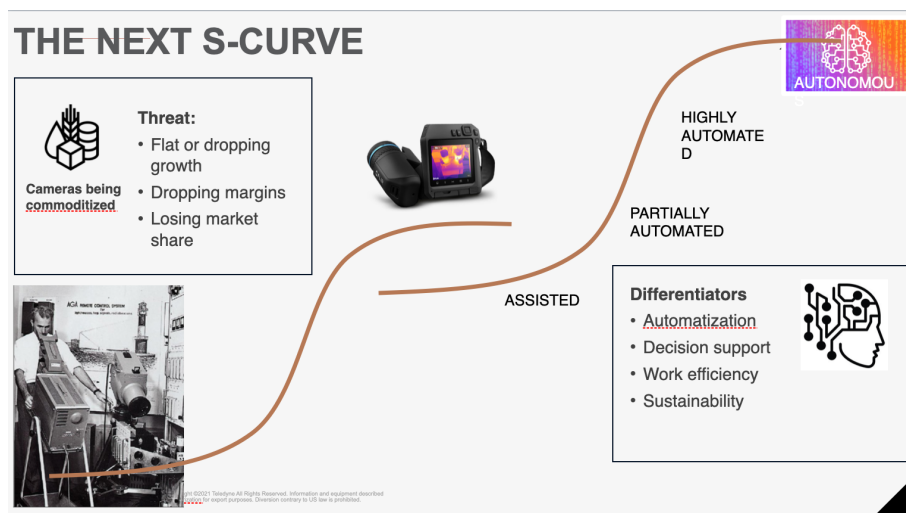
**TELEDYNE FLIR SOLUTIONS**

Employees: 1400  
Revenue: \$800M

## S-CURVE DRIVEN TRANSFORMATION

Teledyne FLIR shared some insights into how the hardware competitive landscape is changing. It is increasingly harder to acquire design protection and with hardware prices dropping rapidly, Teledyne FLIR believes that hardware is commoditizing. They have identified that hardware-only is no longer the future and that they need to transform their offering to future-proof their business.

This can be visualised in a classic S-curve, where it is key to identify where on the S-curve your company is currently at. If you're approaching the flat curve, you need to look ahead to find the next revenue driver before your competitors outrun you.





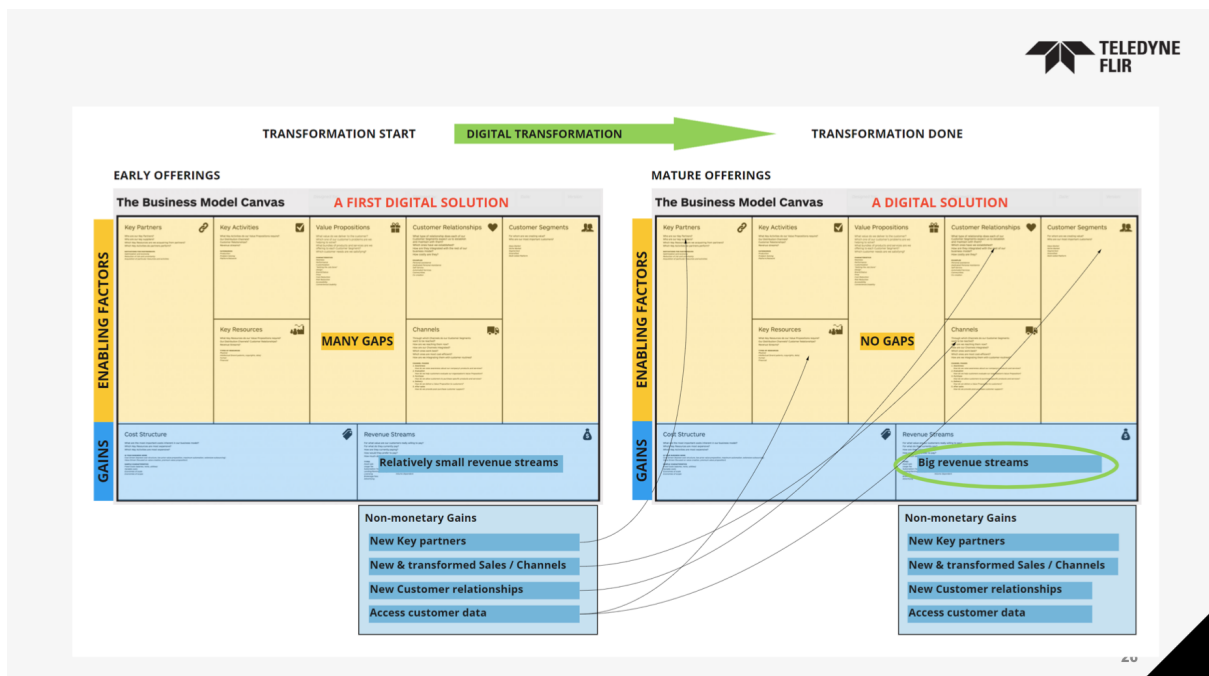
## BUSINESS MODEL CANVAS GAPS

If you have identified that you need to transform your business, where do you start? Teledyne FLIR discussed the “chicken-or-the-egg” situation where you need software to get your first partners, but it can be challenging to get resources and commitment from the organisation when the core product is still the revenue driver.

Teledyne FLIR showed how they are using the Business Model Canvas to visualise their current hardware-focused business model and to identify the gaps in the new service-focused model they want to transition to. As part of their new service offering, Teledyne FLIR has identified that they need to lower the hurdle for customers to use their hardware products. One possible path is to simplify usage by helping customers interpret image results and help them make the right decisions.

