

2016 Member Segmentation

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Member and Geographic Activities

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Executive Summary

THE BIG PICTURE (Assessment of external research firm “the Modellers”)

- ❑ Both Higher Grade member (HGM) and Student satisfaction with IEEE are moderate, declining slightly from 2012
- ❑ Decline in product importance and satisfaction for both HGM and Student members
 - This may be a result of an increase in the perception that there are an overwhelming number of products and services, which are not easy to use
- ❑ Majority of members continue to view Societies as “important”
 - Satisfaction levels remain above 60%
 - The key reason members interact with societies is for information and education

Executive Summary

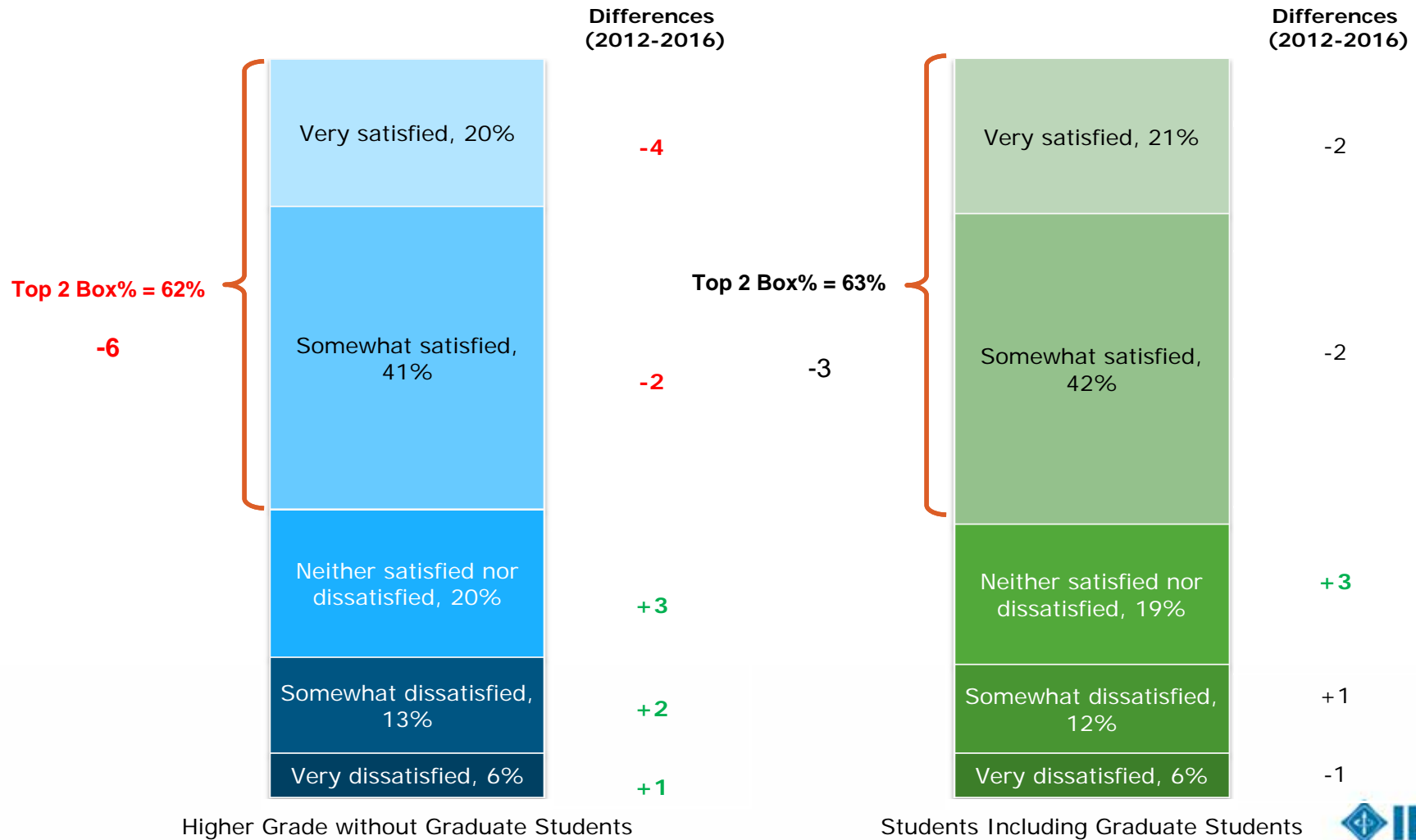
THE BIG PICTURE (Assessment of external research firm “the Modellers”)

- ❑ Students are a bright light in this report
 - Compared to HGM, double the number of Students view their IEEE membership as important to them personally, and 50% more professionally
 - Students are twice as likely to be involved with IEEE than HGM, each group’s involvement held steady since 2012
- ❑ Although “lack of time due to work demands” remains the top barrier to member involvement, it has declined significantly since 2012
- ❑ Willingness to promote IEEE down substantially vs. 2012
 - Both HGM and Students are less likely to share content, discuss IEEE, or recommend membership
- ❑ HGM and Students still perceive IEEE as “Academic” and “Global”

State of the Membership



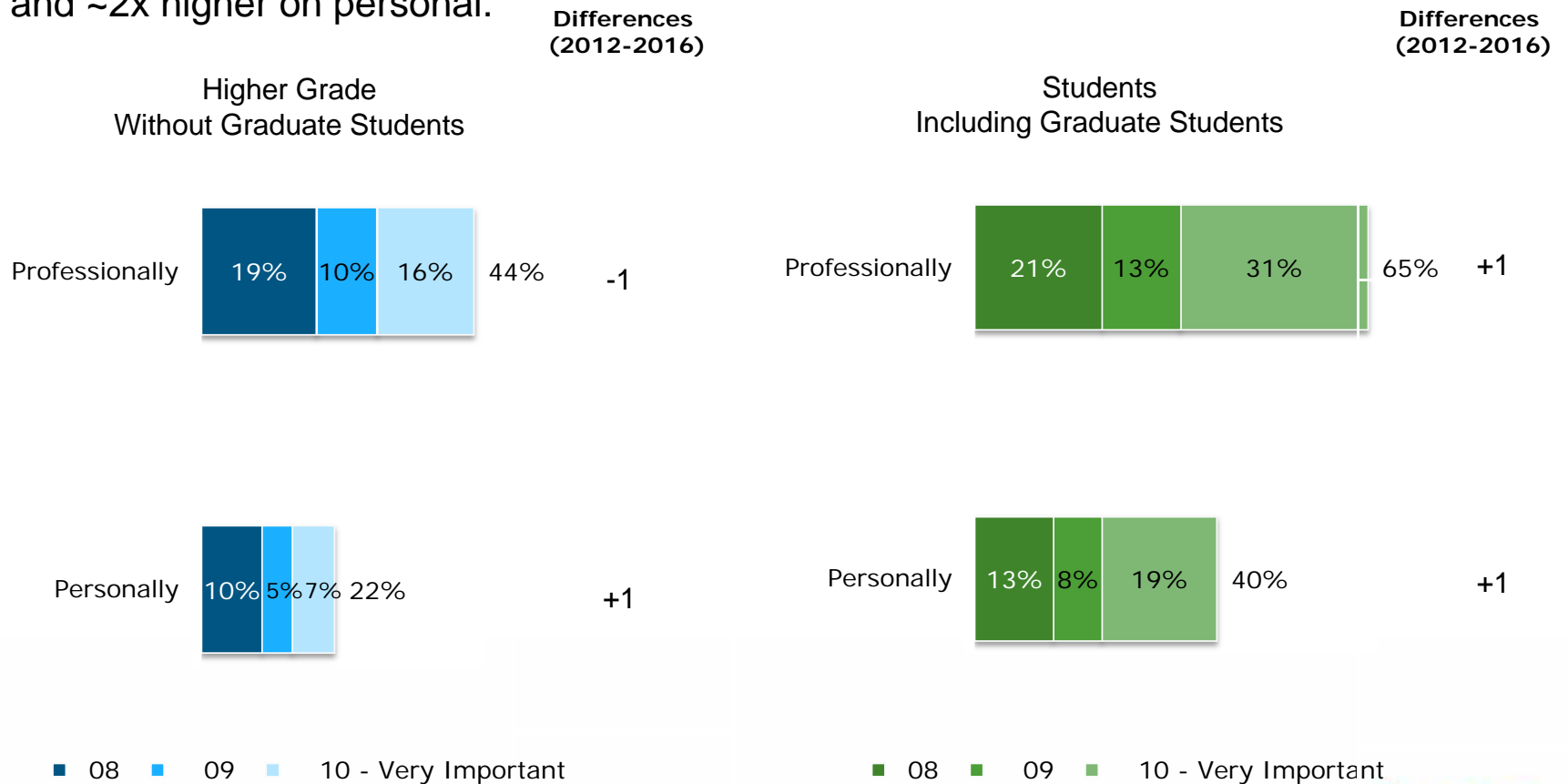
Higher Grade* member satisfaction declined significantly (-6) vs. 2012. Student** satisfaction flat vs. previous study.



