

Michael Adams

22553 Martin Street, Salida, CO 81201, USA

Phone: +1 (719) 221-3725

Email: michael@broadbandsemantics.com

in: [linkedin.com/in/cablebrit](https://www.linkedin.com/in/cablebrit)

Summary

Michael has invented, developed and implemented broadband/video products and services over his career with Digital Equipment, Northern Telecom, Time Warner Cable, Terayon, and Tandberg/Ericsson TV. He is an accomplished speaker who loves explaining complex technology strategies to a wide range of audiences. He is co-author of "Modern Cable Television Technology 2nd Edition" and author of "OpenCable Architecture". Michael works as an Expert Witness in USA and Great Britain and holds 9 U.S. patents. He offers executive coaching and mentoring through Everwise (<https://www.geteverwise.com/>).

Experience

President/Founder, Broadband Semantics Consulting LLC

Delivering independent consulting services since 2003:

- Systems architecture, product and test environment design for **Brighthouse Communications**, **Charter Communications**, and **Comcast Cable**.
- Expert witness and intellectual property consulting for **Bell Canada**, **Charter Communications**, **Comcast**, **Time Warner Cable**, **Virgin Media**, and **SKY**.
- Technical Advisory Board representation for:
 - **Broadband Access Systems** (*acquired by ADC for \$2.25B*)
 - **Entone** (*acquired by Amino for \$73M*)
 - **Everstream** (*acquired by Concurrent for \$15M*)
 - **Jacobs Rimell** (*acquired by Amdocs for \$45M*)
 - **Verivue** (*acquired by Akamai for \$35M*)

Principal Architect, Charter Communications

- Developed the end-to-end test environment architecture for critical product deliverables including **Spectrum Guide**, **Video-on-Demand** and **Dynamic Ad Insertion** by working closely with product, advanced engineering, software engineering and video operations.
- Performed technical assessments of **Charter** markets to identify testing coverage gaps in the lab environments.

Principal, IBB Consulting

- Modeled sizing, performance and scaling of the Dynamic Ad Insertion platform (*originally developed by "This Technology"*) for **Comcast's** Video IP Engineering (**VIPER**) development team.
- Performed a detailed analysis for **Vidéotron**, of a cloud-based, IP video transformation.

- Development of an alignment process for **Comcast Wholesale** to drive the **X1** product feature roadmap being delivered to **Shaw Communications** (*BlueSky TV*) and **Cox Communications** (*Contour*).
- Performed a detailed analysis for **Charter Communications** of broadband IP architecture and infrastructure in support of their acquisition of **TWC** and **Brighthouse Networks**.

(*Accenture acquired IBB in 2018*)

Vice President of Engineering, Bright House Networks (BHN)

- Led an organizational transformation of the **BHN** software engineering team.
- Analyzed the systems architecture design of an IPv6 hosted-navigation system (**H-Nav**) working closely with the **TWC** development team.
- Advised **BHN** executive management on adapting **H-Nav** to operate against the **BHN** back-office environment.
- Developed a migration strategy for **BHN** SmartTV applications (**BHTV**).

(*Charter Communications acquired BHN in 2016*)

Head of Software Strategy, Ericsson TV/Vice President of Systems Architecture, Tandberg Television

Managed global strategy for **Ericsson TV**'s digital video products, including **OpenStream**, **MDMS**, **eCMS**, **IPTV** and **Converged TV** platforms.

- Provided subject matter expertise and technical sales support for digital compression products and standards including MPEG-2, MPEG-4 (H.264), and HEVC/H.265).
- Developed multi-screen video product-prototypes, including first public demonstration of "screen-shifting" from STB to PC to smartphone at **CableLabs** innovation showcase in February 2010. Apple iPad was added to demo for 2010 **NCTA** conference (only 2 months after its release in April).
- Managed end-to-end solution architectures for advanced TV services across cable, satellite, IPTV, and mobile access networks.
- Authored white papers on multi-screen TV, adaptive bitrate management, IPTV user interface, and content management systems.
- **Ericsson**'s corporate spokesperson on all aspects of television at international and domestic conferences.
- Supported standards activities in **SCTE** and **CableLabs**.

(*Ericsson acquired Tandberg Television in 2007.*)

Vice President of Video Architecture and Technology, Terayon Communications Systems

Directed technical strategy for **Terayon**'s digital video product-line family; **DM Network CherryPicker**, **BP 5100**, and **CAP-1000**.

