



Consulting for the Energy Industry
Example Projects

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Syntillica Experience Executive Summary

Syntillica is an Energy consultancy that serves the needs of our clients globally. Syntillica was designed to provide the key value proposition of experienced consulting support across a range of technical disciplines. Having access to a world-wide network of expertise allows Syntillica to efficiently and effectively provide the right skills at the right time.

Syntillica has accrued an enviable Group of consultants with average experience of approximately 25 years each which translates to 3500+ years of experience. Naturally the experience records of the consultants is far longer than Syntillica has been operating so Upstream project examples have been provided from both. While there are thousands of previous Upstream projects to choose from for examples some from the Syntillica Group have been chosen from Exploration, Appraisal, Development, Production and Decommissioning from around the world.

Finally, some overview graphical breakdowns of the Syntillica Group are provided to show expertise by technical discipline, by years of experience within discipline, by qualification, by upstream service type and by geographical experience. We hope you find this beneficial.



Syntillica Upstream Project Examples

Syntillica – Sakarya, Turkey
Syntillica Team conducted exploration geophysical interpretation and analysis for Tuna-1 discovery well for Sakarya field (TPAO was client) – the largest gas discovery in the world during 2020.
Syntillica – Ntomme, Engenra, Ghana
Syntillica Team conducted geological and petrophysical field development activities on two major offshore fields: rebuilding of static models incorporating new petrophysical and drilling production and contributing to history matching. Also transfer of skills through training for GNPC staff. Project is ongoing into new phase for similar static model redevelopment of Jubilee, Mahogany and Sankofa.
Syntillica – Confidential, Offshore Brazil
Syntillica Team conducted geological model re-building for redetermination analysis incorporating new geophysical analysis and inversion. Working in collaboration with reservoir engineering and under PRMS standards.
Syntillica – Confidential, Asia
Syntillica Team conducted multi-discipline field evaluation (geological, geophysical, petrophysical, reservoir engineering, facilities, economic, environmental). Technical evaluation led to multiple successful client equity acquisitions in major oil field.
Syntillica – Confidential, Europe
Syntillica Team is providing Peer Review/Assist in geology, petrophysics, geophysics, well engineering, drilling in High Temperature geothermal field exploration.
Syntillica – Confidential, Scheduled, Central America
Syntillica Team scheduled to provide economic analysis in support of fund-raising then field appraisal/development management including exploration seismic and drilling from multi-discipline technical team.



Syntillica – Confidential, Transaction Support, Asia

Syntillica Team provided multi-disciplinary support (geophysics, geology, petrophysics, reservoir engineering, facilities, economics, HSE) for successful acquisition of equity in major oil field for global client.

Syntillica – Confidential, Transaction Support, Asia

Syntillica Team provided multi-disciplinary support (geophysics, geology, petrophysics, reservoir engineering, facilities, economics, HSE) for successful acquisition of equity in major oil field for global client.

Syntillica – Confidential, Transaction Support, SouthEast Asia

Syntillica Team provided multi-disciplinary support (geophysics, geology, petrophysics, reservoir engineering, facilities, economics, HSE) for acquisition of equity in major oil & gas field cluster for global client.

Syntillica – Confidential, Transaction Support, Far East

Syntillica Team provided multi-disciplinary support (geophysics, geology, petrophysics, reservoir engineering, facilities, economics, HSE) for acquisition of equity in major gas field cluster for global client.

Syntillica – Confidential, Field Development, Gabon

Syntillica Team provided multi-disciplinary support (seismic, geophysics, geology, well engineering) for field development project onshore.

Syntillica – Confidential, Field Development, Gabon

Syntillica Team provided multi-disciplinary support (seismic, geophysics, geology, well engineering) for field development project offshore.

Syntillica – Confidential, Exploration, Middle East

Syntillica Team provided multi-disciplinary support (seismic, geophysics, geology, well engineering) for field development project in environmentally sensitive area.