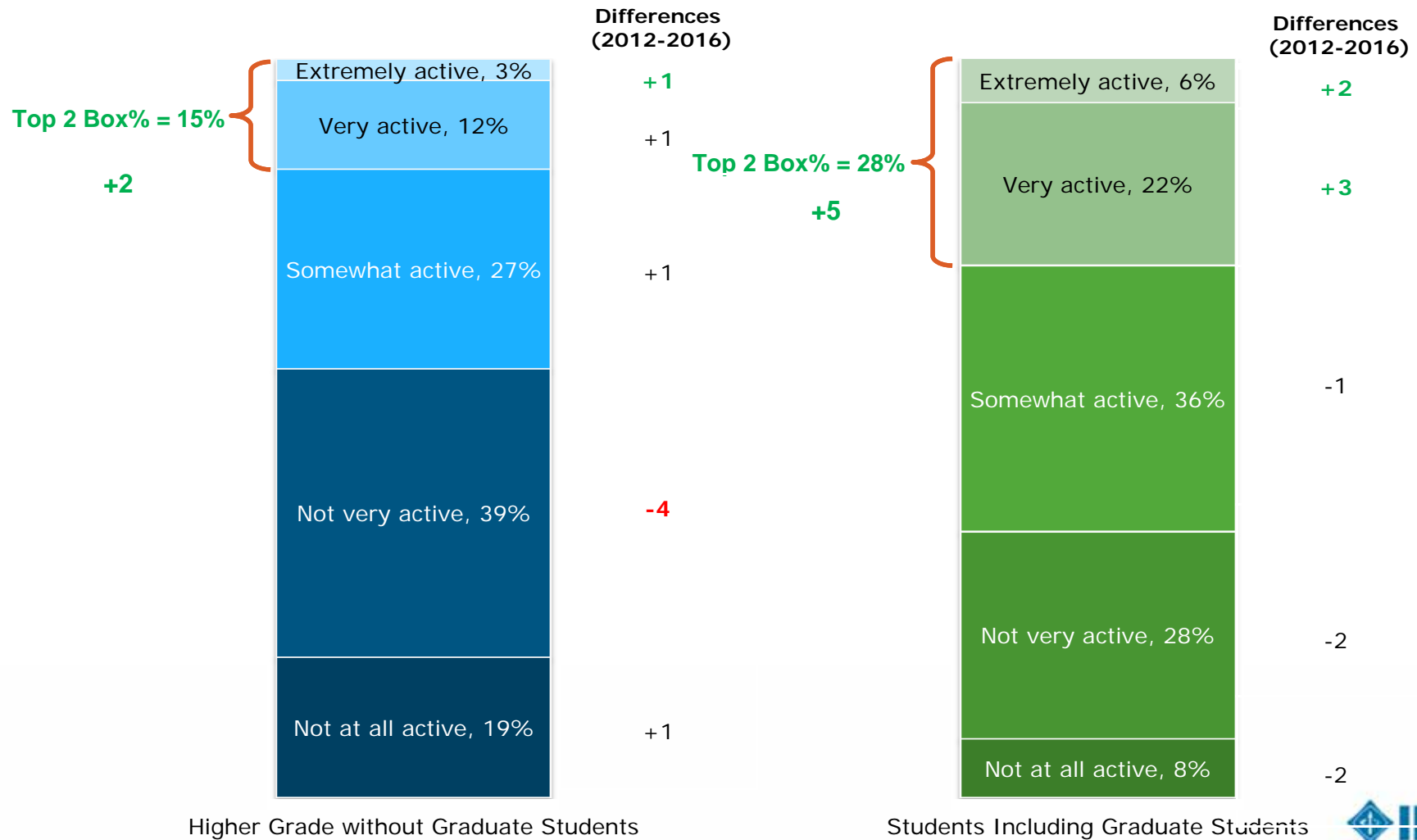
Importance of IEEE in your life

Higher Grade* and Students** flat vs. 2012, but Students are much higher than Higher Grade

- As in the past, Students ~1.5x higher than Higher Grade* on professional importance and ~2x higher on personal.



Both Higher Grade* and Student** activity level increased significantly from 2012. Students continue to be more active.



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*Without Graduate Student Members **Including Graduate Student Members

BASE: Higher Grade (n=9181), Students (n=1496)
Q1. How active with IEEE do you consider yourself to be today?



Reasons for non-involvement show same hierarchy as 2012, but have declined significantly for both Higher Grade* and Students**

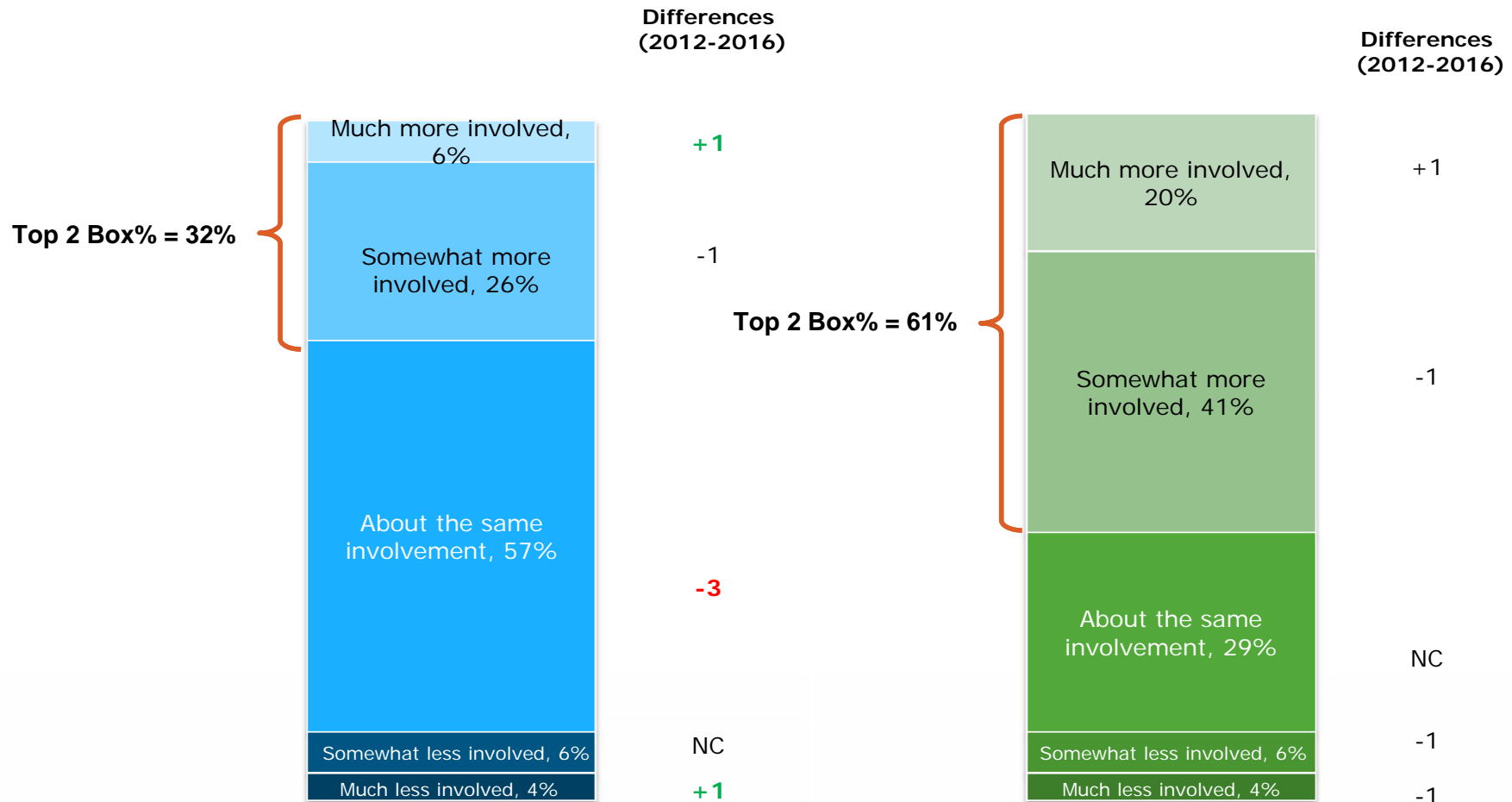
- Lack of time, due to work/personal demands still highest.
- Students need to know how to get involved and expense still barrier



Higher Grade Difference	Student Difference
-6	-5
-4	NC
-2	-4
NA	NA
-2	-2
-1	NC
-2	-2
+1	-5
-1	-1
NA	NA
-1	NC
NA	-5
-2	-2
NC	-3

Future involvement

Higher Grade* * members less likely to be more involved going forward. Students flat vs. 2012.

































Higher Grade without Graduate Students

Students Including Graduate Students



Higher Grade* members significantly more likely to see IEEE as “approachable,” “responsive” and “humanitarian.” Students** declined on many measures vs. 2012.

- Biggest decline for both member groups was on perception of IEEE as “global”

	Higher Grade*	Differences (2012 – 2016)	Students**	Differences (2012 – 2016)
Academic	 76%	-2	 78%	-2
Promotes highest professional standards	 74%	NA	 71%	NA
Global	 73%	-9	 76%	-8
Unbiased source of technical information	 72%	NA	 66%	NA
Relevant to industry	 68%	-3	 69%	-5
Innovative	 62%	NA	 71%	NA
Prestigious	 59%	-2	 68%	-5
Practical	 53%	-3	 50%	-6
Expensive	 53%	+1	 63%	+2
Thought leader	 52%	-2	 59%	-6
US centric	 47%	NA	 53%	NA
Approachable	 44%	+3	 54%	-1
Responsive	 40%	+2	 55%	-3
Humanitarian	 29%	+4	 46%	+1
Exclusive	 26%	+1	 45%	-4

