



Innovation Beyond Borders – Global Talent Hotspots for Engineering Services and Research & Development (ER&D)

Locations Insider™

Market Report – August 2016 – Preview Deck

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¹ Banking, financial services, and insurance

Background and scope of the research

Background of the report

- ER&D global sourcing industry refers to all outsourced and offshored ER&D operations in offshore/nearshore sourcing locations. It excludes domestic and onshore¹ ER&D operations
- The industry is currently USD 35-40 billion and is expected to witness robust growth and reach USD 80 billion by 2020
- As the industry grows, the choice of locations for delivering ER&D will have significant impact on the success of the broader engineering and innovation agenda of players
- ER&D is a talent-centric industry and leading sourcing locations offer differentiated talent value proposition for ER&D delivery across various engineering segments
- This report provides a comprehensive view of global sourcing locations that are the leading “talent hotspots” for ER&D delivery

In this research, we have assessed the ER&D global sourcing industry

- This report analyzes the following dimensions:
 - Current market landscape and distribution of talent in key ER&D global sourcing delivery geographies
 - Comparative assessment of leading sourcing locations in terms of talent availability and financial attractiveness
 - MAP Matrix™ for ER&D, which segregates the maturity of delivery geographies into “Leaders”, “Major Contenders”, and “Aspirants”
 - Implications for buyers and service providers, and future outlook of the ER&D global sourcing industry

The scope of the analysis includes:

- Major ER&D segments as detailed on **pages 4 and 5**
- Leading offshore/nearshore locations for ER&D delivery as detailed on **page 6**
 - This report focuses exclusively on the ER&D global sourcing industry, and the analysis excludes all domestic (in-country) and onshore¹ ER&D operations

¹ Traditional demand markets such as the U.S., Western Europe, Australia, and Japan