Syntillica Group Upstream Project Examples

Field Exploration

Principal Geophysicist – Karachaganak, Kazakhstan
Karachaganak Field in Kazakhstan. Responsible for Geophysical projects on Super-Giant (10bboe) Field. 3D acquisition & processing (time & depth prestack migrations). Interpretation, microseismic, crosswell seismic, well planning.
Principal Geologist – Oseburg, Norway
Exploration geology and initial 3D seismic interpretation between 60?- 62? North. Generated successful new field discovery (Oseberg South, Block 30/9 North Sea) and appraisal well prospects.
Principal Geoscientist – Kudu, Namibia
Namibia: Exploration prospectivity Orange Basin near Kudu gas discovery for Namcor
Principal Geophysicist – Varg, Norway
Identified 2 satellite plays and 5 untested compartments. Talisman discovered economic accumulations in both satellites in 2008/9 and also a new reservoir unit in one well. Drilling in one untested compartment has resulted in a major discovery, which extended the life of the field considerably.??



Field Appraisal

Senior Geophysicist – Mariner/Maureen, UK

Special Geophysics and Seismic Interpretation focusing on Mariner Heavy Oil Field Block 9/11 and Near Field Appraisal. Work involved Rock Physics Modelling of Heimdal and Maureen Sandstone Formations. Well-Seismic Tying (including horizontal wells), Structural interpretation and Depth conversion with associated uncertainty analysis, including GRV analysis. Tested Petrel’s Waveform Classification Module against Paradigm’s, over the Maureen Reservoir.

Senior Geologist – Sabah Deepwater, Malaysia

Malaysia Responsible for maturation of exploration prospects and near field appraisals in Murphy’s Deepwater acreage offshore Sabah, Malaysia. Exploration prospect mapping, probabilistic and deterministic reserves assessment, risk analysis and maturation of prospects in deepwater acreage for drilling. Matured and drilled 4 exploration and 2 appraisal wells in Block K within a 15 months period.

Principal Geologist – Hassi Ba Hamou, Algeria

Appraisal and development of the Hassi Ba Hamou Field in Algeria.

Built five 3D geo-cellular models using Petrel software for different stages of field appraisal and pre-sanction development using the advanced uncertainty analysis workflow manager within Petrel.

Principal Geoscientist – Marmul, Oman

Infill drilling programmes, green field appraisal and development to EOR and the Marmul ASP injection project in PDO. Trained local staff.

Principal Petrophysicist – Bualuang, Thailand

Heavy oil field appraisal. Investment review & recommendations. Later full petrophysical/geo-modeling integration: LWD, core, wireline, WFT, Tests, Sensitivities, Uncertainties, Petrel geo-modeling. Design detailed SCAL program: wettability, overburden porosity & kbrine, Pc, Kro:Krw, Sorw, Co/Cw, BQv, m*, n*, Interfacial Tension, Contact Angle. Revised simulation input



Field Development

Principal Geoscientist – Marmul, Oman
Infill drilling programmes, green field appraisal and development to EOR and the Marmul ASP injection project in PDO. Trained local staff.
Project Manager – Goudron, Trinidad and Tobago
Full field development project including multi-discipline team: geology, geophysics, petrophysics and reservoir engineering.
Principal Geologist – BHP, Algeria
Delivered the interdisciplinary risk evaluation and mitigation programme for a consortium application for an Algerian 27 oil and gas field development and gas-to-liquids project.
Principal Geologist – Ratawi, Iraq
Field Development Plan for Ratawi in Iraq: 3D full Static model carried out in RMS (Yamama, Mishrif, Nahr Umr and Mauddud formations)
Principal Geophysicist – Zama, Canada
Canada, Zama basin field development geophysics; regional and pool specific interpretations, infill development drilling & well planning - 6 well drilling campaign, with successful execution
Principal Geophysicist – Tayyani, Syria
Syria - Tayyani East field development plan; two successful development wells drilled post study
Principal Geomechanics Engineer – Cuisiana, Colombia
Cuisiana Field development, assess wellbore stability issues in GoM (including drilling through salts), and Prudhoe Bay.
Principal Petroleum Engineer – Trinity E&P, Trinidad and Tobago
Trintres Field Development and Galeota Block Appraisal Subsurface support involved the whole spectrum of activities including design of seismic acquisition, seismic interpretation, development geology, exploration and appraisal, reservoir simulation, oil, condensate and gas field development and production operations, gas lift design, development drilling, well planning and design, completion, acid and frac design and operational supervision, production forecasting and reserves evaluation.
Principal Environmental Engineer – Shaikan, Iraq



Lead environmental engineer on Gulf keystone petroleum sour gas field development in Shaikan block / Northern Iraq / Kurdistan. These include feasibility study, Pre FEED and FEED.