- Provided subject matter expertise and technical sales support for digital compression and transrating products and standards including MPEG-2 and MPEG-4 (H.264).
- Developed end-to-end system architecture for digital program insertion (**DPI**), including support for seamless, real-time splicing of MPEG-2 and MPEG-4 (H.264).
- Supplied solutions for **DPI**, targeted advertising and switched digital solutions to **Comcast** and **TWC**.

- Managed standards representation in **SCTE** and **CableLabs**.
- Authored white papers on IPTV and IP-MPEG network convergence.

(Motorola acquired Terayon in 2007)

Corporate Vice President of Broadband Technology Group, Time Warner Cable

Managed the **Road Runner** high-speed data engineering, product management, and quality assurance organizations:

- Overall responsibility for major engineering initiatives including Multiple ISP, Broadband Provisioning Systems, Regional Networks, IP Address Management, Network Management, Consumption Monitoring, Cable Modem management, National Content Center, and Voice over IP.
- Created a cohesive engineering organization by integrating existing network operations, customer operations, programming and product development teams.

(Charter Communications acquired TWC in 2016)

Corporate Vice President of Network Engineering, Time Warner Cable

Managed technical initiatives on multiple ISP for broadband cable systems.

- Developed multiple ISP requirements, recommendations, program plans and architecture, which was a Justice Department order gating AOL delivery via cable modems.
- Built a cross-functional team to implement a multiple ISP trial in Columbus, Ohio.
- Created and delivered presentations to the **FTC** and **FCC** on Open Access.

(AOL acquired Time Warner in 2001)

Principal Network Architect, Time Warner Cable

Developed the detailed network architecture and STB requirements for the **Pegasus** program, which implemented the systems, network, and software platforms to support digital cable services to 20 million STBs in **TWC** and **Brighthouse Networks** cable systems.

- Developed specifications and requirements for video-on-demand, interactive TV, and digital program insertion.
- Served as co-chair of the **JEC Digital Standards Subcommittee** and chair of Working Group 3 for the **SCTE Digital Video Standards Committee**, which created key **OpenCable** specifications.
- Delivered numerous papers, presentations and tutorials at industry conferences.
- Awarded 8 U.S. patents in the fields of digital video and cable networks.

Senior Project Engineer, Time Warner Cable

Developed the network architecture for the **Time Warner** Full Service Network (**FSN**), which was the first video-on-demand system, including an electronic program guide, home-shopping, and multi-player games.

- Developed network architecture, including video compression, network adaptation functions and network management.

- Project management of a multi-disciplinary team of engineers from **AT&T**, **Silicon Graphics**, **Scientific Atlanta**, **Time Warner Interactive**, **Hitachi**, **Objective Systems Integrators**, and **BBN Hark**.
- Managed digital set-top box integration by **Scientific Atlanta** and **Silicon Graphics** personnel in Atlanta, GA.

Software Development Manager, BNR/Northern Telecom

Managed and implemented communications software projects, including:

- Systems architecture and software development for **Magellan Concorde** ATM switch.
- Designed and implemented core frame relay processing for **DataSPAN** product on **LPP** platform.
- Specified an automatic logical link connection protocol for T3 ATM trunks.
- Created an SMDS router architecture, which was adopted by the **MSS 6400 Passport** switch.
- Developed 'c' control software for a fiber-to-the-home TV distribution system in Heathrow, Florida.

Senior Design Engineer, Digital Equipment Company (DEC)

- Designed, and coded in 'c' and assembler, LAP-D firmware for a **DECnet** to **ISDN** network adaptor for the **MicroVAX II**, which was demonstrated in trials with **Deutsche Telekom** in Mannheim, Germany and **Swisscom** in Geneva, Switzerland.
- Developed a manufacturing diagnostic test-suite for a **V22.bis** modem.
- Developed customer and field service diagnostics for **DPV-11** synchronous communications network adapter for the **MicroVAX II**.
- Specified, designed, and coded the user-interface for **VAX/VMS NTR**.

Design Engineer, Kent Process Control

- Hardware evaluation and testing of **LSI-11** based systems for process control.
- Provided on-site support for customers in Netherlands and Italy.
- Firmware design for a token-passing bus LAN for process control (**6809** assembler).

Education

BSc (Hons) Electrical and Electronic Engineering, Bristol University, England

Publications

- **Modern Cable Television Technology** 2nd edition, 2004 (Morgan Kaufmann)
- **OpenCable Architecture**, 1999 (Cisco Press)
- See [linkedin.com/in/cablebrit](https://www.linkedin.com/in/cablebrit) for complete list of publications

Industry Memberships

- Senior Member of **SCTE** (member since 1993)
- Senior Member of **IEEE** (member since 1993)