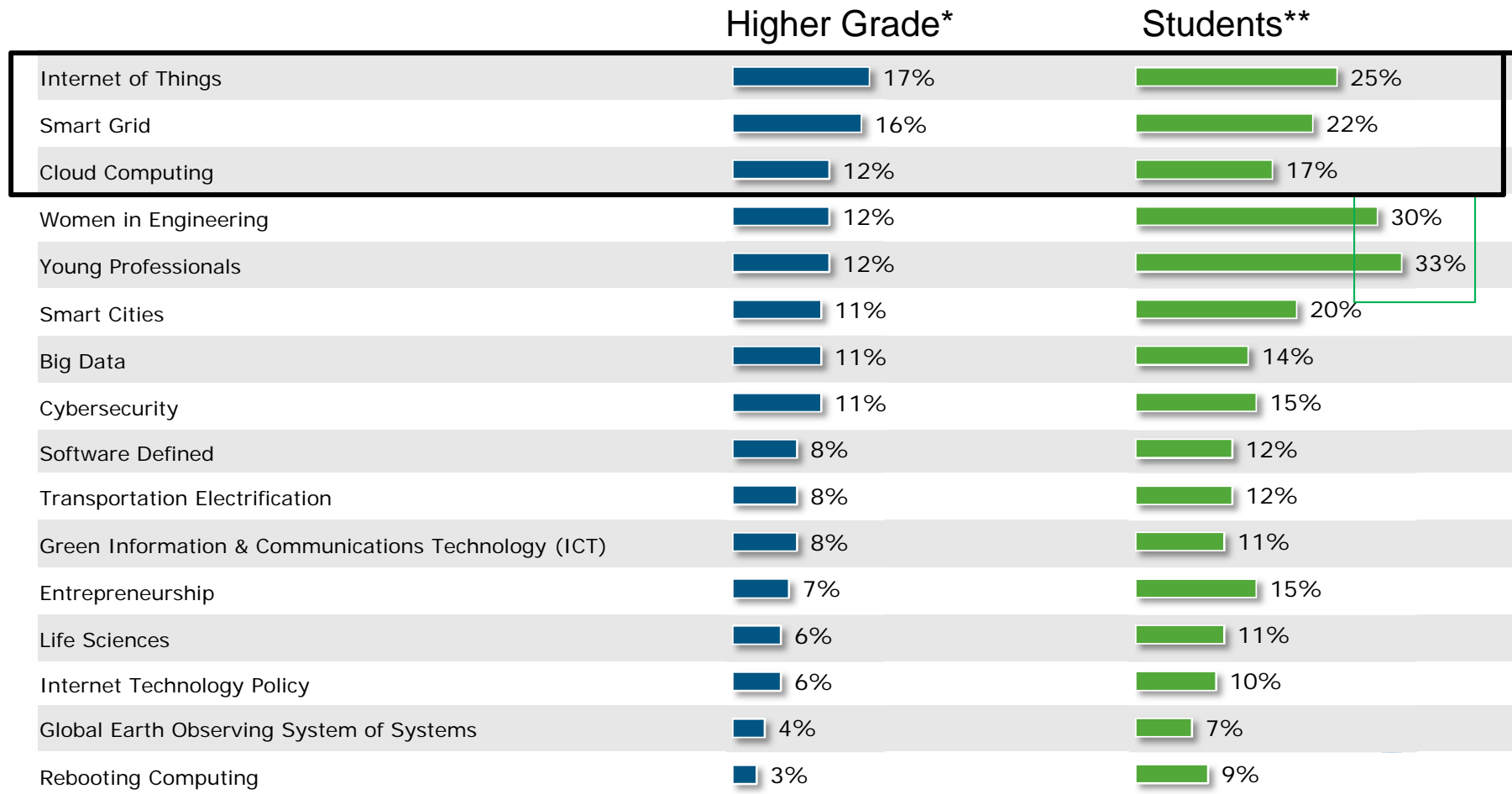


Use of IEEE Products and Services



Affinity group and technical community familiarity (new question in 2016) much higher among Students** than Higher Grade*

- IOT, Smart Grid and Cloud Computing high among both groups
- Women in Engineering and YP awareness very high among Students**



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*Without Graduate Student Members **Including Graduate Student Members

Advancing technology
for Humanity

BASE: Higher Grade (n=9181), Students (n=1496)

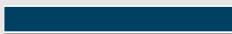























Q10. How familiar are you with each of the following Affinity Groups and Technical Communities?

No change in the order of reasons for joining vs. 2012.

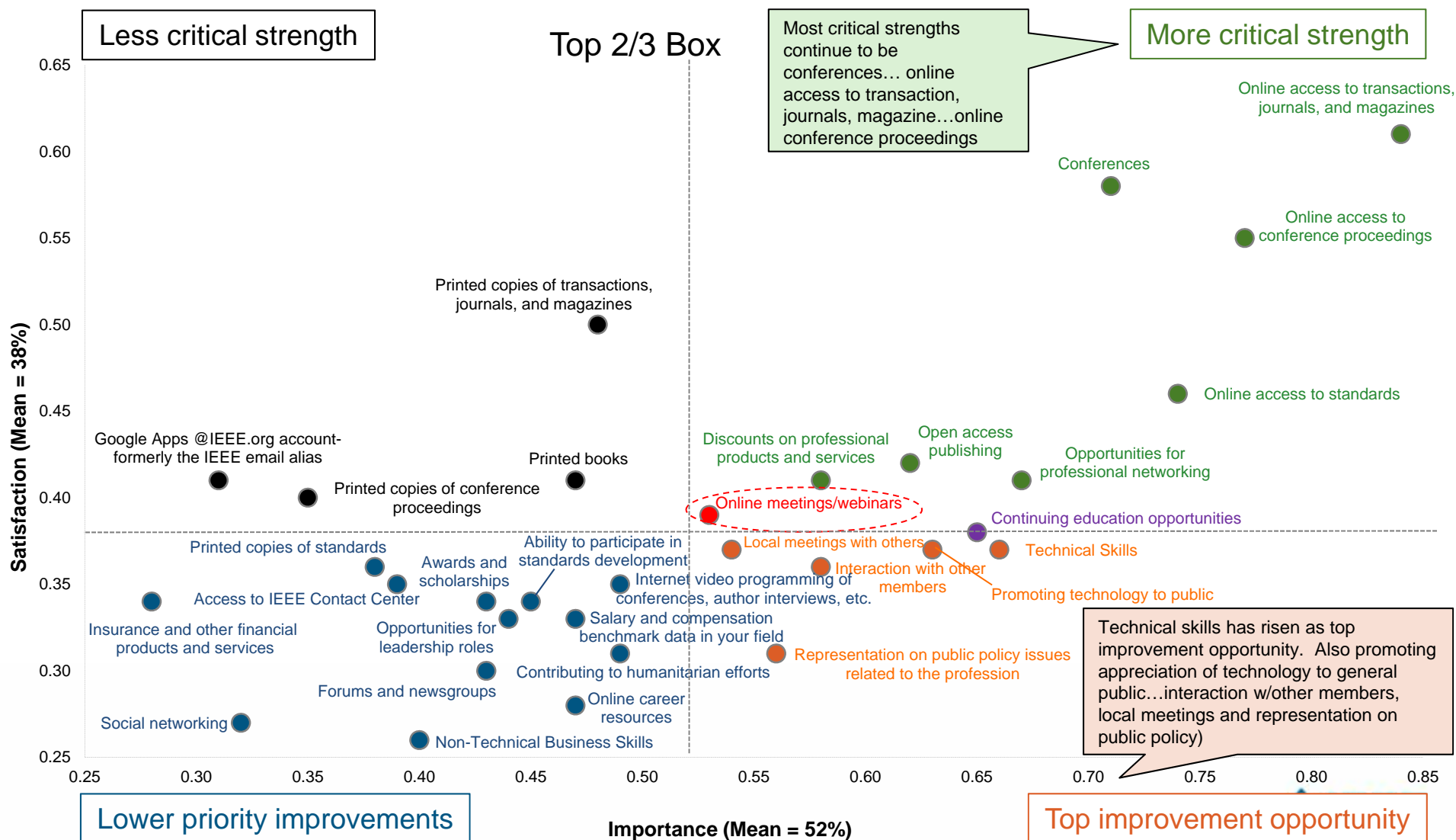
	Higher Grade*	Differences (2012 - 2016)	Students**	Differences (2012 - 2016)
To remain technically current	63%	-4	53%	-7
To obtain IEEE publications	59%	-3	49%	-9
To join IEEE Societies	42%	-2	47%	+5
To network with others in the profession	39%	NC	45%	NC
To enhance my career opportunities	38%	-2	54%	-3
To enhance my stature within the profession	36%	-2	33%	-4
For continuing education	34%	NC	38%	NC
To participate in local IEEE activities	24%	NC	41%	-1
To obtain a reduced registration fee at IEEE conferences	24%	+3	36%	+4
To give back to my profession	19%	NC	20%	-1
A professor suggested it	17%	-1	28%	-1
To participate in student branch activities	13%	-2	45%	-3
Recommended by colleague	13%	-3	24%	+1
To have access to discounts on professional & personal services	13%	-1	22%	NC
To give back to the world community	12%	+1	23%	+5
To participate in standards development	10%	NC	15%	NC
To access insurance	7%	-4	3%	NC
Through a membership drive	5%	+1	10%	+1
To obtain a Google Apps @ IEEE.org - formerly IEEE email alias	4%	-3	11%	-1
To participate in public policy	4%	NC	8%	+1
To participate in student contests	3%	NC	28%	-3

Reasons for belonging to primary society less about obtaining information and more about volunteering for both member groups.

