Market Research Report

Methods & Data Analysis

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Abstract

Both qualitative (n=35) and quantitative research (n=1174) was conducted to explore how Rotarians view online technologies. All 34 Rotary zones were covered, although not all zones contained representative samples. The data contradicts conventional wisdom that Rotarians are not net savvy, and in fact a majority of the sample reported having a Facebook account. Club Engagement is a central theme among the findings, and is primarily driven by interactions with Rotary affiliates such as Rotaractors, Interactors, etc. ($p<.000$), however other key factors are also present. Facebook presence and use both account for more than 18% of the variance in Club Engagement when tested independently from other constructs. It also became evident that the three avenues of service which drive club engagement are: international, vocational, and new generations, and that neither community service nor club service contribute to club engagement in any statistically significant way. A series of recommendations follows the analysis, including suggestions for follow up research that should be conducted as a result of the outcomes in this study.

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Research Background

A major discussion about Rotarians and social media took place over several weeks on Rotary International's official LinkedIn page. There was substantial and heated debate over whether Rotarians and Rotary International should embrace social media and other internet technologies for the purposes of conducting various forms of Rotary business and fellowship.

Because the debate was so heated, a suggestion was made to conduct a market research study to help Rotary International discover the answer to two key **research questions**:

1. How are Clubs and Rotarians effectively leveraging new media or technology to communicate, collaborate, and network?

2. Is there an unmet need with these technologies that RI could help facilitate?

With this objective in place, a committee of Rotarians, along with Rotary International's Chief Information Officer, began the long process of developing a scientifically rigorous market research experiment to study these questions in significant detail.

This report details the results of the final study.

Overview of the Research Method

This study was conducted using both qualitative and quantitative research methods; using the qualitative study data to inductively design question items for a quantitative survey instrument.

A brief six question qualitative study was conducted among 35 Rotarians with varying levels of knowledge about internet technologies and social media, in order to gather specific ideas respective to the research questions under study. All six questions were open-ended and required participants to write paragraph style responses. (See Appendix A for the specific question items.)

After the qualitative data was collected, three members of the survey committee conducted individual content analyses of the answers provided by respondents.

Because inductive content analysis is subjective by nature, each of the independent analyses were further scrutinized and consolidated by the committee.

From the three content analyses, and further review by the committee, a sum total of 22 operationally defined constructs were inductively gathered from the data. Further detail regarding these findings will be provided in later chapters.

The committee spent most of September developing question items for a pilot quantitative survey instrument; yielding 64 question items spread across 16 constructs (excluding seven demographic questions). Of the original 22 constructs, six were either deleted on the basis that they did not address the research questions, or were merged with other constructs.

The pilot survey was posted online October 1st, and pilot data collection began on October 4th. Rotary International identified these candidates in RI's database of Rotarian email addresses and sent the pilot questionnaire hyperlink to a small random sample of Rotarians (N<350) living in majority English speaking countries.

Pilot Test Results

After analysis of the pilot data, five total questions, including one entire construct, were eliminated from the survey instrument.

Validity and reliability scores for the remaining constructs were generally exceptionally high despite a sample of only 35 valid cases.

The final questionnaire list is comprised of 66 questions including demographics. Some question items were relocated to more appropriate constructs and rechecked for validity and reliability within the context of those constructs.

For more detail surrounding the results of the pilot test, please download that report at:

http://eclectricity.com/pilot.doc

Final Survey Preparation

The final survey instrument and supporting materials[1] were translated from English into all officially recognized Rotary languages by Rotary International's Language Services Team.

Although no back-translation was conducted to check consistency across the survey instruments, a quick check using Google Translate did not reveal any major discrepancies between languages when converting back to English.

Each translation was coded into their individual web page and to identify which survey language participants selected from the main welcome page http://eclectricity.com/rotary.htm. This coding allows participants to select the language they themselves are most comfortable with, regardless of what country they are a citizen of[2].

Language	Survey Link	Code Number
English	http://eclectricity.com/en.htm	1
German	http://eclectricity.com/de.htm	2
Spanish	http://eclectricity.com/es.htm	3
French	http://eclectricity.com/fr.htm	4
Italian	http://eclectricity.com/it.htm	5
Japanese	http://eclectricity.com/jp.htm	6
Korean	http://eclectricity.com/ko.htm	7
Portuguese	http://eclectricity.com/po.htm	8

Language	Thank you page
English	http://eclectricity.com/thanks.htm
German	http://eclectricity.com/danke.htm
Spanish	http://eclectricity.com/gracias.htm
French	http://eclectricity.com/merci.htm
Italian	http://eclectricity.com/grazie.htm
Japanese	http://eclectricity.com/arigatou.htm
Korean	http://eclectricity.com/gamsahabnida.htm
Portuguese	http://eclectricity.com/obrigado.htm

After each webpage was coded, the survey links were passed back to the language services team to cross-check for accuracy and completeness, and several minor errors were corrected.

52 question items were designed with 7-point Likert scales using strongly disagree (1) and strongly agree (7) as anchors.

[1] Materials include an introductory email, welcome page, the survey itself, and a thank you page.

[2] Global immigration figures from OECD 2007 show about 3% of the global population migrates to other countries annually (including the author of this document), and many eventually take citizenship of the country they migrate to.

Five question items related to use of social media platforms were broken into 5-point Likert scales using the following choices:

- Never
- Rarely
- Every Few Days
- Once or Twice Daily
- Throughout the Day

These specific question items were designed to be used as categorical variables rather than scale variables, and hence provide no statistical challenges when measuring these responses against scale variables when comparing means.

There were also several binary (yes/no) categorical response variables:

- Do you belong to a Rotary online community?
- Which social media websites do you use?
  - Facebook
  - LinkedIn
  - Twitter
  - GooglePlus
  - RenRen
  - Other (Specify)
- Which avenues of service do you work with?
  - Vocational
  - Community
  - International
  - Club
  - New Generations
- Are you now or have you ever been a club officer?
- Multiple citizenships
- Gender

Additional demographic questions included:

- Length of service (7 choices)
- Current district
  - Hidden coding also provided zone information.
  - A write-in field was included in case one's district did not appear in the list.
- Nationality (Multiple selections allowed of 256)
- Age group (6 choices)
- Gender (2 choices)

Data collection began on October 18th, and concluded November 3rd.

Data Collection

The welcome page hyperlink was sent to a stratified random sample of Rotarians world-wide via an introductory email. Distributions were broken down by identifiable languages in a manner consistent with actual population proportions of Rotarians respective to their expected native language. Actual response counts and rates from the raw data are provided in the following table:

Language Source	Distributions	Responses	Rate
English	21131	944	4.46%
French	1038	106	10.2%
German	1041	120	11.5%
Italian	540	60	11.1%
Japanese	564	88	15.6%
Korean	274	10	3.64%
Portuguese	1036	60	5.79%
Spanish	876	59	6.73%
Totals	26500	1447	5.46%

- A net total of 1447 raw samples were collected.
- 77 cases were deleted because respondents IP addresses appeared more than once.

Duplicate IP addresses frequently occur when respondents decide to change or alter their answers.

- 131 cases were removed because the respondents failed to answer at least 95% of the first 52 questions. [3]
- 34 cases were removed on the basis that their answers were deemed arbitrary.

Arbitrary cases are responses which appear to show respondents were careless in some way with respect to answering the questions. For example, the majority of respondents might tend to answer certain questions a specific way, but arbitrary responses don't follow the same patterns; often with modal responses.

The net total of valid cases returned was n=1174.

Demographic Statistics

ZONE POPULATION STATISTICS

Of the 34 Rotary zones, four zones were heavily under-represented (less than 20 cases); specifically:

[3] A few cases with less than 95% were added back in to accommodate some under-represented zones, but in all cases at least 47 of the first 52 questions had to be answered, and the general cut-off was at least 50.

Zone 6
- Northeastern India, Nepal, Afghanistan, Bangladesh, Brunei, Cambodia, Laos, Malaysia, Pakistan, Singapore, Thailand
- ***16 cases***

Zone 2
- Central Japan, Guam, Micronesia, Northern Marianas, Palau
- ***13 cases***

Zone 9
- Northern Korea
- ***7 cases***

Zone 10
- Southern Korea, China, Macau, Mongolia, Taiwan
- ***4 cases***

A representative sample is 30+ cases in any category, and hence these zones are also under-represented.

Zone 4
- Northwestern India, Western India
- ***20 cases***

Zone 30
- USA: Alabama, Indiana, Kentucky, Mississippi, Ohio, Tennessee
- ***21 cases***

Zone 1
- Northern Japan
- ***21 cases***

Zone 5
- Southern India, Sri Lanka, Central & Southern India
- ***22 cases***

Zone 7
- Indonesia, Philippines, American Samoa, Cook Islands, Fiji, French Polynesia, New Caledonia, New Zealand, Norfolk Islands, Samoa, Tonga, Vanuatu
- ***25 cases***

Zone 29
- Canada, USA: Maryland, Michigan, New York, Ohio, Pennsylvania, West Virginia
- ***26 cases***

76 respondents did not provide their district number or could not find it in the list, and hence zone statistics for these cases cannot be calculated. It is possible that some of the zone information needed could be contained in that missing data, but there is no way to tell.

As a point of information, 5 clubs do not belong to a specific zone; comprising 197 known members at the time of Rotary's last zone population report (as of June 30th, 2010).

A list of the zones and their corresponding case frequencies is provided below:

Zone	Frequency	Percent
11	48	4.1
18	48	4.1
19	47	4.0
8	46	3.9
12	45	3.8
14	42	3.6
26	42	3.6
17	41	3.5
20	41	3.5
24	41	3.5
3	40	3.4
21	39	3.3
13	37	3.2
25	37	3.2
27	37	3.2
28	37	3.2
23	36	3.1
15	34	2.9
31	31	2.6
32	31	2.6
33	31	2.6
16	30	2.6
22	30	2.6
34	30	2.6
29	26	2.2
7	25	2.1
5	22	1.9
1	21	1.8
30	21	1.8
4	20	1.7
6	16	1.4
2	13	1.1
9	7	.6
10	4	.3
99	2	.2
Total	1098	93.5
Missing	76	6.5
Total	1174	100.0

COUNTRY POPULATION STATISTICS

To round out the analysis, demographics by country were also collected.

Since respondents were allowed to select more than one country to represent their citizenship, only the first country they selected was included in this analysis.

To that end 49 respondents indicated they were citizens of at least two countries; or about 4.17%.

Country	Frequency	Percent
USA	380	32.4
Japan	77	6.6
UK	69	5.9
Australia	55	4.7
Germany	52	4.4
Italy	51	4.3
France	48	4.1
Brazil	47	4
Canada	45	3.8
India	45	3.8
Switzerland	28	2.4
Sweden	27	2.3
Austria	21	1.8
Belgium	17	1.4
Netherlands	16	1.4
Mexico	15	1.3
Finland	13	1.1
Denmark	12	1
Philippines	11	0.9
Argentina	10	0.9
New Zealand	8	0.7
South Africa	8	0.7
Romania	8	0.7
Norway	7	0.6
Uganda	7	0.6
Bangladesh	7	0.6
Chile	5	0.4
South Korea	5	0.4
Nigeria	5	0.4
Ghana	4	0.3
Luxembourg	3	0.3
Nepal	3	0.3
Poland	3	0.3
Spain	3	0.3
Portugal	2	0.2
Colombia	2	0.2
Dominican Republic	2	0.2
Iceland	2	0.2
Ireland	2	0.2
Kosovo	2	0.2
Panama	2	0.2
Singapore	2	0.2
Thailand	2	0.2
Uruguay	2	0.2
Slovakia	2	0.2
Taiwan	2	0.2
Bahamas	2	0.2
Democratic Republic of Congo	1	0.1
Peru	1	0.1
Ashmore & Cartier Islands	1	0.1
Sri Lanka	1	0.1
Bulgaria	1	0.1
Cameroon	1	0.1
Central African Republic	1	0.1
Cyprus	1	0.1
Dhekelia	1	0.1

Ecuador	1	0.1
Egypt	1	0.1
Estonia	1	0.1
Fiji	1	0.1
French Polynesia	1	0.1
Greece	1	0.1
Guinea	1	0.1
Indonesia	1	0.1
Israel	1	0.1
Jamaica	1	0.1
North Korea	1	0.1
Morocco	1	0.1
Pakistan	1	0.1
Russia	1	0.1
St. Vincent & the Grenadines	1	0.1
Serbia	1	0.1
Slovenia	1	0.1
Togo	1	0.1
Venezuela	1	0.1
Total	1169	99.6
Missing	5	0.4
Total	1174	100

Respondents from the USA dominated the sample at 380 cases (or 32.4%). Because of this, a new categorical variable was created to separate US data from the rest of the world to prevent US responses from skewing the results for the rest of the Rotary world.

The statistical analysis required for this study will hence be broken into three groups: US only, Most of World [MOW], and Global Composite. Comparisons will also be made between the US and MOW samples to see how they differ.

Age, Gender, and Other Key Demographic Statistics

To round out the other basic demographic statistics, summary data is provided, along with brief analysis.

Category	Mean	Min	Max	Valid N
Gender	0.79	0	1	1136
Age	4.30	1	6	1138
Service Time	4.31	1	7	1165
Officer	0.78	0	1	1163

Across categories of gender, men dominated the sample at 76.2%. Although not terribly desirable from the standpoint of most social research, this is relatively consistent with the actual population of Rotarians.

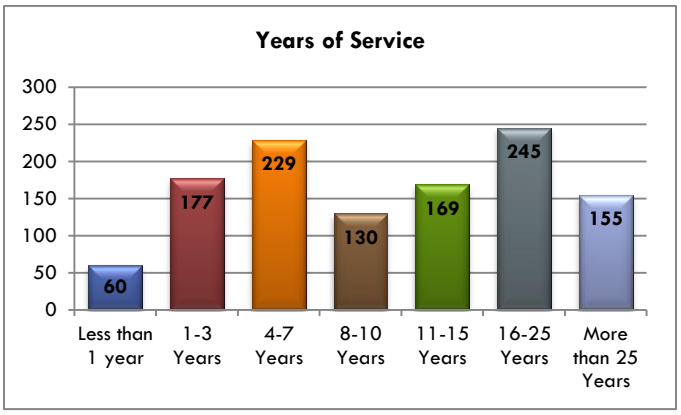
Gender	Frequency	Percent
Male	895	76.2
Female	241	20.5
Total	1136	96.8
Missing	38	3.2

It was largely expected that higher age groups would dominate the sample.

The majority of respondents (59.8%) fell across two adjacent 10-year age categories distributed between 50 and 69 years old. Recategorization of the samples is undertaken later to detect differences, in terms of how respondents in higher and lower age groups responded to the survey questions. More detail is provided in the data analysis sections for each sub sample.

	Frequency	Percent
60-69	381	32.5
50-59	320	27.3
40-49	195	16.6
70 or more	163	13.9
30-39	68	5.8
18-29	11	.9
Total	1138	96.9
Missing	36	3.1
Total	1174	100.0

With respect to the years of service Rotarians reported, those with 16-25 years of service had the most cases in the sample, followed closely by those with 4-7 years of service. This suggests a somewhat tiered and uneven distribution of service years among respondents in the sample which can be seen clearly by graphing the data:



Since all of the years of service categories are representative samples, it will be possible to detect differences between these categories; particularly useful should differences exist.

77.3% of all respondents also indicated that they are or have been a club officer at some point in their Rotary career. Interestingly only 11 cases are missing this data point; suggesting that even for first year Rotarians, the propensity to be a club officer in the first year is potentially high. 13 out of 60 cases of 1st year Rotarians report exactly that condition, or 21.67% of that group.

This statistic raises some very interesting questions that may need to be examined in future research.

Global Composite Study

This document section is dedicated to analysis of the global composite data including US samples.

The results here are heavily skewed by US data, and as such the results of this analysis may not be representative of the wider global Rotary community.

Global Composite Scale Validity and Reliability

Each of the 16 scale variables need to be checked for internal consistency validity and reliability.

A scale variable is considered valid if all of the question items for it actually measure the same thing. That is to say, if one measures the scores for four question items that are supposed to express the same idea, then statistically speaking those four items need to generally report similar scores for that construct across the entire data set. In other words, do respondents generally feel that the question items in a group of questions go together? Exploratory factor analysis [EFA] answers this question with statistical confidence.

The point of EFA is to determine how many distinct ideas exist among a group of questions. The number of possible factors (or ideas) that can be delineated by a factor analysis, range from zero to the sum total of the question items in the construct. Scores for question items must exceed 0.5 on a scale of zero to 1, and not load on to more than one factor to be considered part of a single factor.

A scale variable is considered reliable if respondents generally answer all of the question items for a given construct in about the same way. That isn't to say everyone answers the questions with the same values. It means that the values entered by respondents are generally about the same for each of those people individually.

In theory, a reliable scale (or group of questions) should be able to produce very similar array of scores if the same questions were asked of a different group of people within the same population.

Reliability scores range from zero to 1, and must be at least 0.6 for the scale to be considered reliable in a multi-country study, and 0.7 in a single country study (Nunally, 1978).

If a scale variable is considered both reliable and valid, it is computed into an operationalized variable. Typically, this means calculating the average of all of the question items for each factor case-by-case or response-by-response[4].

[4] Not every scale variable is calculated this way in social science research, but it is the most common technique.

Brainstorming/Idea Generation [BIG]

Exploratory Factor Analysis revealed that [BIG] is a single factor construct[5].

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Reliability analysis, demonstrated a reliability of .620, however removing BIG3 from the scale improves reliability to .751.

Reliability Statistics

Cronbach's Alpha	N of Items
.620	3

Item#	Cronbach's Alpha if Item Deleted
BIG1	.337
BIG2	.404
BIG3	.751

After examining the question items, it appears that respondents had very different ideas about how to search for Rotary ideas and information.

> BIG1: I use the internet as a way to get ideas and information for Rotary.
>
> BIG2: I share Rotary ideas and information on the internet with other Rotarians.
>
> BIG3: I don't know where to begin searching online for Rotary ideas and information.

BIG3 is reverse coded, and the mean score for this question item is 5.34, suggesting that people generally know where to find Rotary ideas and information online, however the standard deviation for this question is +/- 1.925, or said another way, the spread of the data from the mean is quite wide. This suggests that some respondents are very search savvy, and others are not.

