



IEEE reviewing last year, gazing at the future

IEEE Region 8 Meeting, Limassol, March 2015

J. Roberto B. de Marca , 2014 IEEE President

Some focus areas in 2014

- ▶ Career Resources
- ▶ Understanding Infrastructure Costs
- ▶ Entrepreneurship
- ▶ Industry Engagement
- ▶ IEEE Internet Initiative
- ▶ Defining Future of Humanitarian Activities
- ▶ Improving IT operations
- ▶ Constitutional changes

Infrastructure AdHoc Committee

- ▶ The purpose of this *ad hoc* committee is to provide the Board of Directors with information they can use to make informed decisions on infrastructure funding, cost and its future evolution. The committee divided its effort into four categories:
- ▶ Clarify accounting
- ▶ Clarify cash flow
- ▶ Clarify the definition of infrastructure
- ▶ Propose changes in infrastructure spending process

Entrepreneurship – Adhoc committee had participation of several R8 volunteers

- **Times have changed—many of the younger generation are starting their own companies**
- **IEEE is losing relevance with this crowd**
- **We should emulate the past IEEE paradigm of getting members involved early in their careers and supporting them as they rise to positions where their advocacy of IEEE makes a difference**
- **Various Entrepreneurial activities are spontaneously happening now in IEEE societies, sections, chapters, affinity groups, etc.**
- **There is no focal point within IEEE for all these entrepreneurial activities**

Entrepreneurship (2)

- ▶ **Recommendations endorsed by the Board:**
 - Put more entrepreneurs on key IEEE boards, committees, etc.
 - Document best practices from successful entrepreneurial chapters and sections
 - Encourage more entrepreneurial networks globally
 - **Create Global Assemblies for Entrepreneurs**
 - Invest both Time **and Capital** in Entrepreneurs
 - Make IEEE the “Home for Entrepreneurs”

Industry Members are Leaving

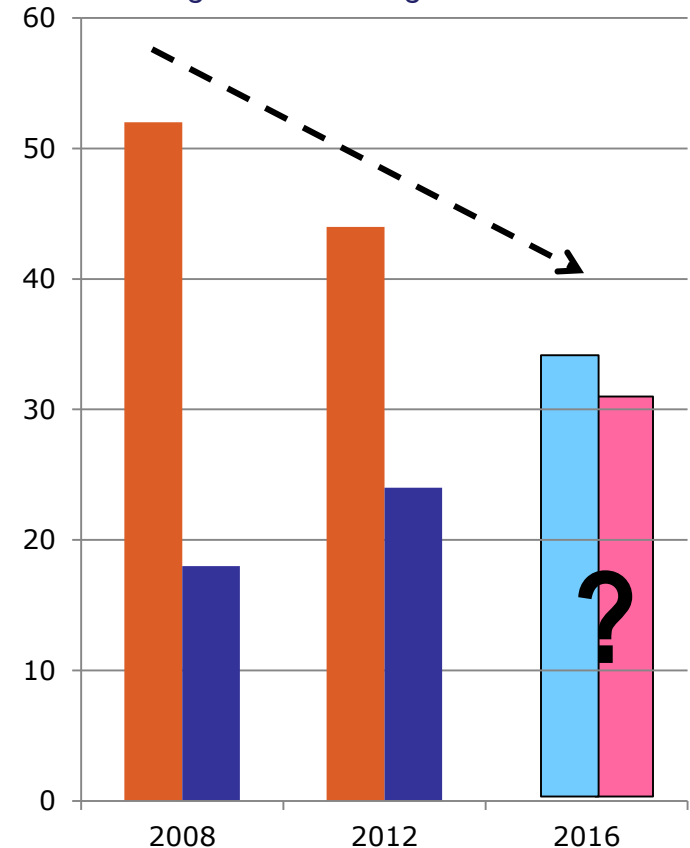
Membership Trend (%)