Field Production

Principal Geoscientist – Multiple fields, Gabon

Gabon, M’Boumba, N’Tchengue, Anguille Marine, Port Gentil Marine Sud field production optimization operated by Shell AFPC: 3D seismic interpretations & 3D geological modelling

Principal Geophysicist – Cormorant, UK

Quad 211 (NNS): Field interpretation North Cormorant field to identify and propose production and water injection wells to locate the remaining oil. LTRO in order to maintain and see increase field production level.

Senior Reservoir Engineer – Trintex, Trinidad & Tobago

Trintex oil field, Trinity exploration and Production; General reservoir engineering support for an offshore field. Activities included field production performance analysis and technical reporting to the asset team.

Senior Reservoir Engineer – Confidential, CPR

Field production forecast. Modelled in PROSPER (obtained lift curve) and through MBAL predicted production profile per well (low, mid and high case). Sensitivity analysis applied

Principal Geochemist – Hawkins Field, USA

East Texas (Hawkins Field production development)

Principal Geologist – Marun, Canada

Collaborated on a production optimisation study and modelling of a super-giant Marun fractured field in Calgary, significantly increasing field production and management of the field’s water problem.

Principal Production Technologist – Multiple, USA/Mexico

Numerical simulations of brown and green fields (onshore North Texas- and offshore Gulf of Mexico-), field development strategy and production scheduling. Tuning of thermodynamic data (PVTi) and preparation of input data for Eclipse. Integration of well production (PIPESIM) with field production (Eclipse) using the Avocet interface (conceptual and feasibility studies).

Senior Geophysicist – Siri, Denmark



Siri Field production team involved in day-to-day operations and construction of updated geomodel based on reprocessed data and 4D data. Operated by INEOS.

Field Decommissioning

Principal Decommissioning Engineer – Mediterranean

Responsible for developing well decommissioning work streams within international facilities contractor. Led tender response projects including an ITT for subsurface, wells and asset decommissioning planning services and an RFP for platform, subsea and onshore asset decommissioning.

Developed method statements and methodologies for decommissioning of a large number of subsea pipelines and fixed installations in the Mediterranean.

Asset Manager – Multiple Fields, UK & Netherlands

Managing a diverse portfolio of 13 mature gas fields in the UKCS and NL, at diverse stage of field life: mid- life, end of life, decommissioning, drafting of COP documents, drafting of FDPA. The role of the asset manager for the non-operated fields is to represent and protect Field owners interest, influence and ensure asset best strategies to maximise EBITDA through Joint Venture.