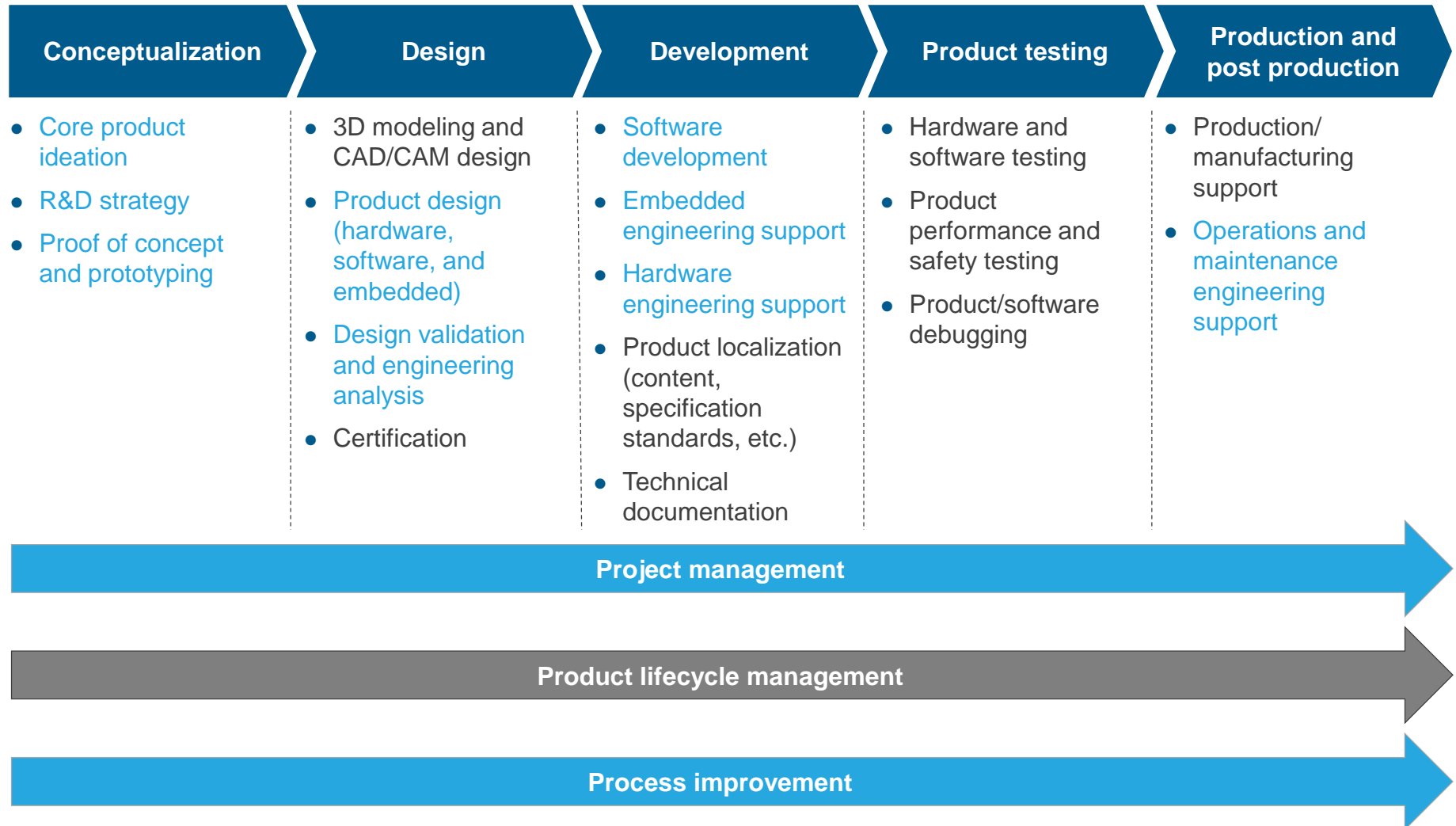
ER&D segments covered in the report

Cluster	Segment	Definition
Software	Software products	Development, testing, and maintenance of software products
Mechanical	Automotive	Design, manufacturing support, and operations support for automobiles, motorcycles, trucks/heavy engine, and their engineering systems
	Aerospace and defence	Design, manufacturing support, and operations support for aircrafts, space crafts, and their engineering systems
	Marine	Design, manufacturing support, and operations support for boats, ships, other marine vessels/vehicles, and their engineering systems
Hi-tech	Semiconductors	Design, development support, and engineering services for embedded systems and semiconductor devices
	Telecom	Design, manufacturing support, and operations support services for telecom and networking equipment (routers, switches, modems, etc.)
	Consumer electronics	Design, manufacturing support, and post-production support for direct-consumer equipment and appliances
	Computing systems	Design, manufacturing support, and support services for computer hardware and accessories (Bluetooth peripherals, chipsets, etc.)
Industrial, energy, chemicals, and natural resources	Industrial, energy, chemicals, and natural resources	Design, development support, and operations support for industrial, energy, chemical production, and natural resources sectors

ER&D processes covered in the report

Complex processes

Simple processes



Locations assessed in the report

India	
Country	City
India	Bangalore
India	Chennai
India	Delhi/NCR
India	Hyderabad
India	Mumbai
India	Pune

Latin America (LATAM)	
Country	City
Argentina	Buenos Aires
Brazil	Sao Paulo
Brazil	Rio de Janeiro
Mexico	Mexico City
Chile	Santiago
Costa Rica	San Jose

Asia Pacific (APAC) (excluding India)	
Country	City
China	Beijing
China	Shanghai
China	Shenzhen
China	Guangzhou
Malaysia	Kuala Lumpur
Singapore	Singapore
South Korea	Seoul
Philippines	Manila
Vietnam	Ho Chi Minh City

Middle East and Africa	
Country	City
Israel	Tel Aviv
Egypt	Cairo
South Africa	Pretoria

Nearshore Europe	
Country	City
Czech Republic	Prague
Hungary	Budapest
Ireland	Dublin
Poland	Krakow
Poland	Warsaw
Romania	Bucharest
Russia	Moscow
Ukraine	Kiev
Bulgaria	Sofia
Turkey	Istanbul
Slovakia	Bratislava
Scotland	Edinburgh
Spain	Barcelona
Portugal	Lisbon

- These are the leading offshore/nearshore cities being leveraged for ER&D delivery
- We have included representative cities from all leading sourcing geographies to present a holistic view of the sourcing landscape
- This report focuses exclusively on the ER&D global sourcing industry
 - Offshore and nearshore locations are treated as delivery geographies and are included in the analysis
 - Onshore locations (e.g. San Francisco, New York, and Germany) are considered as buyer geographies and are excluded from the analysis
 - Domestic ER&D operations in all geographies are excluded from the analysis

Methodology – Everest Group's extensive databases, proprietary market intelligence, and inputs from market participants formed the foundation for this report