Membership is shifting

Employment Status	2008	2012
Private industry	52%	44%
Educational institution	18%	24%
Public/government	10%	11%
Self-employed	8%	7%
Non-profit (non-educational)	3%	3%
Unemployed	3%	4%
Retired	4%	3%
Full Time Student	0%	2%
Other	1%	2%

Industry and Educator: 2008– 2016

Excluding students and graduate students



Industry

Educator

Challenges

► The Challenge

- IEEE offerings are not (perceived) as applicable to the non-research side of industry.
- IEEE is not seen as a single point shopping for training of engineers beyond school
- Industry does not fully understand resources available

1. Recommendation - Goals

Establish goals for each major OU to better define industry needs, highlight best practice and adjust offerings to increase IEEE's value and relevance.

For each, benchmark current industry participation and establish short-term and long-term performance targets.

- ✓ Change management needed
- ✓ **Shift focus back to industry through performance goals**
- ✓ **Showcase best practice to replicate elsewhere**
- ✓ **Regain profile accuracy - measure participation**
- ✓ **Establish targets that unite organizational focus**

2. Recommendation - Resources

Fund new professional activities initiatives to offer relevant services and products to current and future practicing engineers

Include dedicating publications for industry best practices, proven methods of moving theory to practical applications and increasing productivity and quality

- ✓ **Need funding and industry segment ownership**
- ✓ **Address development needs of entire technical workforce**
- ✓ **Position as industry's professional development partner**
- ✓ **Reposition existing industry-focused magazines**

3. Recommendation – Search Engine

Define the system requirements to pull information that is customized to individual profile interests

Define the modifications required to existing tools, new system(s), and collaboration(s) needed to deliver the desired functionality.

- ✓ **Information overload and limited time. Need to offer answers!**
- ✓ **Implement a customized search engine technology to mine data across IEEE. See * items in appendix.**
- ✓ **Find content tailored to personal interests in profiles: publications, application guides, recorded keynotes, standards, conference attendees**
- ✓ **Timely delivery: package virtually**

4. Recommendation – Going Forward

- ✓ **Provide industry advocacy across IEEE**
- ✓ **Need requirements definition and implementation focus**
- ✓ **Monitor progress: ensure relevance**
- ✓ **Connect with executives while development is underway**
- ✓ **Institutionalize executive roundtable activity**