A frequency histogram, with a normal distribution curve, was produced to illustrate how the data appears. (Figure 1) Notice that that the curve is heavily skewed to the right and quite flat. The flatness of the curve means that the data points are very far from the mean on the whole; supporting the standard deviation figure mentioned previously.

[5] Eigenvalue of 1 with Varimax Rotation.

Although this level of analysis wouldn't normally be conducted, the composite reliability score was low enough, and the potential improved score was different enough, to warrant this level of analysis.

Further analysis will be conducted on this point later to identify which users seem to have the most trouble finding Rotary ideas on the internet if such a thing can be identified from this sample.

None the less, the reliability score is sufficient without removing BIG3 from the analysis, so the variable BIG was calculated as:

(BIG1+BIG2+BIG3)/3

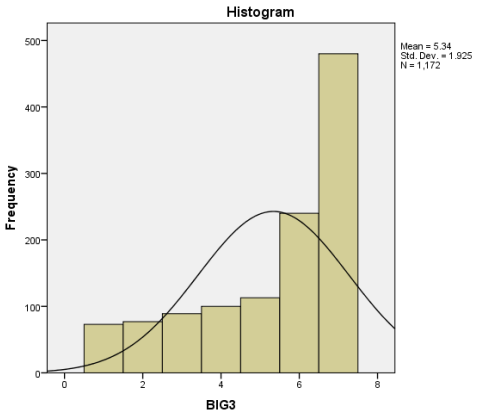


Figure 1

Discussion/Message Boards [DB]

Exploratory Factor Analysis revealed that [DB] is a single factor construct[6].

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

The reliability coefficient was satisfactory at .625.

Reliability Statistics

Cronbach's Alpha	N of Items
.625	4

If DB2 were removed, reliability would improve to .654, but the change is not enough to warrant that action.

Item#	Cronbach's Alpha if Item Deleted
DB1	.418
DB2	.654
DB3	.511
DB4	.605

The reliability score is sufficient without removing DB2 from the analysis, so the variable DB was calculated as:

(DB1+DB2+DB3+DB4)/4

Project Partners/Matching Grants [PPMG]

Again, only one factor was extracted.

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Since PPMG only has two question items, removing either of them would make the entire construct unusable as a scale variable.

Reliability Statistics

Cronbach's Alpha	N of Items
.656	2

Reliability for this construct is .656 and is satisfactory, so the variable PPMG was calculated as:

(PPMG1+PPMG2)/2

Web Conferencing [CONF]

Again, only one factor was extracted.

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

The reliability coefficient for these three question items is .776 and could not be improved by deleting any items.

Reliability Statistics

Cronbach's Alpha	N of Items
.776	3

Item#	Cronbach's Alpha if Item Deleted
CONF1	.670
CONF2	.729
CONF3	.687

CONF was calculated as:

(CONF1+CONF2+CONF3)/3

[6] Eigenvalue of 1 with Varimax Rotation.

Inbound News & Information [INI]

Only one factor was extracted.

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Reliability score was .717 and not improvable by deleting items.

Reliability Statistics

Cronbach's Alpha	N of Items
.717	3

Item#	Cronbach's Alpha if Item Deleted
INI1	.659
INI2	.632
INI3	.591

INI was calculated as:

(INI1+INI2+INI3)/3

Subject Matter Experts [SME]

This four question construct ended up breaking into two factors:

Rotated Component Matrix[a]

	Component	
	1	2
SME1		.919
SME2		.933
SME3	.940	
SME4	.946	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

To distinguish how respondents viewed these questions, one has to examine the questions and make a logical conclusion about the differences between the two factors.

Factor 1 includes SME1 & SME2:

SME1: I'd like to learn from Rotarian experts online about best practices.

SME2: I'd like to learn from Rotarian experts about how to make service projects more successful.

Factor 2 includes SME3 & SME4:

SME3: I am often asked by Rotarians online for information on best practices.

SME4: I am often asked by Rotarians online for information about making service projects more successful.

Clearly factor 1 focuses on learning, while factor 2 focuses on teaching.

Each factor was then checked independently for reliability.

Factor 1 had a very high reliability score of .861, and factor 2 had an even higher reliability score of .900.

Reliability Statistics		
	Cronbach's Alpha	Items
Factor 1	.861	SME1 & SME2
Factor 2	.900	SME3 & SME4

Factor 1 was computed as:

(SME1+SME2)/2 [SME_Learn]

Factor 2 was computed as:

(SME3+SME4)/2 [SME_Teach]

Event Calendars [EC]

This construct also broke into two factors:

Rotated Component Matrix[a]

	Component	
	1	2
EC1		.903
EC2		.747
EC3	.789	
EC4	.860	
EC5	.883	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Factor 1 includes EC1 & EC2.

EC1: My club uses online calendars to announce and invite people to Rotary events or meetings.

EC2: My club should use online calendars to announce and invite people to Rotary events or meetings.

Factor 2 includes EC3, EC4, & EC5.

EC3: It would be terrific if I could download or subscribe to online Rotary event calendars.

EC4: I want my club's events to appear in an online district calendar.

EC5: I want to be able to search and register online for Rotary events created by my district or other clubs in my district.

The difference between factor 1 and factor 2 appear to be that factor one focuses specifically at the club level, while factor 2 focuses on the broader Rotary event universe.

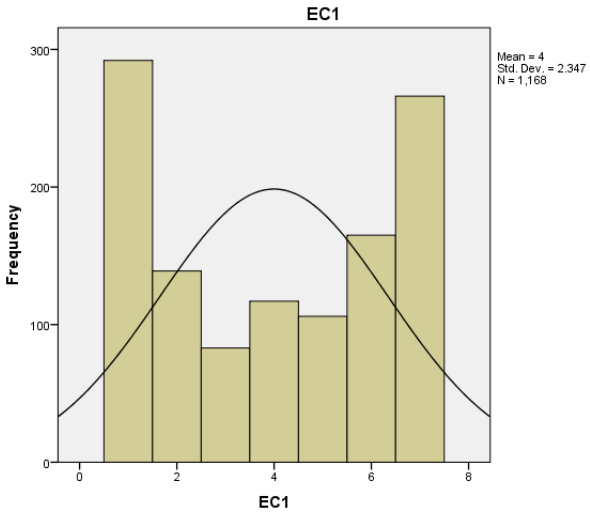
Each factor was then checked independently for reliability.

Reliability Statistics		
	Cronbach's Alpha	Items
Factor 1	.615	EC1 & EC2
Factor 2	.822	EC3, EC4, & EC5

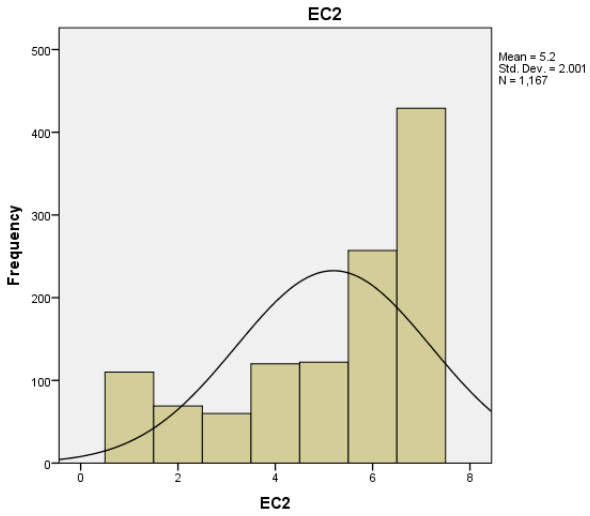
Factor 1 had a fairly low but acceptable reliability score.

A graphical analysis of EC1 and EC2 reveals why reliability was low for this factor.

EC1 appears to be evenly distributed across the mean, however the majority of the scores are at the extremes; suggesting that people felt very strongly about this question on both sides of the scale.



EC2 was heavily skewed to the right (or positive side of the scale) indicating a stronger desire by Rotarians to have their clubs use online calendars to announce events.



Factor 2 had more than 2 question items, but it was not possible to improve the reliability of this factor by removing any one question item.

Factor 1 was computed as:

(EC1+EC2)/2 [ClubEC]

Factor 2 was computed as:

(EC3+EC4+EC5)/3 [RotaryEC]

Communicating with Rotary Affiliates [CRA]

Only one factor was extracted:

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Reliability for this two question construct was .735.

Reliability Statistics	
Cronbach's Alpha	N of Items
.735	2

CRA was computed as:

(CRA1+CRA2)/2

Rotarian Directory [RD]

Only one factor was extracted:

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Reliability for this construct was a very high .921, with no possible improvements from deleting items.

Reliability Statistics

Cronbach's Alpha	N of Items
.921	4

Item#	Cronbach's Alpha if Item Deleted
RD1	.900
RD2	.887
RD3	.884
RD4	.917

RD was calculated as:

(RD1+RD2+RD3+RD4)/4

Consolidate/Integrate Databases [CID]

Only one factor was extracted:

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

This construct had a good reliability score of .798.

Reliability Statistics

Cronbach's Alpha	N of Items
.798	6

Reliability could be improved by deleting CID1 & CID2, but the improvement is negligible.

Item#	Cronbach's Alpha if Item Deleted
CID1	.802
CID2	.839
CID3	.736
CID4	.731
CID5	.741
CID6	.741

CID was calculated as:

(CID1+CID2+CID3+CID4+CID5+CID6)/6

Dislocated Information [DI]

Only one factor was extracted:

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

This construct had a good reliability score of .824.

Reliability Statistics

Cronbach's Alpha	N of Items
.824	5

No improvement could be made by removing items.

Item#	Cronbach's Alpha if Item Deleted
DI1	.780
DI2	.771
DI3	.773
DI4	.804
DI5	.816

DI was calculated as:

(DI1+DI2+DI3+DI4+DI5)/5

Privacy [PRIV]

During the pilot test, privacy broke into two constructs: online privacy in general and privacy concerns related directly to Rotary.

With the larger data set however, the two constructs emerged as a single idea.

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Reliability scores for the entire privacy group were .700.

Reliability Statistics

Cronbach's Alpha	N of Items
.700	4

Improvements to the scale could be made by removing OPRIV1, however the importance of this question item is strong enough that sacrificing some reliability for knowledge makes sense here.

Item#	Cronbach's Alpha if Item Deleted
OPRIV1	.788
OPRIV2	.654
RPRIV1	.522
RPRIV2	.507

OPRIV1: It's very important to me that my online communications are private.

OPRIV2: I am comfortable making online purchases or donations with organizations I trust.

RPRIV1: I would trust Rotary to protect my personal contact information if I supplied it to them online.

RPRIV2: I trust Rotary to protect my financial security if I make online donations or payments.

PRIV was calculated as:

(OPRIV1+ OPRIV2+RPRIV1+ RPRIV2)/4

Email Traditionalists [ET]

Only one factor was extracted:

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

This construct was not deemed sufficiently reliable to warrant further analysis, since the reliability score fell below the 0.6 threshold.

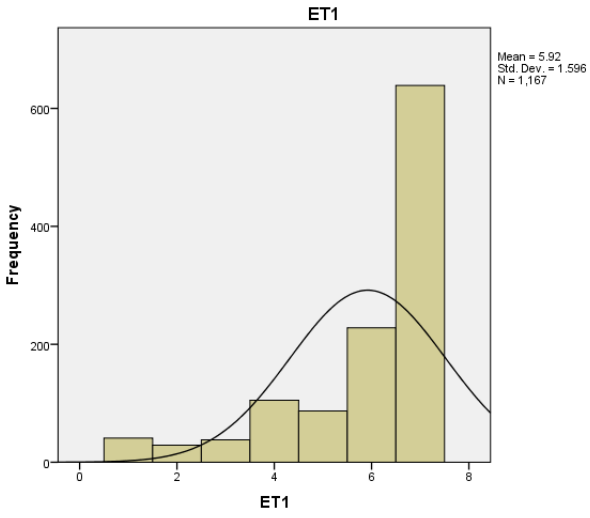
Reliability Statistics

Cronbach's Alpha	N of Items
.528	2

Since only two question items exist in this construct it is impossible to improve the reliability of this scale.

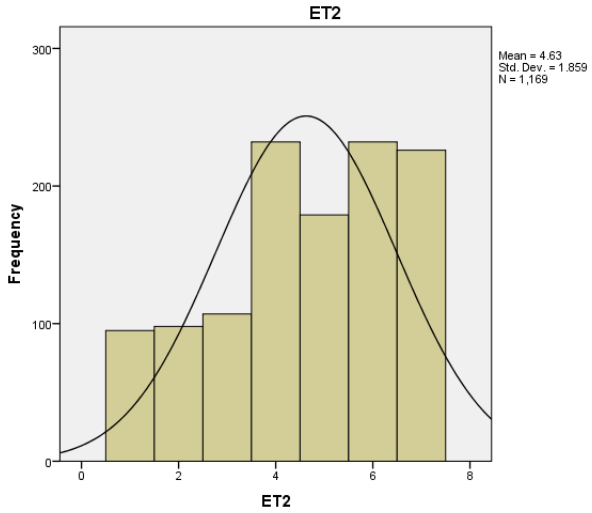
After examining the frequency distributions for ET1, one thing becomes very clear in the composite data set:

- The majority of Rotarians (54.4%) prefer to use email over social media platforms to communicate with each other. (ET1)



There are several questions that arise from this, for example how this affects other scale variables, or how much age or years of service are factors in terms of how this question is viewed.

ET2 was heavily skewed to the right as well, but the distribution of the points was much more even.



The question item itself (ET2) suffers from some problems in so much as it's not very clear (on post-hoc examination) what the purpose of the question really is. Is it asking about time or how Rotarians prefer to communicate?

> *ET2: I don't have time to visit Rotary websites and prefer to use email to communicate with other Rotarians.*

From this standpoint: mea culpa.

Club Engagement [CE]

Only one factor was extracted:

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

Reliability for this construct was .823.

Reliability Statistics

Cronbach's Alpha	N of Items
.823	5

Reliability for this construct could be improved to .911 by removing CE5.

Item#	Cronbach's Alpha if Item Deleted
CE1	.730
CE2	.725
CE3	.794
CE4	.726
CE5	.911

CE was calculated as:

(CE1+CE2+CE3+4+CE5)/5

Other Variables

Other variables included in the survey include several categorical variables and some variables related to social media use demographics.

Online Rotary Community

This is a yes/no demographic.

A coding error was discovered part way through the data collection process and as a result 377 samples for this variable will be excluded from further analysis.

553 (73.8%) respondents indicated they are not part of an online Rotary community, and 196 (26.2%) indicate they are (n=749).

Social Media Presence

This is another yes/no demographic. This variable indicates whether respondents use a particular social media platform.

Platform	Yes	No	% Yes
Facebook	617	557	52.6%
LinkedIn	362	812	30.8%
Google+	128	1046	10.9%
Twitter	127	1047	10.8%
Other SM Site	64	1110	5.5%
RenRen	1	1173	0.1%

More than half of all Rotarians claim to use Facebook in this sample, although not terribly often as is demonstrated in the next section.

Social Media Use

These 5-point question items designed to measure Rotarian use of major social media platforms.

There are five distinct answer choices:

- 1 - Never
- 2 - Rarely
- 3 - Every Few Days
- 4 - Once or Twice Daily
- 5 - Throughout the Day

Platform	1	2	3	4	5	% above three (Daily Use)
Facebook	389	239	213	162	112	24.6%
Google+	770	124	73	40	25	6.3%
LinkedIn	574	236	184	42	20	5.8%
Other SM Site	699	203	67	29	17	4.5%
Twitter	813	134	45	23	19	4.1%

Since the majority of responses are less than daily use, each variable was recalculated into two categories: daily use (1) and other (0).

Avenues of Service

This is a yes/no demographic based on whether respondents associate themselves with the activities of each avenue of service or not.

Platform	Yes	No	% Yes
Community	661	513	56.3%
Club	650	524	55.4%
International	402	513	34.2%
Vocational	362	812	30.8%
New Generations	213	961	18.1%

Because the distributions were all less than 50% except for community service and club service, another variable was calculated to determine whether Rotarians participate in more than one avenue. 51.8% participate in at least two avenues of service.

Correlation (Relationship) Matrix

Correlation testing is used to discover whether two variable pairs have a statistically significant relationship with one another, as well as describes the nature of that relationship.

There are three ways to look at correlations:

- As one variable increases, so does the other variable. (Positive relationship)
- As one variable increases, the other variable decreases (Negative relationship)
- There is no relationship.

If a correlation exists between two variables, we cannot say that one variable causes the other to increase or decrease. We simply know whether there is a relationship and the directional nature of the relationship (+/-/0).

It is possible if a correlation exists that both variables might have a relationship by chance. That is to say, the presence of one variable does not necessarily cause the other variable to manifest in one direction or another, and there may be other factors (perhaps unseen) which influence or cause both variables to have the relationship they do.

For a relationship to be statistically significant it must meet specific criteria. In social science research, the generally accepted minimum level of confidence for a statistical test is 95%, or said another way, social sciences allow for a maximum 5% chance of error for a result to be considered statistically significant ($p < .05$).

With specific respect to correlations there are also degrees of strength. There are no hard and fast rules regarding how strong a relationship is, but as a general rule of thumb:

- A correlation of less than 30% is considered a weak correlation.
- A correlation > 30% and < 50% is considered moderately related.
- A correlation > 50% is considered strong.

Wikipedia has done a very good job of graphically explaining what a correlation looks like:

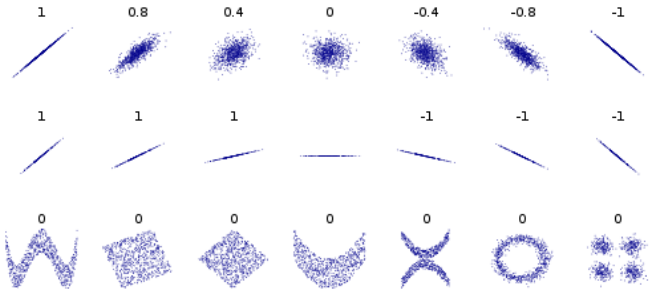


Figure 2 - Correlation and Non-Correlation Shapes (Wikipedia)

The first row shows how the points of two variables overlap in two overlaid X/Y scatter plots and the associated correlation score between those two variables. Notice the points come closer together as the relationship increases either toward 1 or toward -1.

