Human Machine Interface (HMI) Market Research Report- Global Forecast to 2023

Human Machine Interface Research Report: By Components (Hardware, Software), Configuration Type (Standalone, Embedded), End User (Automotive, Semiconductor, Pharmaceutical, Oil & Gas, Food & Beverages, Aerospace & Defense) – Global Forecast till 2023

Market Synopsis of Human Machine Interface Market:

Market Scenario:

Human machine interface (HMI) refers to a technology that provides connection between operator and controller in an industrial system. Industrial control systems (ICS) comprise of integrated hardware and software, designed to monitor and control the operation of machinery and related devices in industrial environment.

Technology giants such as ABB Ltd. (Switzerland), Advantech Co., Ltd. (Taiwan), Emerson Electric Co. (U.S.), General Electric Co. (U.S.), Honeywell International Inc. (U.S.). ABB Ltd. a prominent player in human machine interface market has designed a premium technology named ABB’s System 800xA DCS with its leading object oriented engineering platform, it can be used in a variety of diverse industries, ranging from a single operator workstation with 50 signals and scale up to applications with several thousand signals and workplaces.

Major factors driving the human machine interface market includes growing adoption of industrial automation equipment in the manufacturing sector, emergence of industrial internet of things (IIoT) and demand for smart automation solution, efficient monitoring in the manufacturing plant are aiding HMI market.

The global human machine interface market has been segmented on the basis of components, configuration type and end user. The components segment comprise of hardware and software. The hardware segment consists of basic HMI, advanced panel-based HMI, advanced PC-based HMI and others. By configuration type, the market is segmented into standalone and embedded. The market for embedded HMI solution is expected to grow at a higher. Owing to rapid technological developments, increasing need of integrated systems, and emergence of machine-to-machine (M2M) communication technology that ease the operational work are some of the significant factors expected to promote the adoption of embedded HMI solutions. By software segment, the cloud-based HMIs are gaining popularity owing to the growing industrial internet of things market and increasing demand for new technology by end-user industries. Furthermore, the cloud-based HMIs are being increasingly adopted as it provides better visibility and competitive edge as compared to others.

The North American region holds the largest market share of the market across the globe followed by Europe, and Asia Pacific regions. U.S. and Canada are dominating the North America market is due to rising technological enhancements, the R&D activities in the areas of HMI is increasing owing to the increased adoption of IoT and machine-to-machine communication (M2M) in numerous industries in this region. Asia Pacific region is expected to grow with the highest CAGR. Owing to growing manufacturing sector, advanced industrial operation monitoring technology.

The global human machine interface market is expected to grow at a CAGR of approximately 9% during the forecast period 2017-2023.
Key Players

Some of the prominent players in the global human machine interface market: ABB Ltd. (Switzerland), Advantech Co., Ltd. (Taiwan), Emerson Electric Co. (U.S.), General Electric Co. (U.S.), Honeywell International Inc. (U.S.), Kontron AG (Germany), Mitsubishi Electric Corporation (Japan), Rockwell Automation, Inc. (U.S.), Schneider Electric SE (France), Siemens AG (Germany), Yokogawa Electric Corporation (Japan) among others.

Segments

The global human machine interface market is segmented by components, configuration type and end-user. Based on components segment, the market is bifurcated into hardware and software. The hardware segment consists of basic HMI, advanced panel-based HMI, advanced PC-based HMI and others. By configuration type, the market is segmented into standalone HMI and embedded HMI. By end-user segment, the market is segmented into automotive, semiconductor, pharmaceutical, oil & gas, food & beverages and others.

Regional Analysis

The global human machine interface market is studied for Asia Pacific, North America, Europe, and Rest of the World. It has been observed that North America region accounts for the largest share of the market. Asia Pacific region is expected to show the highest growth opportunities in the market owing to increase in industrial sector, advance technology implementation in manufacturing unit, rising popularity of machine to machine communication are the main factors fuelling the market growth.

Intended Audience

- Technology Investors
- Research/Consultancy firms
- Technology Solution Providers
- Government Bodies
- Industrial automation equipment providers
- Market research and consulting firms
- Original equipment manufacturers (OEMs)
- Research institutes and organizations
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