- Proprietary intelligence
- Market thought leadership
- Actionable and insightful research

1 Robust definitions and frameworks – location assessment, sustainability, and scalability

2 Proprietary databases (GICs, service providers, market activity, cost/labor, and transaction intelligence)

3 Diverse set of touch-points with key global-services stakeholders for on-the-ground perspectives

4 Fact-based research adequately informed by deep domain expertise and experience

- A dedicated team for global sourcing research, comprehensively supporting all location-related requirements of clients (information, strategy, tracking, etc.)
- Comprehensive, year-round tracking of global sourcing activity across outsourcing transactions, locations, GICs, and service providers
- More than 20 years of advising clients on global sourcing decisions spanning strategy, optimization, and implementation
- Executive-level relationships with buyers, service providers, country/industry associations, and other industry stakeholders (recruiters, real estate firms, and legal firms)

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Overview and abbreviated summary of key messages

ER&D global sourcing industry is expected to witness robust growth (annual growth rate of 13%) in the next 4-5 years driven by factors such as gaining access to niche talent pool, cost pressures, and requirement for product localization

This report covers the current ER&D global sourcing market highlighting the leverage of different locations for specific segments. It also provides a detailed comparative assessment of leading sourcing locations for ER&D services delivery on dimensions of talent and cost. In addition, the report also features the MAP™ Matrix for ER&D services delivery

Some of the findings of the report

Co-innovation between buyers and service providers is leading to greater leverage of offshore/nearshore locations

- There is increasing collaboration between buyers and service providers and players are moving towards co-innovation engagement models for new product development
- Increase in leverage of ER&D service providers has led to more ER&D work being delivered from offshore/nearshore locations

India , China and Moscow are the leading locations for ER&D service delivery

- India accounts for >40% of the ER&D services global sourcing market in terms of FTEs. Key segments being served include software product development, automotive, and semiconductors
- China and Russia are mature locations for ER&D service delivery, driven by good talent availability and relatively low operating costs

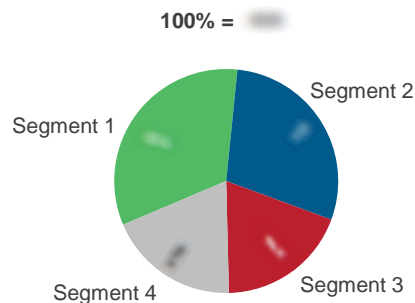
Nearshore Europe and Latin America offer a compelling value proposition for ER&D service delivery

- Nearshore Europe has multiple locations that are being leveraged for ER&D service delivery driven by availability of high-quality engineering graduates and advanced infrastructure. Key locations include Hungary, Czech Republic, and Poland
- ER&D global sourcing industry in Latin America is rapidly growing driven by a strong domestic market and proximity and cultural affinity with North American markets. Key locations include Brazil, Mexico, and Argentina

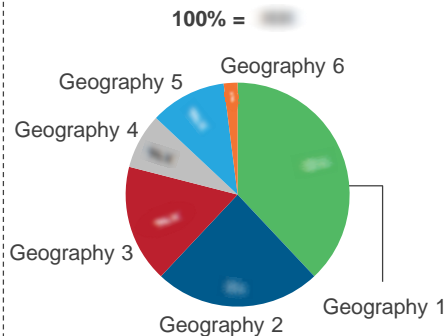
This study offers four distinct chapters providing a deep dive into the current state of the ER&D services global sourcing market

