

Daniel David Armstrong

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Other Age: 39, Citizenship: American
Residence: The Netherlands (1997 - present)

Professional Experience

2000 - present **Takashi Mobile** - Amsterdam NL

Strategy consulting, product development/management and business planning projects in new technologies, mobile banking and payments, MVNOs, roaming/inter-operator relations, acquisitions, alliances, market feasibility and product-fit. Clients include:

Apr 2009 - Dec 2010 **Rabobank Development** (Utrecht NL)

- › Frame agreement to support projects in Rabobank Development partner banks in Mozambique, Malawi, Paraguay, Rwanda, Zambia, Brazil, Viet Nam, China and Tanzania.
- › M&A programme in Ghana involving the Bank of Ghana, Ministry of Finance and Office of the President based on interest in an equity stake in a newly-privatised agricultural bank. (2009)

Aug - Nov 2010 **Banco Regional, SA** (Asunción / Encarnación PY)

- › Programme strategy, feasibility, financial modelling, technology and business planning, mobile banking and payments design for new services for Banco Regional in Paraguay.
- › Follow-up project to launch mobile banking in Paraguay including mobile operator and regulator negotiations, programme planning, product design, processes and IT systems / architecture.
- › Banco Regional began in 1989 as an agricultural finance bank. Through growth and the acquisition of ABN AMRO in 2009 is now one of the largest banks in Paraguay with 18-20% of the total assets, loans and deposits portfolio in the country. Rabobank has a 40% share in Banco Regional (www.bancoregional.com.py).

Jun - Aug 2010 **Banco Terra, SA** (Maputo MZ)

- › Product and launch strategy; business case and financial model; negotiations with mobile operators, payment partners like water and electricity providers, and the telco regulator; as well as application design for the launch of mobile banking and payments services in Mozambique.
- › Banco Terra is a new bank launched in 2008 in Mozambique focusing on consumer segments, new banking channels in rural areas, poverty eradication, rural small businesses and agriculture. Rabobank has a 31% share in Banco Terra (www.bancoterra.co.mz).

Mar - Sep 2010 **Banque Populaire du Rwanda S.A.** (Kigali RW)

- › Work delivering a feasibility study, market / strategy assessment, mobile operator negotiations, government regulator agreements, payment provider agreements, technology and business planning, callcentre set-up, marketing, and communications supporting the new mobile banking and payments product "BPR Mobile Banking".
- › Worked on other strategy projects including overall BPR pricing, IT policy, branch automation, the Rwandan MinAgri / IFDC agricultural voucher roll-out, grant requests, ATM deployment and cards strategy, as well as representing BPR in the Rwandan President's Information & Communications Technology national ICT validation programme.
- › BPR is the largest bank in Rwanda with 188 branches and 1,4 million customers, with business focused on consumers, small businesses and agriculture. Rabobank has a 35% share in BPR, with the other 65% divided over 617.332 other shareholders (www.bpr.rw).

Apr 2009 - Jun 2010 **National Microfinance Bank of Tanzania PLC** (Dar es Salaam TZ)

- › Product strategy programme for mobile point-of-sale products, B2B mobile payments, an un-banked ATM cash-out product, and new agreements with prepaid value / postpaid bill partners. (2010)
- › Work to launch mobile banking and payments services, including technical design, strategy, mobile operator/regulator/vendor negotiations and contracts, financial and business planning, test planning, documentation, process and provisioning design (2FA), customer service, marketing development and launch of the successful "NMB Mobile" USSD Phase II mobile banking and payment application. (2009)
- › NMB is the largest consumer bank in Tanzania with 145 connected branches, 300 ATMs and 1,6 million customers. Focused on consumer banking, agriculture, small business, Rabobank has a 49% share in NMB (www.nmbtz.com).

Nov 2009 - Nov 2010 **Rabobank Nederland, Betalen en Sparen** (Utrecht NL)

- Strategy, technical development, business modelling and feasibility for a new, nation-wide, multi-bank and multi-mobile operator mobile contactless (NFC) payment product framework and business consortium to establish a six-party “Trusted Service Manager” (TSM) in The Netherlands. (2009-2010)
- Mobile technical strategy and due diligence for creation of a new online Rabobank Access Security Solution for internet and mobile banking, authentication and payments. (2010)

Apr 2009 - Apr 2010 **Irdeto BV / Multichoice Africa (DStv)** (Hoofddorp NL)