The second row shows what happens if the points overlay perfectly regardless of the direction of the relationship. That is, if the points are very close together, the relationship approaches 1:1 or -1:-1.

The third row presents hypothetical examples where no correlation exists. Notice that the graphs in this row each take an entirely different shape, but the shape is not generally linear.

Fifteen distinct scale variables became evident from the reliability and validity analysis. To summarize this, the construct names and associated abbreviations are provided (along with their Chronbach Alpha reliability scores) in this table:

Variable	Abbreviation	α
Rotarian Directory	**RD**	.921
Teach as Subject Matter Experts	**SME_Teach**	.900
Learn from Subject Matter Experts	**SME_Learn**	.861
Dislocated Information	**DI**	.824
Club Engagement	**CE**	.823
Rotary Event Calendar	**RotaryEC**	.822
Consolidate/Integrate Databases	**CID**	.798
Web Conferencing	**CONF**	.776
Communicating with Rotary Affiliates	**CRA**	.735
Inbound News/Information	**INI**	.717
Online Privacy	**PRIV**	.700
Project Partners/Matching Grants	**PPMG**	.656
Discussion/Message Boards	**DB**	.625
Brainstorming/Idea Generation	**BIG**	.620
Club Event Calendar	**ClubEC**	.615

Table 1 - Scale Variables (sorted by α descending)

Statistically speaking, correlations of scale variables can only correctly be calculated against other scale variables, and only with the same range limits. In this study all scale variables could score as low as 1 and as high as 7; or said another way, use a 7-point Likert scale.

Categorical variables (including demographics) are (1) not scale variables, and (2) contain ranges of choices that don't operate on 7-point scales, and hence it is not possible to accurately test whether there is a relationship between these categorical variables and the fifteen scale variables listed in Table 1 above.

There are statistical tests which can be used to compare scale variables against categorical variables, and this will be done in later sections of this document.

With this in mind, let's take a look at the correlations between the fifteen scale variables and see what they tell us.

Spearman's rho	BIG	DB	PPMG	CONF	SME_Learn	SME_Teach	INI	ClubEC	RotaryEC	CRA	RD	CID	DI	PRIV	CE
Brainstorming/Idea Generation		.419	.345	.381	.381	.293	**.586**	.180	.381	.224	.336	.261	~~.008~~	.205	.286
Sig. (2-tailed)	~~1.000~~	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	~~.786~~	.000	.000
N	1167	1128	1129	1123	1151	1152	1153	1155	1148	1142	1153	1089	1102	1144	1115
Discussion/Message Boards	.419		.367	**.623**	**.508**	.376	.496	.182	.439	.372	.433	.273	~~.034~~	.177	.402
Sig. (2-tailed)	.000	~~1.000~~	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	~~.259~~	.000	.000
N	1128	1133	1098	1090	1117	1119	1119	1122	1114	1110	1120	1061	1074	1111	1083
Project Partners/Matching Grants	.345	.367		.326	.459	.290	.416	.149	.260	.275	.247	.182	~~-.029~~	.166	.475
Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	~~.335~~	.000	.000
N	1129	1098	1136	1095	1126	1121	1121	1124	1116	1110	1122	1061	1073	1114	1079
Web Conferencing	.381	**.623**	.326		**.542**	.301	.448	.170	.485	.391	.468	.353	.139	.261	.475
Sig. (2-tailed)	.000	.000	.000	~~1.000~~	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
N	1123	1090	1095	1129	1116	1114	1116	1118	1109	1106	1115	1052	1069	1106	1079
Learn from Subject Matter Experts	.381	**.508**	.459	**.542**		.305	.478	.148	**.546**	.320	**.547**	.464	.221	.281	.417
Sig. (2-tailed)	.000	.000	.000	.000	~~1.000~~	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
N	1151	1117	1126	1116	1158	1143	1146	1146	1138	1133	1144	1081	1094	1135	1106
Teach as Subject Matter Experts	.293	.376	.290	.301	.305		.464	.151	.208	.375	.210	.152	.066	.086	.324
Sig. (2-tailed)	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.000	.000	.000	.000	.029	.004	.000
N	1152	1119	1121	1114	1143	1159	1145	1147	1139	1134	1145	1083	1095	1136	1110
Inbound News/Information	**.586**	.496	.416	.448	.478	.464		.205	.415	.427	.367	.294	.063	.232	.402
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.000	.000	.000	.038	.000	.000
N	1153	1119	1121	1116	1146	1145	1160	1149	1140	1135	1146	1082	1096	1137	1110
Club Event Calendar	.180	.182	.149	.170	.148	.151	.205		.345	.147	.211	.175	~~.049~~	.210	.089
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.000	.000	~~.101~~	.000	.003
N	1155	1122	1124	1118	1146	1147	1149	1162	1142	1137	1148	1084	1099	1140	1110
Rotary Event Calendar	.381	.439	.260	.485	**.546**	.208	.415	.345		.284	**.587**	**.531**	.271	.333	.386
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.000	.000	.000	.000
N	1148	1114	1116	1109	1138	1139	1140	1142	1154	1128	1140	1081	1091	1133	1103
Communicating with Rotary Affiliates	.224	.372	.275	.391	.320	.375	.427	.147	.284		.296	.175	.082	.113	**.632**
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.007	.000	.000
N	1142	1110	1110	1106	1133	1134	1135	1137	1128	1148	1136	1071	1085	1125	1096
Rotarian Directory	.336	.433	.247	.468	**.547**	.210	.367	.211	**.587**	.296		**.586**	.319	.380	.406
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.000	.000
N	1153	1120	1122	1115	1144	1145	1146	1148	1140	1136	1160	1083	1097	1137	1108
Consolidate/Integrate Databases	.261	.273	.182	.353	.464	.152	.294	.175	**.531**	.175	**.586**		**.547**	.371	.296
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	~~1.000~~	.000	.000	.000
N	1089	1061	1061	1052	1081	1083	1082	1084	1081	1071	1083	1095	1037	1074	1049
Dislocated Information	~~.008~~	~~.034~~	~~-.029~~	.139	.221	.066	.063	~~.049~~	.271	.082	.319	**.547**		.173	.164
Sig. (2-tailed)	~~.786~~	~~.259~~	~~.335~~	.000	.000	.029	.038	~~.101~~	.000	.007	.000	.000	~~1.000~~	.000	.000
N	1102	1074	1073	1069	1094	1095	1096	1099	1091	1085	1097	1037	1109	1091	1060
Online Privacy	.205	.177	.166	.261	.281	.086	.232	.210	.333	.113	.380	.371	.173		.182
Sig. (2-tailed)	.000	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000	.000	.000	~~1.000~~	.000
N	1144	1111	1114	1106	1135	1136	1137	1140	1133	1125	1137	1074	1091	1151	1100
Club Engagement	.286	.402	.231	.475	.417	.324	.402	.089	.386	**.632**	.406	.296	.164	.182	
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000	~~1.000~~
N	1115	1083	1086	1079	1106	1110	1110	1110	1103	1096	1108	1049	1060	1100	1122

Brainstorming/Idea Generation [BIG]

Since all but one of the scale variables have a correlation with BIG, it makes sense to look at the strength order of the correlations in the table.

Variable	Brainstorming/Idea Generation	Sig. (2-tailed)	N
INI	**.586**	.000	1153
DB	.419	.000	1128
CONF	.381	.000	1123
SME_Learn	.381	.000	1151
RotaryEC	.381	.000	1148
PPMG	.345	.000	1129
RD	.336	.000	1153
SME_Teach	.293	.000	1152
CE	.286	.000	1115
CID	.261	.000	1089
CRA	.224	.000	1142
PRIV	.205	.000	1144
ClubEC	.180	.000	1155
DI	.008	~~.786~~	1102

What this table explains is that Brainstorming/Idea Generation has a positive relationship with thirteen components, or said another way, the thirteen components related to BIG are critical to it.

Examining each of the thirteen components that do have a relationship, Rotarians who do a lot of brainstorming online also have a strong propensity to need news and information [INI] transmitted to them. These Rotarians also tend to use discussion boards, web conferencing, have a desire to learn from subject matter experts, would like to have an online calendar of RI and district events, look for and work with project partners online, and possess a strong desire to have a directory of Rotarians. This covers the strong and moderate correlations.

These Rotarians also have some desire to act as subject matter experts, be engaged with their clubs activities, wish that Rotary databases were more consolidated, tend to engage with Rotary affiliates, express a modest desire to protect their online privacy, and have some interest in an online calendar for their club.

76.7% of the sample reported at least some desire to brainstorm online, since a positive score for BIG constitutes any score greater than 4. (4 being neutral on a 7-point scale.)

When we examine the demographic variables against this construct, it will be possible to identify which Rotarians identify strongly with BIG.

Brainstorming/Idea Generation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	9	.8	.8	.8
	1.33	6	.5	.5	1.3
	1.67	16	1.4	1.4	2.7
	2.00	22	1.9	1.9	4.5
	2.33	19	1.6	1.6	6.2
	2.67	27	2.3	2.3	8.5
	3.00	54	4.6	4.6	13.1
	3.33	57	4.9	4.9	18.0
	3.67	57	4.9	4.9	22.9
	4.00	60	5.1	5.1	28.0
	4.33	65	5.5	5.6	33.6
	4.67	85	7.2	7.3	40.9
	5.00	96	8.2	8.2	49.1
	5.33	92	7.8	7.9	57.0
	5.67	110	9.4	9.4	66.4
	6.00	104	8.9	8.9	75.3
	6.33	97	8.3	8.3	83.6
	6.67	70	6.0	6.0	89.6
	7.00	121	10.3	10.4	100.0
	Total	1167	99.4	100.0	
Missing	System	7	.6		
Total		1174	100.0		

This battery of tests will be performed later in the document in order to consolidate the analysis, but as an example, Rotarians do not treat BIG differently among categories of Age (p=.563) or Years of Service (p=.506)

Since the prevailing rhetoric among Rotarians is that as age or years of service increases, online presence decreases, these two demographic variables will be compared for each of the fifteen constructs, in-line with their correlation tables, in order to see what if any variables actually line up with this hypothesis.

Discussion/Message Boards [DB]

DB also demonstrates a positive relationship with thirteen variables.

Variable	Discussion/Message Boards	Sig. (2-tailed)	N
CONF	**.623**	.000	1090
SME_Learn	**.508**	.000	1117
INI	.496	.000	1119
RotaryEC	.439	.000	1114
RD	.433	.000	1120
BIG	.419	.000	1128
CE	.402	.000	1083
SME_Teach	.376	.000	1119
CRA	.372	.000	1110
PPMG	.367	.000	1098
CID	.273	.000	1061
ClubEC	.182	.000	1122
PRIV	.177	.000	1111
DI	.034	~~.259~~	1074

In this case, Rotarians who use discussion boards also have a strong propensity to use web conferencing and a strong desire to learn from subject matter experts.

Among these Rotarians, there is a fairly strong need for news and information, an online calendar of Rotary and district events, desire for a Rotarian Directory, a propensity to brainstorm online and be engaged with their clubs, some propensity to act as subject matter experts, to communicate with Rotary affiliates, and look for and work with project partners.

There is a significant difference between categories of years of service for discussion boards (p<.000).

- Rotarians with less than one year of service were significantly more likely to use discussion boards than Rotarians with eight or more years of service.
- Rotarians with 1-3 years of service were significantly more likely to use discussion boards than Rotarians with 25 or more years of service.

The sum of Rotarians with less than four years of service is 226, and represents 20.1% of the sample.

As for age, there are some very interesting statistics as well; beginning with the 18-29 age group having no significant differences with any other age category.

The statistical difference between ages is actually between the 30-49 age group (a 19 year range) and the 50 plus group (p<.000). This is fascinating because although the hyperbole about ages generally holds true here, the cutoff line is 50 years old; MUCH higher than many Rotarians might have predicted. Rotarians between 30 and 49 constitute 23.1% of the sample.

For a more complete analysis on the propensity to use discussion boards however, we have to look at the frequency distributions of scores for DB.

Remember that the scores for any scale variable in this study are calculated as the average of a group of questions (in this case four separate questions representing DB), and hence the range of possible scores will not be strictly limited to integers.

The percentage of Rotarians who use discussion boards in this sample is 46.1%; another astonishing statistic in light of the prevailing rhetoric.

Discussion/Message Boards					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	14	1.2	1.2	1.2
	1.25	8	.7	.7	1.9
	1.50	19	1.6	1.7	3.6
	1.75	16	1.4	1.4	5.0
	2.00	29	2.5	2.6	7.6
	2.25	31	2.6	2.7	10.3
	2.50	55	4.7	4.9	15.2
	2.75	63	5.4	5.6	20.7
	3.00	68	5.8	6.0	26.7
	3.25	60	5.1	5.3	32.0
	3.50	81	6.9	7.1	39.2
	3.75	61	5.2	5.4	44.6
	4.00	88	7.5	7.8	52.3
	4.25	81	6.9	7.1	59.5
	4.50	82	7.0	7.2	66.7
	4.75	76	6.5	6.7	73.4
	5.00	52	4.4	4.6	78.0
	5.25	54	4.6	4.8	82.8
	5.50	52	4.4	4.6	87.4
	5.75	29	2.5	2.6	89.9
	6.00	30	2.6	2.6	92.6
	6.25	26	2.2	2.3	94.9
	6.50	20	1.7	1.8	96.6
	6.75	10	.9	.9	97.5
	7.00	28	2.4	2.5	100.0
	Total	1133	96.5	100.0	
Missing	System	41	3.5		
Total		1174	100.0		

So, although the propensity is for 30-49 year olds with 0-3 years of service to use online discussion boards, and a comparative lack of use for Rotarians 50+, there is still a startling number of Rotarians who use online discussion boards in this sample (46.1%).

Project Partners/Matching Grants [PPMG]

PPMG did not exhibit any strong correlations, nor did the data reveal much interest within the sample.

Variable	Project Partners/Matching Grants	Sig. (2-tailed)	N
CE	.475	.000	1079
SME_Learn	.459	.000	1126
INI	.416	.000	1121
DB	.367	.000	1098
BIG	.345	.000	1129
CONF	.326	.000	1095
SME_Teach	.290	.000	1121
CRA	.275	.000	1110
RotaryEC	.260	.000	1116
RD	.247	.000	1122
CID	.182	.000	1061
PRIV	.166	.000	1114
ClubEC	.149	.000	1124
DI	-.029	~~.335~~	1073

Those Rotarians which do look for project partners and matching grants online consist of 20.3% of the sample. These Rotarians tend to be engaged with their clubs, have an interest in learning from experts, desire news and information, are willing to participate in online discussion boards, brainstorm online, and are willing to participate in web conferences.

There is no significant difference for this construct across categories of service years or age, and this might be partially due to the lack of interest in the construct.

Project Partners/Matching Grants					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	161	13.7	14.2	14.2
	1.50	60	5.1	5.3	19.5
	2.00	178	15.2	15.7	35.1
	2.50	138	11.8	12.1	47.3
	3.00	149	12.7	13.1	60.4
	3.50	81	6.9	7.1	67.5
	4.00	132	11.2	11.6	79.1
	4.50	55	4.7	4.8	84.0
	5.00	63	5.4	5.5	89.5
	5.50	49	4.2	4.3	93.8
	6.00	36	3.1	3.2	97.0
	6.50	14	1.2	1.2	98.2
	7.00	20	1.7	1.8	100.0
	Total	1136	96.8	100.0	
Missing	System	38	3.2		
Total		1174	100.0		

Web Conferencing [CONF]

The relationship between DB and CONF has already discussed. The next variable in this correlation table is learning from subject matter experts, which has a very strong correlation, suggesting that Rotarians are willing to participate in online conferences to learn from experts. These same Rotarians also seem to need an online calendar to know when to participate in these Rotary events.

Variable	Web Conferencing	Sig. (2-tailed)	N
DB	**.623**	.000	1090
SME_Learn	**.542**	.000	1116
RotaryEC	.485	.000	1109
CE	.475	.000	1079
RD	.468	.000	1115
INI	.448	.000	1116
CRA	.391	.000	1106
BIG	.381	.000	1123
CID	.353	.000	1052
PPMG	.326	.000	1095
SME_Teach	.301	.000	1114
PRIV	.261	.000	1106
ClubEC	.170	.000	1118
DI	.139	.000	1069

Rotarians reporting higher levels of CONF use tend to be moderately engaged with their club's activities, desire to connect to other Rotarians by looking them up in a Rotarian directory, actively desire news and information be sent to them, tend to work with Rotary affiliates, are looking to brainstorm, would like simpler more consolidated databases, and might even be willing to teach as they become experts in certain Rotary areas. This profile describes a very energetic Rotarian.

What's very interesting here is the evidence which contradicts another common notion among Rotarians; that Rotarians who operate online tend not to be active members. As we say here in France, "*au contraire*".

Here again the distribution of CONF across categories of years of service is significantly different (p<.000). There are some interesting categorical statistics here too.

- Rotarians with less than 1 year of service are significantly more likely to use web conferencing than those with more than eight years of service.

- Rotarians with 1-3 years of service are significantly more likely to use web conferencing than those with 11 or more years of service.

The reason the cutoff line shifts right after 1 year may be due to experience, but clearly there are differences between these years of service categories. Thought of another way, it could well be that web conferencing increases after one year of service as a Rotarian; perhaps because there are existing club projects or other activities that require newer Rotarians to become familiar with web conferencing.

Although I can detect no statistically significant differences between Rotarians with less than one year of service and Rotarians with 1-3 years of service, the mean score for the 1-3 year category (μ=5.0995) is in fact slightly higher than the mean score for then those with less than one year of service (μ =5.0303).

There are also statistically significant differences among categories of age, and here again the 30-49 age group differs significantly and is greater than the 50+ age group with respect to web conferencing usage (p<.000); a similar breakdown as it was for DB.

Again, 48.2% of respondents indicated at least some use of web conferencing; suggesting that although age does make a difference, almost half the sample reports web conferencing use for Rotary purposes.

