
Description: The global functional printing market has been estimated to be worth USD 5.07 billion in 2015 and is forecasted to grow at a CAGR of 21.60% over the forecast period to reach USD 13.48 billion by the end of 2020. Functional printing enables 3D printing of functional electronic objects with the use of substrates and inks. It involves the deposition of a printable substance on a substrate, which results in a product with a specific form and functionality.

The various applications of functional printing market are smart tags, smart cards, diagnostic labels, functional packaging, smart textiles, ceramic tiles, signage, organic light emitting diodes (OLEDs), RFID chips, sensors, etc.

The demand for low-cost, high-speed manufacturing is growing exponentially, for which functional printing acts as a solution. This drives the market to a large extent. The features of functional printing such as lesser environmental impact and lower energy consumption and material wastage are the basic things that the organizations are looking to develop, thus driving the market. With the growing economy, the demand for various electronic devices like RFID tags, displays, biosensors, etc. is contributing to the growth of the functional printing market. Conversely, the challenges faced by the electrically functional inks are hampering the growth of the market in the electronic sector. Additionally, the functional printing techniques currently available are not suited for printing of electronic devices, thus restricting the growth of the market. As these technologies involve complex manufacturing processes that require a high level of accuracy to obtain an end product, they need a highly skilled workforce to manage these activities. This serves as a major challenge that needs to be addressed in this market. The scope for exploring new techniques for the manufacturing of electronic devices can be seen as an opportunity for this market. Additionally, capabilities such as cost advantages in fabrication and fine printing of structures offer enormous opportunities for the growth of this market.

In our study, the global functional printing market is segmented by materials, printing technology, application/components, and geography. The materials segment is further sub-segmented into substrates (glass, plastic, paper, etc.), inks (conductive, graphene, etc.), coatings, and others. Printing techniques such as the screen, gravure, inkjet, flexography, offset printing, etc. are used for printing on a wide range of substrates with the use of functional inks. Screen printing technology is leading in the field of functional printing due to its high reliability and is extensively used in the manufacture of sensors and radio frequency identification (RFID) antennas. With the use of various substrates such as glass, plastic, paper, gallium nitride (GAN) and silicon carbide, companies can experiment in the field of functional printing. Also, with the use of various printing inks such as conductive inks, dielectric inks, graphene inks and others, companies in the functional printing market can produce robust and reliable electronic devices. Sensors, displays, batteries, RFID tags, lighting, photovoltaic, and others are the major applications that are considered in this market.

The geographical coverage in our study includes North America, Europe, Latin America, Asia-Pacific and the Middle East & Africa. A lot of manufactures, especially in Europe, are printed electric parts and components due to their variety of features. Thus, Europe is expected to have significant growth, followed by the Americas and Asia-Pacific. The growth is essentially due to the sustainability of the low-cost and efficient material.

The key players identified in our study are:

- ALTANA AG
- AFGA (Gevaent Corporation)
- Avery Dennison Corporation
- BASF SE
- Blue Spark Technologies
- Ceradrop (MGI Group)
- E Ink Holding Inc.
- Eastman Kodak Company Ltd.
- Enfucell Oy
Key Deliverables of the Study

- Market definition for the global functional printing market, along with identification of key drivers and restraints for the market.
- Market analysis for the global functional printing market, with region-specific assessments and competition analysis on a global and regional scale.
- Identification of factors instrumental in changing the market scenario, rising prospective opportunities and identification of key companies that can influence the market on a global and regional scale.
- Extensively researched competitive landscape section with profiles of major companies along with their strategic initiatives and market share.
- Identification and analysis of the macro and micro factors that affect the global functional printing market on both global and regional scale.
- A comprehensive list of key market players along with the analysis of their current strategic interests and key financial information.

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