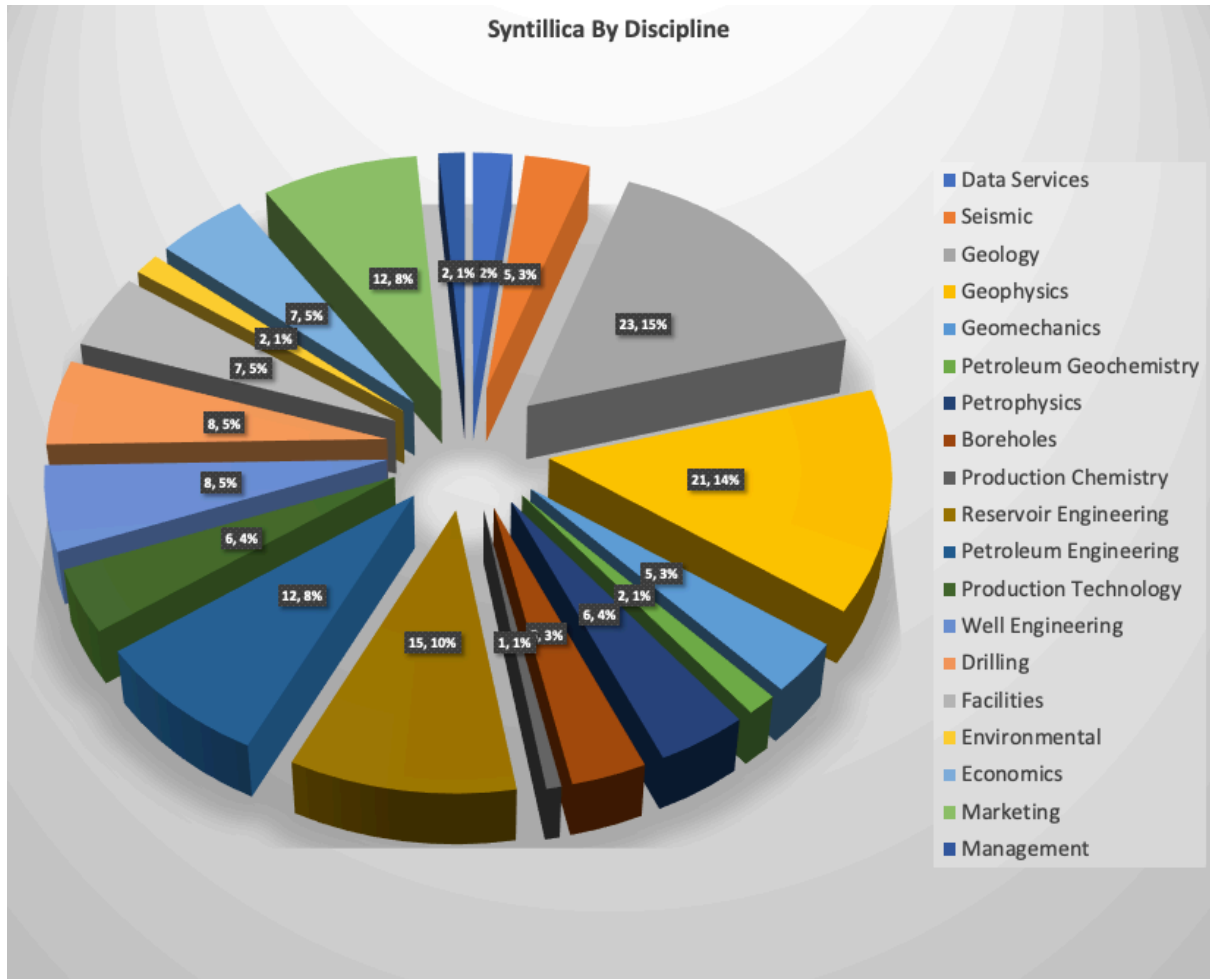
Principal Geologist – Multiple Fields, Global

Key member of the Shell Global Discipline Heads Decommissioning and Restoration team with accountability for developing and providing Shell group-wide subsurface discipline guidelines.

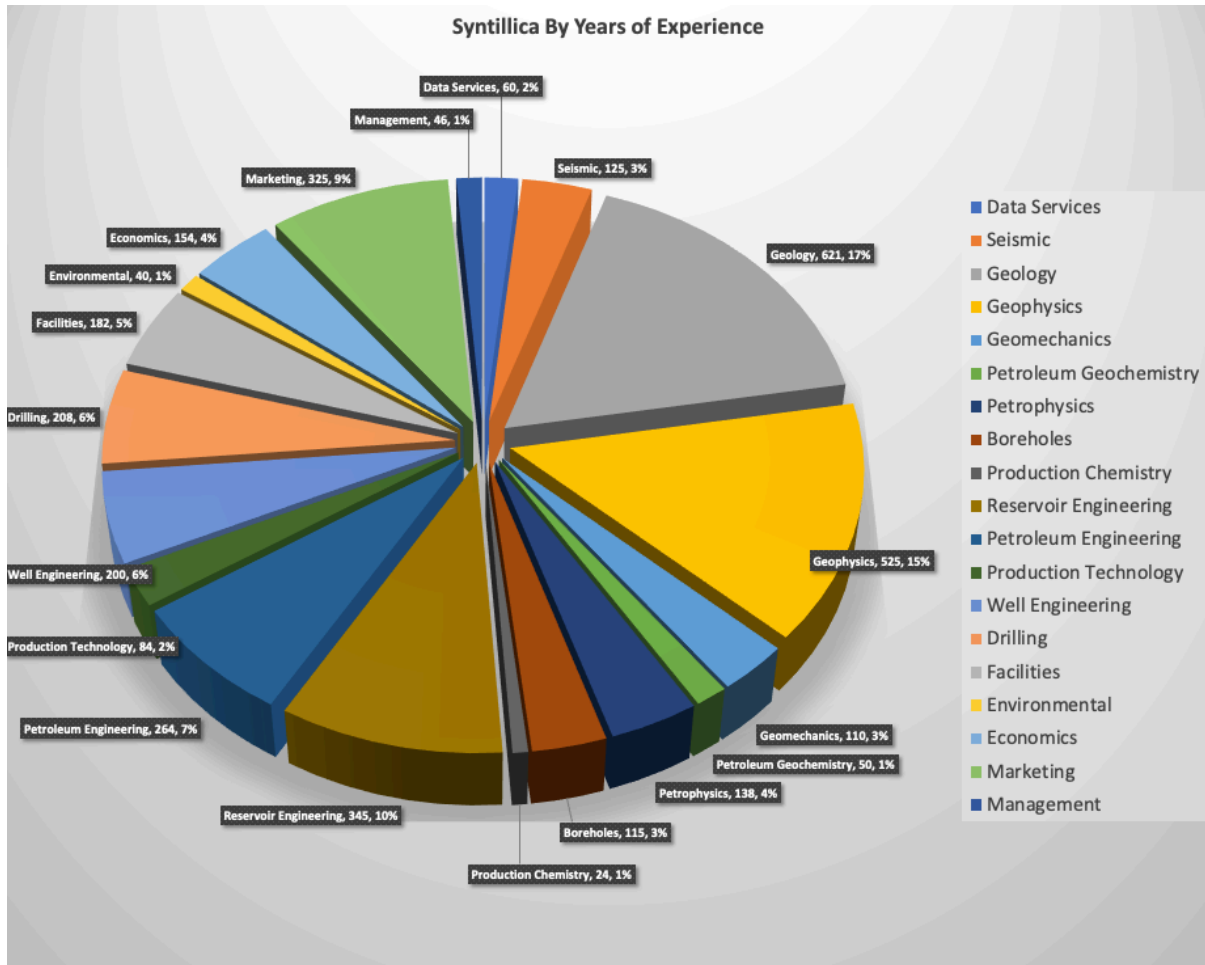
Undertook integrated technical assurance for several projects in Russia, Australia, Oman, Egypt, Iraq and Brunei, East Africa, India, and Thailand.