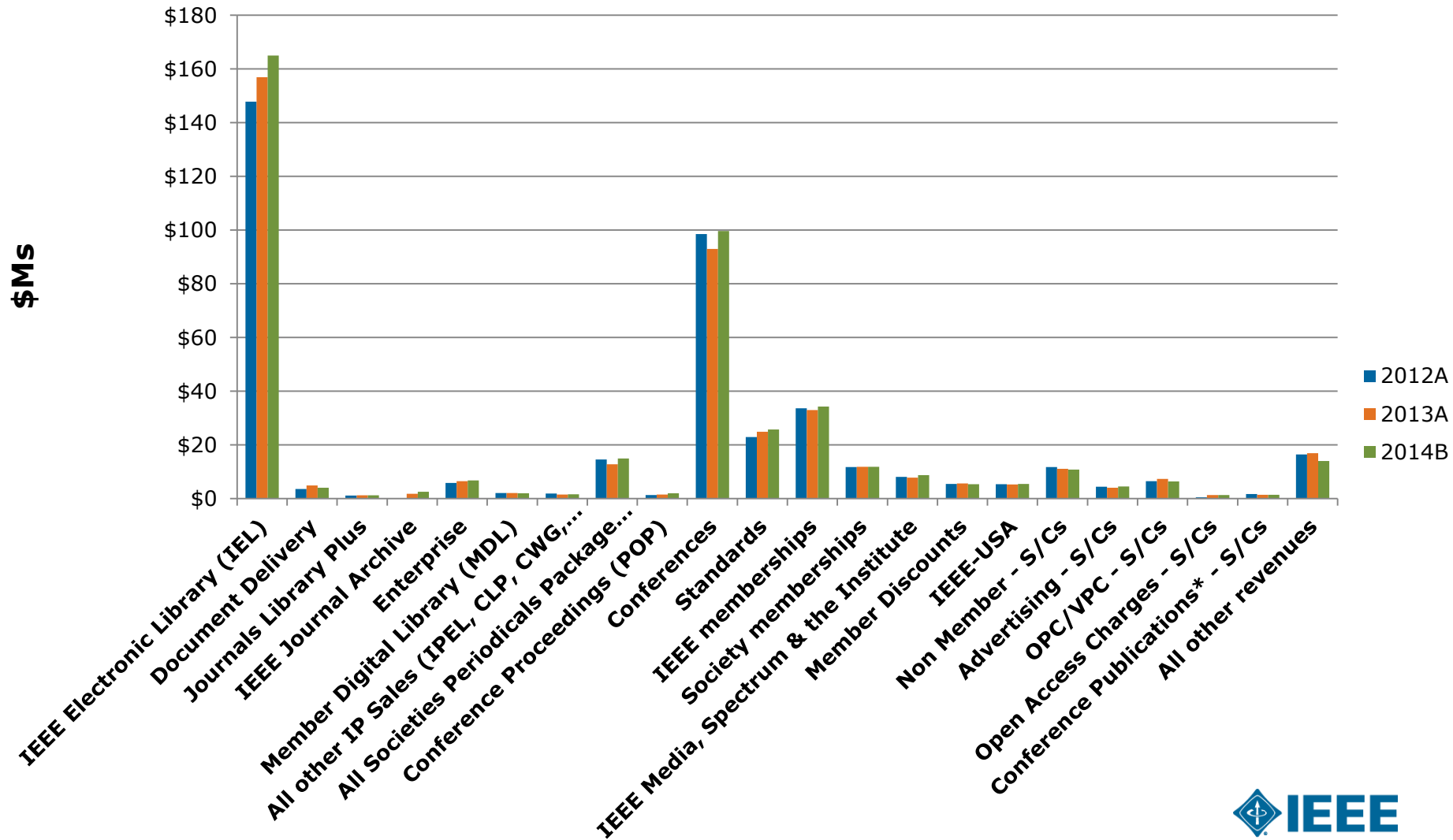
IEEE Internet Initiative

- ▶ **Mission:** Raise IEEE's influence and profile in global technology policy in the areas of Internet governance, cyber-security and cyber-privacy policy development by providing a consensus of sound technical and scientific knowledge and guidance to the process
- ▶ **Goals:**
 - Brand Recognition: IEEE is key player in 3I tech policy efforts
 - Build a 3I community and link to existing technical communities
 - Coordinate efforts inside and outside of IEEE (**Leverage** opportunities)
 - Stand up Thought Leaders and Evangelists/Champions in 3I (**Recognized leader**)
 - Market Presence (Single face to the customers)
 - Deliver **value** - resources, products and services
 - Framework** for tech policy efforts

Potential Threats (1)

- ▶ Revenue concentrated in very few products/services lines.

IEEE income by category



Potential Threats (1)

- ▶ Revenue concentrated in very products/services lines.
- ▶ Difficulty in Identifying New Revenue Streams
- ▶ Cost of doing business in IEEE growing fast. Is this a sustainable growth?
- ▶ How can one effectively sell information in the future?
New Business Model?
- ▶ Open Access

Possible Threats (2)

- Competition in Conference business: New Style Conferences (TED, SXSW, TTI Vanguard, etc...)
- Services based on Social Media Platforms (LinkedIn, Research Gate, Stack Overflow)
- Lack of Relevance to Industry
- Fail to attract Young Professionals
- Lack of Volunteer Engagement (Eventual changes in governance structure should take into account impact on volunteer motivation and engagement)

Difficulties

- ▶ Put the money where priorities go, i.e., **align funding with priorities.**
- ▶ **Align** strategic planning of **all organizational units** and staff with Board Priorities.
- ▶ Implement **Multi-year planning** and change financial model

Real Challenge

- ▶ **A bright and relevant future for IEEE depends on making the right changes but it also depends on preserving the IEEE Culture.**

Σας ευχαριστώ.

