

Title: Qatar's ICT Landscape & Digital Trends 2022

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Introduction:

- Background of Qatari Labor Market:

Qatar has one of the highest GDPs per capita globally, thanks to significant oil and gas reserves. The economy relies heavily on expatriates, who make up 95% of the workforce.

Qatars are mainly employed in the public sector. The government has emphasized economic diversification under the Qatar National Vision 2030. This aims to transform Qatar into an advanced country and reduce hydrocarbon dependence.

- Current State of Qatari Labor Market:

The ICT sector currently employs about 1% of Qatar's workforce. Over 85% of ICT sector employees are expatriates. Females represent 17% of the ICT workforce, lower than in other service sectors. The share of Qatars in ICT (15%) mirrors other major service sectors. Qatar performs reasonably on international workforce quality benchmarks, but lags the UAE. Local graduate talent availability is decent thanks to university programs. But quality concerns remain, especially for senior roles. Hiring and retaining skilled foreign professionals is challenging due to global talent competition, unclear immigration processes and uncompetitive remuneration packages.

Objectives:

Inform policymaking and strategic initiatives by the CRA and other public entities. Help industry players make business and investment decisions.

Methodology:

Extensive primary research through a survey of over 400 ICT companies, 40+ stakeholder interviews, and workshops. Supported by secondary research on international trends, Qatar's economy, and additional local perspectives.

Key Findings:

- ICT Market:

1. ICT contributes 2.7% to Qatar's real non-hydrocarbon GDP, growing 2.5% annually since 2016 versus 0.3% for other sectors. But still below GCC and international levels (4-7% GDP share).
2. Telecoms mature and concentrated around a few players like Ooredoo and Vodafone. IT nascent and fragmented – 80% of companies surveyed have <50 staff.
3. 11% of local IT companies export abroad. 70% see potential for Qatar as a digital hub. But exports still limited.
4. Public sector drives 50% of ICT revenues currently. But global trends and government initiatives can expand private sector digitalization.
5. IT spending forecast to grow 5.5% through 2025, above projected GDP growth. Government cloud and digitalization initiatives will drive investment.

- 6. Most companies active across IT services, software and hardware. But 40% focus just on traditional tech, especially local firms.
- Infrastructure:
 - 1. Mobile infrastructure world-class – near universal 4G and 96% 5G population coverage. Doha's mobile speeds among the best globally.
 - 2. Fixed connectivity also robust – 99% fiber coverage and strong broadband speeds.
 - 3. Data center investments growing substantially, enabling cloud and edge computing. But connectivity pricing, skills gaps and limited SME cloud demand persist as challenges.
 - 4. Payments infrastructure improving – Apple Pay, Google Pay and local solutions now present. But cash remains prominent.
 - 5. Postal and delivery services upgraded but still only 50% find them adequate, especially startups. E-commerce potential untapped.
- Regulatory Environment:
 - 1. 60% find regulatory setup attractive. But 40% do not fully agree. Qatar still lags regional leaders.
 - 2. Data regulations like privacy, storage and sharing rules need enhancement. Cloud policy welcomed, but data governance has room to improve.
 - 3. Business registration easy, but obtaining permits and licenses cumbersome. Limited government entities collaboration and process clarity challenges smooth business operations.
 - 4. Public procurement practices pose barriers for SMEs – especially tender visibility, promotion of local industry and contractual conditions.
 - 5. Labor regulations and unclear visa processes hinder talent attraction. Immigration red tape deters foreign professionals.
- Investment & Funding:
 - 1. 66% of companies plan to increase investments in Qatar over next 3-5 years.
 - 2. But investments target distribution, marketing and customer service more than innovation and R&D.
 - 3. FDI inflows to ICT growing substantially in recent years. Now above 2% of Qatar's total FDI.
 - 4. Telecoms spent over QAR 1 billion in annual CapEx since 2017 to upgrade networks.
 - 5. Businesses rely on internal cash flow and retained earnings. Loans also key, but SMEs struggle to obtain them.
 - 6. VC/PE funding limited - especially for startups and SMEs. Total 2021 VC was QAR 69 million versus billions in UAE/KSA.
- Talent:
 - 1. 64% of companies looking to hire face difficulties. Shortages in software development, cybersecurity, data analytics.
 - 2. Junior local talent availability decent thanks to university programs. But quality concerns remain, especially for senior roles.
 - 3. 49% do not consider international talent easily available. Visa process unclear and burdensome.

