

# Smart Textiles Markets 2016-2023

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## Abstracts

In this report we identify the opportunities emerging from commercialization of smart textiles. These include textiles that are (1) fabricated from smart materials or (2) utilize sensing devices that are seamlessly integrated into the textile.

The smart textile sector has taken off in the past few years, driven by the keen interest in the Internet-of-things (IoT) and enabled by the latest smart materials and powerful sensing devices. This report provides market coverage of the potential for emerging textile products where the textile is rapidly becoming the sensor.

The report also discusses how the latest generation of smart materials is expanding the market for advanced textiles. While the focus of this report is on the opportunity for smart textiles, we also discuss how the sensor industry can benefit from the latest trends in smart textiles and also how the supply chain for smart textiles is evolving.

In putting together this report n-tech has drawn on its extensive experience in the smart materials space as well as interviews with key companies in smart textiles. n-tech believes that this report will provide valuable insight into the smart textiles market that will benefit marketing and business development executives from various parts of the supply chain, including raw material suppliers, chemical companies, and clothing manufacturers, as well as investors in the industry.

## Applications and Markets

This report includes an analysis of applications where n-tech believes smart textiles have a real opportunity to move beyond the lab and expensive demonstrations high-volume commercial applications. Applications covered include:

Health and Fitness: Sportswear, health monitoring, and clinical applications

Military and Security: Uniforms for soldiers and firefighters

Fashion: Functional clothing for the masses

Non-clothing applications: Solar cells, automotive, and more.

## Smart Textile: Materials, Manufacturing and Components

This report provides coverage of how the following categories of materials are being used to fabricate commercially available smart textiles:

Electrically conductive yarns and threads

Conductive polymers

Shape memory materials

Color-changing materials

Phase-changing materials

Self-cleaning and antimicrobial materials

Nanomaterials

We also discuss how sensors are being integrated into textiles and how these will be powered. Finally, this report provides coverage of the latest business trends in smart textile fabrication processes, including weaving, knitting, printing, and embroidery. We focus on how these processes can be used to advance integration of function into textiles.

## Eight-Year Forecasts for Smart Textile Materials

This report contains detailed forecasts of volume (in square meters and units) and revenue (in \$ millions), broken down by:

End application

Type of material

Fabrication method

### Profiles of Key Players

This report evaluates the product/market strategies of the leading suppliers of key materials for smart textiles. These firms include giants such as DuPont, as well as newer and smaller companies and startups that n-tech believes have compelling products that are likely to make inroads into the smart textiles market.

## Contents

### EXECUTIVE SUMMARY

- E.1 Market Opportunities: Blurring the Lines between Fashion, Technology, and Healthcare
- E.2 Emerging Second Generation Smart Textiles: Sports, Health and Fashion
  - E.2.1 Tracking Motion and Ensuring Comfort: Sports and Fitness
  - E.2.2 Monitoring Health: Medical Applications
  - E.2.3 What Role will the Fashion Industry Play in Smart Clothing?
- E.3 Technical Trends in Smart Materials and the Future of Smart Textiles
  - E.3.1 R&D Trends
  - E.3.2 Moving Technology into the Garment: Opportunities and Challenges for Manufacturing
- E.4 Influential Firms to Watch in the Smart Textiles Sector
  - E.4.1 Adidas: Bringing a Brand Name to Smart Textiles
  - E.4.2 BASF: Possible Future Smart Textiles Powerhouse
  - E.4.3 BeBop Sensors: Funding for a Multifunctional Smart Textile Company
  - E.4.4 Clothing+/Jabil: Printing Intelligence in Smart Textiles
  - E.4.5 Schoeller Textiles: Functional Fabrics Get Smarter
  - E.4.6 OMSignal: Embedded Biometrics
  - E.4.7 Sensoria: More Than Smart Shirts
- E.5 Summary of Eight-Year Forecasts for Smart Textiles Materials
  - E.5.1 Summary by Type of Material
  - E.5.2 Summary by Functionality
  - E.5.3 Summary by Application