Grazie.

Diolch yn fawr.

Salamat sa inyo.

Cảm ơn bạn.

감사합니다.

谢谢

Kiitos.

Merci.

Thank you.

Děkuju.

ขอบคุณ

ありがとう

مرکشیتم.

Asante.

اڤل اركش.

Danke.

Дзякуй.

Go raibh maith agat.

Спасибо.

Obrigado.

Gràcies.

הבר הדות.

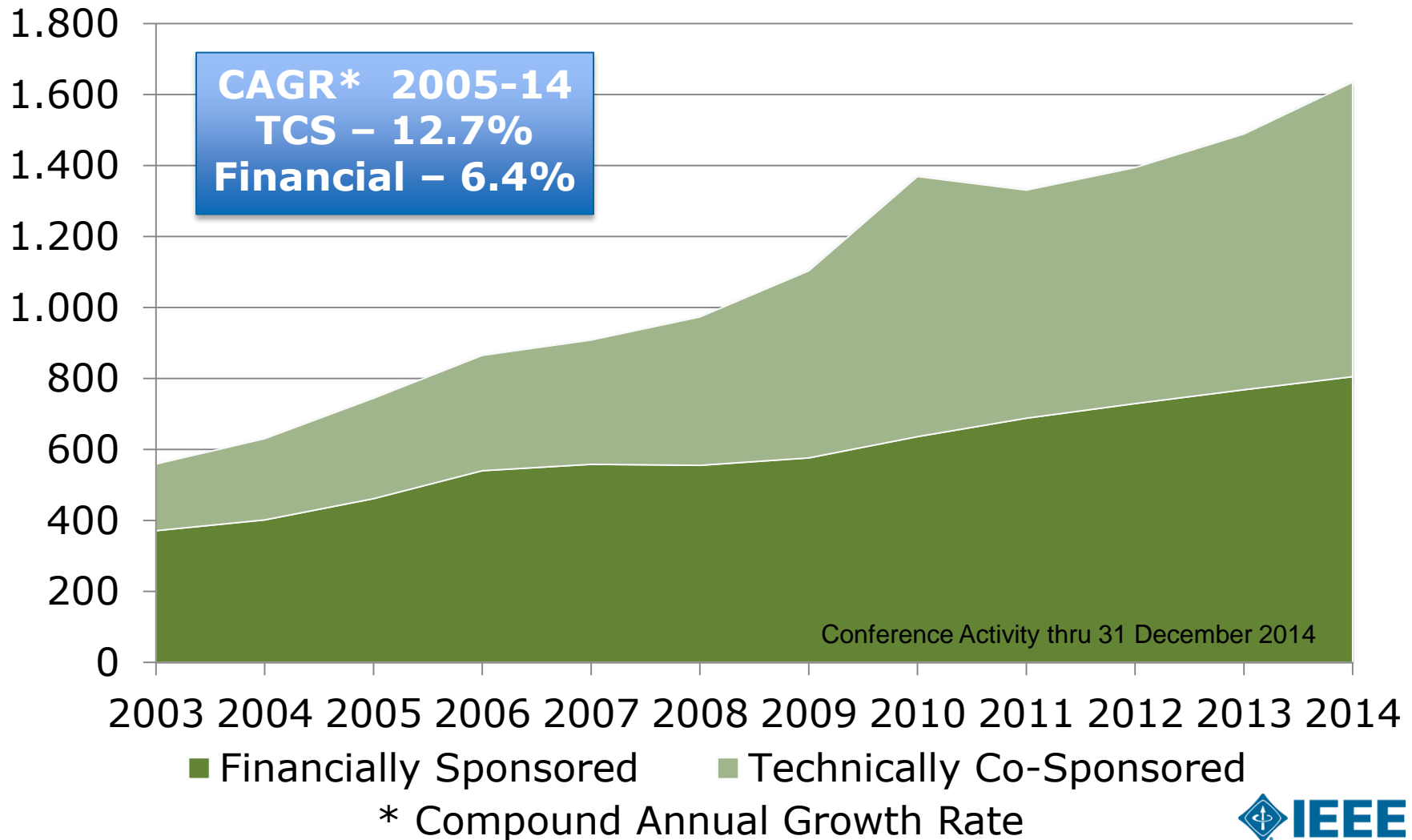
Backup Slides

Brief Survey of IEEE Entrepreneurial Activities

Examples of diverse activities we are aware of happening in pockets around IEEE

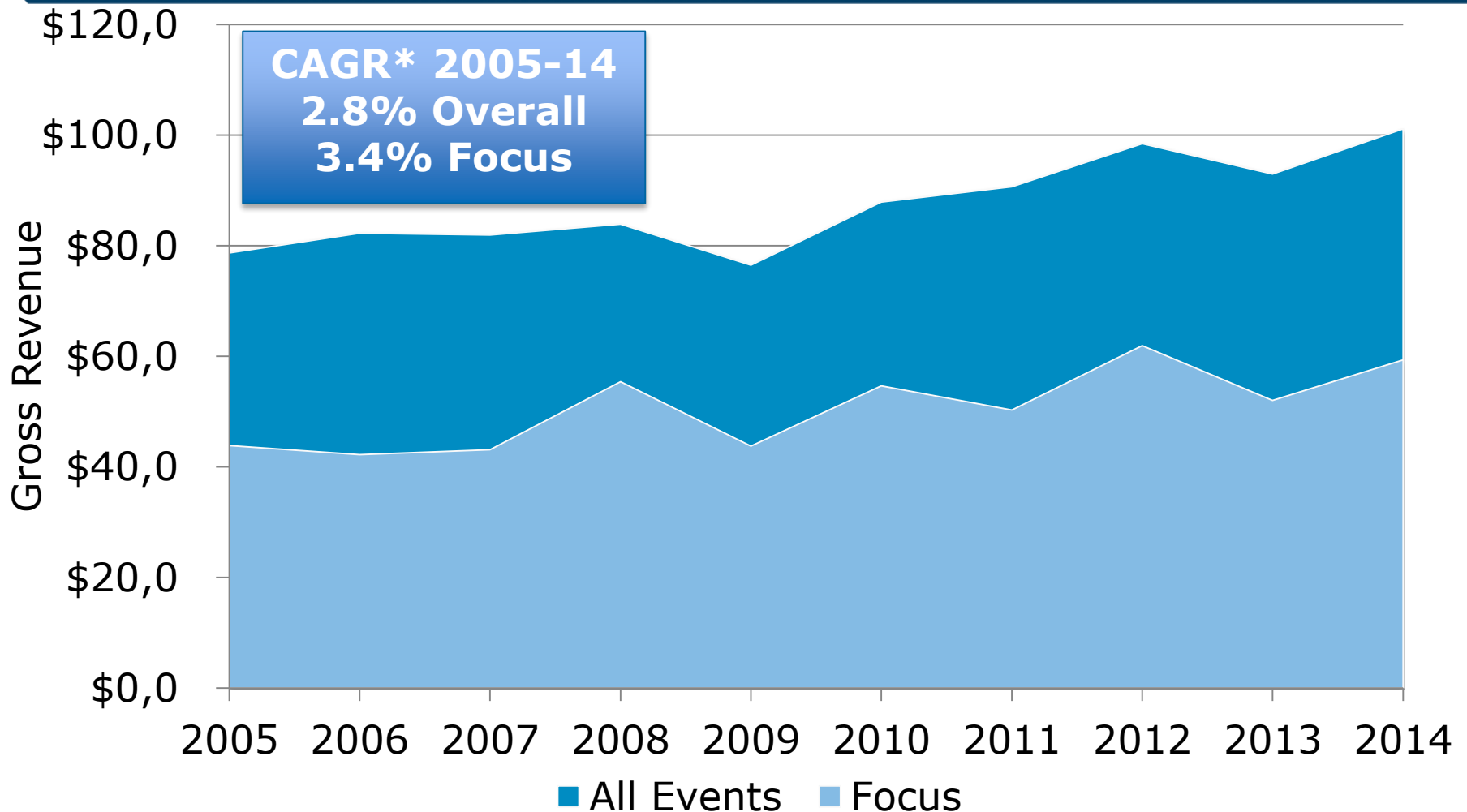
- **IEEE-USA Entrepreneurial Activities Committee**
 - **Boston Section Entrepreneurs Network**
 - **Kerala Section, India (PIE, Promotion of Innovation & Entrepreneurship)**
 - **Cyprus Section Entrepreneurs Network**
 - **IEEE Young Professionals Technical Entrepreneurship Mini-Conference (Toronto, October 25th)**
 - **Women in Engineering (WiE INNOVATE San Jose proposal)**
 - **Electron Devices Society Entrepreneur's Luncheon Speaker**
 - **Power& Energy Society Community Solution Initiative**