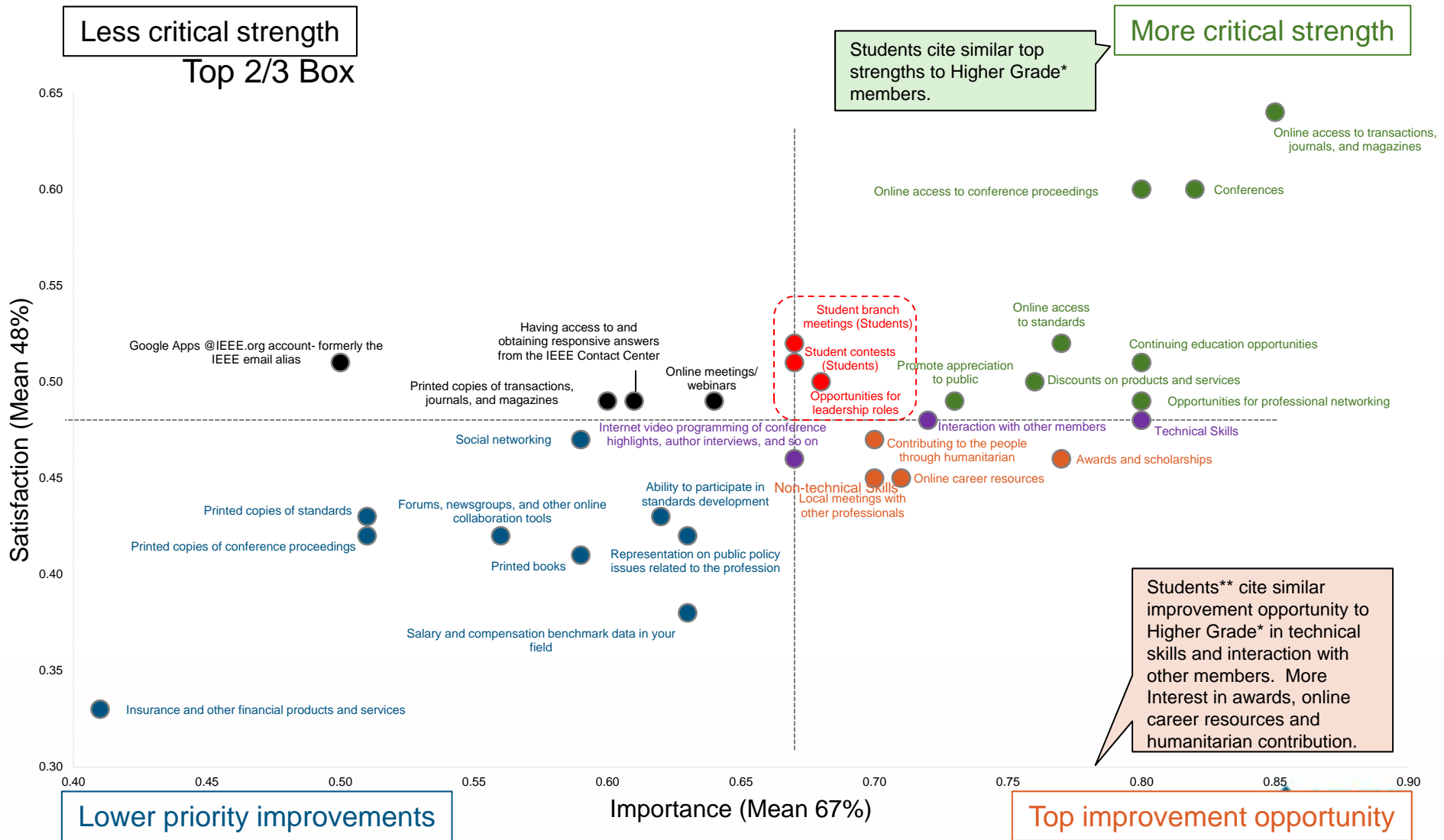
- Students also more interested in discounts on conference fees

	Higher Grade* 2016		Students** 2016	
To keep myself informed of all the advancements in my field	 69%	-2	 65%	-2
To obtain technical information and resources	 66%	-2	 60%	-7
To obtain society publications (paper and/or electronic)	 63%	-5	 52%	-11
To meet and interact with others who share my professional interests (networking)	 38%	+1	 45%	+5
To contribute to my profession	 35%	+2	 39%	+4
To get access to continuing education opportunities	 28%	-1	 40%	-2
To support my industry	 23%	0	 21%	+4
To receive discounts on society conference fees	 22%	+3	 36%	+9
To serve as a volunteer (for example, write or review articles, speak at conferences, or serve on committees)	 22%	+3	 29%	+7
To attend local chapter activities	 20%	-1	 33%	+5
To get access to online career resources (For example, job listings)	 12%	-1	 31%	-1
Other	 1%	-1	 1%	NC

Satisfaction by Importance – Higher Grade Members Without Graduate Students (2016)

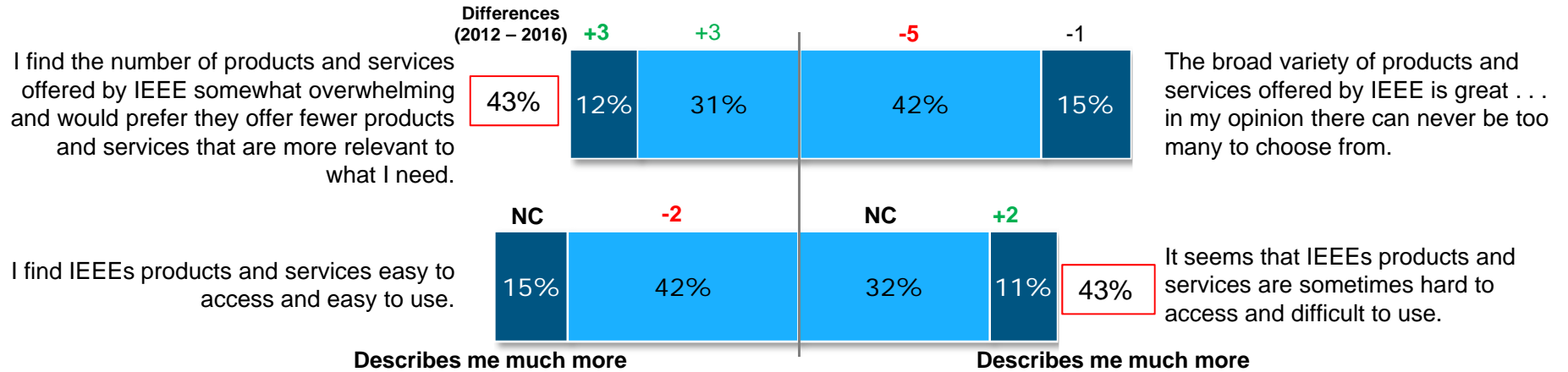


Satisfaction by Importance – Student Members Including Graduate Students (2016)

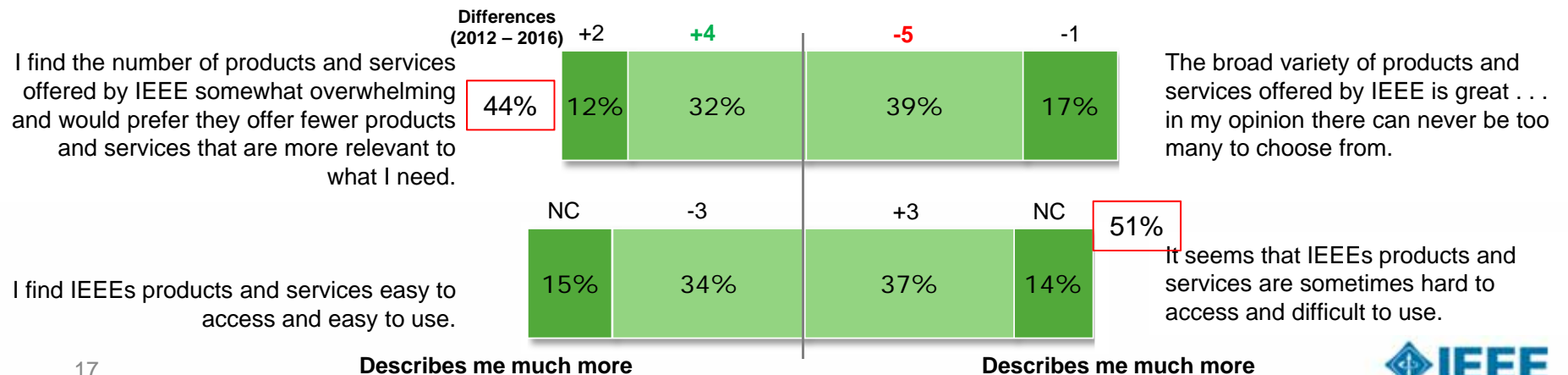


Both Higher Grade* and Student** members more likely to find the number of products and services overwhelming vs. 2012.

Higher Grade*



Students**



Demographic Profiles



Education : Higher Grade Members

Education	Total		
	2016	2012	%Change
Some college	1%	1%	0%
Vocational/technical degree/certification	1%	2%	-1%
Bachelor's degree or equivalent	20%	23%	-3%
Graduate/professional degree	32%	35%	-3%
Doctoral degree	44%	37%	7%
Other	2%	2%	0%

Employment Status

Employment Status	Total		
	2016	2012	% Change
Private industry	39%	44%	-5%
Public/government	9%	11%	-2%
Educational institution	29%	24%	5%
Non-profit institution (non-educational)	3%	3%	0%
Self-employed/consulting	6%	7%	-1%
Retired	6%	3%	3%
Unemployed	3%	4%	-1%
Full time student	2%	2%	0%
Entrepreneur/founder	2%	2%	0%
Other	1%	-1%	2%

Across the board, Academics more engaged (top boxes)



Overall Satisfaction

Industry Professionals*		Academics**
59%	IEEE Importance Overall	66%
37%	Professional Importance	60%
18%	Personal Importance	28%
27%	Future Involvement	45%

Academics are more satisfied with IEEE overall. IEEE is more important to them in all aspects of their lives and they intend to continue that relationship.



Activity Level & Interaction

10%

Interaction with IEEE



- For info & education in field (83%)
- For products and services (36%)

27%

Interaction with IEEE



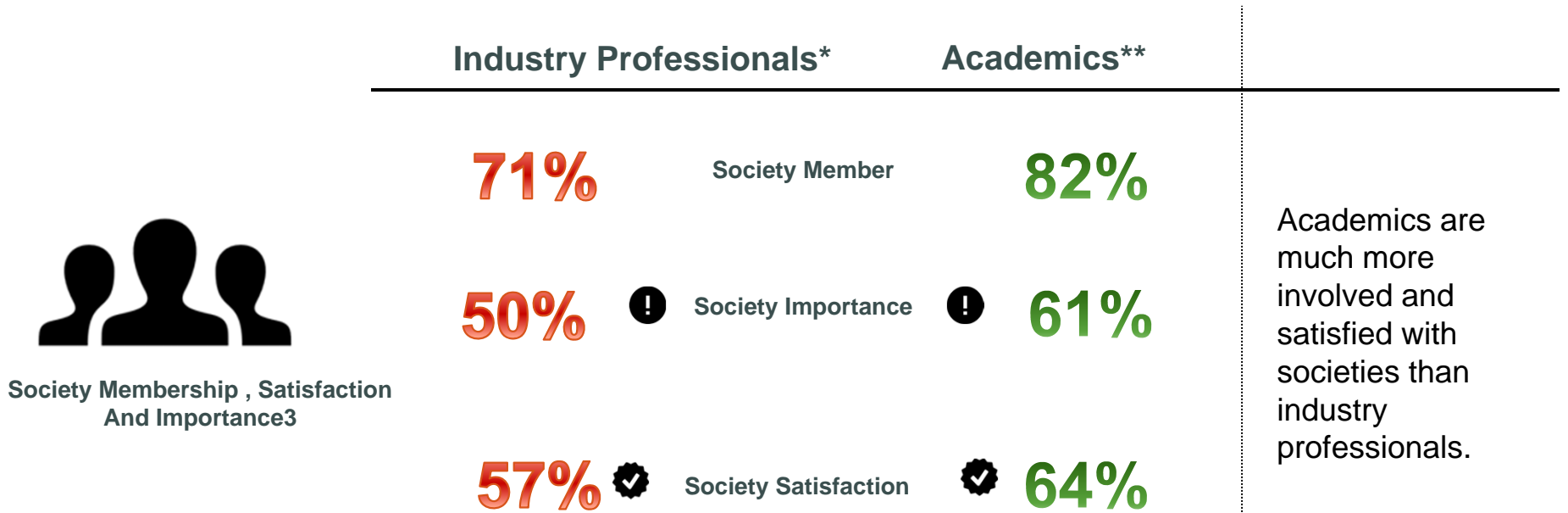
- Involved in volunteer activities (30%)
- Leadership positions (17%)

- Academics are interacting with IEEE significantly more than industry professionals particularly through volunteer and leadership roles.
- Industry professionals are much more likely to be involved for information/education and products/ services.