### CHAPTER ONE: INTRODUCTION

- 1.1 Background to this Report
  - 1.1.1 The New Smart Fabrics: Smart Materials and Integrated Sensors
  - 1.1.2 Integration Defining the Opportunities in Smart Materials
  - 1.1.3 Merging Fashion and Function
  - 1.1.4 A Bottom Line
- 1.2 Objectives and Scope of this Report
- 1.3 Methodology of this Report
- 1.4 Plan of this Report

### CHAPTER TWO: MATERIALS AND TECHNOLOGY ADVANCES IN SMART

## TEXTILES

- 2.1 Electrically Conductive Fabrics
  - 2.1.1 Metallic Fibers
  - 2.1.2 Conductive Polymers
- 2.2 Embedding Sensors into Textiles
  - 2.2.1 Pressure Sensors
  - 2.2.2 Heating and Temperature Sensing
  - 2.2.3 Motion Sensors
  - 2.2.4 Measuring Biometrics
  - 2.2.5 Chemical Sensors and Biosensors
- 2.3 Powering Smart Textiles
  - 2.3.1 Textile-based Solar Cells
  - 2.3.2 Energy Harvesting and Storage
- 2.4 Electronics and Communication
  - 2.4.1 Embedding Electronic Components
  - 2.4.2 Textile Transistors
- 2.5 Inherently Smart Fabrics
  - 2.5.1 Types of Color-changing Fabrics
  - 2.5.2 Color-Changing Materials for Camouflage Uniforms
  - 2.5.3 Smart Fabrics for Cold and Hot Weather
  - 2.5.4 Antimicrobial Fabrics
  - 2.5.5 Use of Shape Memory materials
  - 2.5.6 Self-cleaning Fabrics
  - 2.5.7 Self-Healing Fabrics
  - 2.5.8 Nanomaterials and Other Emerging Opportunities
- 2.6 Manufacturing Challenges
  - 2.6.1 Weaving and Knitting
  - 2.6.2 Printing
  - 2.6.3 Embroidery
  - 2.6.4 Addressing Washability
  - 2.6.5 Environmentally Friendly Processes
  - 2.6.6 Merging Textile and Electronics Production
  - 2.6.7 Smart Textiles and the Evolving Global Textile Market
- 2.7 Key Points from this Chapter

## CHAPTER THREE: APPLICATIONS FOR SMART TEXTILES

- 3.1 Overlap between Health and Fitness Markets

- 3.2 Sports-focused Applications
  - 3.2.1 The IP Battle in the Smart Shirt Sector
  - 3.2.2 Sports-focused Applications beyond Biometric Shirts
  - 3.2.3 Products for Adventurers
  - 3.2.4 Companies to Watch in the Sportswear Industry
- 3.3 Medical-focused Applications
  - 3.3.1 Smart Textiles for in-Home Monitoring of Health Conditions
  - 3.3.2 Smart Textiles for use in Hospitals and Clinics
  - 3.3.3 Companies to Watch in the Medical Sector
- 3.4 Clothing for the Military
  - 3.4.1 Moving Technology to the Individual
  - 3.4.2 Smart Clothing for Soldiers
  - 3.4.3 Leveraging Medical Applications
  - 3.4.4 Color-Shifting Textiles for the Military
- 3.5 Protective Clothing for First Responders and Industrial Workers
  - 3.5.1 Smart Uniforms for Firefighters
  - 3.5.2 Addressing the Needs of Industrial Workers
- 3.6 Changes in the Fashion Industry
  - 3.6.1 Blending Design and Technology
  - 3.6.2 Blurring the Lines between Fashion and Athletic Wear
- 3.7 Niche Applications for Smart Textiles
  - 3.7.1 Safety and Security
  - 3.7.2 Transportation
  - 3.7.3 Architecture
- 3.8 Key Points from this Chapter