Web Conferencing					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	45	3.8	4.0	4.0
	1.33	16	1.4	1.4	5.4
	1.67	24	2.0	2.1	7.5
	2.00	56	4.8	5.0	12.5
	2.33	39	3.3	3.5	15.9
	2.67	53	4.5	4.7	20.6
	3.00	81	6.9	7.2	27.8
	3.33	74	6.3	6.6	34.4
	3.67	76	6.5	6.7	41.1
	4.00	98	8.3	8.7	49.8
	4.33	88	7.5	7.8	57.6
	4.67	72	6.1	6.4	64.0
	5.00	79	6.7	7.0	70.9
	5.33	55	4.7	4.9	75.8
	5.67	52	4.4	4.6	80.4
	6.00	82	7.0	7.3	87.7
	6.33	34	2.9	3.0	90.7
	6.67	24	2.0	2.1	92.8
	7.00	81	6.9	7.2	100.0
	Total	1129	96.2	100.0	
Missing	System	45	3.8		
Total		1174	100.0		

Learning from Subject Matter Experts [SME Learn]

This construct has some striking statistics associated with it; beginning with four very strong correlations: Rotarian Directories, Rotary Event Calendars, Web Conferencing, and Online Discussion Boards.

Variable	Learn from Subject Matter Experts	Sig. (2-tailed)	N
RD	**.547**	.000	1144
RotaryEC	**.546**	.000	1138
CONF	**.542**	.000	1116
DB	**.508**	.000	1117
INI	.478	.000	1146
CID	.464	.000	1081
PPMG	.459	.000	1126
CE	.417	.000	1106
BIG	.381	.000	1151
CRA	.320	.000	1133
SME_Teach	.305	.000	1143
PRIV	.281	.000	1135
DI	.221	.000	1094
ClubEC	.148	.000	1146

That is to say, if Rotarians desire to learn from others they consider to be more expert on some Rotary topic than they themselves are, they want to be able to find these experts in a Rotarian directory, see when events are scheduled, participate in web conferences with them, and discuss what they've learned in online discussion forums.

On a more moderate level, these Rotarians seek news and information, believe that Rotary databases should be consolidated, are fairly well engaged with their clubs, regularly brainstorm online, communicate with Rotary affiliates, and have some propensity to teach material they are familiar with.

Not surprisingly, those Rotarians with eleven or more years of service are significantly different than those with 10 or less years of service, and have statistically lower mean scores for this construct.

Learn from Subject Matter Experts					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	47	4.0	4.1	4.1
	1.50	8	.7	.7	4.7
	2.00	66	5.6	5.7	10.4
	2.50	30	2.6	2.6	13.0
	3.00	88	7.5	7.6	20.6
	3.50	43	3.7	3.7	24.4
	4.00	137	11.7	11.8	36.2
	4.50	67	5.7	5.8	42.0
	5.00	141	12.0	12.2	54.1
	5.50	76	6.5	6.6	60.7
	6.00	196	16.7	16.9	77.6
	6.50	51	4.3	4.4	82.0
	7.00	208	17.7	18.0	100.0
	Total	1158	98.6	100.0	
Missing	System	16	1.4		
Total		1174	100.0		

The same cutoff that has appeared in previous constructs applies to the 30-49 and 50+ age groups; also statistically different and higher scores in the lower age groups.

Despite this, a substantial number of Rotarians desire to learn from Rotarian experts: 63.9%.

Teaching as Subject Matter Experts [SME Teach]

Not surprisingly, the number of Rotarians willing to serve as experts is much smaller than those interested in learning, but this group does constitute 13.2% of the sample population.

The correlation coefficients for this construct are all moderate or weak, but this isn't a surprise considering that the population of Rotarians willing to act as experts is comparatively small.

Variable	Teach as Subject Matter Experts	Sig. (2-tailed)	N
INI	.464	.000	1145
DB	.376	.000	1119
CRA	.375	.000	1134
CE	.324	.000	1110
SME_Learn	.305	.000	1143
CONF	.301	.000	1114
BIG	.293	.000	1152
PPMG	.290	.000	1121
RD	.210	.000	1145
RotaryEC	.208	.000	1139
CID	.152	.000	1083
ClubEC	.151	.000	1147
PRIV	.086	.004	1136
DI	.066	.029	1095

Still, those willing to teach have a need for news and information, to participate in online discussion boards, tend to communicate with Rotary affiliates, are fairly engaged with their clubs, are interested in learning from other experts, and are comfortable with web conferencing.

Here we might expect that as age or years of service increase so too will the desire to teach, but in both cases there is no statistically significant categorical difference between ages (p=.122) or years of service (p=.979) with respect to SME Learn (both error probabilities greater than .050).

Teach as Subject Matter Experts					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	459	39.1	39.6	39.6
	1.50	54	4.6	4.7	44.3
	2.00	224	19.1	19.3	63.6
	2.50	53	4.5	4.6	68.2
	3.00	88	7.5	7.6	75.8
	3.50	48	4.1	4.1	79.9
	4.00	77	6.6	6.6	86.5
	4.50	31	2.6	2.7	89.2
	5.00	47	4.0	4.1	93.3
	5.50	15	1.3	1.3	94.6
	6.00	34	2.9	2.9	97.5
	6.50	4	.3	.3	97.8
	7.00	25	2.1	2.2	100.0
	Total	1159	98.7	100.0	
Missing	System	15	1.3		
Total		1174	100.0		

Inbound News & Information [INI]

As previously discussed, INI has a strong correlation with Brainstorming/Idea Generation. The simplest way to explain this is that people need information in order to generate ideas, which is certainly logical.

Variable	Inbound News/Information	Sig. (2-tailed)	N
BIG	**.586**	.000	1153
DB	.496	.000	1119
SME_Learn	.478	.000	1146
SME_Teach	.464	.000	1145
CONF	.448	.000	1116
CRA	.427	.000	1135
PPMG	.416	.000	1121
RotaryEC	.415	.000	1140
CE	.402	.000	1110
RD	.367	.000	1146
CID	.294	.000	1082
PRIV	.232	.000	1137
ClubEC	.205	.000	1149
DI	.063	.038	1096

What's interesting here is how the information is shared. Discussion boards rank first among the moderate correlations followed by both subject matter expert constructs, then web conferencing, then with Rotary affiliates, then Project Partners, followed by a desire to have an online RI and District event calendar.

These Rotarians are also reasonably engaged with their clubs and express a desire for a Rotarian Directory.

Where the statistics get really interesting is examining the frequency distribution of scores for this construct:

Inbound News/Information					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	92	7.8	7.9	7.9
	1.33	28	2.4	2.4	10.3
	1.67	42	3.6	3.6	14.0
	2.00	70	6.0	6.0	20.0
	2.33	75	6.4	6.5	26.5
	2.67	61	5.2	5.3	31.7
	3.00	105	8.9	9.1	40.8
	3.33	61	5.2	5.3	46.0
	3.67	84	7.2	7.2	53.3
	4.00	81	6.9	7.0	60.3
	4.33	83	7.1	7.2	67.4
	4.67	55	4.7	4.7	72.2
	5.00	81	6.9	7.0	79.1
	5.33	56	4.8	4.8	84.0
	5.67	43	3.7	3.7	87.7
	6.00	44	3.7	3.8	91.5
	6.33	36	3.1	3.1	94.6
	6.67	20	1.7	1.7	96.3
	7.00	43	3.7	3.7	100.0
	Total	1160	98.8	100.0	
Missing	System	14	1.2		
Total		1174	100.0		

53.3% of Rotarians in this sample express a lack of desire for online news and information, and 7% are indifferent. 39.7% express interest in online news and information.

This phenomenon is probably explained by the presence of the word "online" in the three question items. That is, the majority of Rotarians may want news and information, but they'd rather have it distributed in some other way.

This is an excellent place for a comparison of age groups and categories of years of service and some fascinating statistics came out of this comparison as well.

First there are no significant differences among categories of years of service (p=.193), which might come as a surprise.

There are significant differences between age groups, but unlike previous constructs, there is no clearly defined age line. Instead this comparison shows generational differences distributed quite unevenly.

- The 18-29 year olds feel differently than the 70+ group, but show no differences with any other group.

- The 40-49 age group also feels differently than the 70+ group, but show no difference with any other group.

All other groups are statistically equivalent with each other. That is to say, those folks who are between 18 and 69 express zero differences between them.

This raises some larger questions which can't be adequately addressed with the current data:

1. Since the scores for INI on the whole are negative, does this mean that Rotarians already feel they have enough information?

2. Since INI is so strongly and positively correlated with BIG, does this mean that Rotarians who don't brainstorm also don't want information, or vice versa, Rotarians who don't want information subsequently don't brainstorm?

Forgive me for offering a colloquialism, but is this condition commensurate with being a RINO?

3. And in this vein, does lack of desire for information effectively classify someone as a know-it-all, or perhaps indifferent Rotarian?

4. Last but not least, is the quality of the news and information provided inciting Rotarians to be less active?

I want to make clear that I cannot address these questions with the current data set, but the data tells me that there are clear questions that should be investigated in more detail with another research study; expressly addressing club turnover, engagement, and activity.

Club Event Calendar [Club EC]

There are some amazing statistics with respect to the frequency distributions of scores for this construct, but there isn't a great deal to talk about with respect to this construct's correlations, since all but one of the correlations are weak or non-existent, and the one moderate correlation is with Rotary Event Calendars.

Variable	Club Event Calendar	Sig. (2-tailed)	N
RotaryEC	.345	.000	1142
RD	.211	.000	1148
PRIV	.210	.000	1140
INI	.205	.000	1149
DB	.182	.000	1122
BIG	.180	.000	1155
CID	.175	.000	1084
CONF	.170	.000	1118
SME_Teach	.151	.000	1147
PPMG	.149	.000	1124
SME_Learn	.148	.000	1146
CRA	.147	.000	1137
CE	.089	.003	1110
DI	.049	~~.101~~	1099

It should come as no surprise that people who desire to have a club event calendar would naturally also want to have a Rotary event calendar, and for this reason these statistics are fairly uninteresting. There are also no significant differences between categories of age (p=.378) or years of service (p=.660) with respect to this construct.

What ***IS*** very interesting is to look at the frequency distribution of scores for this construct, which show that 54.1% of Rotarians would in fact like to have an online club event calendar. (**214 people (18.4%) listed strongly agree for all questions in this construct!**)

Club Event Calendar					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	85	7.2	7.3	7.3
	1.50	22	1.9	1.9	9.2
	2.00	54	4.6	4.6	13.9
	2.50	44	3.7	3.8	17.6
	3.00	69	5.9	5.9	23.6
	3.50	78	6.6	6.7	30.3
	4.00	182	15.5	15.7	46.0
	4.50	68	5.8	5.9	51.8
	5.00	82	7.0	7.1	58.9
	5.50	78	6.6	6.7	65.6
	6.00	124	10.6	10.7	76.2
	6.50	62	5.3	5.3	81.6
	7.00	214	18.2	18.4	100.0
	Total	1162	99.0	100.0	
Missing	System	12	1.0		
Total		1174	100.0		

This is particularly interesting in light of the fact that there are no significant differences between either age groups or years of service; meaning that the use of online club event calendars is acceptable to, and desired by, Rotarians, regardless of age or service time.

Although it is a weak correlation, the fact that Club EC and INI have a positive relationship suggests perhaps that Rotarians may overwhelmingly want an online club event calendar specifically because they're not getting enough club event information in the right places.

Rotary Event Calendar [RotaryEC]

This construct has three very strong correlations with a directory of Rotarians, learning from experts, and consolidating databases.

Variable	Rotary Event Calendar	Sig. (2-tailed)	N
RD	**.587**	.000	1140
SME_Learn	**.546**	.000	1138
CID	**.531**	.000	1081
CONF	.485	.000	1109
DB	.439	.000	1114
INI	.415	.000	1140
CE	.386	.000	1103
BIG	.381	.000	1148
ClubEC	.345	.000	1142
PRIV	.333	.000	1133
CRA	.284	.000	1128
DI	.271	.000	1091
PPMG	.260	.000	1116
SME_Teach	.208	.000	1139

Looking further down the list, these Rotarians have a propensity to use web conferencing, online discussion boards, seek news and information, are engaged with their clubs, do a lot of online brainstorming, would like to see a club event calendar, and express concern for privacy.

These ideas, in the sequence they're listed, appear to express the personality of this segment of the Rotarian population. If I may, this group of Rotarians should probably be called something like the "Automators".

Automators clearly see the benefits of net technology and are probably wondering when and if the remainder of the Rotary population will catch up to the 21st century. They are, to use a marketing term, "early adopters".

Rotary Event Calendar					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	19	1.6	1.6	1.6
	1.33	6	.5	.5	2.2
	1.67	6	.5	.5	2.7
	2.00	22	1.9	1.9	4.6
	2.33	16	1.4	1.4	6.0
	2.67	19	1.6	1.6	7.6
	3.00	37	3.2	3.2	10.8
	3.33	39	3.3	3.4	14.2
	3.67	36	3.1	3.1	17.3
	4.00	62	5.3	5.4	22.7
	4.33	48	4.1	4.2	26.9
	4.67	81	6.9	7.0	33.9
	5.00	96	8.2	8.3	42.2
	5.33	71	6.0	6.2	48.4
	5.67	58	4.9	5.0	53.4
	6.00	167	14.2	14.5	67.9
	6.33	70	6.0	6.1	73.9
	6.67	52	4.4	4.5	78.4
	7.00	249	21.2	21.6	100.0
	Total	1154	98.3	100.0	
Missing	System	20	1.7		
Total		1174	100.0		

What is truly fascinating about this construct is the number of Rotarians who view a consolidated Rotary event calendar favorably. In fact the number is a staggering 75.9%.

Interestingly there is a significant difference between both categories of age and years of service respective to this construct. But given the proportion of the sample that expresses some desire to have a consolidated online event calendar, there appear to be strong disagreements within groups as well as between groups.

Those with 11 or more years of service view this construct significantly differently than those with less than 11 years of service.

Still, the mean scores for each category are fairly close in most cases. It's not the scores that are so different, but rather the dispersion or variance of the data across the mean for each group that is so interesting here.

Rotary Event Calendar				
Years of Service	Mean	N	Difference	Std. Deviation
Less than 1 year	5.8056	60		1.39854
1-3 Years	5.7181	175		1.21054
4-7 Years	5.3737	223		1.45154
8-10 Years	5.3281	127		1.49366
11-15 Years	5.2622	164	*	1.46384
16-25 Years	5.0560	244	*	1.55851
More than 25 Years	4.8180	152	*	1.75289
Total	5.2865	1145		1.51329

Notice that only the last three years of service categories are below the overall mean score, and that every category's average is above the mid-point of four.

The standard deviation (or measure of dispersion from the mean) is roughly 1.5 points out of 7, suggesting wide disagreement within each category as previously discussed.

As for age, every group's mean score was over and above the midpoint of 4. This time the significant difference was between the 30-39 age group, and Rotarians over 40 years old.

Rotary Event Calendar				
Age	Mean	N	Difference	Std. Deviation
18-29	5.7879	11		1.66181
30-39	6.1566	66	*	.98748
40-49	5.6736	191		1.32540
50-59	5.3859	317		1.44570
60-69	5.0018	373		1.57565
70 or more	4.8157	161		1.67120
Total	5.2744	1119		1.52671

After examining the individual means and standard deviations however, it appears that this phenomenon exists because the 30-39 year olds both had higher mean scores as well as much more solidarity within that group; or said another way, a much smaller standard deviation.

None the less, the evidence here is overwhelmingly in favor of an online Rotary event calendar, which should gain fairly broad acceptance in the Rotary community if implemented.

Communicating with Rotary Affiliates [CRA]

CRA shows a very strong correlation with Club Engagement (.632). This statistic by itself suggests that Rotarians who communicate with Rotary affiliates are also highly engaged Rotarians.

Variable	Communicating with Rotary Affiliates	Sig. (2-tailed)	N
CE	**.632**	.000	1096
INI	.427	.000	1135
CONF	.391	.000	1106
SME_Teach	.375	.000	1134
DB	.372	.000	1110
SME_Learn	.320	.000	1133
RD	.296	.000	1136
RotaryEC	.284	.000	1128
PPMG	.275	.000	1110
BIG	.224	.000	1142
CID	.175	.000	1071
ClubEC	.147	.000	1137
PRIV	.113	.000	1125
DI	.082	.007	1085

These Rotarians also need information that they can share, and much of the sharing is done by teaching. These Rotarians also have a propensity to use online discussion boards, and are interested in learning from others. Some of this communication is done through web conferences as well.

The age line that was discussed previously holds true here with the 30-49 age group perceiving this construct differently than the 50+ group, and equally between the 0-7 service years versus the 8+ group.

In this sample, only 22.9% of Rotarians indicate they desire to communicate with Rotary affiliates online. This statistic indicates that either or both of these conditions could exist: (1) online is a troublesome word for Rotarians over 50 with at least eight years' service, or, (2) this same category of Rotarians doesn't tend to interact with Rotary affiliates.

Communicating with Rotary Affiliates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	255	21.7	22.2	22.2
	1.50	90	7.7	7.8	30.1
	2.00	119	10.1	10.4	40.4
	2.50	113	9.6	9.8	50.3
	3.00	117	10.0	10.2	60.5
	3.50	63	5.4	5.5	65.9
	4.00	122	10.4	10.6	76.6
	4.50	47	4.0	4.1	80.7
	5.00	65	5.5	5.7	86.3
	5.50	40	3.4	3.5	89.8
	6.00	50	4.3	4.4	94.2
	6.50	20	1.7	1.7	95.9
	7.00	47	4.0	4.1	100.0
	Total	1148	97.8	100.0	
Missing	System	26	2.2		
Total		1174	100.0		

Rotarian Directory [RD]

Three strong correlations appeared in this list, with Rotary Event Calendars appearing at the top of the list. This is particularly important to note because 75.9% of Rotarians indicated an interest in having an online Rotary event calendar. With respect to a Rotarian directory, one would expect that these two items both need to be addressed, and this proves true since 76.0% of Rotarians also responded favorably to this construct.

Variable	Rotarian Directory	Sig. (2-tailed)	N
RotaryEC	**.587**	.000	1140
CID	**.586**	.000	1083
SME_Learn	**.547**	.000	1144
CONF	.468	.000	1115
DB	.433	.000	1120
CE	.406	.000	1108
PRIV	.380	.000	1137
INI	.367	.000	1146
BIG	.336	.000	1153
DI	.319	.000	1097
CRA	.296	.000	1136
PPMG	.247	.000	1122
ClubEC	.211	.000	1148
SME_Teach	.210	.000	1145

Although I've not analyzed this data yet, consolidating Rotary databases [CID] is also likely to have very favorable support since the correlation is so strong here.

