Telenor Research
Snarøyveien 31
N-1360 Fornebu, Norway

telenor
group

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To whom it may concern,

Pål Sundsøy has been employed as Senior Data Scientist & Researcher in Telenor Group from 01.06.2007 to 01.06.2016 (9 years). He has been a key employee in Telenor Research and its Data Analytics Team in this time period. Telenor Research is organized under Global Markets and is a cross-disciplinary team with backgrounds from data science, mathematics, machine learning, physics, and cognitive and social science.

The unit works globally and do research around the general theme of deriving new and relevant knowledge from our large datasets applied to different areas, such as marketing, customer insight, competition strategy and Big Data for Common Good. The group has ongoing research collaborations with elite universities such as Harvard, Northeastern University, MIT, and Cambridge University, and collaborations with leading Asian institutes.
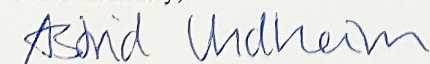
His job has included the following tasks:

- Develop and test new methods to extract insight and value from vast amounts of telecom customer data (including raw financial top-up data, call detail records and others). This includes data mining, machine learning, social network analysis, human mobility analysis and setting up data-driven pilots in marketing. Each dataset typically range from 500 million to 500 billion rows.
- Do data-driven research within Telenor and in collaboration with our external partners, to both influence running business and write papers that are publishable in high-end academic journals. The insight has led to strategic recommendations for Telenor's Business Units and Group Top Management.
- Initiating and leading research initiatives with MIT University in US (MIT Sloan and MIT Media Lab). This includes in particular modelling human behaviour using Supervised Machine Learning on Large-scale datasets in Emerging Markets. E.g. Poverty Prediction in Bangladesh using mobile phone and satellite data, gender, age, income prediction, social network analysis and Data-Driven Pilots.
- Leading data-driven initiatives together with Telenor Group Financial Services - banking the poor using credit scoring based on mobile phone datasets in Emerging Markets.
- Leading several international implementations of Social Network Analysis and Viral Marketing based on own research. This has led to 13 times better take-up rate compared to best-practice marketing and top-management attention.
- Headed several expert workshops on Advanced Analytics & Big Data, arranging SQL/programming courses for Econometricians.
- Promoting visualization of Big Data (showcased during several events).
- Given key recommendations to Top Management on Business Intelligence, Artificial Intelligence & Advanced Analytics (BI Groupwide Program – India, Norway, Serbia).

During Pål Sundsøy's time in Telenor he has held over 30 international conference talks (incl United Nations and several occasions at MIT), published over 20 scientific papers on Big Data/Data Science for Social Sciences. His research is cited in Wall Street Journal, MIT Technology Review, Science News, Harvard Magazine, White House Report on Big Data, Economic Times and more. He has contributed in several International Scientific Committees (including Netmob (MIT) and KDD). He has been working on projects in most of the Telenor Business Units. This includes work in Bangladesh, Pakistan, Malaysia, Thailand, Myanmar, India, Serbia, Hungary, Montenegro, Denmark and Sweden. In the same period he has been working with several universities – including Harvard University, MIT, Cambridge University, Chiang Mai University, Northeastern University and UIO.

Pål Sundsøy is a creative, hard-working, analytical and reliable person who is also good in communication, takes new initiatives and has a global mind-set. He can lead projects and mentor junior colleagues, as well as work independently. I would happily re-employ Pål Sundsøy as I consider him to be a valuable member of the team, who consistently achieved good results and delivers on expectations.

Yours faithfully,

Astrid Undheim
Vice President Analytics and AI
Telenor Research
Telenor Group