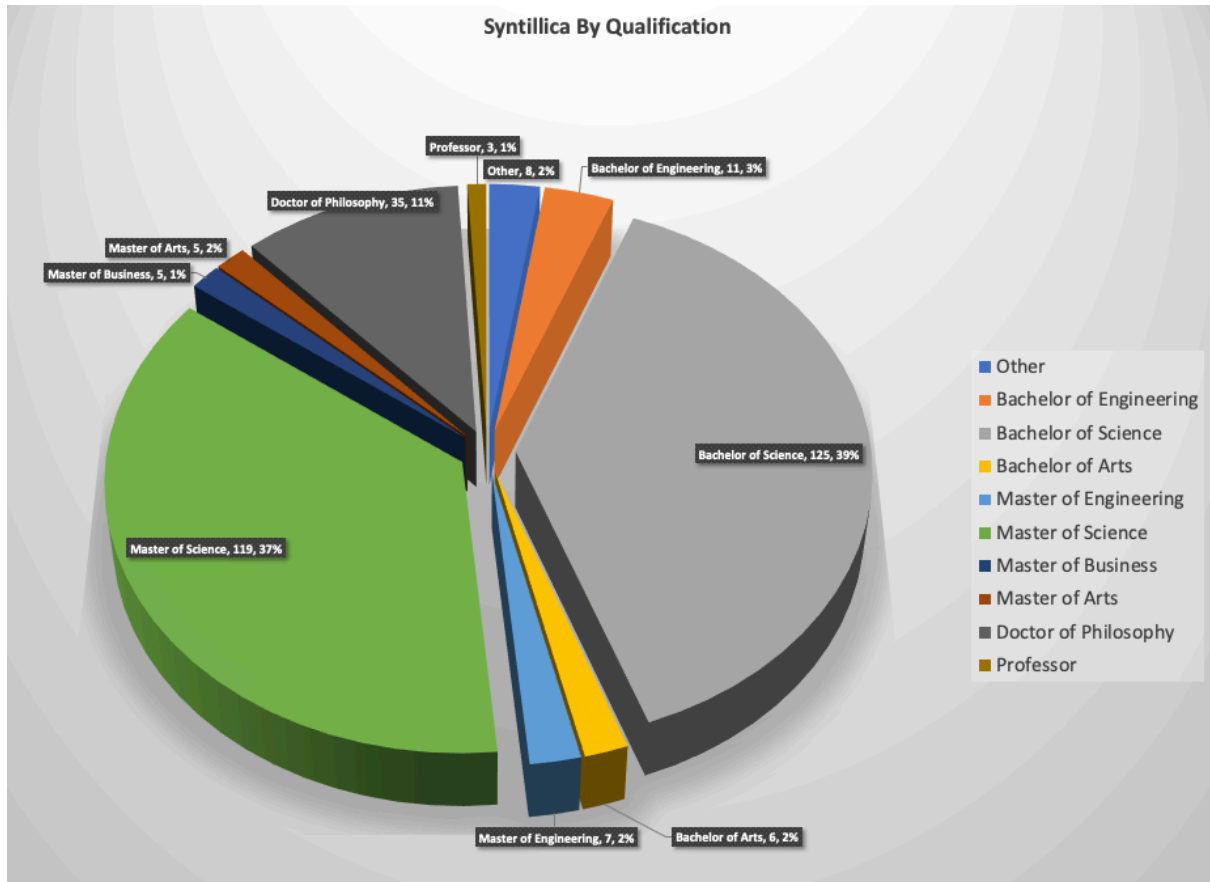
Syntillica Group by Technical Discipline and Head Count