Learning from subject matter experts was covered extensively already, but the Rotarians in support of a Rotarian directory also seem to be very interested in the available online tools; both web conferencing and online discussion boards. These Rotarians are also strongly engaged with their clubs, have a keen sense of privacy, are interested in news and information, brainstorming, and are conscious that much of the information RI provides or requests is not well organized.

Rotarian Directory					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	41	3.5	3.5	3.5
	1.25	1	.1	.1	3.6
	1.50	7	.6	.6	4.2
	1.75	13	1.1	1.1	5.3
	2.00	20	1.7	1.7	7.1
	2.25	14	1.2	1.2	8.3
	2.50	18	1.5	1.6	9.8
	2.75	17	1.4	1.5	11.3
	3.00	25	2.1	2.2	13.4
	3.25	14	1.2	1.2	14.7
	3.50	17	1.4	1.5	16.1
	3.75	29	2.5	2.5	18.6
	4.00	52	4.4	4.5	23.1
	4.25	33	2.8	2.8	25.9
	4.50	35	3.0	3.0	29.0
	4.75	45	3.8	3.9	32.8
	5.00	68	5.8	5.9	38.7
	5.25	61	5.2	5.3	44.0
	5.50	57	4.9	4.9	48.9
	5.75	50	4.3	4.3	53.2
	6.00	119	10.1	10.3	63.4
	6.25	50	4.3	4.3	67.8
	6.50	44	3.7	3.8	71.6
	6.75	51	4.3	4.4	75.9
	7.00	279	23.8	24.1	100.0
	Total	1160	98.8	100.0	
Missing	System	14	1.2		
Total		1174	100.0		

There are significant differences between age groups, but again this is because Rotarians don't tend to agree within their own age groups. Again the 30-39 group has higher scores and more agreement (smaller standard deviation) than all other groups. The mean scores for all age categories were all above the midpoint of 4; with only the 60 plus age group falling below the entire sample's average score.

Rotarian Directory				
Age	Mean	Difference	N	Std. Deviation
18-29	5.8409		11	1.43733
30-39	6.1604	*	67	1.10586
40-49	5.8539		190	1.40013
50-59	5.2759		319	1.57364
60-69	5.0955		377	1.70726
70 or more	4.4550		161	1.86600
Total	5.2538		1125	1.67461

And, there are significant differences between service year categories, again with the difference showing up between those with up to 10 years' service and those with 11 or more years' service.

With this comparison however, the means and standard deviations are clearly different between these two years of service categories. Those with 10 years or less of service scored anywhere between 5.33 and 5.86 on average, while those with 11 or more years of service scored between 4.74 and 5.14 on average.

The dispersion of the data is also fairly wide among all categories; suggesting some disagreement within groups as well.

Rotarian Directory				
Years of Service	Mean	Difference	N	Std. Deviation
Less than 1 year	5.8559		59	1.39365
1-3 Years	5.6207		176	1.51798
4-7 Years	5.4733		225	1.49230
8-10 Years	5.3242		128	1.71330
11-15 Years	5.1377	*	167	1.66820
16-25 Years	5.1364	*	242	1.70534
More than 25 Years	4.7435	*	154	1.84974
Total	5.2817		1151	1.66164

Consolidate/Integrate Databases [CID]

As discussed in the last construct, this construct is also demonstrating some very high correlations; two of which have already been discussed at length. The new entrant is Dislocated Information [DI].

DI differs from CID in that CID was designed to measure the extra work required by Rotarians to keep their clubs' data synchronized with districts and RI, while DI focuses on how difficult it is to manage data flowing to Rotarians from RI. (See Appendix C – Final Quantitative Question Items for more detail regarding these survey questions.)

Variable	Consolidate/Integrate Databases	Sig. (2-tailed)	N
RD	**.586**	.000	1083
DI	**.547**	.000	1037
RotaryEC	**.531**	.000	1081
SME_Learn	.464	.000	1081
PRIV	.371	.000	1074
CONF	.353	.000	1052
CE	.296	.000	1049
INI	.294	.000	1082
DB	.273	.000	1061
BIG	.261	.000	1089
PPMG	.182	.000	1061
ClubEC	.175	.000	1084
CRA	.175	.000	1071
SME_Teach	.152	.000	1083

Returning to CID, 80.6% of the respondents answered this group of questions favorably; denoting huge demand for consolidation of the record trails that stream from clubs to RI.

There are no significant differences among different years of service categories; however, there are significant differences among age groups.

Consolidate/Integrate Databases				
Age	Mean	Difference	N	Std. Deviation
18-29	5.3788		11	.79962
30-39	5.7071		66	.81705
40-49	5.7500		178	.92147
50-59	5.3990	*	297	1.19295
60-69	5.3461	*	353	1.12763
70 or more	4.9412	*	156	1.33223
Total	5.3919		1061	1.15163

Here the data is more mixed. There's generally more agreement within age groups under 50 than there are for those above 50, and the average scores for 18-59 are all above the composite average. The scores drop a bit lower for the 60 plus group, but all of the mean scores are above the mid-point of 4.

Consolidate/Integrate Databases					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	2	.2	.2	.2
	1.17	1	.1	.1	.3
	1.33	3	.3	.3	.5
	1.50	1	.1	.1	.6
	1.67	1	.1	.1	.7
	1.83	2	.2	.2	.9
	2.00	5	.4	.5	1.4
	2.17	3	.3	.3	1.6
	2.33	6	.5	.5	2.2
	2.50	5	.4	.5	2.6
	2.67	9	.8	.8	3.5
	2.83	5	.4	.5	3.9
	3.00	11	.9	1.0	4.9
	3.17	7	.6	.6	5.6
	3.33	9	.8	.8	6.4
	3.50	12	1.0	1.1	7.5
	3.67	15	1.3	1.4	8.9
	3.83	16	1.4	1.5	10.3
	4.00	35	3.0	3.2	13.5
	4.17	21	1.8	1.9	15.4
	4.33	31	2.6	2.8	18.3
	4.50	25	2.1	2.3	20.5
	4.67	34	2.9	3.1	23.7
	4.83	46	3.9	4.2	27.9
	5.00	53	4.5	4.8	32.7
	5.17	53	4.5	4.8	37.5
	5.33	57	4.9	5.2	42.7
	5.50	72	6.1	6.6	49.3
	5.67	74	6.3	6.8	56.1
	5.83	46	3.9	4.2	60.3
	6.00	109	9.3	10.0	70.2
	6.17	59	5.0	5.4	75.6
	6.33	57	4.9	5.2	80.8
	6.50	73	6.2	6.7	87.5
	6.67	43	3.7	3.9	91.4
	6.83	34	2.9	3.1	94.5
	7.00	60	5.1	5.5	100.0
	Total	1095	93.3	100.0	
Missing	System	79	6.7		
Total		1174	100.0		

Dislocated Information [DI]

This construct is very interesting because of its' exclusivity. Four of the constructs under study did not report significant correlations, and there is only one strong and one moderate correlation.

Variable	Dislocated Information	Sig. (2-tailed)	N
CID	**.547**	.000	1037
RD	.319	.000	1097
RotaryEC	.271	.000	1091
SME_Learn	.221	.000	1094
PRIV	.173	.000	1091
CE	.164	.000	1060
CONF	.139	.000	1069
CRA	.082	.007	1085
SME_Teach	.066	.029	1095
INI	.063	.038	1096
ClubEC	.049	~~.101~~	1099
DB	.034	~~.259~~	1074
BIG	.008	~~.786~~	1102
PPMG	-.029	~~.335~~	1073

CID was covered in the last section, so there's no need to revisit it, and RD was also covered previously. What's left to discuss are categorical differences and overall scores for this construct.

57.7% of the respondents answered favorably with respect to this construct; suggesting that there is substantial difficulty locating or getting to Rotary information in an efficient manner.

Dislocated Information					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	14	1.2	1.3	1.3
	1.40	3	.3	.3	1.5
	1.60	14	1.2	1.3	2.8
	1.80	9	.8	.8	3.6
	2.00	14	1.2	1.3	4.9
	2.20	23	2.0	2.1	6.9
	2.40	18	1.5	1.6	8.6
	2.60	24	2.0	2.2	10.7
	2.80	27	2.3	2.4	13.2
	3.00	33	2.8	3.0	16.1
	3.20	24	2.0	2.2	18.3
	3.40	43	3.7	3.9	22.2
	3.60	54	4.6	4.9	27.1
	3.80	54	4.6	4.9	31.9
	4.00	79	6.7	7.1	39.0
	4.20	51	4.3	4.6	43.6
	4.40	60	5.1	5.4	49.1
	4.60	63	5.4	5.7	54.7
	4.80	50	4.3	4.5	59.2
	5.00	47	4.0	4.2	63.5
	5.20	63	5.4	5.7	69.2
	5.40	47	4.0	4.2	73.4
	5.60	49	4.2	4.4	77.8
	5.80	54	4.6	4.9	82.7
	6.00	41	3.5	3.7	86.4
	6.20	24	2.0	2.2	88.5
	6.40	30	2.6	2.7	91.3
	6.60	31	2.6	2.8	94.0
	6.80	10	.9	.9	95.0
	7.00	56	4.8	5.0	100.0
	Total	1109	94.5	100.0	
Missing	System	65	5.5		
Total		1174	100.0		

There are no significant differences among either age groups or years of service categories with respect to this construct, which means there is a general need across both categories to improve website navigation.

Online Privacy [PRIV]

There are no strong correlations between PRIV and any other construct, but there are some moderate correlations between PRIV and Rotarian Directory, CID, and Rotary Event Calendar.

Privacy and RD make a good deal of sense in so much as people want to protect their personal identities, and this is probably equally true for a Rotary Event Calendar. It's interesting that CID correlates here however.

After reexamining the question items for CID, it appears that the concern for privacy respective to CID might come from two CID questions:

1. It would help me if I could get all of my Rotary information from one place with only one user ID and password.

2. It would help me if basic Rotary Information was synchronized across Rotary websites.

From this perspective the correlation makes sense.

Variable	Online Privacy	Sig. (2-tailed)	N
RD	.380	.000	1137
CID	.371	.000	1074
RotaryEC	.333	.000	1133
SME_Learn	.281	.000	1135
CONF	.261	.000	1106
INI	.232	.000	1137
ClubEC	.210	.000	1140
BIG	.205	.000	1144
CE	.182	.000	1100
DB	.177	.000	1111
DI	.173	.000	1091
PPMG	.166	.000	1114
CRA	.113	.000	1125
SME_Teach	.086	.004	1136

There is a very strong desire to protect personal privacy, with 83.4% of respondents answering favorably.

There were no significant differences between age groups or years of service categories.

Online Privacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	.7	.7	.7
	1.50	1	.1	.1	.8
	1.75	5	.4	.4	1.2
	2.00	4	.3	.3	1.6
	2.25	2	.2	.2	1.7
	2.50	21	1.8	1.8	3.6
	2.75	6	.5	.5	4.1
	3.00	12	1.0	1.0	5.1
	3.25	23	2.0	2.0	7.1
	3.50	24	2.0	2.1	9.2
	3.75	22	1.9	1.9	11.1
	4.00	44	3.7	3.8	14.9
	4.25	26	2.2	2.3	17.2
	4.50	41	3.5	3.6	20.8
	4.75	55	4.7	4.8	25.5
	5.00	73	6.2	6.3	31.9
	5.25	47	4.0	4.1	36.0
	5.50	110	9.4	9.6	45.5
	5.75	77	6.6	6.7	52.2
	6.00	115	9.8	10.0	62.2
	6.25	96	8.2	8.3	70.5
	6.50	78	6.6	6.8	77.3
	6.75	58	4.9	5.0	82.4
	7.00	203	17.3	17.6	100.0
	Total	1151	98.0	100.0	
Missing	System	23	2.0		
Total		1174	100.0		

Club Engagement [CE]

Since this is the last construct, the correlations for club engagement have already been discussed respective to all other constructs. None the less, the strength order of correlations provides useful information.

Variable	Club Engagement	Sig. (2-tailed)	N
CRA	**.632**	.000	1096
CONF	.475	.000	1079
SME_Learn	.417	.000	1106
RD	.406	.000	1108
DB	.402	.000	1083
INI	.402	.000	1110
RotaryEC	.386	.000	1103
SME_Teach	.324	.000	1110
CID	.296	.000	1049
BIG	.286	.000	1115
PPMG	.231	.000	1086
PRIV	.182	.000	1100
DI	.164	.000	1060
ClubEC	.089	.003	1110

It is very interesting that club engagement increases substantially when Rotarians communicate with Rotary affiliates. This provides tremendous support for the New Generations avenue of service as a means to drive club engagement or vice versa.

Club Engagement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.60	20	1.7	1.8	1.8
	1.80	9	.8	.8	2.6
	2.00	21	1.8	1.9	4.5
	2.20	31	2.6	2.8	7.2
	2.40	32	2.7	2.9	10.1
	2.60	49	4.2	4.4	14.4
	2.80	77	6.6	6.9	21.3
	3.00	55	4.7	4.9	26.2
	3.20	74	6.3	6.6	32.8
	3.40	60	5.1	5.3	38.1
	3.60	59	5.0	5.3	43.4
	3.80	52	4.4	4.6	48.0
	4.00	73	6.2	6.5	54.5
	4.20	64	5.5	5.7	60.2
	4.40	63	5.4	5.6	65.9
	4.60	65	5.5	5.8	71.7
	4.80	56	4.8	5.0	76.6
	5.00	47	4.0	4.2	80.8
	5.20	48	4.1	4.3	85.1
	5.40	33	2.8	2.9	88.1
	5.60	35	3.0	3.1	91.2
	5.80	37	3.2	3.3	94.5
	6.00	24	2.0	2.1	96.6
	6.20	12	1.0	1.1	97.7
	6.40	26	2.2	2.3	100.0
	Total	1122	95.6	100.0	
Missing	System	52	4.4		
Total		1174	100.0		

Sadly however, only 43.5% of Rotarians felt they were generally engaged with their clubs. There are significant differences between age groups and years of service categories (p<.000). Here again the line divided those Rotarians in the 50 plus group with 8 or more years of service from those under 50 with 0-7 years of service.

Particularly interesting and a bit sad is that those with 8 or more years of service reported generally negative scores on average. This is also true for Rotarians over the age of 60, although much more understandable. Rotarians in the 50-59 age group were neutral on the whole, as were Rotarians in the 4-7 years of service category. Rotarians under 49 reported positive scores, but no score in either demographic was greater than 5.

Club Engagement			
Years of Service	Mean	N	Std. Deviation
Less than 1 year	4.5033	60	1.16357
1-3 Years	4.2438	169	1.18129
4-7 Years	4.0045	223	1.17427
8-10 Years	3.9431	123	1.16493
11-15 Years	3.9215	158	1.10167
16-25 Years	3.8613	235	1.15618
More than 25 Years	3.6883	145	1.12073
Total	3.9777	1113	1.16718

Club Engagement			
Age	Mean	N	Std. Deviation
18-29	4.6400	10	.82084
30-39	4.6471	68	1.34458
40-49	4.3433	187	1.19317
50-59	4.0007	307	1.15510
60-69	3.7702	363	1.04854
70 or more	3.5766	154	1.08416
Total	3.9690	1089	1.16570

These statistics speak to a larger problem that Rotary as a whole has been trying to address for some time now. Whether previous studies have examined this in this statistical detail is impossible for this author to say, but I would encourage any Rotarian reading this to make a serious self-examination of their personal strengths and consider how they might become more engaged, more interested, and more involved. This is your Rotary. Rotary is what you make it to be.

Summary Statistics

With so many constructs, it makes sense to summarize the analysis respective to the percentage of Rotarians who tend to agree with the questions they were asked.

Construct Statistics		Categorical Difference			
Variable	% Agree	Age	Yrs. Svc	Between	Within
PRIV	83.40%	N	N		
CID	80.60%	Y	N	x	x
BIG	76.70%	N	N		
Rotary EC	75.90%	Y	Y		x
RD	75.90%	Y	Y		x
SME Learn	63.90%	Y	Y	x	
DI	57.70%	N	N		
Club EC	54.10%	N	N		
CONF	48.20%	Y	Y	x	
DB	46.10%	Y	Y	x	
CE	43.50%	Y	Y	x	
INI	39.70%	Y	N	x	
CRA	22.90%	Y	Y	x	
PPMG	20.30%	N	N		
SME Teach	13.20%	N	N		

It's also important to demonstrate which constructs were viewed differently with respect to their mean scores. For example, just because a difference exists between categories of age or years of service, in many cases the differences between groups originates from broad disagreement within groups.

Six variables show no differences between or within groups: PRIV, BIG, DI, Club EC, PPMG, & SME Teach. This is in part explained by the sweeping majority of Rotarians that either tended to agree with the construct questions (PRIV, BIG, DI, & Club EC) or disagree with the construct questions (PPMG & SME Teach).

Three variables demonstrate significant differences within groups (CID, Rotary EC, & RD), and in one case also demonstrated differences between groups (CID).

The remaining variables all demonstrated significant differences between groups.

Other Categorical Statistics

Scale variables will be tested against categorical variables to identify whether there are statistically significant differences between categories; beginning for example with the five avenues of service.

Avenues of Service

For each of the avenues of service, respondents were asked to identify whether or not they regularly engage in a given avenue of service; hence the questions were binary, requiring either a yes or no response for each avenue of service.

Club Service and Community Service were the only service avenues with a majority of respondents answering affirmatively, with the other three avenues of service falling below 35% affirmative. Although a variable was previously created to count responses with more than 1 avenue of service, it seemed important to examine the impact of more than one avenue of service excluding club and community service, hence a new variable was calculated:

IF(VOC+INTL+NewG>1) : True (1), False (0)

When this variable was calculated, 21.9% of respondents identified they participate in at least 2 avenues of service from vocational, international, or new generations. Frequency statistics were also captured to identify how many avenues of service respondents indicate they participate in.

A word of caution on this set of statistics: because of the web page coding, a non-response is treated as a zero, and as such these statistics are skewed a bit to the left and I am not able to identify by how much. Please remember that these statistics are only being used to identify differences between categories, not to examine the categories in explicit detail, which would need to be done in a different study.