• Industry professionals include: private industry, public/government, non-profit institution, self-employed/consulting and entrepreneur/founder

** Academics: includes: educational institution

Across the board, Academics more engaged (top boxes)



Academics are much more involved and satisfied with societies than industry professionals.

* Industry professionals include: private industry, public/government, non-profit institution, self-employed/consulting and entrepreneur/founder

** Academics: includes: educational institution

What is Segmentation?

Market segmentation is the process of dividing the market into smaller, more homogeneous subgroups. This can be based on demographics, products/services sold, psychographics(values), and needs.



Reminder: IEEE is relatively homeogeneous as a whole so our segments are relative and not perfectly separate and distinct.

Key factors in deciding segments

- Rational connection to IEEE
 - Level of activities and involvement
 - Reasons joining and remaining
 - Importance and satisfaction of memberships, products and services
 - Familiarity with affinity groups
 - Level of activity and involvement in IEEE societies

- Emotional connection to IEEE
 - Perceived value
 - Intended future involvement
 - Perceptions of IEEE
 - Barriers to greater engagement
 - Overall personal and professional importance of IEEE

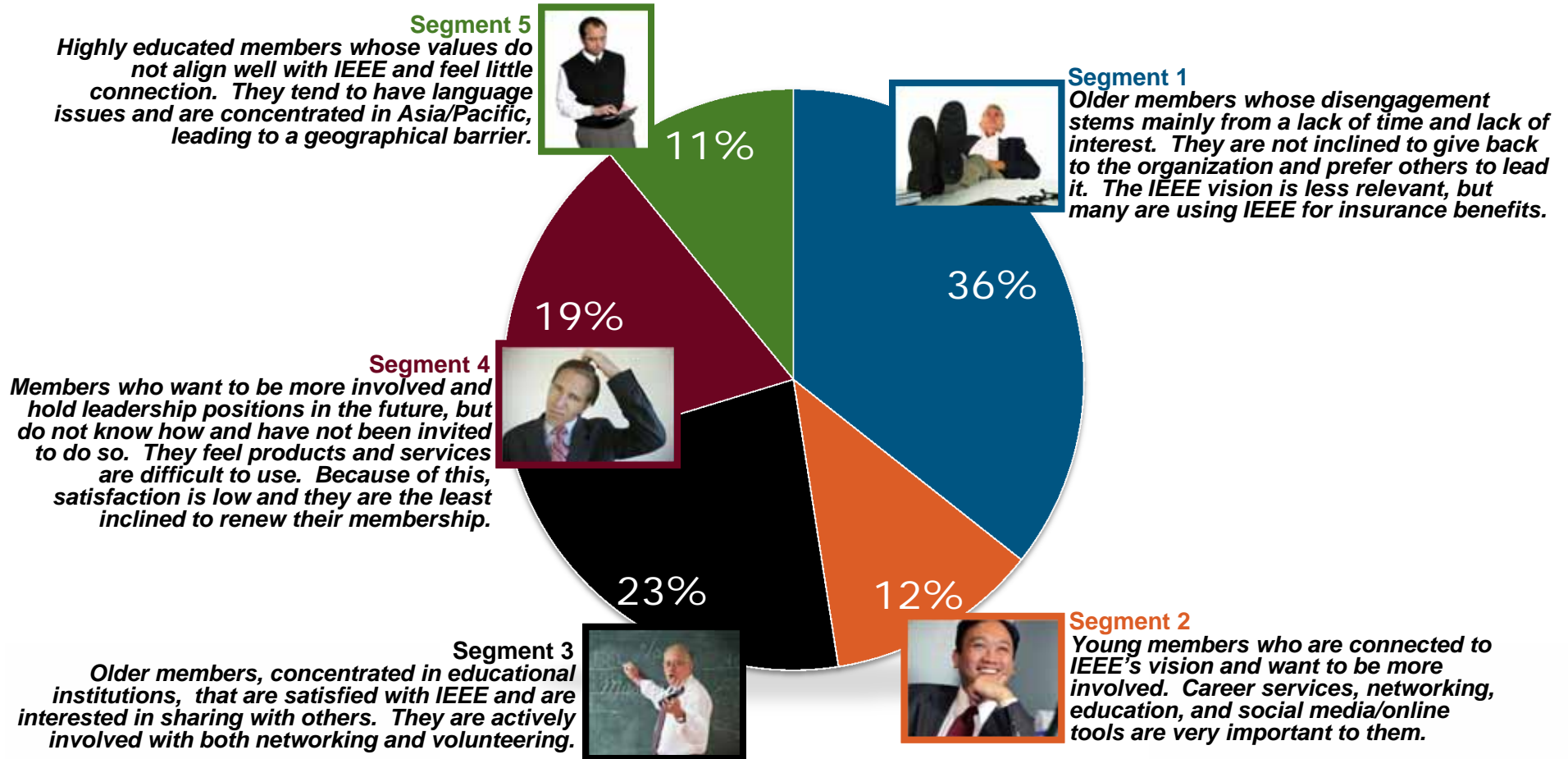
- Demographics: grade, society memberships, age, region, and etc