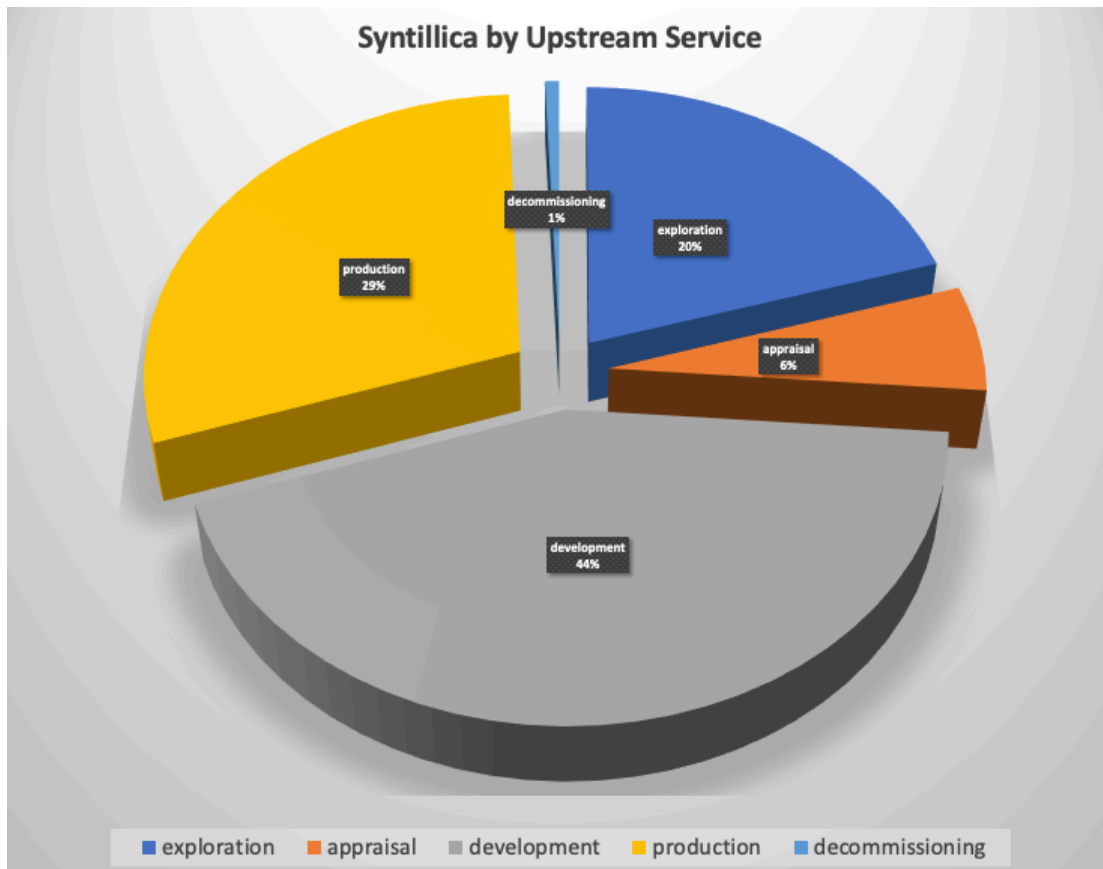
Syntillica Group by Technical Discipline and Years of Experience