A few challenges were highlighted:

- Comparing a business model with no gaps, with a new model with many gaps, how do you make them compete internally?
- How do you develop the service offering, before you have your first customer?
- How can you make the sales and reseller channels to adapt to the new offering?
- How do you shift competence focus within the company?



## WORKSHOP: HOW TO MOVE FROM PRODUCT TO SERVICE OFFERING

The participants got a chance to discuss ideas and solutions to Teledyne FLIR's challenges. To aid the discussions, Teledyne FLIR shared their pre-filled Business Model Canvas to showcase the gaps in the new business model. The participants also received a set of questions to help spur the discussions.

How to:

- Compare near term revenue vs long term when there is also a strategic component to calculate?
- Calculate indirect revenue, high business risk and strategic fit?
- Estimate how much collected data is worth? Customer data, usage data (how customers are using the products) and image/sensor data?
- Create a systematic approach to guide when to work with partners or develop internally?
- Ensure the right balance between hardware and software projects?
- Organize R&D, product management etc to generate ideas and create focus on the important things?
- Risk minimize new software offerings and in what stage?

The groups were divided into four groups and got an hour to discuss and prepare a short presentation of their learnings and discussions.



## DISCUSSIONS, REFLECTIONS AND LEARNINGS

Many good topics were covered during the discussions. The participants shared their own experiences and knowledge and were able to discuss the topic from many different angles and perspectives. The discussions covered everything from strategy and product development to people management and organisational structures. Some themes were extra prominent during the discussions, such as the importance of focusing on a solutions-oriented product, the importance of understanding your customers' pain points and communicating a vision to align the whole organisation.

Many insights and learnings were shared during the day, however below are some of the themes, insights and discussion topics that were shared during the group discussions and presentations.

### **1. Problem-centric instead of product-centric solutions development**

- Instead of developing products, and then finding product-market fit there was a discussion around the importance of including your customers in the product development phase.
- Many development projects fail, however the people who are the closest to the problem tend to be the most successful ones at developing solutions that the market wants
- One way to stay close to the problem to be solved, is to invite your key customers to co-create the solution for them. Make sure you dig deep into their needs, their problems and their pain points.
- A member mentioned that we often start with hardware and then think “how can we make this more valuable by adding software?” If you instead focus on the problem and then bundle the products and/or services required to solve the problem, you’ll have a better chance of developing the right offering
- Who will create the best value proposition for the customer? The one who nails the value proposition and solves the customer’s real problems in a simple way will get a head start

### **2. Understanding the ecosystem you’re operating within**

- There was a discussion about ecosystem strategy, or platform strategy, as a way to build customer value
- What are the potential roles your company can take within this ecosystem? Are you an advisor? Consultant? Where are you building value?
- What role does your customer’s data play? What is their data worth? Can you train “the ultimate AI-prediction model”?
- Can you build modules or applications that fit existing ecosystems as a value-add to customers?

### **3. Injecting the service management DNA into the whole organisation**

- The participants discussed the importance of having the service management thinking integrated into the whole organisation. This covers everything from rethinking titles and responsibility areas, replacing old KPIs with experience based KPIs and understanding future competence needs.
- The importance of internal communication was highlighted and having a strong communications team who can inspire the organisation to align on the vision. One member said “the biggest challenge is typically not the technology, it is the people”.
- Based on previous experience, a participant recommended putting the emphasis on the employees who want to make a change. There will always be laggards, and they also need to be managed and motivated, however the main focus should be on the internal pioneers. Put “lagom effort” on the laggards.

#### 4. Being profitable is an argument to invest!

- “Do or die” - you need to understand where you are at at the S-curve and act fast
- Having a hero product should be viewed as a reason to invest, rather than the opposite. It is when you are profitable that you can invest in the future, when profit margins are decreasing it is going to be much harder. Nokia was brought up as an example of a profitable company that lost market share to their competitors.
- The skills of the market place is changing too - you might need to shift business model only due to the fact that the employees who know how to run your machines are retiring

#### 5. Understanding when you can get lost, and when you need to be 100% accurate

- There was a discussion around the importance of understanding whether you are “optimising for the rule or the exception”.
- It was argued that it is important to be allowed to get lost, to navigate within the unknown to find the next big thing
- In order to know when you can ship products to the market, it is important to understand when you can be wrong, and when you need to be 100% right. It was argued that it is important to make this decision internally, not to get stuck in perfection unless it needs to be perfect.

#### 6. Bridging the gaps to complete the transformation - making it happen

- When making the transition there was a discussion about prioritization and the importance of prioritising wisely
- A member raised the importance of having your strategic path set before you start your technical innovation process, otherwise it gets difficult to know which innovation to keep focusing on
- Do you develop the new business as a separate entity or integrate it to the whole business? The example of Scania was mentioned where everyone in the organisation wanted to work on the future. The solution was to integrate both into everyone’s work responsibilities. Which path is the right one for your organisation?
- A member raised a point about sharing your vision, not only internally but also externally. If you share your vision externally and make yourself approachable, more collaboration and partnerships opportunities can open up
- How do macro trends influence your customers’ demand for your products?
- Could you lobby for certifications and set the market standards of the future?



### SHARED DOCUMENTATION

This and previous documentation from other sessions can be downloaded on our website: <https://www.innovationpioneers.net/members-area>

Password: innopion2019

### UPCOMING TANKMEETING

Tankmeeting nr 57 at RISE (on site) – How to stay relevant in a complex world

**Date:** 27 th of October 2021

**Time:** 12.00 – 17.00

**Venue:** Drottning Kristinas väg 61, 11428 Stockholm

**Register:** <https://www.innovationpioneers.net/event/tankmeeting-nr-56-at-rise>

### CONTACT

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