The realities that we’ve taken for granted in the telecommunications and information technology industries are under assault as never before, from new technologies, new business and consumer customer needs, and new global entrants with new business models.

Traditional profit pools are evaporating as “free” apps and services from over-the-top competitors ride the global telecommunications infrastructure and enormous base of capital expenditures, exploiting nontraditional business models for monetization.

The changing realities of the global economy are shifting the growth opportunities from the developed world to the developing, thanks to faster growth rates, state-of-the-art mobile infrastructure, and a hunger for services such as mobile payments and the use of the Internet of Things to solve basic problems in healthcare, agriculture, energy, and water.

Disruptive technologies—including 5G mobile, 8K video, cloud, the Internet of Things, and cognitive computing, deep learning, and artificial intelligence—are changing the realities of business, driving competitive turbulence, and empowering new entrants in the Pacific Rim and beyond.

Incumbents in all verticals are finding that the changing realities of smart, digital, connected businesses exploiting a variety of market, product, and technology platforms mean they need to adapt—quickly and proactively—or find their markets gone seemingly overnight.

The changing realities of the global regulatory environment, including net neutrality and broadband as a human right, are redefining the boundaries, constraints and opportunities of the industry.

The realities of dynamically changing customer demands for flexibility, agility, cost-optimization, security, and privacy are redefining a new generation of services and platforms.

The reality is that change is everywhere, and therefore it is imperative to adapt. Or be forgotten.

Come to PTC’17 and identify how the new realities will impact you.

Come to PTC’17 and clarify your path through the dynamically changing realities of our industry.

Come to PTC’17, catch the waves of change, and ride them to success.
Topics

For speaking opportunities at PTC’17, please submit a proposal on one of the following topics.

**Satellite’s Altered Realities**

The satellite industry is experiencing an unprecedented wave of change, altering long established business models and assumptions. These new challenges are coming from all quarters: new space and terrestrial technologies, as well as dramatic shifts in the traffic mix.

New satellite entrants are planning a mix of satellite types and constellations offering a variety of coverage, price, or latency options designed for both new and classic communications applications. Established operators are responding with new solutions that may make their existing business models obsolete. Satellite manufacturers are also being challenged—by demands for lower costs, higher throughput, faster production cycles, and new contenders—to “think outside the box” or risk being labeled “old space”.

What are the new realities? Will the rise of one type of satellite constellation lead to the demise of another? How will the existing video distribution market react to these new systems and the prevalence of high capacity terrestrial networks? What are the real latency requirements of the new 5G systems? Are the assumed price reductions available with High Throughput Satellites (HTS) real or only available when the satellites are full? The satellite sessions will take an in-depth look at all these questions.

**Submarine Cable**

Submarine cables carry more than 90% of international traffic. As such, the planning, design, construction and development of submarine cables are essential to sustain growth of the global economy. Cable connectivity needs to be secure; the network needs to be resilient and expansive – both in terms of geographical coverage and capacity to meet demand; and the cable network needs to be dynamic and flexible to meet the changing needs of burgeoning markets. Many new subsea systems are being constructed. Many of these integrate terrestrial connectivity with undersea networking capability, many are choosing to deploy innovative cable landing station techniques and concepts, and many are ensuring that the services offered span at wavelength levels between major traffic center locations. Capacity upgrades to existing systems are ongoing, with subsea cables delivering enormous capacity through wavelength services to meet demand. The PTC Subsea Cable sessions offer an excellent opportunity for industry organizations and experts to share the concepts, ideas and experience that affect our industry and thus influence the development of systems around the globe.
Submission Guidelines

- Submit a short and well-crafted proposal that defines the problem(s) and issue(s) you intend to address.
- Explain why your approach is significant and focus on strategic directions, rather than specific technicalities.
- Include the proposed speaker's information (i.e. name, job title, company) and a short 150-word bio and contact information fullstop.
- DO NOT submit commercial or product promotions/service pitches or proposals that otherwise focus on a company.

Note: Individuals, whose proposal are accepted and have agreed to participate in PTC’17, are kindly asked to register for conference at the special program participant rate of US$550.