- Three-part strategy programme to include a market strategy for postpaid/prepaid payments for Multichoice/DStv satellite television across sub-Saharan Africa; hardware security strategy for Near Field Communications products, and mobile product portfolio development. (2010)
- Research and analysis project in the mobile hardware, software, transactions and internet security applications market in relation to Irdeto’s core business in Conditional Access (CA) / Digital Rights Management (DRM). (2009)

Aug 2005 - Apr 2009 **Rabo Mobiel B.V.** (Amsterdam NL)
CTO / Co-Founder

- Served on the management team of this mobile service provider (owned by Rabobank Nederland) in charge of teams responsible for innovations, product and technology management, strategy and business development.
- Budget holder/owner of mobile products and services, banking, payments, integration with Rabobank systems, Dutch and European standardisation programmes, NFC technologies and trials, SIMs and handsets, mobile operator negotiations, technical SLAs, post-paid, pre-paid and all mobile applications.
- Successful management of the full migration of operations to a new mobile operator host in 2008, requiring SIM swap processes, comparable product functionalities, and quick/cost-effective migration of customers to the new network.
- Rabo Mobiel acquired over 200.000 new customers in the competitive Dutch marketplace in the first two years of operations and continues to provide mobile telecommunications, mobile banking and payments services, spending alerts, customer service, online account management, as well as launch of “SMS Betalen” – the nation-wide SMS payments service available for all customers, regardless of bank or mobile operator, and without requiring pre-signup.
- Rabo Mobiel project initially began in mid-2005 with a nine-month project for Rabobank International where we created an MVNO feasibility study, competitive analysis, 5-year financial model and systems architecture, mobile operator negotiations and agreements, a market feasibility study, business plan, and a portfolio of mobile and banking products.

Nov 2003 - Aug 2005 **Irdeto Access BV / Irdeto** (Hoofddorp NL)

- Product feasibility, development and management for “Irdeto Mobile” product portfolio including CA, DRM, content protection and satellite television streaming products. (2005)
- Strategy, product development and marketing projects including an M&A project to acquire and integrate technologies and commercial development of US mobile digital rights management software company LockStream Corporation. (2004)
- Mobile content protection, new products in Satellite DMB (TU-Media video DAB service launched by SK Telecom in South Korea), DVB-H and feasibility of mobile CA across the world, and worked on analysis in acquisition of a mobile DRM start-up. (2003-2004)

Nov 2002 - Sep 2003 **MobilTel EAD** (Sofia BG)

- Work for this Bulgarian GSM operator on various projects, including managing the sale of the company in 2003 for €200 mln. to Telekom Austria. Constructed the corporate data room, wrote the 2002-2007 Business Plan and 2003 Marketing Plan, and completed projects in product development, deregulation, ARPU improvement, international roaming and the launch of GPRS.

Nov 2001 - Nov 2005 **ONE GmbH** (now Orange Austria, GSM operator, Vienna AT)

- Project delivering the design of a hybrid pre/post-paid product, business planning for new MVNO opportunities. (2005)
- Long-term, fixed support in the areas of international roaming, wholesale, 3G network sharing, new MVNOs and service providers, as well as the strategy, complete analysis, research and KPIs for launch of the Starmap Mobile Alliance. (2003-2004)
- Programme Manager for the launch of Austrian ESP/MVNO Tele2 Mobil including planning, negotiations, networks, business processes, reconciliation and transition of customers / operations from an ESP to a full MVNO. (2003)
- Created ONE’s consolidated Austrian wholesale/MVNO strategy and high-level business case. (2001)

Jun - Nov 2001 **Virgin Mobile Netherlands** (Amsterdam NL)
CTO / Head of Products & Services

- › Served on the management team of this planned MVNO building the product portfolio, overall corporate structure, IT, networks and systems, internet, marketing and customer service plans and the mobile launch portfolio. This venture (Rabobank, mmO2, Virgin Group) was cancelled because of airline investment risks after the US terrorist attacks on 9/11.

Mar - Jun 2001 **Talkline Nederland** (Baarn NL)

- › Corporate development project to develop an MVNO and new business products strategy, architecture, business case and mobile operator negotiations for this GSM service provider (now part of Debitel).