Higher Grade Member Without Graduate Students

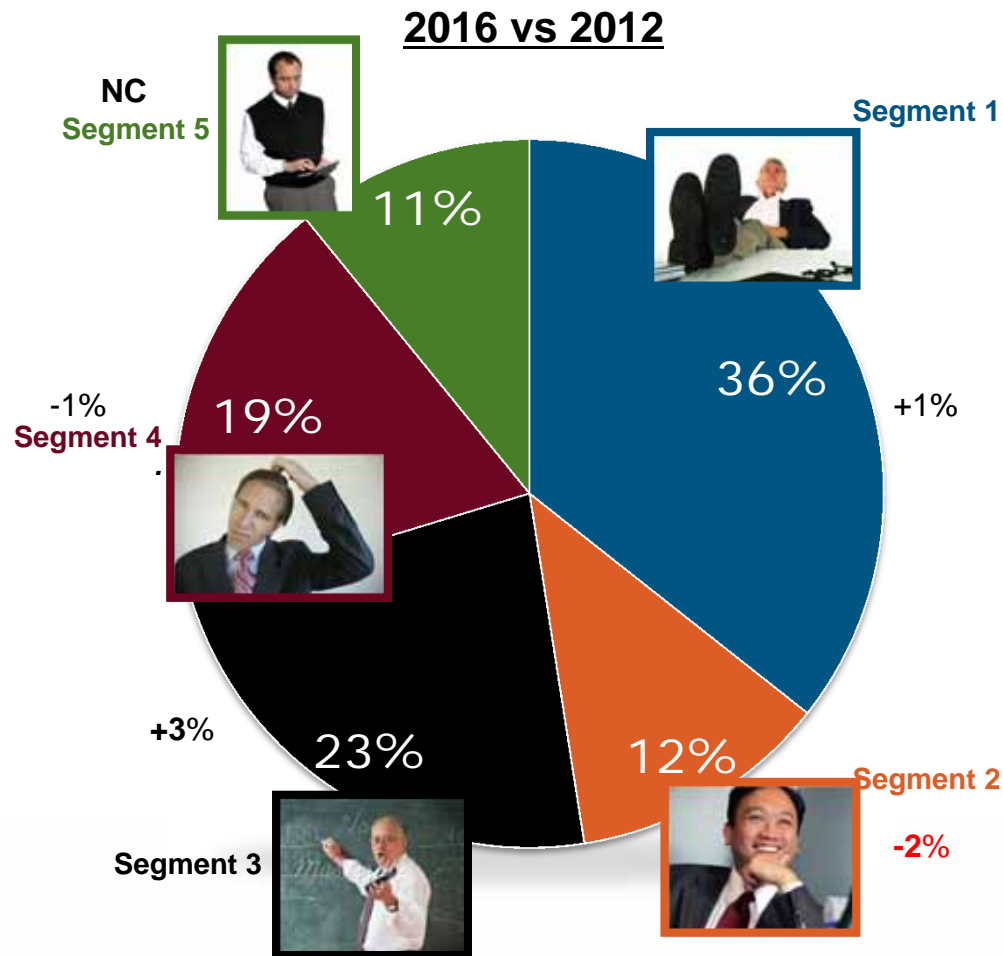
Segment Summary



Higher Grade Without Graduate Students Segment Distribution

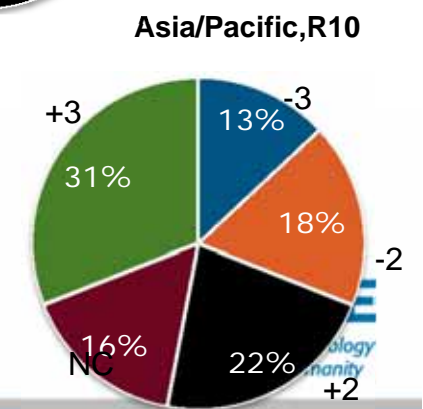
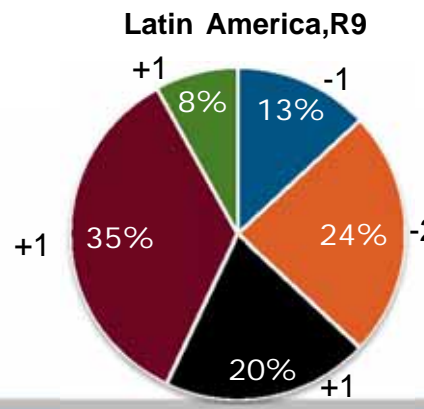
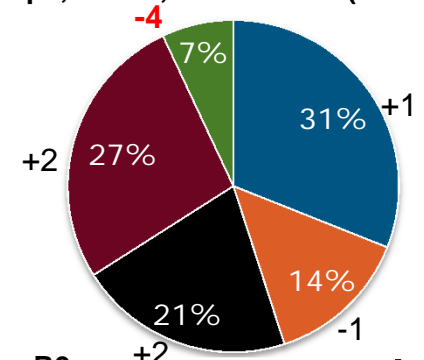
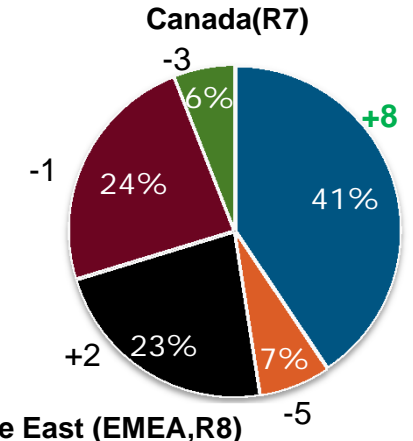
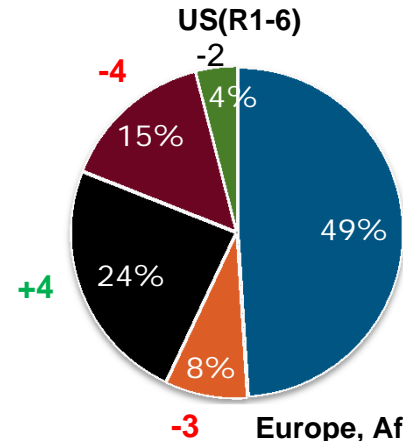
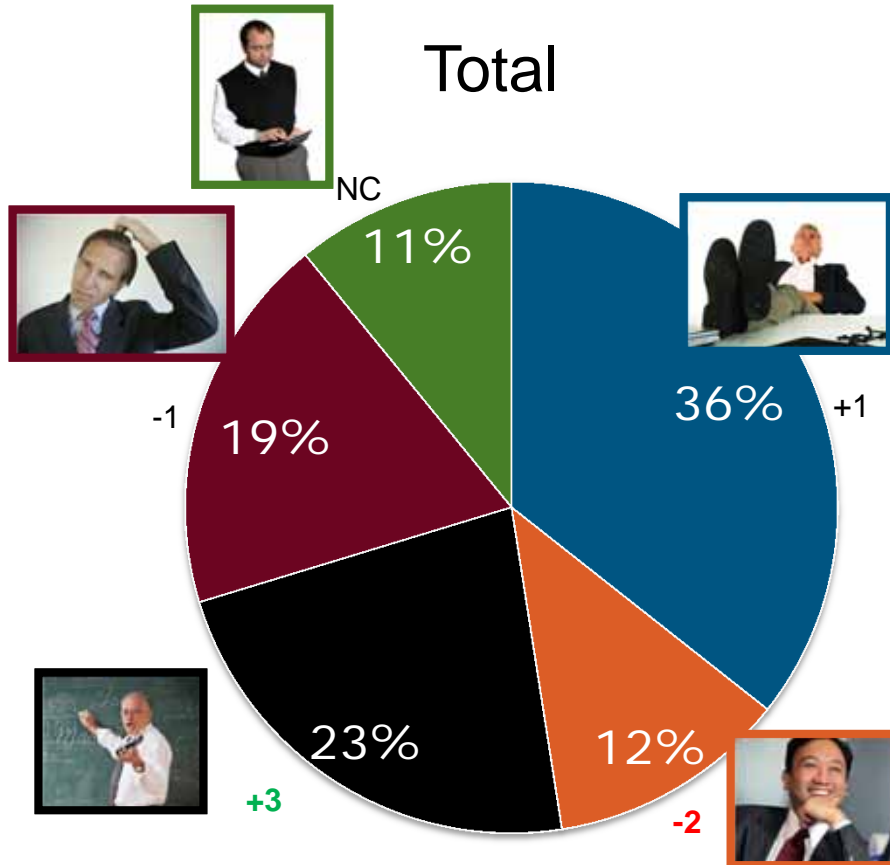


Among Higher Grade*, significant increase in Segment 3; decreases in segment 2



*Without Graduate Student Members **Including Graduate Student Members

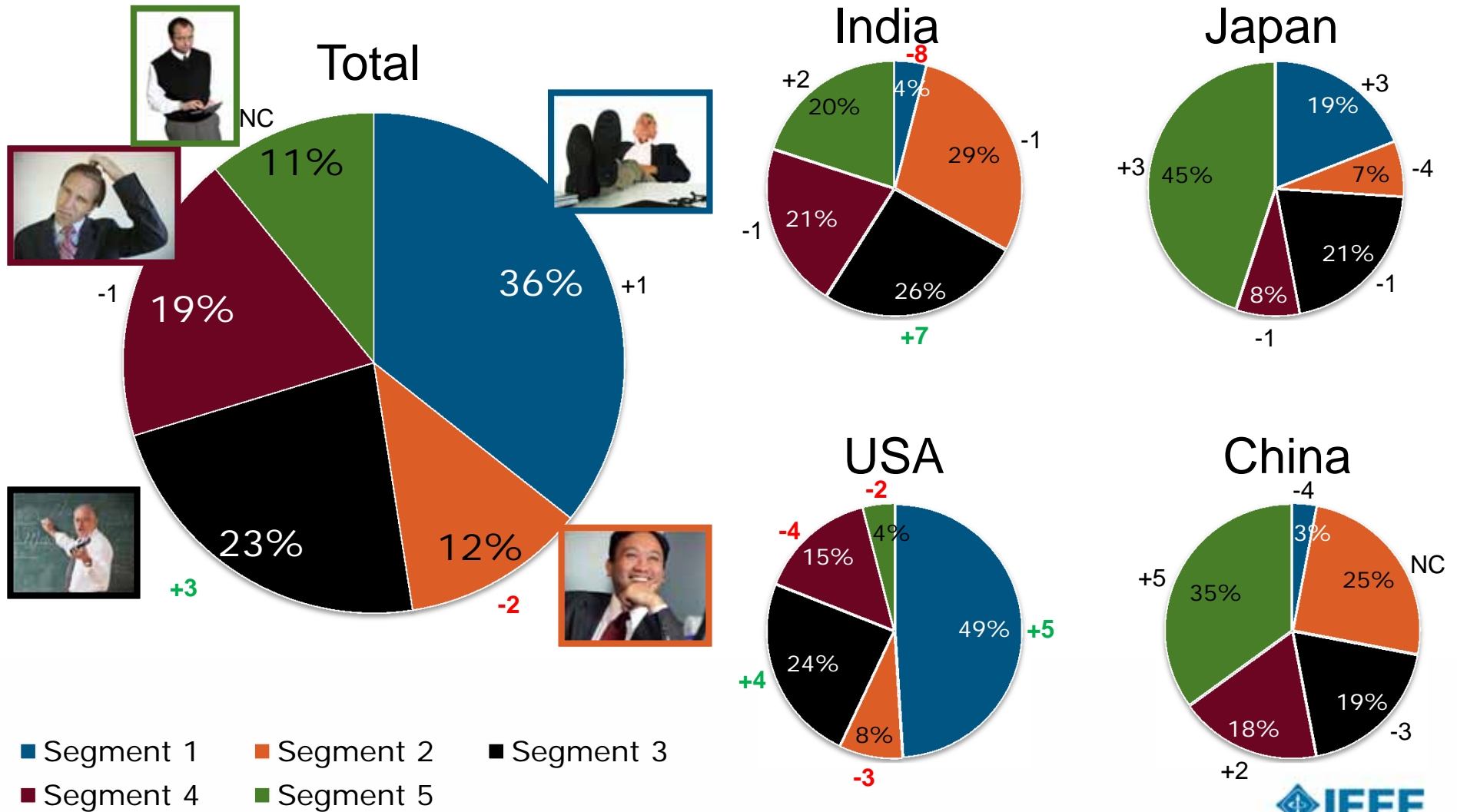
Higher Grade Member* Segment Distribution by Region



- Segment 1
- Segment 2
- Segment 3
- Segment 4
- Segment 5

*Without Graduate Student Members **Including Graduate Student Members

Higher Grade Member* Segment Distribution by Country



*Without Graduate Student Members **Including Graduate Student Members

Other detail available as a result of segmentation study:

- *Student & GSM (Importance, Satisfaction, Segments)*
- *Young Professionals*
- *Society vs. non-Society members*
- *Priority countries (China, US, Japan, India)*
- *Demographic information overall
(e.g. age, education, industry, income, etc.)*
- *Answers to attitudinal and behavioral questions*
- *Segment details*

Appendix

Methodology



2016 vs. 2012 Segmentation Survey

- Quantitative online survey, conducted October 5-November 4, 2015
- International member database sample, Total Respondents (n=10,677)
- Completed Interviews: Higher Grade Members Without Graduate Students (n=9,181) and Student Members Including Graduate Students (n=1,496)

Geographies Represented

Higher Grade Members		
	2012	2016
Higher Grade Total	6,259	9,181
India	653	717
Japan	909	631
US	974	2,836
EMEA	1,000	2,568
Latin America	924	701
China	451	383
Remaining Geographies	1,348	1,345