Deadlines (General Proposal)

Proposal Submission: 6 July 2016
Proposal Status Notification: starting 15 August 2016
Final Paper and Presentation Slides: 5 December 2016

Changing Realities for Mobile / Wireless

How will fixed networks and business models be transformed in the wake of multiple waves of change in mobility and wireless? What will it mean that 5G will support gigabit access to every device or that new wireless platforms are available? How will Internet of Things (IoT) and OTT apps change business and revenue models as “smart life” becomes a reality? How will core networks evolve to support video on one hand and IoT narrowband on the other hand? What are the opportunities for partnerships? How will “customer ownership” change, and what are the implications? What spectrum policies are needed to enable all the benefits? Where and how will we find all the new spectrum? How will multiple waves of change affect society, economy and industry?

Network Infrastructure, Architectures and Technologies

The vast sea of network technologies has experienced numerous waves over the past century: from operators to crossbar switches, analog to digital, purpose-built hardware to softswitches, voice to data, enterprise to cloud, firm to open collaboration, and now people to things. 4G to 5G, HD to 4K to 8K, dumb networks to smart networks, and human to artificial intelligence and robots. How are these massive, fundamental shifts impacting network infrastructure, operations, administration, and management? How are operators re-architecting their networks? What role will intelligent, software-defined networking play, and what lessons are operators learning from actual deployments? How are operators actually deploying network functions virtualization technologies, how will this evolve in the coming years, and what are the financial implications? Are there opportunities for “telco clouds?” How is fundamental network architecture evolving, is network disaggregation a reality, and how is the vendor/provider/customer ecosystem evolving?

New Business Models

The “dumb pipe” model has proven to be capital and opex intensive, especially since new technologies seem to demand a never-ending stream of investment, with limited opex reduction to date through network functions virtualization and software-defined networking. However, technology enablers and global price competition have hindered revenue growth. Mobile and wireline operators need to find new business models to drive profitable revenue growth and justify continued investment. What new business models, pricing models, strategies, policies, and real execution initiatives represent a viable way forward, especially in the context of global network neutrality initiatives, aggressive over-the-top players, and new data services and applications, such as free multimedia messaging which are eliminating traditional profit centers?

Cloud, Colo and Data Center

The fundamental nature of telecommunications is undergoing massive shifts due to emerging technologies and evolving applications. Rather than peer-to-peer traffic, as in the early days of voice, everything-as-a-service, consolidation initiatives, hyperscale data centers, central offices converting into data centers, and new enterprise applications are shifting traffic to private/public/hybrid clouds in data centers, and through interconnection/peering facilities. The next wave—internet-connected things—will further this transition, shifting the balance of asymmetric traffic and driving bandwidth and network availability up and latency requirements down. How will new technologies and services, such as network virtualization, mobile data and digital media, and new on-line users and devices, globally, and the growth of cloud services and interconnections ultimately impact architectures, business models, and revenue streams?
Asia-Pacific Emerging Markets
Waves of development have brought the most sophisticated networks, services and applications to many parts of the Asia-Pacific region, which are now world-leading markets and hosts for innovation. The next wave of development requires addressing remaining challenges as many areas continue to lack adequate connectivity at an affordable level. How can the industry genuinely help provide inexpensive and reliable Internet access to everyone? Can a digital transformation lead to a significant application economy in emerging markets? What new opportunities and business models lead to successful infrastructure and services development especially in rural and remote areas? How can barriers to progress be removed?

Security, Privacy and Data Protection
Network and services reliance and dependence continues to become ever more essential in every aspect of life. That dependence unfortunately also continues to attract nefarious activity in massive waves of threats requiring effective principles of trustworthiness and resilience to be put into practice as core responsibilities of service provisioning. What are the strategies and best practices to mitigate unwarranted access to information, intrusions to privacy, and security threats in both cyberspace and cyber-physical infrastructure? What are the effective frameworks for countering cyber-threats? How are cyber-security concerns at the national and international level impacting societies, businesses and individuals?

Policy and Regulatory Challenges
As exponentially more people and things connect via the Internet, regulators and policy makers across the world are imposing new data security regulations, wrestling with the boundaries of data privacy, and scrutinizing encryption practices. As the use of mobile apps and IoT devices increases, what is the right balance between commercial and governmental uses of personal information and consumer expectations of privacy?

Moreover, many regulators are attempting to find new ways to meet the growing demand for spectrum. While the FCC’s recent Incentive auction may temporarily ease US domestic demands for spectrum, consumer demand for increasing wireless bandwidth remains unabated across the Asia-Pacific region and indeed globally. As mobile apps and faster wireline and mobile broadband speeds drive further consumer demand and growth, what are the new tools that national regulators can use to meet the challenge of ensuring universal access to these technologies? And, what regulatory policies can address the needs of consumers, businesses, app and service providers, and network operators to balance affordability with continued investment?
Research Paper Prize Awards

PTC is pleased to offer two named awards for excellence in research: The Meheroo Jussawalla Research Prize Award for best overall participant research paper and the O.S. Braunstein Student Prize Award for best student research paper at PTC’17.