Total Number of IEEE Conferences



Conference Gross Revenues

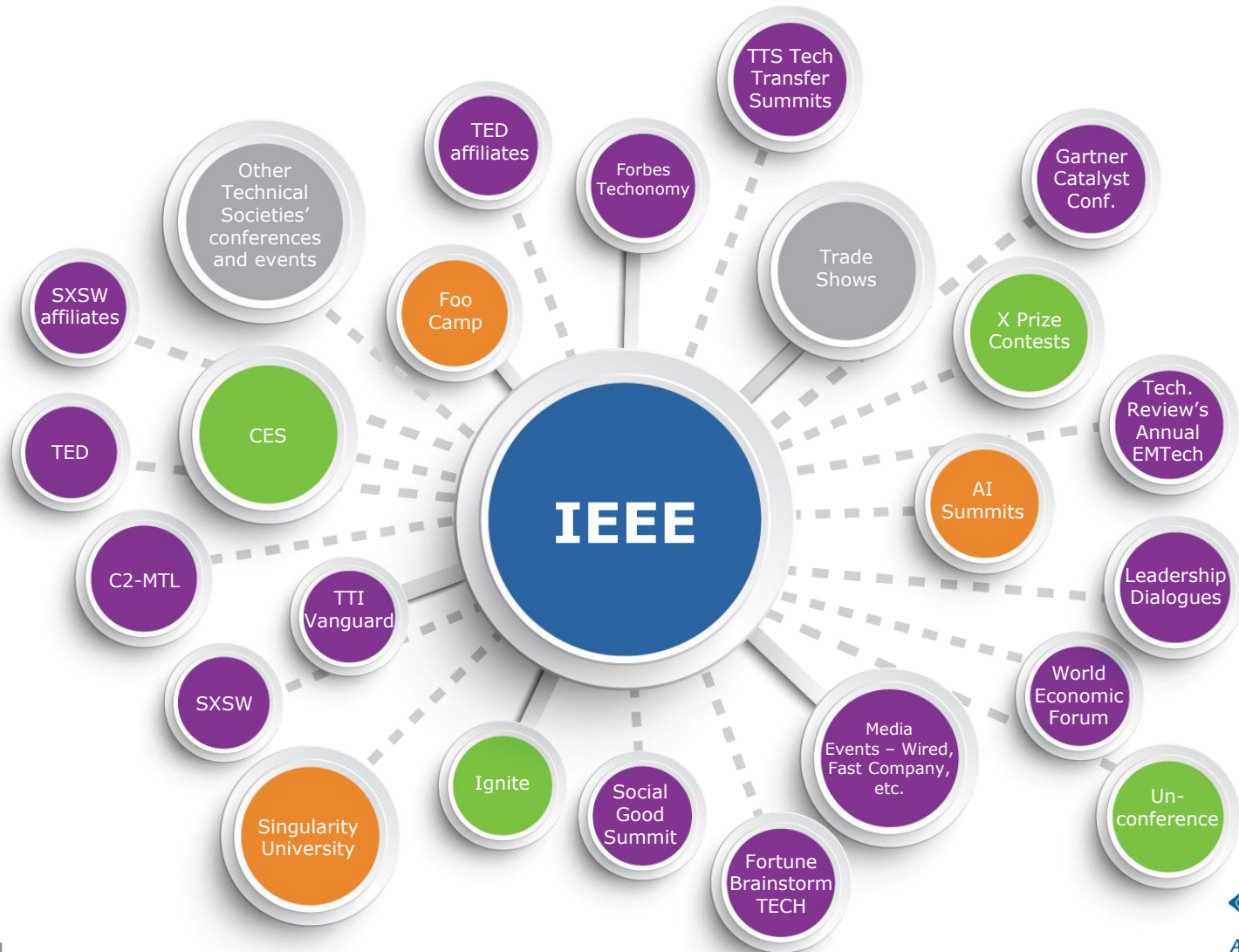
From Financially-Sponsored Conferences, in \$M