## **CHAPTER FOUR: EIGHT-YEAR FORECASTS FOR MATERIALS AND SENSORS IN SMART TEXTILES**

- 4.1 Forecast Methodology
  - 4.1.1 Raw Data
  - 4.1.2 Calculations
  - 4.1.3 Scope of Coverage
- 4.2 Smart Textiles: Forecasts by Smart Material Type
  - 4.2.1 Color-shifting Materials
  - 4.2.2 Antimicrobial Coatings
  - 4.2.3 Self-cleaning Coatings
  - 4.2.4 Heating and Cooling Fabrics
  - 4.2.5 Conductive Yarns, Threads, and Inks

#### 4.3 Forecasts by Type of Sensor

4.3.1 Pressure Sensors

4.3.2 Biometric Sensors

4.3.3 Motion Sensors

4.2.4 Chemical Sensors and Biosensors

#### 4.4 Forecasts by Application

4.4.1 Health and Fitness

4.4.2 Medical

4.4.3 Military

4.4.4 Fashion Industry

4.4.5 Non-Clothing Applications

### **ACRONYMS AND ABBREVIATIONS USED IN THIS REPORT**

## About

### ABOUT THE AUTHOR



## List Of Exhibits

### LIST OF EXHIBITS

Exhibit E-1: Eight-Year Forecasts for Materials and Sensors in Smart Textiles by Application, 2016-2023, \$ Millions

Exhibit E-2: Eight-Year Forecasts for Fabrics and Coatings in Smart Textiles by Material, 2016-2023, \$ Millions

Exhibit E-3: Eight-Year Forecasts for Sensors in Smart Textiles by Sensor Type, 2016-2023, \$ Millions

Exhibit 2-1: Requirements for Active Heating and Cooling Fabrics

Exhibit 2-2: Requirements for Antimicrobial Fabrics

Exhibit 2-3: SBIR Grants Related to Antimicrobial Textiles

Exhibit 2-4: Fabrication Processes for Smart Textiles with Conductive Traces

Exhibit 3-1: Smart Shirt Suppliers

Exhibit 3-2: Patents for Smart Shirts with Biometric Monitoring

Exhibit 3-3: Nike Patents Related to Smart Textiles

Exhibit 3-4: Medical Smart Textile Products Based on Pressure Sensors

Exhibit 3-5: Medical Smart Textile Products Based on Temperature, Motion, Chemical, or Biometric Sensors

Exhibit 3-6: Examples of Smart Textile Fashion Concepts Using Light and Color

Exhibit 4-1: Eight-Year Forecast for Color-Shifting Materials in Smart Textiles, 2016-2023

Exhibit 4-2: Eight-Year Forecast for Antimicrobial Coatings in Smart Textiles, 2016-2023

Exhibit 4-3: Eight-Year Forecast for Self-Cleaning Coatings in Smart Textiles, 2016-2023

Exhibit 4-4: Eight-Year Forecast for Heating and Cooling Fabrics in Smart Textiles, 2016-2023

Exhibit 4-5: Eight-Year Forecast for Conductive Yarns, Threads and Inks in Smart Textiles, 2016-2023

Exhibit 4-6: Assumptions Made in Forecasting Various Sensors

Exhibit 4-7: Eight-Year Forecast for Pressure Sensors in Smart Textiles, 2016-2023

Exhibit 4-8: Eight-Year Forecast for Biometric Sensors in Smart Textiles, 2016-2023

Exhibit 4-9: Eight-Year Forecast for Motion Sensors in Smart Textiles, 2016-2023

Exhibit 4-10: Eight-Year Forecast for Chemical and Biosensors in Smart Textiles, 2016-2023

Exhibit 4-11: Eight-Year Forecast for Smart Textiles in Health and Fitness Applications, 2016-2023

Exhibit 4-12: Eight-Year Forecast for Smart Textiles in Medical Applications, 2016-2023

Exhibit 4-13: Eight-Year Forecast for Smart Textiles in Military Applications, 2016-2023  
Exhibit 4-14: Eight-Year Forecast for Smart Textiles in Fashion Applications, 2016-2023  
Exhibit 4-15: Eight-Year Forecast for Smart Textiles in Non-Clothing Applications,  
2016-2023

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