Market overview

ER&D global sourcing industry by segments
2016; USD billions



Global ER&D offshore industry by geography
2016; USD billions



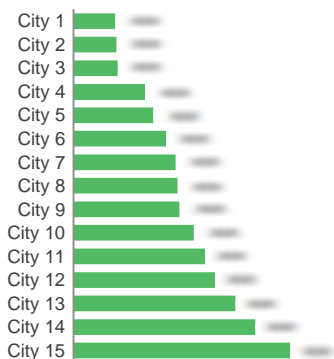
Current sourcing landscape

ER&D global sourcing market size
2016; FTEs in '000s

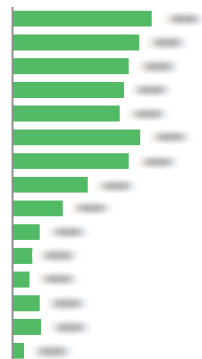


Comparative assessment

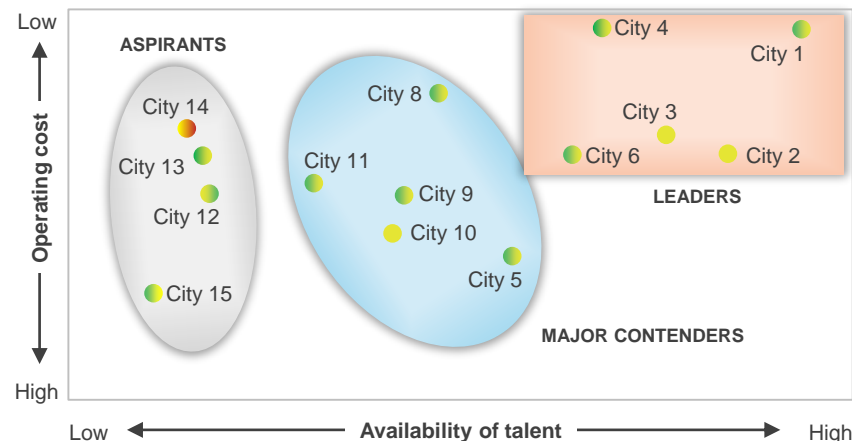
Annual operating cost per FTE for ER&D
2016; USD in '000s per annum



Annual employable graduate pool from cities and adjoining areas
2016; Number in '000s



MAP™ Matrix for ER&D service delivery



Source: Everest Group (2016)

Locations Insider research calendar

Topic	<div> <div>Published</div> <div>Current</div> </div> Release date
Nearshore Europe Is IT! IT Services Riding The Nearshore Advantage	April 2015
Next-wave Location Profile – Penang, Malaysia	April 2015
North America Domestic Outsourcing Services: Providers Embrace Onshoring – Is the World Still Flat?	May 2015
Ukraine Crisis: Is the Regional IT Service Delivery Landscape Changing?	June 2015
"Next-wave" location profiles: Lithuania	July 2015
Value Proposition of Tier-2/3 Cities for Global Services Delivery	July 2015
"Next-wave" location profiles: Lodz, Poland	July 2015
"Next-wave" location profiles: Puerto Rico	August 2015
"Next-wave" location profiles: Brno, Czech Republic	September 2015
"Next-wave" location profiles: Curitiba, Brazil	September 2015
"Next-wave" location profiles: Tunisia	October 2015
Will Robots Eat Locations Strategy for Breakfast?	October 2015
Global Locations Annual Report	November 2015
"Next-wave" location profiles: Turkey	February 2016
"Next-wave" location profiles: Bogota, Colombia	March 2016
Many voices, Many locations: Understanding the Multilingual Contact Center Market in East and Southeast Asia	April 2016
IT service delivery in Latin America	May 2016
Global Hotspots for Digital Services	June 2016
Innovation Beyond Borders – Global Talent Hotspots for Engineering Services and Research & Development (ER&D)	August 2016

Additional research references

The following documents are recommended for additional insight into the topic covered in this report. The recommended documents either provide additional details on the topic or complementary content, that may be of interest:

1. **Global Hotspots For Digital Services** ([EGR-2016-2-R-1778](#)); 2016. This report provides an in-depth view of the global digital services industry from a talent perspective. It covers the global distribution of digital talent coupled with cost trade-offs and provides readers with an up close view of global “sweet-spots” for various digital services
2. **GICs Leading the Way for Digital Transformation of the Enterprise** ([EGR-2016-2-R-1682](#)); 2016. This report gives an overview of the current state of digital adoption in GICs, assesses digital maturity of GICs based on a framework, evaluates functional maturity of the top three industry verticals, and highlights best practices, key implications, and the call-to-action for GICs
3. **Global Locations Annual Report 2015: Resurgence of Activity Amidst Evolving Propositions** ([EGR-2015-2-R-1619](#)); 2015. The global sourcing locations landscape showed definite signs of recovery in 2014, after a slump in 2013. The Global Locations Annual Report 2014 is a unique and comprehensive guide to understanding the nuances of the locations landscape and interpreting locations-related developments and trends to frame locations strategy. It presents insights into the size and growth of the global services market, update of locations activity, changes in risk profiles of locations, and an analysis of the maturity, arbitrage, and potential of locations (MAP Matrix™)

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