For submission details, please refer to the online submission form at ptc.org.

**Meheroo Jussawalla Research Prize Award**

The **Meheroo Jussawalla Research Prize Award** is given to the best participant research paper at PTC’s annual conference. Named in honor of the late international telecommunications scholar Meheroo Jussawalla, the Award is open to all conference participants whose research papers have been accepted for presentation.

Meheroo Jussawalla was an Emerita Senior Fellow/Economist at the prestigious East West Center in Honolulu. She served as an Affiliate Faculty in the Department of Economics and the School of Communications at the University of Hawaii at Manoa. A leading scholar in the Economics of Telecommunications, she published 15 books in the field and garnered several national and international awards, including two from the Pacific Telecommunications Council.

**How to Submit a Paper for this Award**

Submit proposal (full paper not required at time of submission) via ptc.org. If proposal is accepted for conference, the full paper must be submitted by September 20, 2016 for award consideration.

**Award recipient will receive:**

- US$1,000 cash award
- Conference registration waiver
- Speaking opportunity to present winning paper at PTC’17
- Stipend of up to US$1,500 for travel and accommodations (prize winner to arrange for own accommodations)
- Certificate to be presented at the PTC’17 Closing Lunch and Awards Ceremony

**Terms and Conditions:**

- Researchers and faculty members are welcome to apply. Students with a faculty co-author may also submit
- Must be an original research paper in the field of telecommunications or information and communication technology (ICT)
- Prize award winner for PTC’16 is not eligible for this same prize the following year
- Author will allow PTC to publish their paper and presentation slides on the PTC’17 conference website
- Publication of the paper elsewhere is allowed after it has been presented at PTC’17

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**Deadlines**

(Research Proposal/Student Paper)

- Research Proposal Submission: **6 July 2016**
- Research Proposal Status Notification: **starting 15 August 2016**
- Full Student Paper: **1 September 2016**
- Full Student Paper Notification: **21 September 2016**
- Final Paper and Presentation Slides: **5 December 2016**
Research Paper Prize Awards continued

Yale M. Braunstein Student Prize Award

The Yale M. Braunstein Student Paper Prize Award for the best student paper is named in honor of Yale M. Braunstein, longtime participant and contributor to PTC’s Research Committee.

Yale was a scholar of the economics of information and communications industries and systems, focusing on policy, broadband and the economics of intellectual property. Serving on the faculty of the UC Berkeley School of Information, he authored or co-authored over 50 articles, and worked as a consultant in the United States and internationally. Widely regarded as a wise counselor and mentor to students and faculty alike, he was also a tireless advocate for students’ welfare.

In 2007, Yale established the Pacific Telecommunications Council’s O. S. Braunstein Prize for the year’s best student research paper in telecommunications in honor of his father.

How to Submit a Paper for this Award

Student authors (with a 2017 or later graduation date) should upload their full paper (not a proposal), and proof of current student status, i.e. transcript, official letter from school administrator, etc. at time of submission. Deadline for the paper and proof of status is September 1, 2016.

Award recipient will receive:
- US$1000 cash award
- Conference registration waiver
- Speaking opportunity to present the winning paper at PTC’17
- Stipend of up to US$1,500 for travel and accommodations (prize winner to arrange for own accommodations)
- Certificate to be presented at the PTC’17 Closing Lunch and Awards Ceremony

Terms and Conditions:
- Award is open to all current students with a 2017 or later graduation date
- Must be an original research paper
- Authored by a single student or co-authored with one or more fellow students. Papers co-authored with faculty members are ineligible
- Prize award winner for PTC’16 is not eligible for this same prize the following year
- Author will allow PTC to publish their paper and presentation slides on the PTC’17 conference website
- Publication of the paper elsewhere is allowed after it has been presented at PTC’17

Other Opportunities for Participation in PTC’17

Maximize your organization’s exposure and visibility at PTC’17. Sponsor an event or a delegate item, or reserve a private meeting room.

For more information, please email sponsors@ptc.org.

Tel: +1.808.941.3789 | Fax: +1.808.944.4874

How to Submit a Proposal

Submit your proposal online at ptc.org

Questions? Please contact Ms. Jamie Wan-Lopaz at ptc17@ptc.org.