* Compound Annual Growth Rate

Commercial and Non-Profit Organizations

Have compelling products with produced content



Discussion

Industry Professionals

- ▶ Planning Events for Industry
 - Create New Style Events
 - Optimize the value in Scholarly content
- ▶ Collaborating with commercial providers
 - Event organizers
 - Product and Service providers with an interest in promoting the profession
- ▶ Should we think of the employer as the customer?
 - Regional registration fee expectations vary
- ▶ Exploit the value of the IEEE brand
 - Increase the value of the IEEE brand
- ▶ Tutorial content
 - Develop more of it, develop the market for it



What emerged ...

IEEE is well-positioned for success in 2030 and continues to serve the needs of technologists between now and then.

[1] Create a Nimble, Flexible, Forward-looking Organization	[2] Foster Public Imperatives	[3] Foster Diverse Technical Communities with Industry, Government, and Academia	[4] Empower the Discovery, Development and Delivery of Cutting-edge Products and Services
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Strategies

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IEEE Priorities (2013 – 2014)

IEEE Priorities



Expand nimble, flexible, disband-able IEEE communities allowing individuals from all around the world to share, collaborate, network, debate and engage with one another.



Provide an agile forum for discussion, development and implementation of emerging technologies.



Leverage IEEE's technology-related insight to provide governments, NGOs, and other organizations with innovative, practical recommendations to address public policy issues.



Ensure we are in front of disruptions (technology, social, etc.) affecting our operations.

Endorsed by IEEE Board of Directors 17 February 2013

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Strategies			
<p>A.Determine our core priorities and define the Board structure we need to maintain our role as the world's leading association serving technologists</p> <p>B.Align our business operations to our evolving priorities</p>	<p>A.Support humanitarian efforts</p> <p>B.Socialize Public Imperative Activity</p> <p>C.Consider a Public Imperative OU by 2018</p> <p>D.Provide critical information to support public policy decisions worldwide</p>	<p>A.Engage to build and maintain strong connections with professionals working in industry and industry</p> <p>B.Provide "the place" where communities gather across a diverse field of technologies and technologists</p> <p>C.Cultivate, nurture, and strengthen our relevance to the technologists of the future</p>	<p>A.Know what is important to "IEEE activity participants," align our products and services to serve them and recognize their engagement</p> <p>B.Serve and generate a surplus by turning information into knowledge in formats that technologists need</p> <p>C.Leverage and promote our position as leading Global technologists</p>