Vocational Service

	Frequency	Percent
No	812	69.2
Yes	362	30.8

Respondents indicating they participate in Vocational Service, showed significant differences with those who don't across 10 of the 15 scale variables.

Variable	No	Yes	Sig.	Yes>No
CID	5.3240	5.5661	Y	TRUE
RD	5.1950	5.4529	Y	TRUE
BIG	4.8954	5.2179	Y	TRUE
SME Learn	4.7765	5.0154	Y	TRUE
DB	3.9607	4.2493	Y	TRUE
CE	3.9000	4.1349	Y	TRUE
INI	3.5883	4.0185	Y	TRUE
PPMG	3.0109	3.2068	Y	TRUE
CRA	2.9639	3.1955	Y	TRUE
SME Teach	2.2603	2.5492	Y	TRUE
PRIV	5.5324	5.5616	N	TRUE
Rotary EC	5.2438	5.3754	N	TRUE
Club EC	4.5804	4.6125	N	TRUE
DI	4.5319	4.5079	N	FALSE
CONF	4.1457	4.3324	N	TRUE

Most interesting here are the three categories where respondents disagree; specifically Discussion Boards, Club Engagement, and Inbound News/Information. That is, those who indicated they do vocational service tend to express agreement with DB, CE, & INI, where those who didn't indicate they do vocational service have slightly negative responses. The statistical difference here is significant across all three variables (DB<.011, INI<.011, & CE<.004).

Although the means are very close among respondents who do and don't perform vocational service, I'm particularly struck here by the fact that both CE and INI appeared in the list of variables where participants and non-participants express disagreement.

As previously discussed, club engagement appears to be fairly low in this sample (43.5%), and has a moderate positive correlating relationship with INI. The fact that both variables show up here with respect to vocational service should worth making note of. Whether this condition exists respective to the other avenues of service remains to be seen, but I raise the issue to highlight it.

Community Service

Community service has a good deal less difference among scale variables than vocational service. There are differences among seven of the fifteen scale variables. Those answering yes to participating in community service accounted for a majority of the sample.

	Frequency	Percent
No	513	43.7
Yes	661	56.3

Because of the nature of this variable (for many Rotarians a requisite for membership), there isn't a great deal of truly interesting information in the data for most of the variables.

Variable	No	Yes	Sig.	Yes>No
PRIV	5.4345	5.6237	Y	TRUE
BIG	4.8088	5.1393	Y	TRUE
CONF	4.0463	4.3239	Y	TRUE
DB	3.9335	4.1409	Y	TRUE
CE	3.8588	4.0620	Y	TRUE
INI	3.5832	3.8295	Y	TRUE
SME Teach	2.1923	2.4709	Y	TRUE
CID	5.3604	5.4306	N	TRUE
Rotary EC	5.2401	5.3190	N	TRUE
RD	5.2392	5.3015	N	TRUE
SME Learn	4.7645	4.9155	N	TRUE
Club EC	4.5030	4.6583	N	TRUE
DI	4.5659	4.4934	N	FALSE
PPMG	3.0091	3.1199	N	TRUE
CRA	2.9451	3.1066	N	TRUE

There is significant disagreement with respect to DB relative to Rotarians who do and don't do community service. This is very interesting to consider because it suggests that more discussion board use increases community service (or vice versa).

It shouldn't come as a surprise that club engagement differs between those who participate in community service and those who don't. Otherwise, the data has very little else to say here that hasn't already been discussed at length elsewhere.

International Service

International service is much more interesting. Here, those who indicated they do international service had higher scores for every variable than those who don't participate; with statistically significant differences among nine of those variables.

	Frequency	Percent
No	772	65.8
Yes	402	34.2

Although probably not a surprise, those who indicated they participate in international service projects are more inclined both toward club engagement and discussion boards, while those who don't tend to go the other direction.

Variable	No	Yes	Sig.	Yes>No
PRIV	5.4674	5.6849	Y	TRUE
BIG	4.8277	5.3150	Y	TRUE
SME Learn	4.7346	5.0718	Y	TRUE
CONF	4.1173	4.3667	Y	TRUE
DB	3.9258	4.2851	Y	TRUE
CE	3.8741	4.1631	Y	TRUE
INI	3.5783	3.9966	Y	TRUE
PPMG	2.9401	3.3286	Y	TRUE
SME Teach	2.2068	2.6241	Y	TRUE
CID	5.3704	5.4553	N	TRUE
RD	5.2163	5.3854	N	TRUE
Rotary EC	5.2367	5.3764	N	TRUE
Club EC	4.5761	4.6175	N	TRUE
DI	4.4954	4.5809	N	TRUE
CRA	2.9774	3.1477	N	TRUE

Again there is broad and statistically significant disagreement between international service participants and non-participants with respect to both discussion boards and club engagement. This has become a recurring theme among the results across avenues of service.

Club Service

The scores for each scale variable relative to club service are generally very close, yet significant differences exist between those who do club service and those who don't.

	Frequency	Percent
No	524	44.6
Yes	650	55.4

This means that there are big differences within groups for club service but less so between groups. For this reason, club service, like community service, is generally not a good indicator for comparing groups.

Like before, club engagement is positive for club service participants and negative for non-participants.

Variable	No	Yes	Sig.	Yes>No
PRIV	5.5000	5.5750	Y	TRUE
BIG	4.8375	5.1223	Y	TRUE
SME Learn	4.8113	4.8812	Y	TRUE
Club EC	4.5087	4.6558	Y	TRUE
CONF	4.1490	4.2468	Y	TRUE
DB	4.0079	4.0845	Y	TRUE
INI	3.5504	3.8606	Y	TRUE
PPMG	3.0558	3.0848	Y	TRUE
SME Teach	2.3133	2.3777	Y	TRUE
CID	5.3323	5.4554	N	TRUE
Rotary EC	5.2782	5.2896	N	TRUE
RD	5.3250	5.2328	N	FALSE
DI	4.5389	4.5130	N	FALSE
CE	3.8584	4.0656	N	TRUE
CRA	2.9343	3.1176	N	TRUE

New Generations Service

The vast majority of respondents indicated that they do not participate in New Generations projects, and here again the three variables that stick out as critical variables appear to be DB, INI, and CE.

	Frequency	Percent
No	961	81.9
Yes	213	18.1

Given the results from the other service variables, I'm not surprised to see engagement and discussion boards appearing in the list being divided by participants agreeing and non-participants disagreeing.

Variable	No	Yes	Sig.	Yes>No
CID	5.3296	5.7200	Y	TRUE
Rotary EC	5.1979	5.6762	Y	TRUE
BIG	4.8661	5.5798	Y	TRUE
RD	5.2062	5.5778	Y	TRUE
SME Learn	4.7605	5.2548	Y	TRUE
CONF	4.1516	4.4302	Y	TRUE
DB	3.9748	4.3828	Y	TRUE
INI	3.5868	4.3255	Y	TRUE
CE	3.8951	4.3229	Y	TRUE
SME Teach	2.2748	2.6825	Y	TRUE
PRIV	5.5334	5.5778	N	TRUE
DI	4.4878	4.6910	N	TRUE
Club EC	4.5773	4.6493	N	TRUE
PPMG	3.0361	3.2308	N	TRUE
CRA	2.9979	3.2052	N	TRUE

INI also manifests here, which means that New Generations participants need information passed to them in order to function.

Club Engagement & Avenues of Service

The trend on these variables appears to draw a pretty clear line between those Rotarians that are engaged and those that aren't, since CE appeared in every single avenue of service as a major division line separating those who agree they are engaged and those who disagree. In every case, engagement went up if Rotarians participate in service activities.

This is a logical deduction, but what is important about this finding is that it is also statistically significant across every avenue of service with a 99.6% (or better) level of confidence (p<.004).

The message here is clear: if a Rotarian feels disengaged, it is because they're not involved; particularly evident if they're not involved in at least one of the less active service avenues: international, new generations, or vocational.

Discussion Boards & Avenues of Service

The use of online discussion boards also differs substantially across every avenue of service. In every avenue, there are statistically significant differences between those who participate and those who don't, and in all cases except club service, those who participate in service activities tend to agree that online discussion boards are useful, while those that aren't active tend not to.

As previously mentioned, causality or directionality is beyond the scope of what this researcher can handle both technically and capably, but this said, the results raise a question: does service activity drive the use of discussion boards, or does the use of discussion boards drive service activity? Whatever the direction of the answer, or even if the relationship is cyclical, clearly this relationship exists.

Multiple Avenues of Service

Since there is a big difference with respect to club engagement respective to the avenues of service Rotarians participate in, I have taken the time to compare the scale variables across two groupings.

One group represents Rotarians which participate in at least two avenues of service. The other comparison will be between Rotarians who participate in at least two service avenues from International, Vocational, and New Generations; which I refer to as the Key-3. These Key-3 have proven to be much stronger drivers of club engagement.

The purpose of this exercise is to demonstrate how differently Rotarians view the constructs relative to the focus of their service activities. Because of the complexity of this analysis, I apologize in advance for the small data table.

The two significance columns demonstrate whether there is a significant difference between Rotarians who do and don't participate in at least two avenues of service generally (multiple aves), or at least two of the Key-3 avenues of service. Green shaded data in the "Sig" columns demonstrates a statistically significant difference between the Yes and No groups within their columns.

Yellow highlights show which mean scores were higher when comparing the Key-3 to Multiple Avenues of service generally; provided those scores were above 4. If the scores were below 4 (e.g. Rotarians generally disagree with the question statements they were given), then the lower of those scores are highlighted in Blue.

		Multiple Aves				The Key 3			
		N	Mean	Std. Dev	Sig	N	Mean	Std. Dev	Sig
BIG	No	562	4.76	1.512		911	4.87	1.462	
	Yes	605	5.22	1.366	.000	256	5.45	1.338	.000
DB	No	544	3.93	1.401		882	3.96	1.338	
	Yes	589	4.16	1.288	.003	251	4.35	1.344	.000
PPMG	No	551	3.00	1.497		885	3.02	1.516	
	Yes	585	3.14	1.547	.101	251	3.25	1.540	.035
CONF	No	540	4.09	1.608		877	4.15	1.591	
	Yes	589	4.30	1.609	.029	252	4.40	1.665	.030
INI	No	558	3.50	1.638		904	3.57	1.617	
	Yes	602	3.93	1.628	.000	256	4.26	1.638	.000
SME Learn	No	557	4.75	1.790		903	4.77	1.737	
	Yes	601	4.94	1.622	.054	255	5.12	1.567	.002
SME Teach	No	561	2.21	1.507		907	2.26	1.511	
	Yes	598	2.48	1.640	.003	252	2.66	1.785	.001
Club EC	No	558	4.51	1.923		907	4.56	1.877	
	Yes	604	4.67	1.783	.147	255	4.70	1.763	.286
Rotary EC	No	555	5.21	1.543		901	5.24	1.527	
	Yes	599	5.35	1.490	.128	253	5.46	1.469	.038
CRA	No	549	2.92	1.756		893	2.99	1.746	
	Yes	599	3.15	1.765	.026	255	3.18	1.820	.148
RD	No	564	5.25	1.660		905	5.22	1.679	
	Yes	596	5.30	1.671	.570	255	5.45	1.607	.051
CID	No	529	5.32	1.200		851	5.35	1.176	
	Yes	566	5.47	1.086	.035	244	5.58	1.010	.002
DI	No	531	4.53	1.415		865	4.53	1.388	
	Yes	578	4.52	1.370	.832	244	4.50	1.404	.805
PRIV	No	554	5.44	1.302		899	5.51	1.278	
	Yes	597	5.63	1.231	.011	252	5.64	1.233	.156
CE	No	536	3.83	1.199		874	3.91	1.176	
	Yes	586	4.11	1.126	.000	248	4.21	1.114	.000

Although I don't know of a specific statistical test to make this comparison accurately, what I hope to illustrate here is that the Key-3 are very strong predictors of agreement with respect to all but three of the fifteen constructs under study, and two or more service avenues from the broader group tends to better predict disagreement.

Importantly the standard deviations are also much smaller in the Key-3 column regardless of whether Rotarians satisfied the condition of participating in the Key-3 or not, and hence there's generally more agreement within groups of yes or no when the data is viewed this way.

The conclusion here: If we know that the Key-3 service avenues are critical drivers of club engagement, then participation in two or more of the Key-3 also means that these Rotarians are generally more accepting of the constructs under study.

Social Media

52.6% of Rotarians sampled use Facebook, and 30.8% use LinkedIn, yet less than 11% use other social media. Given this, it makes sense to only examine the larger social media platforms relative to the scale variables.

Facebook

The majority of Rotarians sampled report using Facebook; although only 24.6% report daily use as previously stated.

	Frequency	Percent
No	557	47.4
Yes	617	52.6

Since Club Engagement has proven to be such a critical factor to this analysis, one shouldn't be surprised to see it showing up here. Those using Facebook generally report that they feel engaged with their clubs, while those that don't use Facebook tend to feel disengaged.

Variable	No	Yes	Sig.	Yes>No
PRIV	5.3677	5.7005	Y	TRUE
RD	4.8732	5.6382	Y	TRUE
Rotary EC	4.9362	5.6006	Y	TRUE
CID	5.1890	5.5927	Y	TRUE
SME Learn	4.4112	5.2418	Y	TRUE
BIG	4.7381	5.2282	Y	TRUE
CONF	3.7911	4.5721	Y	TRUE
CE	3.4385	4.4436	Y	TRUE
DB	3.7388	4.3315	Y	TRUE
INI	3.2447	4.1506	Y	TRUE
CRA	2.2317	3.7658	Y	TRUE
PPMG	2.8634	3.2592	Y	TRUE
SME Teach	2.0951	2.5799	Y	TRUE
Club EC	4.4799	4.6886	N	TRUE
DI	4.4524	4.5913	N	TRUE

This really shouldn't come as a surprise to the Rotary community, since Facebook is used by $^{1}/_{7}^{th}$ of the world population, and half of Rotarians in this sample. The chances are pretty good that Rotarians cannot conduct service projects without running into someone who uses Facebook.

Granted this study uses data collected from 2011, and is not longitudinal in nature, so one can't predict how the world community will view Facebook in the years to come, but at the present moment it is popular, including among Rotarians. Importantly, Facebook and Club Engagement clearly work together.

LinkedIn

LinkedIn users comprise a smaller proportion of the sample, however these users tend to have much stronger views of the constructs than those who don't use LinkedIn.

	Frequency	Percent
No	812	69.2
Yes	362	30.8

There are statistically significant differences between those who do and don't use LinkedIn for all but two of the scale variables.

Variable	No	Yes	Sig.	Yes>No
PRIV	5.4195	5.8139	Y	TRUE
RD	5.0916	5.6799	Y	TRUE
CID	5.2989	5.6297	Y	TRUE
Rotary EC	5.1790	5.5221	Y	TRUE
BIG	4.9042	5.1991	Y	TRUE
SME Learn	4.7036	5.1750	Y	TRUE
Club EC	4.5088	4.7707	Y	TRUE
CONF	4.0242	4.6142	Y	TRUE
CE	3.7729	4.4207	Y	TRUE
DB	3.9312	4.3106	Y	TRUE
INI	3.5805	4.0371	Y	TRUE
CRA	2.7434	3.6849	Y	TRUE
SME Teach	2.2559	2.5590	Y	TRUE
DI	4.4732	4.6399	N	TRUE
PPMG	3.0255	3.1752	N	TRUE

Since LinkedIn acts essentially as a glorified discussion board, it's not surprising to see that construct showing up prominently here.

What's more fascinating however is just like Facebook users, LinkedIn users also generally report being more engaged with their clubs.

The key questions then become:

1. How many LinkedIn users are not Facebook users? (n=73; 6.2%)
2. How many Facebook users are not LinkedIn users? (n=328; 27.9%)
3. How many Rotarians use both? (n=289; 25.4%)
4. How many Rotarians use one or both? (n=690; 58.8%)

Cross-Tabs		LinkedIn	
		No	Yes
Facebook	No	484	73
	Yes	328	289

The answer to the last question is very interesting here, because this means that 58.8% of Rotarians sampled use at least one of these two platforms.

As a follow up cross-tabs were also calculated with Facebook*Twitter and Facebook*Google+. Rotarians who report only Twitter (n=15; 1.2%) or only Google+ (n=50; 4.2%) use accounted for a very negligible proportion of the sample.

In the case of Google+, the ratio of Google+ only to Google+*Facebook was much higher (39.1%) than for Twitter only to Twitter*Facebook. I expect some of this phenomenon could be explained by the novelty of Google+ being released earlier this year. Early adopters in many cases were anxious to try a Facebook alternative[7], and hence may have given up their Facebook accounts early on.

Daily Facebook Usage

A variable was previously calculated to compare daily and non-daily users of Facebook. A majority of the sample indicated that they have a Facebook account, and slightly more than one quarter of Rotarians sampled use Facebook daily.

There are statistically significant differences between Rotarians who use Facebook daily and those who don't across fourteen of fifteen constructs. Daily Facebook users had higher scores across every construct under study.

Variable	No	Yes	Sig.	Yes>No
RD	5.0711	5.9435	Y	TRUE
Rotary EC	5.0957	5.9148	Y	TRUE
CID	5.3010	5.7240	Y	TRUE
PRIV	5.4870	5.7203	Y	TRUE
SME Learn	4.6642	5.4647	Y	TRUE
BIG	4.8787	5.3801	Y	TRUE
Club EC	4.5281	4.7930	Y	TRUE
CONF	3.9791	4.9311	Y	TRUE
CE	3.6881	4.8910	Y	TRUE
DB	3.8655	4.6489	Y	TRUE
INI	3.4563	4.5929	Y	TRUE
CRA	2.6190	4.4192	Y	TRUE
PPMG	2.9612	3.4228	Y	TRUE
SME Teach	2.2213	2.7714	Y	TRUE
DI	4.4910	4.6392	N	TRUE

That statement is not terribly striking by itself, but what is striking is that there are no significant differences with respect to dislocated information. In other words, Rotarians generally feel (exclusive of their use of Facebook or not) that online Rotary information is difficult to locate from various sources including, but not limited to, Rotary.org.

Since Club Engagement has been a central theme to this study, one should take special note of the vast differences between the two categories with respect to this variable. Rotarians who use Facebook daily are significantly more engaged with their clubs (p<.000).