Aug 2000 - Feb 2001 **Veronica Mobile** - Hilversum NL
Head of Networks and Technology / Co-Founder

- › Secured 1,25 mln NLG in funding in the spring of 2000 and led a small team in forming an MVNO for media venture "Veronica". Veronica ran the first 'Big Brother' reality-tv show and managed successful television, radio, print and internet assets.
- › Responsible for programme strategy, business, personnel and operations planning, marketing, as well as the negotiations with two GSM operators, networks and IT architecture and the vendor selection programme.

smaller engagements

Mobile, financial services development projects / assignments for BC Card (KR, Korea's largest credit card issuer), Vodafone D2/Sparkåse (DE), Rabobank / E.ON Benelux (NL, freeEnergy green energy service provider), Scarlet Telecom / One.Tel (NL), easyMobile (UK), Sony M'Club / Sony Network Services GmbH (AT), XS4ALL (NL), Más Vida Móvil (SP), SK Telecom (KR), Swisscom Mobile (CH), De Persgroep (BE, DMB-T MVNO plan), Virgin Mobile Asia (SG), Rebel Sport (AU), GSM / picocell MVNE for CMG (NL), XOIP BV (NL), Lost Boys UK / H3G UK, a new prepaid mobile service provider in Angola and various conference producers and publications.

1997 - 2000 **Telfort B.V. / British Telecom** - Amsterdam NL
Director, Internet Development

- › Responsibility for Telfort's internal and external internet strategy from 1997-2000, including online (websites, extranets), intranet and e-business programmes. Held overall budget for hiring and management of a small team of internal and external web developers, programmers and designers and served as Product Manager for BT Ignite Global Webhosting, launched in 2000.
- › Coordinated Telfort Mobile's first SMS information, Over-the-Air (OTA) applications and worked on mobile programmes like B2B WAP supply-chain applications, unified messaging products, the Dutch UMTS auction, MVNOs, and specialty projects for BT like multimedia payphones, digital terrestrial television and the overall European BT Quality and Processes Team.
- › Telfort began as a fixed-line operator and internet services provider and later launched a GSM operator gaining 1,3 mln subscribers in three years of operation.

1997 **BitWrench Incorporated** - Washington DC, US
Manager, Major Accounts

- › Led a small team of developers for six months completing US\$600,000 of online projects for MCI Telecommunications for MCI Global Engineering (fractal/streaming video), AES Energy, Environmental and Energy Study Institute, The National Institutes of Health and World Airways.

1995 - 1997 **Proxicom, Inc.** - Pentagon City VA, US
Senior Producer, Internet Products - MCI Telecommunications Team

- › Part of the initial start-up team completing web, internet business re-engineering and e-commerce projects. Responsible for telecommunications, insurance and manufacturing business segments, generating US\$3 mln. of business annually. Proxicom was purchased by South African integrator Dimension Data in 2001 for US\$448 mln.
- › Manager for onsite teams in the design of MCI callcentre intranets, internetMCI dialup portal, work with Netscape on the first e-commerce systems, and launch of 22 corporate client sites for customers like PepsiCo International, Traveler's Group, Kemper National Insurance, Tarmac America, Albright & Wilson, Georgia-Pacific, SAAB USA, The Center for Media & Public Affairs and TelecomUSA.
- › Project Manager for 28 commercial and non-profit customers including Aetna Insurance, Asian-American Business Information Network, AiB Software, VISA Interactive and marketplaceMCI - the world's first e-commerce site with 30+ "stores" like Major League Baseball, Owens Corning, Dun and Bradstreet, Border's Books, Radisson Hotels and Office Max Online.

- 1993 - 1995 **Ordway-Kousoulas Architects** - Bethesda MD, US
Marketing Manager, Exhibit/Museum Designer
- › Responsible for marketing, business development, operations and project planning for this small architecture firm specialising in public spaces, exhibits and museums.
 - › Staff designer on architecture, interpretive planning, design, signage, research and writing projects for 11 exhibition, museum and national park projects including exhibits at The White House Visitor Center, Acadia National Park, Fire Island National Seashore, Lincoln Memorial Visitor Center and the Smithsonian National Museum of Natural History.
- 1992 - 1993 **Washington World Group Ltd.** - Washington DC, US
Junior Account Executive, Lobbyist
- › Public relations, policy and lobbying projects for international clients including the Embassy of El Salvador, Mauritania and Malta. Handled policy research, writing, marketing materials, liaising with diplomatic, congressional and executive brand offices and the US White House.
- 1990 - 1992 **National Committee on Public Employee Pension Systems** - Washington DC, US
Writer and Press Assistant
- › Staff writer and editor for articles and policy features. Worked as Special Assistant to former U.S. Congressman Hastings Keith (R-Massachusetts) on research and briefings of congressional action.