Syntillica Group by Qualifications

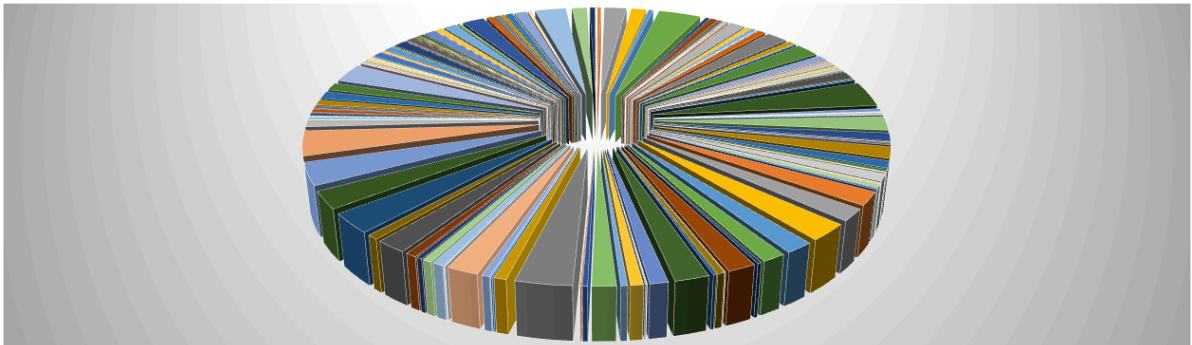


Syntillica Group by Upstream Service Type Examples



Syntillica Group by Global Experience Map

Syntillica Group Global Experience by Country



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|----------------|---------------|--------------|------------------------|---------------------|----------------------------|--------------------|------------------|
| ■ afghanistan | ■ albania | ■ algeria | ■ angola | ■ argentina | ■ australia | ■ austria | ■ azerbaijan |
| ■ bahrain | ■ bangladesh | ■ barbados | ■ belgium | ■ benin | ■ bolivia | ■ brazil | ■ brunei |
| ■ bulgaria | ■ burundi | ■ cambodia | ■ cameroon | ■ canada | ■ chad | ■ chile | ■ china |
| ■ colombia | ■ comoros | ■ congo | ■ ivory coast | ■ croatia | ■ cuba | ■ cyprus | ■ czech republic |
| ■ denmark | ■ east timor | ■ ecuador | ■ egypt | ■ equatorial guinea | ■ eritrea | ■ ethiopia | ■ fiji |
| ■ finland | ■ france | ■ gabon | ■ the gambia | ■ georgia | ■ germany | ■ ghana | ■ greece |
| ■ grenada | ■ guatemala | ■ guinea | ■ guyana | ■ honduras | ■ hungary | ■ iceland | ■ india |
| ■ indonesia | ■ iran | ■ iraq | ■ ireland | ■ israel | ■ italy | ■ jamaica | ■ japan |
| ■ jordan | ■ kazakhstan | ■ kenya | ■ north korea | ■ south korea | ■ kuwait | ■ liberia | ■ libya |
| ■ madagascar | ■ malawi | ■ malaysia | ■ mali | ■ malta | ■ marshall islands | ■ mauritania | ■ mexico |
| ■ mongolia | ■ montenegro | ■ morocco | ■ mozambique | ■ myanmar | ■ namibia | ■ netherlands | ■ new zealand |
| ■ niger | ■ nigeria | ■ norway | ■ oman | ■ pakistan | ■ panama | ■ papua new guinea | ■ paraguay |
| ■ peru | ■ philippines | ■ poland | ■ portugal | ■ qatar | ■ romania | ■ russia | ■ rwanda |
| ■ saudi arabia | ■ senegal | ■ seychelles | ■ sierra leone | ■ singapore | ■ slovakia | ■ slovenia | ■ somalia |
| ■ south africa | ■ south sudan | ■ spain | ■ sri lanka | ■ sudan | ■ suriname | ■ sweden | ■ switzerland |
| ■ syria | ■ taiwan | ■ tajikistan | ■ tanzania | ■ thailand | ■ trinidad and tobago | ■ tunisia | ■ turkey |
| ■ turkmenistan | ■ uganda | ■ ukraine | ■ united arab emirates | ■ united kingdom | ■ united states of america | ■ uruguay | ■ uzbekistan |
| ■ venezuela | ■ vietnam | ■ yemen | ■ zambia | ■ zimbabwe | | | |

Geographical Experience: Syntillica Group





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