



From the MixCache.com library

SAMPLE COPY

FLIR Systems

MixCache.com

SAMPLE COPY

Table of Contents

- **Introduction**
- **Chapter 1** Origins in Tigard: FLIR's Founding Vision
- **Chapter 2** Infrared for the Masses: Early Innovations in Airborne Imaging
- **Chapter 3** Expanding Horizons: Handheld and Laboratory Systems
- **Chapter 4** Strategic Acquisitions: Building a Sensing Empire
- **Chapter 5** Going Global: International Growth and Market Penetration
- **Chapter 6** The Agema and Inframetrics Impact: Engineering Excellence
- **Chapter 7** Indigo Systems: The Detector Revolution
- **Chapter 8** Navigating the 2000s: Diversification and Market Disruption
- **Chapter 9** Raymarine and the Maritime Transition
- **Chapter 10** Nano to Macro: Prox Dynamics and Point Grey Integration
- **Chapter 11** Drones and Robots: The Quest for Unmanned Dominance
- **Chapter 12** FLIR's Product Portfolio: From Thermal Cameras to Sensor Suites
- **Chapter 13** Pushing Technology Boundaries: Core Innovations
- **Chapter 14** Serving Government and Defense: The Power of "The Sixth Sense"
- **Chapter 15** Industrial Strength: Applications in Utilities and Manufacturing
- **Chapter 16** Public Safety and Humanitarian Missions
- **Chapter 17** Commercial Frontiers: Security, Maritime, and Automotive Markets
- **Chapter 18** Research & Development: Driving Scientific and Technological Progress
- **Chapter 19** Manufacturing & Workforce: Culture, Locations, and People
- **Chapter 20** Corporate Social Responsibility: FLIR's Societal Impact
- **Chapter 21** Financials Through the Decades: Growth, Profit, Setbacks
- **Chapter 22** Weathering Challenges: Management Scandals and Legal Hurdles
- **Chapter 23** The Teledyne Merger: Reshaping FLIR's Future
- **Chapter 24** Current Standing: FLIR Today as Teledyne FLIR
- **Chapter 25** The Road Ahead: Vision, Innovation, and Future Prospects

Introduction

The story of FLIR Systems is one of relentless innovation, strategic ambition, and a bold vision to expand the boundaries of human perception. Since its humble beginnings in Tigard, Oregon in 1978, FLIR Systems has been synonymous with pioneering the use of infrared and thermal imaging technology, evolving from a small upstart focused on energy audits to a global leader whose products empower users to "see the unseen." This transformation has been fueled not only by a dedication to technical excellence but also by an unwavering commitment to serving both societal and industrial needs.

FLIR's technological prowess laid the foundation for a new era in sensing solutions, allowing people to see in complete darkness, adverse conditions, and even through obstacles like smoke and haze. Its thermal cameras and sensing devices quickly migrated from specialized airborne applications to an ever-expanding range of markets — from aerospace and defense to industrial safety, public security, transportation, and environmental stewardship. In the process, FLIR didn't just build products; it defined industries and inspired new standards for performance, reliability, and innovation.

Integral to FLIR's journey has been its bold acquisition strategy. Recognizing how collaboration and integration could accelerate innovation, FLIR systematically acquired companies at the forefront of related technologies, including Agema, Inframetrics, Indigo Systems, Raymarine, Prox Dynamics, Point Grey Research, and more. Each brought unique talent, capabilities, or market leadership, weaving together a corporate fabric richer and more robust with every new partnership. These moves gave FLIR a commanding position not just in thermal imaging, but in the broader domains of intelligent vision, unmanned systems, and advanced sensor integration.

FLIR's story, however, is far more than a story of commercial success and technological advances. It is also a narrative about people, company culture, and responsibility. Its employees — spanning continents and specialties — have fostered an environment where creativity, mission-driven work, and a commitment to community are central. The company's emphasis on supporting veterans and building a diverse, inclusive workforce speaks to a broader understanding of its place in society and duty to continue evolving.

Throughout its four-decade journey, FLIR has faced formidable challenges: market downturns, management controversies, and regulatory scrutiny. Yet, its record shows resilience and a propensity to emerge stronger and more future-focused. The 2021 merger with Teledyne Technologies marks the latest chapter in FLIR's evolution,

creating a powerhouse in imaging across the electromagnetic spectrum.

As the world grows increasingly reliant on intelligent sensors and unmanned systems — for safety, efficiency, sustainability, and exploration — FLIR’s story remains unfinished. This book traces that journey: from its origins and meteoric growth to its current standing as Teledyne FLIR, exploring not only its past but also the pivotal role it will continue to play in shaping how humanity perceives, protects, and thrives in a changing world.

SAMPLE COPY

CHAPTER ONE: Origins in Tigard: FLIR's Founding Vision

In 1978, a small company with a big idea emerged from Tigard, Oregon, a quiet suburb nestled southwest of Portland. This was the birth of FLIR Systems, Inc., a name that would, in time, become synonymous with the power of thermal imaging. The company's initial mission was ambitious yet remarkably focused: to pioneer high-performance, low-cost infrared imaging systems for airborne applications. This wasn't about fancy military hardware, at least not yet. It was about something far more mundane, yet equally vital: energy audits.

Imagine a time when concerns about energy efficiency were just beginning to percolate into the public consciousness. The oil crises of the 1970s had driven home the need to conserve resources, and people were starting to look for ways to make their homes more energy-efficient. FLIR's founders saw an opportunity to apply cutting-edge technology to a very practical problem. Their early systems were designed to be mounted on vehicles, essentially turning them into mobile thermal scanners. These vehicles would then cruise through residential areas, their infrared cameras silently capturing the invisible heat signatures emanating from houses.

The magic of thermal imaging, even in its nascent form, lay in its ability to "see" what the human eye could not. All objects and materials emit infrared energy, or heat. By detecting and visualizing these temperature differences, FLIR's cameras could pinpoint areas of abnormal heat leakage from homes – identifying drafty windows, poorly insulated walls, or gaps in roofing. It was like giving homeowners X-ray vision for their energy bills, revealing hidden inefficiencies that were costing them money.

This initial venture into residential energy audits, while innovative, was a tough sell. The demand for such specialized equipment, particularly for home-by-home inspections, proved to be rather limited, and what little demand existed soon tapered off. It was a classic startup conundrum: great technology, but a niche market that wasn't quite ready for it. However, the foundational technology FLIR was developing—the ability to create clear, actionable images from heat signatures—was undeniably powerful. The challenge was finding the right application, a market that truly needed to see in complete darkness, through adverse weather, or even through obscurants like smoke and haze.

The early years for FLIR were a period of intense learning and adaptation. While the energy audit market didn't take off as hoped, the company quickly realized that the core capabilities of its infrared technology had far broader potential. It was clear that

seeing heat had implications beyond just saving on heating bills. It could save lives, enhance security, and provide critical insights in countless scenarios. This realization would pivot the company towards more robust and sustainable markets, setting the stage for the growth and diversification that would define FLIR's future. The ingenuity of those early engineers and the founding vision, despite initial commercial struggles, laid the groundwork for a company that would eventually become a global leader in sensing solutions.

SAMPLE COPY

This is a sample preview. Purchase the book to read the full content.

Visit MixCache.com to purchase the complete book.

SAMPLE COPY