IHS Markit™

TECHNOLOGY

The Outlook for the Professional Service Robot Market

PROFESSIONAL SERVICE ROBOTS (PSRs)

are used to perform challenging tasks with higher reliability, autonomy and efficiency than traditional machines. As the advanced technologies that are used in robotics become more commercialized and widely adopted by various industries, the market for service robots is expected to take off.

REVENUE AND SHIPMENTS

2015

$2.6 billion

2020

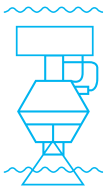
$12.8 billion

APPLICATIONS

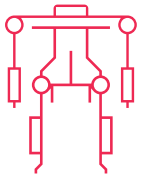
- Agriculture and forestry
- Construction, maintenance and demolition
- Hospitality, retail, hotel and restaurant
- Government, humanitarian, civic defense and rescue
- Energy and mining
- Medical and care
- Space and aeronautical
- Transportation and logistics systems

FORM FACTORS

LAND BASED



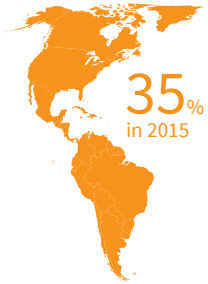
WATER BASED



WEARABLES AND EXOSKELETONS

Land-based PSRs currently dominate the market, comprising 88% of unit shipments in 2015. Few water-based and wearable robots are shipping today. Land-based robots are forecast to dominate the market through 2020, although the scope of use for water-based and wearable robots will expand more quickly. In general, mobility increases the utilization of robots in every form factor.

REGIONAL REVENUE SHARE



The **AMERICAS** had a slightly bigger share of PSR revenue in 2015 than Europe or Asia, but by 2020 is expected to fall behind Asia.

The potential market in **ASIA** is very large, and China is projected to become a PSR powerhouse thanks to the various application scenarios and huge markets.

CHALLENGES TO ADOPTION

The global market for service robots is still in the early adoption stage. It is very diversified and fragmented, with a great number of entrepreneurs, small- and medium-sized companies focusing on specific product types or industry applications. Markets around the world are developing in different ways at varying paces, and adoption is affected by a number of factors including:

- GOVERNMENT SUPPORT
- INDUSTRY APPLICATION REQUIREMENTS
- BUSINESS STRENGTH OR FOCUS
- TECHNICAL BARRIERS
- SAFETY AND REGULATORY FRAMEWORKS
- CULTURAL INFLUENCES

3559-GC-1116