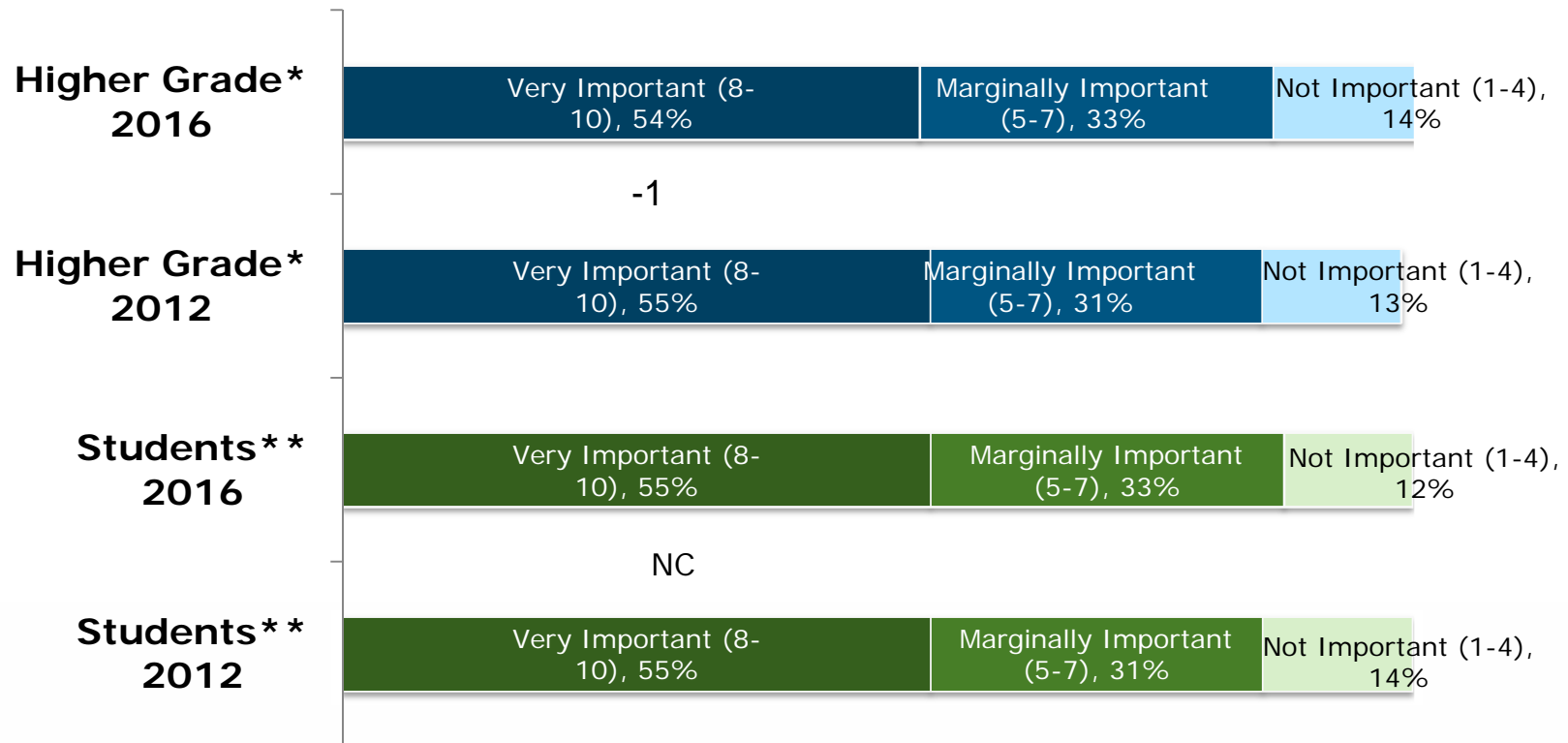


Student Members		
	2012	2016
Student Total	1,636	1,496
India	170	406
Japan	80	60
US	370	221
EMEA	426	372
Latin America	228	145
China	108	60
Remaining Geographies	254	232

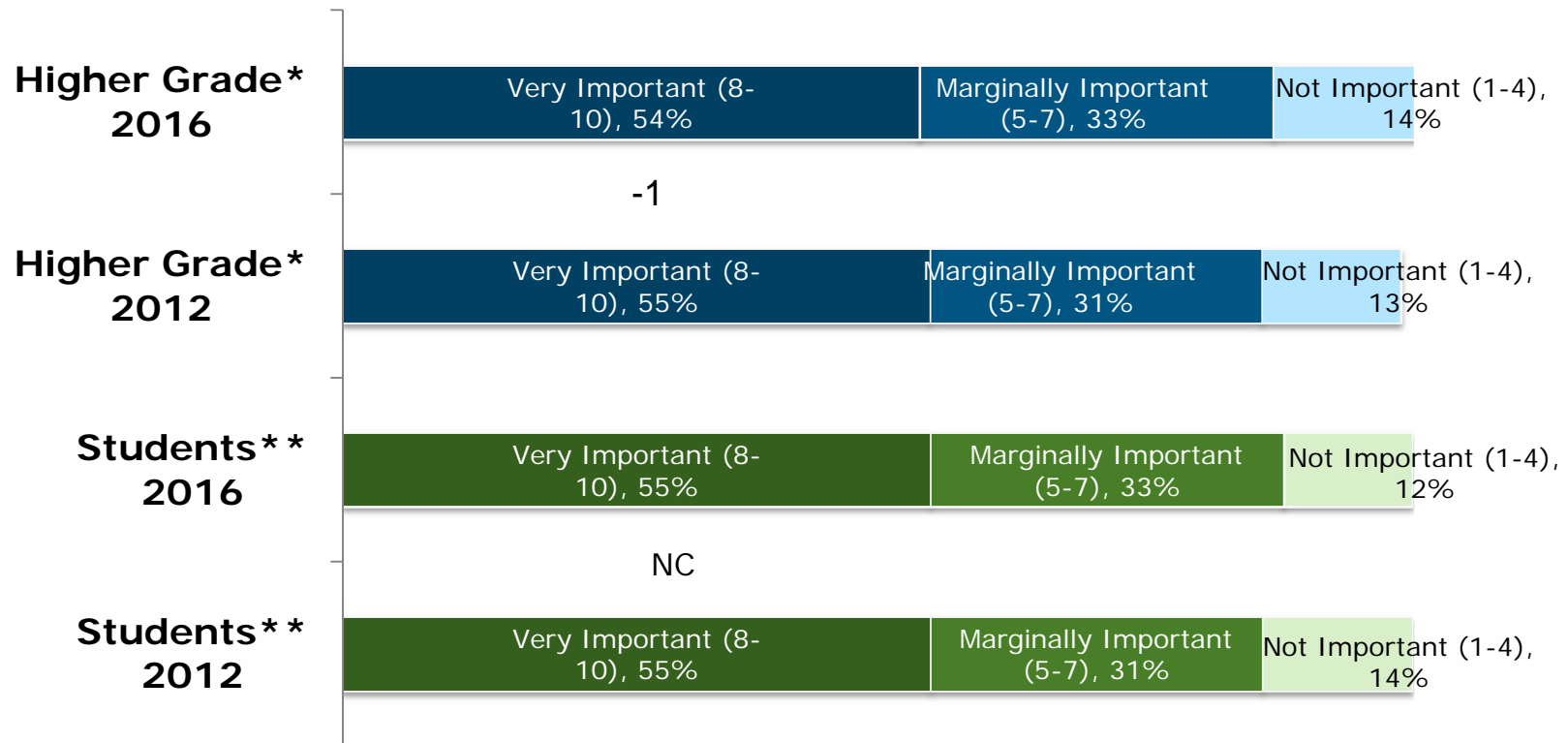
Society Interactions



Importance of Society membership holds even for both Higher Grade* and Student** members with just over half saying “very important”

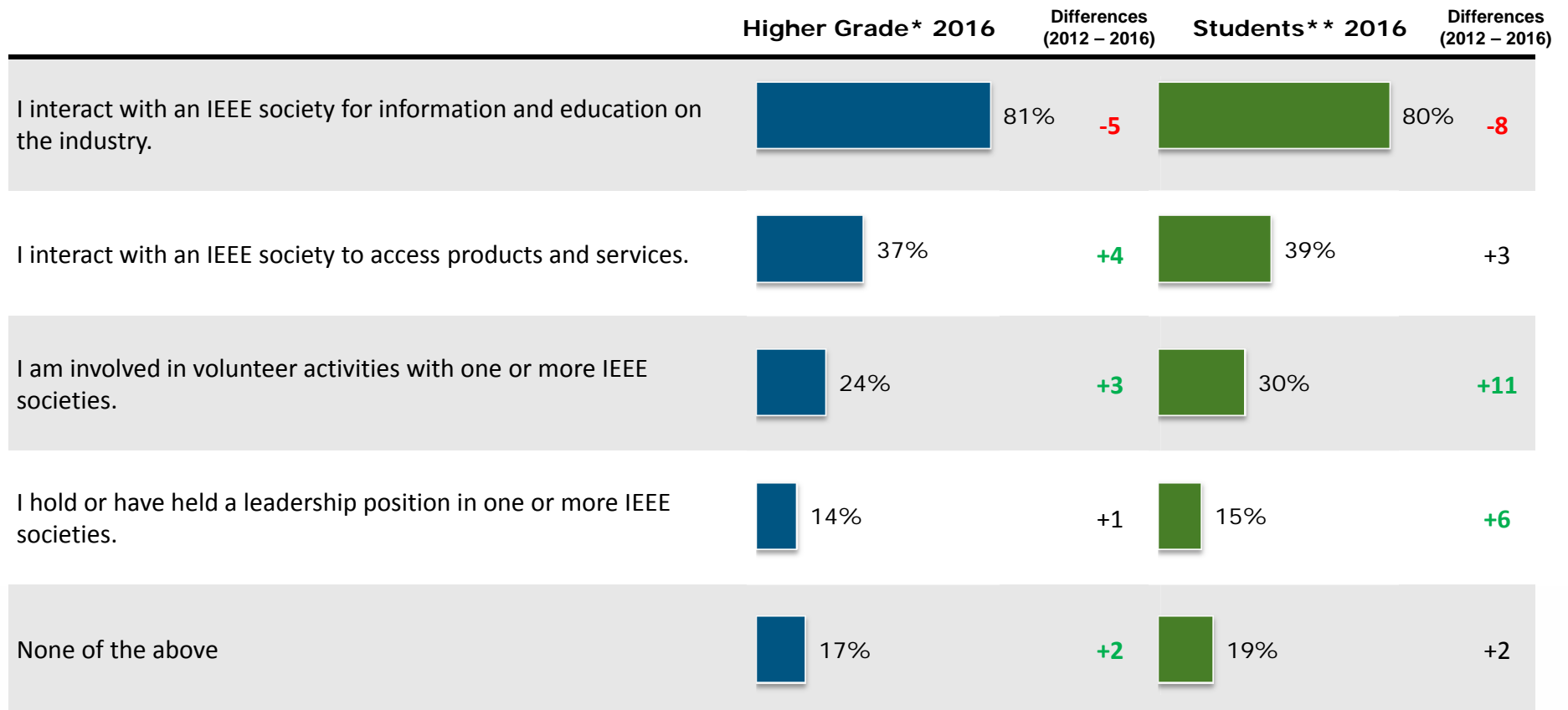


Importance of Society membership holds even for both Higher Grade* and Student** members with just over half saying “very important”