These Rotarians also appear to be those who communicate with Rotary affiliates[8].

Daily LinkedIn Usage

After examining the data carefully, only a handful of Rotarians in this sample use LinkedIn daily; just 62 out of 1174, or 5.3%. For this reason I would caution against examining this data in any substantial detail.

I do think highlighting where there are no statistically significant differences might be useful here. To that end, there is no significant difference between daily and non-daily users of LinkedIn respective to PPMG, Rotary EC, DI, or PRIV.

Prefers Email [ET1]

The email traditionalists construct was not statistically reliable and couldn't be calculated into a scale variable with the two question items that were asked.

In order to work with the one question item that was kept, a new variable was calculated. If Rotarians scored greater than 4 on ET1 then they received a value of 1, and anything less than 4 received a value of 0. Note that 112 respondents selected 4 as their choice for this question and hence will be excluded from the analysis and treated as missing data.

Email Preferred					
		Frequency	Percent	Valid %	Cumulative %
Valid	Prefers Social Media	108	9.2	10.2	10.2
	Prefers Email	954	81.3	89.8	100.0
	Total	1062	90.5	100.0	
	Neutral Answers	***112***	***9.5***		
Grand Total		1174	100.0		

The results of this analysis are very interesting because the committee's expectation is that those preferring email to social media would feel vastly differently about the majority of the constructs, but this has not proven to be true here.

There are differences between email traditionalists and social media buffs, but those differences are not at all in the constructs one would expect. There are differences for: PRIV, CID, RD, Club EC, DI, CE, & CRA.

There are no significant differences for Rotary EC, BIG, SME Learn, CONF, DB, INI, PPMG, & SME Teach. There is directional disagreement with two constructs.

[7] This author is not terribly convinced that Google+ offers much that Facebook doesn't, so I don't expect wide adoption of this platform until and unless Google designs significant competitive differences into Google+.

[8] Based on personal experience, this author would conjecture that Facebook is the critical bridge to maintaining long term contact with university Rotaractors in the U.S, but cautions that this may not prevail in other Rotaract clubs.

Variable	Email Pref	SM Pref	Sig.	Yes>No
PRIV	5.6374	5.1262	Y	FALSE
CID	5.4500	5.1821	Y	FALSE
RD	5.2969	5.1751	Y	FALSE
Club EC	4.6704	4.2477	Y	FALSE
DI	4.5696	4.3218	Y	FALSE
CE	3.8349	4.5670	Y	TRUE
CRA	2.8045	4.0300	Y	TRUE
Rotary EC	5.2850	5.2824	N	FALSE
BIG	4.9828	5.0489	N	TRUE
SME Learn	4.8094	5.0278	N	TRUE
CONF	4.1494	4.4371	N	TRUE
DB	3.9813	4.3491	N	TRUE
INI	3.6235	4.1468	N	TRUE
PPMG	3.0695	3.0814	N	TRUE
SME Teach	2.3215	2.4679	N	TRUE

We predicted that Rotarians who prefer email would have higher privacy concerns, and this proves true. We also predicted that those who prefer email would be less likely to communicate with Rotary affiliates and would also tend to be disengaged from their clubs, and this has also proven true.

We are very surprised to see that CID, RD, Club EC, and DI had higher mean scores for Rotarians who prefer email than those who prefer social media. This is really quite astonishing; especially given that the difference is statistically significant.

That is to say, those Rotarians who prefer email to social media actually feel more strongly about RI making secretarial reporting simpler, having a directory of Rotarians, having an online club calendar, and wish RI would make online information easier to find.

This finding is entirely counter to the dominant rhetoric on LinkedIn.

In fact, the result is so surprising that this author went back and reviewed the survey coding to ensure that all reverse coded items were actually reverse coded. After this reality check, the result reported here is in fact accurate.

Since Club Engagement is so critical to this entire analysis, I'd like to expand on this for a moment and point out that those Rotarians who prefer email tend to be disengaged from their clubs on the whole.

This is not terribly surprising, but the distance between the email traditionalists and the social media buffs is .7321, or 10.5% of the 7-point scale different respective to club engagement. That's a BIG jump!

Gender

There are significant differences between men and women among eleven of fourteen scale variables. On the whole men in this sample answered the questions more toward the middle of the scales[9], while women tended to move more to the extremes[10].

Variable	No	Yes	Sig.	Yes>No
PRIV	5.7735	5.4767	Y	FALSE
CID	5.5511	5.3558	Y	FALSE
RD	5.4344	5.2146	Y	FALSE
Rotary EC	5.6008	5.1938	Y	FALSE
BIG	5.1625	4.9295	Y	FALSE
SME Learn	5.0702	4.7763	Y	FALSE
Club EC	4.7971	4.5277	Y	FALSE
CONF	4.4483	4.1163	Y	FALSE
CE	4.2587	3.8915	Y	FALSE
INI	4.0126	3.6222	Y	FALSE
CRA	3.4454	2.9066	Y	FALSE
DI	4.5225	4.5153	N	FALSE
DB	4.1379	4.0139	N	FALSE
PPMG	3.1532	3.0197	N	FALSE
SME Teach	2.2068	2.3592	N	TRUE

This phenomenon is actually quite unusual in social research and is frequently the reverse among genders. However since men outnumber women three to one in this sample, and something similar exists within the Rotary population as a whole, perhaps many female Rotarians find it difficult to get their male counterparts to listen carefully to the ideas women Rotarians come up with[11].

Statistically speaking men and women in this sample have very different views toward most of the constructs under study, and more cautious club presidents should take these important differences into careful account; whether there are a substantial number of women in their clubs or not.

Zones

An examination of the differences between zones across each of the constructs revealed that there are statistically significant differences between zones across all but one construct; specifically DI.

For the fourteen constructs which were significantly different, the probability of error is infinitesimal at p<.000 in each and every case.

Two important things come out of this analysis:

[9] Often referred to as "Central Tendency Bias"
[10] Often referred to as "Extremity Bias"
[11] This author admits there may be personal bias involved in stating this, noting his own personal preference to work with and for women.

1. Dislocated information, or information which Rotarians try to find on the internet for Rotary purposes is difficult for Rotarians everywhere.

2. A deeper investigation of the differences between countries is definitely warranted, especially given that US data dominates a plurality of the sample data.

A quick comparison of the US relative to MOW also showed significant differences among nine of fifteen constructs. Those constructs where there is general agreement between the US and the rest of the world are: BIG, PPMG, CONF, SME Teach, Rotary EC, and RD.

Big differences exist among the survey languages as well, with each and every construct showing extremely significant differences across languages groups ($p<.003$ or better).

There are also significant differences across districts with only Rotary EC and DI not demonstrating significant differences.

Stepwise Regression Testing

Stepwise Linear Regression is a statistical technique which takes a single dependent scale variable and compares it to a group of independent scale variables in order to determine which independent variables predict the presence of the variance in the dependent variable.
Although at first this sounds a good deal like correlation testing, what correlations do is demonstrate that data points overlap and generally slope upward or downward between a pair of variables. Regression, however, examines the predictive power of two or more variables to exist due to circumstances other than chance.

This said it is possible that even though a correlation exists between two variables, the relationship that exists could be due to chance or other outside factors that aren't being measured.

Regression by contrast examines the predictive power of at least one variable to explain the presence of the other. Another critical difference here is that regression can examine more than two variables at a time, and in this way, we can see the broader scope of relationships between variables.

Stepwise linear regression has the additional benefit that it eliminates those variables which don't directly contribute to the variance in the dependent variable. Those variables which do have predictive power are ranked by the amount of power they have in explaining the variance in the dependent variable.

One must remember that just because an independent variable does not predict the variance in a dependent variable, that the relationship between the two variables may still be very strong, but that relationship is due to outside factors or chance; not the variables themselves.

This idea is best explained by an old joke:

GIVEN DATA
Crime is high in the city.
There are lots of churches in the city.

HYPOTHETICAL QUESTIONS
Does church cause crime?
Does crime cause church?

Obviously a number of other independent factors could explain the phenomenon that both church and crime exist in large numbers simultaneously, but a regression test (unlike correlation tests) can tell you how much power the relationship between church and crime has. If that power is 100%, then there would be no other outside factors involved.

Regression can't tell you whether church causes crime or crime causes church however. Regression can only tell you if two variables predict one another.

For the purposes of this study, I will discuss variables with an explanatory power of at least 1%, but list all of the variables that contribute to the dependent variable regardless of how much predictive power they have.

Brainstorming/Idea Generation [BIG]

BIG had five predictive variables associated with it; explaining 39.2% of the variance in BIG. INI explained the largest proportion of this variance at 35.1%, followed by DB (2%) and Rotary EC (1.1%).

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
BIG	.000	.392	134.516
Independent	Adj. R^2	Std. Beta	Beta Sig.
INI	.351	.485	.000
DB	.371	.135	.000
Rotary EC	.382	.129	.000
CRA	.389	(-.105)	.000
PPMG	.392	.068	.016

It is logical that inbound news and information would naturally contribute to the variance in brainstorming of course, so there isn't a great deal to expand on with respect to BIG.

The three variables with at least 1% explanatory power with respect to the variance in BIG all demonstrated positive beta coefficients; that is to say, the slope of the line that best fits the points between these three variables and BIG slopes upward, and as such an increase in one of these three independent variables should show a proportional increase in BIG.

To highlight this, the slope of the best fit line between the points in INI and BIG slopes upward 48.5%, or said another way, for every 1 point INI increases, BIG increases .485; just like your rise over run fractions or ratios we all studied in high school math.

Discussion/Message Boards [DB]

Four variables here explained at least 1% of the variance in DB: CONF, INI, SME Teach, & SME Learn.

The total variance explained by all ten variables is 49.8%.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
DB	.000	.498	103.68
Independent	Adj. R^2	Std. Beta	Beta Sig.
CONF	.380	.375	.000
INI	.445	.113	.000
SME Teach	.459	.112	.000
SME Learn	.470	.104	.001
DI	.478	(-.110)	.000
RD	.486	.100	.001
BIG	.490	.078	.005
PPMG	.493	.077	.004
PRIV	.496	(-.069)	.005
Rotary EC	.498	.062	.046

It seems logical that online discussion boards are a natural follow up for web conferences and online courses, and that news and information is broadcast this way, so this construct makes a good deal of sense with respect to its predictive elements.

Project Partners/Matching Grants [PPMG]

Three variables explained at least 1% of the variance in PPMG: INI, SME Teach, and DB.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
PPMG	.000	.301	51.849
Independent	Adj. R^2	Std. Beta	Beta Sig.
INI	.216	.214	.000
SME Teach	.268	.233	.000
DB	.285	.097	.015
BIG	.290	.085	.021
PRIV	.294	.070	.025
DI	.298	-.076	.011
CONF	.301	.079	.040

This also seems to make a good deal of sense, since information is crucial for international projects, there is frequently some level of mentorship or teaching required. And because Rotarians often have to work at great geographic distances, online discussion boards are a reasonable and inexpensive way to solve many of the communication problems that existed prior to the internet.

Web Conferencing [CONF]

This model is a bit more interesting in light of the last model. In the last model DB was a more significant predictor than CONF for PPMG. This model appears to affirm that, since PPMG is at the bottom of the list here.

Said another way, Rotarians on the whole prefer to use online discussion boards asynchronously rather than web conferences synchronously to manage their international projects.

Moving back to the CONF construct, the significant predictors for this construct appear to be a good mix of tools and functions. On the tools side, Discussion Boards and a Rotary Event Calendar are present, followed closely by purposed functions such as club engagement and learning from experts.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
CONF	.000	.483	129.728
Independent	Adj. R^2	Std. Beta	Beta Sig.
DB	.361	.364	.000
Rotary EC	.430	.143	.000
CE	.459	.166	.000
SME Learn	.474	.147	.000
PRIV	.480	.082	.003
PPMG	.483	.059	.033

Since these statistics are not directional in nature, it is just as possible that these independent variables drive CONF as it is that CONF drives the independent variables.

Although we're not examining club engagement here, since it's such a critical variable relative to other points in the analysis, I am highlighting it here since CONF should appear in the list of predictive variables relative to CE when that analysis is done.

Inbound News/Information [INI]

INI also proves to be very interesting in so much as the flow of information appears to be so functionally critical to Rotarians.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
INI	.000	.544	142.042
Independent	Adj. R^2	Std. Beta	Beta Sig.
BIG	.341	.338	.000
CRA	.440	.169	.000
SME Teach	.487	.152	.000
SME Learn	.518	.128	.000
PPMG	.536	.142	.000
DB	.542	.096	.002
Rotary EC	.544	.067	.024

This construct appears to be where the vitality of Rotarians comes from as previously stated. Rotarians who get news share news. News is received and given to generate ideas and teach, and this model clearly identifies these traits.

Although club engagement does not appear in the list here, remember that regression helps describe whether one or more variables predict the scores in the other.

Failure to predict a score doesn't mean no relationship exists. In fact we know the correlation coefficient between INI and CE is 40.2%, but from the regression we now also know that there is at least one other factor which drives both INI and CE. This variable, if it is only one, becomes evident in CRA which we will examine later.

Learning from Subject Matter Experts [SME Learn]

This construct is affected by eight other variables, six of which explain at least 1% of the variance in SME Learn: RD, INI, CONF, Rotary EC, CID, & DB.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
SME Learn	.000	.495	102.258
Independent	Adj. R^2	Std. Beta	Beta Sig.
RD	.312	.166	.000
INI	.402	.154	.000
CONF	.444	.141	.000
Rotary EC	.467	.190	.000
CID	.477	.158	.000
DB	.488	.138	.000
Club EC	.493	-.078	.004
SME Teach	.495	.059	.039

This is a very interesting finding because it shows how important a directory of Rotarians is. This variable by itself explains 31.2% of the variance in SME Learn, and with this in mind clearly Rotarians want to be able to find an expert knowledgeable about the subject they're interested in by quickly looking them up.

This is immediately followed by INI, which suggests that if an expert isn't available, online news and information is the next desired source.

Although it might appear there are some impracticalities associated with the order of these variables, e.g. no expert is available on demand every second of every day, a good deal of this can be overcome by the presence of good calendaring and online discussion boards; both of which appear in the predictive list for SME Learn.

Teach as a Subject Matter Expert [SME Teach]

This construct has five predictive variables, four of which explain more than 1% of the variance: INI, PPMG, CRA, & DB.

The majority of the variance in SME Teach is explained by information, but the purpose of that information appears to be focused on entities that are not Rotarians.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
SME Teach	.000	.303	72.986
Independent	Adj. R^2	Std. Beta	Beta Sig.
INI	.207	.225	.000
PPMG	.259	.224	.000
CRA	.288	.172	.000
DB	.300	.136	.000
PRIV	.303	(-.067)	.027

PPMG and CRA both show up here and both constructs identify working relationships with people who are directly attached to Rotary but not Rotarians themselves.

30.3% of the variance is explained here, which is a respectable number, but the other 69.7% of the variance that the statistics can't account for is also very interesting to consider, and it's a shame we don't have data to explore this more deeply. For example, this data makes one wonder if the effect of SME Teach is predicted by or predicts variance in project benefits. Unfortunately we didn't collect data around this point, so it's impossible to say with statistical confidence.

Club Event Calendar [Club EC]

We already know this construct is a very independent construct from the rest of the constructs under study, but vitally important as the majority of the sample (54%) supports club event calendars. As a result of this constructs' independency, the amount of variance explained by the other constructs is only 20%.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
Club EC	.000	.200	30.552
Independent	Adj. R^2	Std. Beta	Beta Sig.
RotaryEC	.149	.433	.000
PRIV	.158	.125	.000
CE	.168	(-.199)	.000
CRA	.184	.135	.001
SME Teach	.191	.104	.003
DI	.197	(-.081)	.015
SME Learn	.200	(-.080)	.044

Particularly interesting is the fact that CE has a negative beta coefficient here. This phenomenon is probably best explained by what the constructs measure. That is, the need for a club event calendar appears to be partly predicated on poorer levels of club engagement or vice versa. In other words, some Rotarians are unclear what their clubs are doing and when they're doing them.

The other interesting variable here is PRIV. In this case the desire for privacy may increase as the desire for a club event calendar increases (as the direction of the beta coefficient suggests). Because of the questions the committee asked, it's impossible to say what about event calendars causes privacy concerns to increase, but this is an excellent place for some follow up research.

Rotary Event Calendar [Rotary EC]

The popularity of a Rotary Event calendar among Rotarians has already been well established, but what that calendar should be used for has not. Some ideas about that come directly from this regression analysis.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
Rotary EC	.000	.549	144.878
Independent	Adj. R^2	Std. Beta	Beta Sig.
RD	.365	.199	.000
SME Learn	.432	.163	.000
Club EC	.491	.223	.000
CID	.520	.216	.000
CONF	.535	.109	.000
CE	.542	.099	.000
BIG	.549	.094	.000

First, many Rotarians associate an event calendar with a directory of Rotarians. This is probably explained by the fact that the Rotary EC construct is for district and higher level events and hence these Rotarians would like to be able to maintain contact with Rotarians they've met outside their own clubs.

Not surprisingly, these scheduled events are frequently teaching sessions of one sort or another, and so SME Learn and CONF make a good deal of sense here as does Club EC as a natural extension of a larger calendar.

Rotarians associate CID with calendaring, and this is a critically important point, because this data suggests that better information from Rotary should be scheduled and provided in an easily retrievable way.

Although lower down on the list, Rotarians also associate a district and higher level calendar with club engagement, and although under the 1% threshold I established earlier, BIG plays a role too.

Communicating with Rotary Affiliates [CRA]

This appears to be the construct that is so crucial with respect to club engagement and news and information. Rotarians that do communicate with Rotary affiliates are heavily engaged with their clubs and need news and information passed to them regularly.

The propensity for these Rotarians to teach is also quite prominent here, which makes sense if the Rotary affiliates they work with are Rotaractors, Interactors, GSE/VTT teams, etc.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
CRA	.000	.443	110.668
Independent	Adj. R^2	Std. Beta	Beta Sig.
CE	.377	.497	.000
INI	.415	.174	.000
SME Teach	.431	.126	.000
Club EC	.435	.078	.004
BIG	.440	(-.103)	.002
DB	.443	.073	.022

Again, although less than my arbitrary 1% threshold, note the presence of Club event calendars and online discussion boards is interesting.