- 4. Employing Qataris remains expensive. Uncompetitive compensation compared to public sector.
- 5. Upskilling support deemed inadequate by over 50% of businesses. But government/private programs emerging.
- 6. Workforce regulations and processes need streamlining to attract foreign professionals.
- 7. Females underrepresented at 17% of ICT workforce versus over 60% of university enrollment.
- R&D and Innovation:
 - 1. Qatar lags globally in innovation outcomes. Commercialization of research remains limited.
 - 2. But knowledge generation decent. Qatar files more patents than GCC states.
 - 3. Government and public institutions drive over 90% of R&D spending and direction. Private sector participation marginal.
 - 4. Less than 40% of IT companies engage in R&D and innovation. But many plan to.
 - 5. Access to talent and availability of funding and incentives are key gaps. Regulatory sandbox needs expansion.
 - 6. Total VC remains low at QAR 69 million in 2021. Versus billions in UAE/KSA.
 - 7. Startup activity growing but minimal compared to GCC peers.
 - 8. Public-private collaboration must improve to translate R&D into viable businesses.

Key Insights:

- Significant progress made in developing world-class ICT infrastructure. But ecosystem integration, demand stimulation, cost and talent remain challenges.
- Government continues as main growth driver. But private sector digitalization can expand given global trends and national initiatives.
- Holistic policies needed to further support MSMEs. Critical to boost innovation, exports, localization.
- The ICT sector's GDP contribution growth rate of 2.5% exceeds Qatar's non-hydrocarbon GDP growth. This indicates rising ICT importance in economic diversification. Further growth potential exists.
- Low ICT exports and FDI outflows demonstrate untapped potential to scale local innovation globally. Targeted policy support needed.
- Immigration and visa challenges may deprive Qatar's ICT sector of global talent needed for innovation and growth.
- Limited senior female participation represents underutilized talent. Improving workplace inclusion and diversity policies can help.
- Immigration and workforce regulation enhancements key to addressing talent gaps. Especially at senior levels.
- Better startup funding accessibility and availability needed to drive innovation outcomes.
- Enhanced public-private partnerships essential to translate R&D into commercially viable solutions.

Recommendations:

- Craft holistic policies and national vision to further integrate ICT ecosystem components. Increase public-private collaboration.
- Make public procurement more visible and accessible for SMEs/startups. Incentivize partnerships with multinationals.
- Continue developing local ICT skills. Streamline immigration and enhance attractiveness for foreign professionals.
- Set specific goals for ICT's GDP share aligned with global leaders. Help drive economic diversification.
- Develop export assistance programs. Help local startups expand abroad. Could include grants, market access support.
- Benchmark immigration policies against most business-friendly economies. Streamline to efficiently meet talent needs.
- Expand female STEM education initiatives. Develop targeted recruiting. Improve workplace flexibility. Help close ICT gender gap.
- Expand regulatory sandbox for new technologies. Enact clear data governance guidelines.
- Lower connectivity costs to boost competitiveness. Stimulate infrastructure demand.
- Increase R&D spending and incentives. Develop regulatory frameworks to enable commercialization.
- Grow VC availability. Establish more public-private partnerships for innovation.

Future Prospects:

The future outlook is positive given the government's commitment to ICT sector growth and major upcoming events. However, competition is intense for global digital leadership. Realizing Qatar's digital hub ambitions requires urgent collective action on the talent, innovation and policy fronts.

Limitations:

Research focused on supply-side. Further demand-side insights needed for complete outlook.

Conclusion:

The report provides comprehensive insights into Qatar's ICT sector landscape. But continued public-private collaboration and urgent reforms are critical for the country to achieve its digital ambitions. The government must craft policies to better integrate the ICT ecosystem, stimulate infrastructure demand, develop local talent, boost innovation and attract foreign expertise.