While industry information/education highest society interaction among both member groups, it has decreased from 2012.

- Other activities have increased for Higher Grade*
- Students show big jump in volunteer activities



Use of IEEE Products and Services Appendix



Importance of Products & Services

Importance of aspects of membership	Higher Grade*		Students**	
	2016 (%)	Difference*** (2012-2016)	2016 (%)	Difference*** (2012-2016)
Online access to transactions, journals, and magazines	84	NC	85	-3
Online access to conference proceedings	77	+1	80	-1
Online access to standards	74	-3	77	-3
Conferences	71	+2	82	NC
Opportunities for professional networking	67	-1	80	-1
Technical Skills	66	NA	80	NA
Continuing education opportunities	65	NC	80	-2
Promoting the appreciation of technology and our profession to the general public	63	-7	73	-6
Open access publishing	62	NA	76	NA
Interaction with other members	58	-1	72	-3
Discounts on professional products and services	58	-4	76	-6
Representation on public policy issues related to the profession	56	-6	63	-4
Local meetings with other professionals	54	-2	70	-2
Online meetings/webinars	53	NC	64	-3
Contributing to the people of the world through humanitarian efforts	49	+1	70	-1
Internet video programming of conference highlights, author interviews, and so on	49	+2	67	-3
Printed copies of transactions, journals, and magazines	48	-5	60	-9
Online career resources	47	-5	71	-6
Salary and compensation benchmark data in your field	47	NA	63	NA
Printed books	47	-7	59	-7
Ability to participate in standards development	45	-2	62	-2
Opportunities for leadership roles	44	+7	68	+4
Forums and newsgroups	43	-5	56	-10
Awards and scholarships	43	-1	77	-4
Non-Technical Business Skills	40	NA	66	NA
Having access to and obtaining responsive answers from the IEEE Contact Center	39	NC	61	-7
Printed copies of standards	38	-5	51	-6
Printed copies of conference proceedings	35	-4	51	-6
Social networking	32	+2	59	-1
Google Apps @IEEE.org account- formerly the IEEE email alias	31	NA	50	-3
Insurance and other financial products and services	28	-7	41	-3
Student contests (Students)	NA	NA	67	-2
Student branch meetings (Students)	NA	NA	67	-2

Satisfaction With Products & Services

Satisfaction with aspects of membership	Higher Grade*		Students**	
	2016 (%)	Difference*** (2012-2016)	2016 (%)	Difference*** (2012-2016)
Online access to transactions, journals, and magazines	61	-4	64	-1
Conferences	58	-4	60	-4
Online access to conference proceedings	55	-5	60	-2
Printed copies of transactions, journals, and magazines	50	-10	49	-11
Online access to standards	46	-8	52	-4
Open access publishing	42	NA	54	NA
Opportunities for professional networking	41	-1	49	-2
Google Apps @IEEE.org account- formerly the IEEE email alias	41	-15	51	-8
Discounts on professional products and services	41	-5	50	-4
Printed books	41	-10	41	-11
Printed copies of conference proceedings	40	-9	42	-9
Online meetings/webinars	39	-6	49	-4
Continuing education opportunities	38	NC	51	-2
Technical Skills	37	NA	48	NA
Promoting the appreciation of technology to the general public	37	-3	49	-3
Local meetings with other professionals	37	-4	45	-1
Interaction with other members	36	-3	48	NC
Printed copies of standards	36	-11	43	-7
Obtaining responsive answers from the IEEE Contact Center	35	-5	49	-3
Internet video programming of conference highlights, and interviews	35	-9	46	-5
Insurance and other financial products and services	34	-10	33	-9
Awards and scholarships	34	-4	46	NC
Ability to participate in standards development	34	-7	43	-4
Opportunities for leadership roles	33	-1	50	2
Salary and compensation benchmark data in your field	33	NA	38	NA
Contributing to the people of the world through humanitarian efforts	31	-1	47	-3
Representation on public policy issues related to the profession	31	-4	42	-5
IEEE online communities	30	-2	45	-2
Forums, newsgroups, and other online collaboration tools	30	-3	42	-4
Online career resources	28	-5	45	-5
Social networking	27	-1	47	1
Non-Technical Business Skills	26	NA	45	NA
Student contests (Students)	-	-	52	-4
Student branch meetings (Students)	-	-	51	-3

Demographic Profiles Appendix



Education in key countries

Education	Total		India		Japan		US		China	
	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff
2016 vs 2012	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff
Some college	1%	NC	0%	NC	1%	NC	1%	-1%	2%	1%
Vocational/ technical degree/ certification	1%	-1%	1%	NC	1%	NC	1%	-1%	2%	1%
Bachelor's degree or equivalent	20%	-3%	8%	-2%	7%	-1%	30%	NC	2%	-2%
Graduate/professional degree	32%	-3%	37%	-10%	18%	1%	38%	-2%	8%	-2%
Doctoral degree	44%	7%	49%	13%	72%	-1%	29%	4%	86%	1%
Other	2%	NC	5%	-1%	1%	1%	1%	NC	0%	NC

Education

Higher Grade Members without GSM

	Total			R1-6			R7			R8			R9			R10		
	2016	2012	%Change	2016	2012	%Change	2016	2012	%Change	2016	2012	%Change	2016	2012	%Change	2016	2012	%Change
Education																		
Some college	1%	1%	0%	1%	2%	-1%	1%	1%	0%	0%	0%	0%	1%	1%	0%	1%	1%	0%
Vocational/technical degree/certification	1%	2%	-1%	1%	2%	-1%	4%	3%	1%	1%	1%	0%	0%	0%	0%	1%	2%	-1%
Bachelor's degree or equivalent	20%	23%	-3%	30%	30%	0%	33%	36%	-3%	7%	9%	-2%	9%	9%	0%	11%	12%	-1%
Graduate/professional degree	32%	35%	-3%	38%	40%	-2%	31%	29%	2%	26%	30%	-4%	37%	41%	-4%	25%	26%	-1%
Doctoral degree	44%	37%	7%	29%	25%	4%	30%	29%	1%	63%	56%	7%	46%	42%	4%	61%	57%	4%
Other	2%	2%	0%	1%	1%	0%	1%	2%	-1%	3%	4%	-1%	7%	7%	0%	1%	2%	-1%

Employment Status

Higher Grade Members without GSM

Employment Status	Total		R1-6		R7		R8		R9		R10	
	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff
2016 vs 2012	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff
Private industry	39%	-5%	52%	NC	40%	-2%	27%	-7%	24%	-1%	23%	-6
Public/government	9%	-2%	8%	-2%	13%	-3%	10%	-1%	10%	-6%	9%	-3
Educational institution	29%	5%	12%	-1%	17%	-1%	45%	7%	47%	4%	51%	6
Non-profit institution (non-educational)	3%	NC	3%	NC	1%	NC	3%	NC	1%	NC	2%	NC
Self-employed/consulting	6%	-1%	8%	NC	10%	-1%	4%	-3%	6%	-3%	4%	NC
Retired	6%	3%	7%	3%	8%	4%	4%	2%	3%	2%	3%	1
Unemployed	3%	-1%	4%	-2%	4%	1%	2%	1%	2%	1%	2%	NC
Full time student	2%	NC	2%	NC	3%	NC	2%	NC	3%	NC	3%	1
Entrepreneur/founder	2%	NA	2%	NA	3%	-1%	2%	NA	3%	NA	2%	NA
Other	1%	-1%	2%	NC	1%	NC	1%	-1%	1%	NC	1%	NC

Employment status in key countries

Employment Status	Total		India		Japan		US		China	
	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff
2016 vs 2012	2016	Diff	2016	Diff	2016	Diff	2016	Diff	2016	Diff
Private industry	39%	-5%	19%	-14%	32%	-1%	52%	NC	8%	-1%
Public/government	9%	-2%	11%	-2%	6%	-1%	8%	-2%	8%	-1%
Educational institution	29%	5%	50%	14%	51%	-1%	12%	-1%	75%	2%
Non-profit institution (non-educational)	3%	NC	1%	1%	2%	NC	3%	NC	4%	NC
Self-employed/consulting	6%	-1%	4%	-2%	2%	1%	8%	NC	1%	NC
Retired	6%	3%	5%	2%	5%	3%	7%	3%	0%	-1%
Unemployed	3%	-1%	2%	NC	1%	NC	4%	-2%	1%	1%
Full time student	2%	NC	6%	1%	1%	NC	2%	NC	1%	-1%
Entrepreneur/founder	2%	NA	3%	NA	0%	NA	2%	NA	1%	NA
Other	1%	-1%	0%	-1%	0%	-11%	2%	NC	1%	NC