Professional Involvement and Other Information

- Telecommunications & Mobile Financial Services
- › 40+ speaking engagements at workshops, conferences and telecommunications industry forums (e.g. Mobey Forum, Open Mobile Alliance, De Nationale Phone Show, GSMA, De Nederlandse Bank, IBC, FAPIA/ICMA, IIR Telecoms, IIR Asia, Forrester Research, Informa, Symphony Global, LogicaCMG Masterclasses, Ovum, ECP-NL, The World Bank, NL TMA, SmartStadium, iMMovator, NACHA, Mobile Monday, IPAN, FMO, British Telecom, Critical Distance, Marcus Evans, ARCGroup, Telecom.Paper, Total Telecom, Terrapinn, Magenta Global, X|Media|Lab, NPS/NOS, universities and media journals, etc.) on MVNOs, mobile banking and payments, NFC, product strategy and customer experience (1997-present).
 - › Founder of the TM MVNO/SP List – the world's first MVNO/ESP/SP listing website with country listings, news and MVNO resources. The list was taken over by telecommunications analyst Telecom.Paper in Oct 2006. (2003-2006)
- Board Roles
- › Serve on the Board of Advice (Raad van Advies) of Private Mobility B.V., a new Dutch MVNO targeting small and medium-sized businesses with convergent fixed/mobile voice and data solutions, also deploying localised femtocells using newly available unlicensed GSM spectrum. (2008-present)
 - › Serve on the Board of Advice (Raad van Advies) of Glossy Affairs, a Dutch public relations and communications consulting company, focused on business and financial support. (2007-present)
- Space and Satellite
- › De Nederlandse Vereniging voor Ruimtevaart (NVR) (2010-)
 - › Partner in Stichting Takashi Space, a Dutch non-profit group dedicated to helping African countries in promotion of new and cost-effective ways to engage in space technology sectors. Author of three papers and feasibility studies for launch site programmes. (2004-2010)
 - › Launch project for the government of Cameroon was the construction of the concept proposal and research plan for initiating investment and construction of new spaceport / satellite launch facility for the National Ministry of Higher Education and Research of Cameroon. Research trip and meetings at Baikonur launch facility in Kazakhstan. (Jun-Dec 2005)
 - › ESA SATCOM Technologies Modules I, II and III (System & Services, Communication Link, Space Segment, Networking and Earth Segment) (2005)
- Other Professional
- › Various freelance internet projects for non-profit organisations and corporations: BT Telecomunicaciones Espania, Ocean Communications Ireland, BTFarland, UPC e-City, U.S. National Endowment for the Humanities, U.S. National Assembly for Social and Health Welfare Organizations, The Vision Council of America, President Clinton's Commission on Critical Infrastructure Protection, Manugistics Inc., The Discovery Channel. (36 projects in total for 28 companies, 1995-1999).
 - › Various freelance public relations projects and photography for the Corporate Relations Department of Canadian telecommunications provider Northern Telecom Ltd. in McLean, VA US (1992).

Personal

- Volunteer Work Volunteer for Wakuluzu: Friends of the Colobus Trust - a primate rehabilitation and wildlife conservation project in Diani, Kenya from 2003-2006. Constructed the four-year business and funding plan; served as Interim Manager for the facility in Kenya in 2004 and volunteered myself in 2003 also in Kenya, working on species inventory projects, island biogeography, primate husbandry, rehabilitation and release.
- Music Extensive work in experimental, electronic and improvised music and guitar. 60+ performances, concerts and CD releases in Europe, Asia-Pacific and North America from 1990-2009. Collaborations with artists, labels, festivals, concert halls and museums. See separate discography for more information.
- Interests Technology, reading, biology and island biogeography, photography, history, information design, cartography, planetary and space science, rocket launch systems, cooking, music, travel, golf.
- Languages English (mother tongue), Dutch (good), German, French, Spanish (basic)

Education

- 1993 - 2003 Various courses and seminars in business and technology management, process design, personnel management, telecommunications, cartography, design, architecture, history, etc.
- 1988 - 1992 **B.A. Philosophy** - American University, Washington DC, US, cum laude, 1992 Pearson Prize for Academic Excellence in Philosophy
- 1985 - 1988 **Secondary School** - John Piersol McCaskey, Lancaster PA, US, honours, early graduation