GENERAL INFORMATION

Job Title: Advanced Analytics Lead
Location: Barcelona, Spain

INTRODUCTION

Novartis A.G., Basel, Switzerland

Novartis provides innovative healthcare solutions that address the evolving needs of patients and societies. Headquartered in Basel, Switzerland, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, cost-saving generic, biosimilar pharmaceuticals and eye care. Novartis has leading positions globally in each of these areas. In 2018, the Group achieved net sales of USD 51.9 billion, while net income amounted to USD 12.6 billion. Novartis Group companies employ approximately 125,000 full-time-equivalent associates. Novartis products are sold in approximately 155 countries around the world. For more information, please visit http://www.novartis.com

Barcelona Global BPA

The Barcelona Global Business Planning & Analysis (Barcelona GBPA) is startup within Novartis, which designs finance business partnering solutions leveraging innovation and talent. Artificial intelligence and predictive analytics are reshaping the function and this new team will be a differentiator, inspiring new ideas. To continue BPA (R)evolution to add even greater value for the business we need to have the right people with the right capabilities in the right location. We need disruptive innovation, customer-orientation and focus on bringing the best services and solutions to the business – both globally and locally – to support the BPA function. We are looking for early talent with experience in consulting or business partnering who are eager to make a difference.

The Barcelona Global BPA team offers this extraordinary work experience in a lively city with a real opportunity to develop in a highly fast-paced, multicultural, technology-driven environment where collaboration and innovation are at the heart of who we are and what we do.

Barcelona GBPA has three key work streams i.e. Business Partnering, BPA Consulting & Digital Innovation. Each work stream has specific focus areas, however, every associate while focusing majorly on their specific work stream needs to work flexibly across other work streams in order to drive innovation and collaboration.

ROLE PURPOSE

The associate in this position will be part of the Digital Innovation work stream of the Barcelona Global BPA

The Digital Innovation work stream

The Advanced Analytics Lead is responsible for solving financial and business challenges applying Advanced Analytics and Data Modelling techniques on a variety of small, medium and big data. The Advance Analytics Lead will drive the development and implementation of advanced forecasting techniques to support key financial processes such as budget, strategic planning and latest outlook. The Advanced Analytics Lead will develop methodologies to identify and quantify drivers that affect the financial performances.

The role encompasses the full lifecycle from ideation to requirements elicitation, design, implementation and rollout of the solutions. The associate will work and interact actively with internal stakeholders across different functions and departments at country, region and global levels, as well as external ones, such as consultants, universities, etc.

The Advanced Analytics Lead will be key link in connection between various stakeholders like the country organization, IT, Global functions, etc. She or he will need to understand the business questions from internal stakeholders and translate into technical guides and instructions.
MAJOR ACCOUNTABILITES

Advanced Analytics
Primarily responsible to lead and drive advanced analytics activities in finance, including explorative applications of machine learning, deep learning and artificial intelligence. Strong familiarity and experience with data preparation and processing such as assessment of data quality, new variable creation, variable selection, etc. Ability to create advanced predictive models using concepts like Time Series, Regression techniques, Artificial Neural Networks, Random Forest, etc. Structure problem domain and drive/define data, process, functional, and architectural requirements. Work with relevant partners in functions or franchises to scope data science requirements: need identification, hypothesis generation, data discovery and methodology proposal. Excellent quantitative skills and the ability to tell a story using data.

Modelling
Experiment with new datasets to try unguided and unsupervised learning to understand hidden insights. Ability to build and fine tune algorithms that scale up from small-scale proof-of-concept stage to full production systems. Build knowledge artifacts of real business problems that were solved with advanced analytics techniques which can be published in journals.

Innovation
Ensure smooth performance of implemented models and on-time delivery of machine-generated forecasts. Drive Innovation ideas / discussions, PoC’s. Evaluate new technological developments and evolving business requirements and makes recommendations for improved service levels and efficiencies. Provide input to project proposals related to new technologies/innovations. Actively engage with internal and external business & technical stakeholders. Be ultimately accountable for the full lifecycle of the advanced analytics solution. Select and rapidly prototype the models that are appropriate for the problem at hand and the available data that characterizes the components of the problem. Responsible for recommending the most appropriate data science approach to ultimately solve the problem at end. Ensure the selected data science approach can be engineered in an advanced analytics product. Ensure projects that use external data science consultants or solution vendors are well managed by ongoing engagement

JOB DIMENSION

Influence
High: Work and impact different stakeholders within a wide range of leadership

Complexity
High: End to end responsibilities of processes. Understand the systems landscape of Novartis and business landscape of the Pharmaceutical Industry in the market / region supported by the associate. Be ready to embrace change and be a change agent

Impact
High: Every decision / action taken by the associate will have a direct impact on the BPA function supported

PROFESSIONAL EXPERIENCE

- **Education**
  University degree in statistics, operational research, computer science or in a highly quantitative field

- **Work Experience**
  2+ years post-graduate experience in a multidisciplinary data & analytics environment or in research; experience in predictive modelling and large data analysis

- **Languages**
  All communication in Novartis globally is in English. Hence, the candidate is expected to be Fluent in written & spoken English. Knowledge of another European language is an advantage.

- **Mobility**
  Candidates looking for an international career, open to relocate to different countries and with a global mindset

- **Technical Competencies**
  Experience in statistical/analytics tools such as R, SAS, Python or big data technologies for machine learning. Expertise in at least a visualization tools
Job Description

Professional Competencies

Qlikview, Spotfire, Tableau for designing insights. Expertise in working with databases and hands of experience with data mining – concepts, techniques, implementation. A track record of innovating through machine learning and statistical algorithms and their applications. Hands on experience with data mining, its concepts, techniques and implementation.

Proven self-starter with experience in initiating and ensuring delivery. Ability to adjust to multiple demands, shifting priorities and unexpected events while maintaining a positive work attitude. Well-organized, excellent time management with respect to priorities and self-management. Strong interpersonal and communication skills, and ability to communicate analytical and technical content with clarity to non-experts. Expert team player with demonstrated ability to build collaborative relationships. Quick action taker. Result driven and proactive attitude with high commitment. Self-motivated with a high degree of ownership and accountability for results.

WHAT WE VALUE

Innovation
• Takes smart risks that benefit patients and customers
• Delivers new solutions ahead of time and helps others to do so
• Experiments & builds on others’ ideas (internal and / or external)
• Be open to failures

Quality
• Consistently finds and delivers improvement opportunities in own and other areas
• Consistently delivers at outstanding levels; pushes others not to compromise on quality and safety
• Energizes self and mobilizes others to develop knowledge and skills deeper and broader

Collaboration
• Able to collaborate across teams and garner necessary support / resources through all phases of the projects
• Adapt towards the changing business dynamics – like build cross team culture / networking
• Good communication and influencing skills
• Adapts style to impact others positively
• Models and leverages diversity and inclusion of style, ideas and perspectives to create a better impact, does not tolerate lack of inclusion by others

Performance
• Proactively and consistently works with others to create synergies and maximize results
• Consistently excels and energizes others to excel
• Acts with good judgment during ambiguity, creates buy in of others along the way

Courage
• Encourages and holds others accountable to speak up and challenge the norm constructively
• Tenacious, persevering and positive during challenging times
• Seeks feedback proactively and is approached by others for feedback

Integrity
• Encourages others to operate with high ethical standards
• Consistently demonstrates inclusive behaviors (humble, caring, trustworthy, respect and empathy) even during tough times and across all people
• Strong advocate of the Code of Conduct and encourages others to follow the Code of Conduct