Another interesting point is that BIG is present. BIG's beta coefficient is negative which means that there tends to be less brainstorming when communicating with Rotary affiliates within this sample, although I would argue that the amount of variance explained here barely registers and hence could change direction with a different sample of Rotarians. This could also suggest that some Rotarians tend to look down on their younger counterparts; an egregious error if true[12].

Rotarian Directory [RD]

This construct is fascinating to look at, because it screams "fix me". Rotarians sampled see a significant need to consolidate information on the web to make it easier to work with, and identify a directory of Rotarians as one critical factor that needs to be fixed. Rotarians also strongly associate a directory with a Rotary event calendar.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
RD	.000	.550	169.802
Independent	Adj. R^2	Std. Beta	Beta Sig.
CID	.385	.322	.000
Rotary EC	.479	.204	.000
DB	.518	.145	.000
SME Learn	.532	.135	.000
PRIV	.543	.118	.000
CE	.550	.100	.000

Less significant, but none the less important are the presence of online discussion boards, learning from experts, online privacy, and yes, club engagement.

Although I've not yet explored the CID and DI constructs for their contributing variables, RD provides substantial evidence that there is an unmet need with respect to information flow that needs to be addressed.

Consolidate/Integrate Databases [CID]

This construct is almost entirely independent from the other constructs under study. The only major contributing factors are CID which was just covered, and INI which explains 1% of the variance in CID.

[12] While on the student diversity board at my university, the faculty senate approved a measure which proudly declared that it was every faculty member's responsibility to promote tolerance. I and others on the student board disagreed, noting that inclusion is a much better term than tolerance. After all, does anyone work hard for the purpose of being tolerated?

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
DI	.000	.325	212.871
Independent	Adj. R^2	Std. Beta	Beta Sig.
CID	.315	.597	.000
INI	.325	(-.109)	.000

One should expect a decrease in useful information flow would contribute to an increase in dislocated information, so INI clearly belongs here.

As previously stated, a majority of Rotarians (57.6%) agree that many critical online Rotary resources are difficult or impossible to locate.

Online Privacy [PRIV]

More than 83% of those sampled expressed at least some agreement with the need to protect online privacy, and the construct most affected by this is RD.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
PRIV	.000	.218	39.519
Independent	Adj. R^2	Std. Beta	Beta Sig.
RD	.161	.220	.000
CID	.188	.190	.000
Club EC	.204	.122	.000
CONF	.211	.122	.003
PPMG	.214	.088	.010
DB	.218	-.096	.019

We don't know what these particular Rotarians specifically want to protect in RD from the questions we asked. One might be willing to allow their name to be listed, and for other Rotarians to be able to contact them through a Rotary system, but unwilling to share telephone numbers or street addresses, for example. These kinds of questions should be pursued in a follow up study with respect to PRIV and RD.

Privacy concerns were also raised around CID, but I'm at a bit of a loss to explain this phenomenon. It could be that Rotarians feel that some of the Rotary.org resources (donate online, etc.) are not private enough. Although I am not sure what's happening here, some follow up exploratory research is probably a good idea.

Club EC is also present here, and this makes a good deal more sense. During the course of this study, one committee member pointed out that some Rotarians in her club don't mind using an event calendar for their club's activities, but are less interested in letting other invitees know they plan to be present or not. This statement may be more of a cautionary tale for clubs, but this depends to some extent whether RI plans to offer some sort of integrated calendaring system or not.

Club Engagement [CE]

This is the last construct in the list, but perhaps one of the most important. Here, six variables explain 48.7% of the variance in CE.

Dependent	ANOVA Sig.	Adj. R^2	F-Stat
CE	.000	.487	132.15
Independent	Adj. R^2	Std. Beta	Beta Sig.
CRA	.377	.466	.000
CONF	.439	.151	.000
RD	.464	.126	.000
Club EC	.472	-.139	.000
Rotary EC	.484	.144	.000
INI	.487	.074	.015

Right at the top of the list is CRA. I've made this point several times already, but clearly club engagement has a great deal to do with Rotary affiliates. This said, clubs whose membership are faltering, or are generally disengaged, might benefit substantially by carefully adopting New Generations functions into their club's activities, such as Rotaract, Interact, or getting involved youth service projects.

The next three constructs I will take as a group because they make a good deal more sense together than apart. If Rotarians participate in web conferences, then there is a desire to be able to find participants in a directory of Rotarians. There is also interest in knowing when Rotary events occur, and in the case of CE here, it seems that Rotarians on the whole feel that there isn't enough calendaring presence to be able to track when and where critical Rotary events will occur.

Said another way, RI should expect event attendance to increase if an online calendaring system is adopted, and even more importantly, this is critically important to driving club engagement. Don't forget to bring your Rotaractors and Interactors with you to the event.

Recommendations (Global Data)

Club engagement has proven to be strategically important to Rotary as a whole, and statistically in this study.

In the regression analysis, 48.7% of the variance in club engagement is predicted by six factors, but chief among them is communicating with Rotary affiliates such as Rotaractors, Interactors, and GSE/VTT teams (σ^2=.377; β=.466).

It would seem that one of the most strategic maneuvers Rotary could make would be to develop new Rotary affiliates and track them through life until such time they are capable or qualified to become Rotarians.

In fact, the data infers that many Rotarians are being turned off by working with younger people in the 14-30 age range. We don't have data from Rotary affiliates, but given the ever increasing average age of Rotarians, it would seem that many Rotary affiliates are turned off by their Rotarian counterparts as well.

That said, it may be very worthwhile for Rotary International to identify Rotarians qualified and interested in developing these young people and ask them to lead a general transformation of Rotary clubs toward deeper integration with all of its affiliates: Rotaract, Interact, Early Act, GSE/VTT, etc.

The data implies that some Rotarians are heavily engaged with Rotary affiliates (22.9%), but Rotary should ask this group to go back and teach their clubs about the joys and pleasures of working with non-Rotarians, and then help their clubs do it.

Not every Rotarian will be interested of course, but the statistical evidence regarding the relationship between these two constructs (CRA & CE) is essentially incontrovertible with a statistical level of confidence of 99.9999 all the way up to 50 decimal places.

The next relevant variable for club engagement is CONF. Web conferencing is generally interpreted to mean classes, and these classes seem to be critical fuel to drive club engagement. The data also suggest there is a crucial need for these classes to be scheduled on a common online calendar and that Rotarians have the ability to look up information in a directory about the people they interact with.

With respect to the factors that drive club engagement, each of these has their own drivers, and critically an online Rotary calendar is crucial to the sample population.

The factors that drive Rotary EC appear to suggest that Rotarians want an online calendar of events at the district and higher level that also allows them to interact with a directory of Rotarians.

The reason this pairing exists is unclear, but it may be that Rotarians will pay special attention to scheduled events if they know someone else that is attending. An alternative explanation could be that Rotarians who meet at these events wish to exchange contact information but may need to refer to a directory of some kind. Regardless of the reason these variables match up (RD & Rotary EC), they're both central to club engagement.

All said, these factors are predictive elements of club engagement, and I encourage both RI and the wider Rotary community to consider these elements carefully in their strategic planning.

From the categorical data, we also know that Facebook is a driver of club engagement since those with Facebook accounts (52.6%) and/or those with Facebook accounts that use them daily (24.6%), report significantly higher levels of club engagement than those who don't.

Although it's not a correct use of statistics, the correlation coefficients for these two categorical variables relative to CE were moderately strong (FB=43.4%; FB_Use=43.2%), and explain nearly 20% of the variance in CE in both cases (FB=18.3%; FB_Use=19.1%).

All said, the statistics suggest that further integrating Rotary business into Facebook might be a good idea; particularly as more Facebook users come online or join Rotary (or its affiliates).

The study data also suggests that club engagement is heavily driven by three key avenues of service: International, Vocational, and New Generations. Community Service and Club Service, though very important, don't have nearly as much influence over club engagement as the other three avenues of service.

Again, although it's statistically incorrect to do these tests, correlation tests revealed the Key-3 service avenues have weak correlations, but they are stronger than the other two. Stepwise regression results kept the Key-3 and dropped the other two incidentally.

	The Key-3			The Other 2	
	New Gen	Intl	Vocation	Community	Club
Correlation	.140	.119	.089	.095	.081
Sig.	.000	.000	.003	.001	.007

The Key-3 together explain 3.2% of the variance in CE, which is not earth shattering, but it's still important; especially since club and community service don't predict engagement among those Rotarians sampled.

I also strongly recommend that there be a campaign to bring more women into Rotary. Women Rotarians in this sample expressed more passion than men for eleven of the fourteen constructs under study. With specific respect to club engagement, women generally reported feeling engaged with their clubs, while men did not. These are astonishing findings that should be put to good use.

Directions for Future Research

Some of the findings here are incomplete without examining the other side of the story, and I'm particularly referring to Rotary affiliates.

CRA is clearly the primary driver of club engagement, yet only one quarter of Rotarians appear to do much of anything with Rotary affiliates.

Is the reason for this lack of involvement because of:

- Generational miscommunication?
- Age group discrimination or preferences?
- Something else?
- Some combination of factors?

The data tells me that getting the affiliates perspective on how effective Rotarians are at helping them be Rotaract, Interact, etc. entities, would be invaluable for designing a better strategic alliance between Rotary and its affiliates. With less than one quarter of Rotarians engaged with Rotary affiliates, clearly the partnership is weak.

To quote Matt Dyer in a critical LinkedIn thread:

"I'm 31 and heavily involved with Rotaract, I have no intention of joining Rotary because I want to be with people who I have things in common with, not a 65 year old.

I also prefer the more relaxed style of our club, not the formalities and mostly male nature of a Rotary club. We have never had any 18-21 year olds anyway, but I will have a lot more in common with an 18 year old than a 65 year old.

In the majority of cases it's the older members who will contribute more, so Rotaract will be stronger if we can keep hold of these people - but still try to push forward those younger members who want to contribute.

Increasing the age isn't the solution to anyone's problems, but it's part of the answer. Rotaract and Rotary has an awful lot it needs to do to change, but this would help.

So I will remain involved if the age increases, if it doesn't I'll be lost to Rotaract/Rotary like a lot of my friends from the club who have left in the last 7 years that I've been involved." ~ Matt Dyer

Limitations

Although the committee tried to mitigate as much of the potential bias as possible, we must acknowledge that there are underrepresented zones and countries in the sample data. We must also acknowledge that the accuracy of survey translations has not been explicitly verified through back-translation, and hence there is some potential translation error that exists.

Furthermore, the survey was distributed through email only, and as a result Rotarians who do not have computers at all could not participate in the study.

Answering the Research Questions

1. How are clubs effectively leveraging new media or technology to communicate, collaborate, and network?

The data doesn't answer this question well. The question that the data appears to answer is, "what tools and technologies do Rotarians want in order to communicate, collaborate, and network".

The reason for the question shift is that many of the existing social media tools provide most of the desired key functionality to Rotarians that use them. What are missing are two key things:

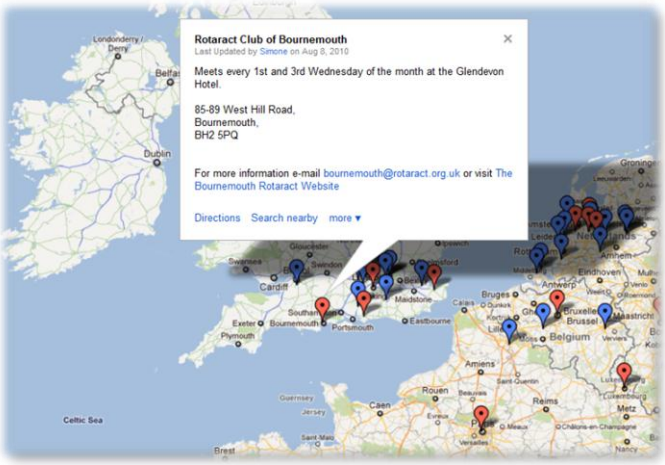
1. A way to integrate the existing tools Rotary-wide.
2. A way to deliver the missing tools Rotary-wide.

Since more than half of Rotarians in this sample have Facebook accounts, this social media platform seems to be a good place to begin, and Facebook already has many of the features Rotarians require.

Facebook allows for online calendars, discussion boards, public and private group discussion areas, privacy controls, RSS feeds (for inbound news and information), and even rudimentary polling features. Although not part of this study, Facebook is already highly integrated with a variety of mobile devices; particularly so with Apple's portable touch devices[13].

Software developers (including some members of the survey committee) have created add-on applications that integrate fully with Facebook; allowing for expanded functionality beyond the basic features Facebook offers.

Indeed this may be a very good way for RI to "crowd source" online tools the Rotary community needs; e.g. directly from Rotarians. Some of this is already happening of course while RI and ROSNF partner up to create a Facebook directory of Rotarians and a Google Maps powered Facebook app which shows club meeting locations and times around the world.



2. Is there an unmet need with these technologies that RI could help facilitate?

The answer to this question is a very clear yes.

There are three critical areas RI can really contribute to:

- Software & Application Development
- Technology Training Programs
- Technology Public Relations & Marketing

There's a great deal of detail behind each of these that really require a separate document, but to be brief:

[13] iPhone, iPad, & iPod

Software & Application Development

Larger software applications should probably be developed by RI, but smaller initiatives might be handled by Rotarians themselves with some support from RI; particularly as far as integration goes.

One member of the survey committee pointed out that in the past, home-grown software applications have been torn down by RI for legal reasons. This kind of action might be a good deal less necessary with direct support from RI for Rotarian software developers.

The type of RI development support needed probably comes in two forms: (1) a set of guidelines about what Rotarian developed software apps should and should not do, and (2) specific support for home-grown applications to link to approved RI database resources.

Technology Training Programs

A great deal of this has already been done by ROSNF, but training on how best to use social media for Rotary purposes would be invaluable for most clubs.

(From ROSNF: *Some tips and tools for making the most of social networking*)

Even though a good number of Rotarians in this sample are familiar with the ins and outs of social networking tools, even the more expert of us could benefit from new tips and tricks.

Technology Public Relations & Marketing

Very little of what's been recommended will be of value unless there is a public relations and marketing effort explaining some of what's happening technologically and how to take advantage of it.

Since this committee was founded, RI has rolled out several small initiatives on Rotary.org that, to the best of my knowledge, haven't been broadcast to the Rotary audience at large.

I might suggest that the Rotary CIO take a half page in The Rotarian magazine each month and talk about some of the technological updates Rotary is going through. This is a baseline maneuver, but should be viewed as a stepping stone toward a larger marketing effort that also filters down through the chain of zone, district, club, and individual level.

This author is also capable of writing strategic and tactical marketing plans, but for the sake of time and sanity, I will leave this be for now.

Some (Personal) Final Thoughts

I don't believe Rotary will be 1.2 million members strong in 10 years if two things don't happen.

First, Rotarians must become more culturally inclusive.

The fact that Rotary is dominated by older men is a recipe for disaster in the long term. (In this sample 76.2% are men and 59% of them are over 50 years old.) Personally I think these statistics are so alarming that if a close friend were in the same situation I would recommend they pilot a program to recruit anything but men over 50.

Second, Rotarians need to start living where the rest of the world lives, and that world is increasingly in cyberspace.

When one seventh of the world population is using Facebook, this to me is an implied mandate to get familiar with Facebook. After all, how do Rotarians expect to reach out and touch people's lives if they have no idea how to get in touch with them?

- The US post office is virtually bankrupt because no one is sending letters.
- Telephone companies are slowly phasing out land line telephones[14].
    - Land lines that do exist are increasingly unpublished voice over IP telephone numbers.
- Countries in the developing world have ceased development of wire-line infrastructure and switched over to wireless communications which, incidentally, are seamlessly integrated with the internet.

The world has changed dramatically in the last three years alone, and the pace of change is increasing exponentially. If Rotary and Rotarians do not develop plans to minimally stay ahead of the curve, or optimally set the direction of the curve, Rotary will slowly whither on the vine.

[14] AT&T stopped advertising local and long distance telephone service in 2004.

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Glossary of Terms

Binary Variable	A variable which can only have two choices such as yes/no.
Categorical Variable	A variable used to compare groups; for example categories of age.
Construct	A term which represents an overall idea and is characterized by at least one dimension. For example, the construct "size" can be represented by height and weight. The operational definition of the construct then represents the dimensions of the construct that need to be measured for the study.
Correlation	"Any of a broad class of statistical relationships involving dependence."
Scale Variable	A variable which is (generally) the mean or average of a group of responses assigned to a specific construct.

Appendix A – Qualitative Question Items

1. Do you use the internet to meet and establish relationships for Rotary business or to stay connected with people you've met at Rotary conference or events? Describe how in a few words.

2. What tools and platforms on the internet do you use to communicate, collaborate, and maintain fellowship with other Rotarians (including any "home grown" tools)?

3. How do you use these tools and platforms to accomplish your Rotary business objectives? Please be sure to describe the functions and features you use for each tool.

4. How do these tools and platforms compliment and supplement face-to-face meetings or Rotary events?

5. Are there functions and features that could be improved or which aren't available in the online tools you use which would make it easier to do Rotary business? What are they?

6. If you could design a perfect hub or marketplace where the functions and features you've listed above were available, what would it look like? Please describe and detail the functions and features you think would make your proposed platform an effective way to conduct Rotary business.

Appendix B – Pilot Survey Questionnaire Items

Discussion & Collaboration Question Group [D&C]

Brainstorming/Idea Generation [BIG]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.626	p < .000	1	.768	BIG3	.848	Retained	(BIG1+BIG2+BIG3)/3

Definition: Rotarians' desire to brainstorm or generate ideas online from/with other Rotarians outside their clubs.

1. I use the internet as a way to get ideas and information for Rotary.
2. I share Rotary ideas and information on the internet with other Rotarians.
3. I don't know where to begin searching online for Rotary ideas and information. [Reverse coded]

Discussion/Message Boards [DB]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.585	p < .000	1	.753	DB2	.761	Retained	(DB1+DB2+DB3+DB4)/4

Definition: Rotarians' desire to participate in discussion forums for both business and personal reasons. Includes features and functions, such as voting/polling.

4. I participate, or would be willing to participate, in online discussions for Rotary business and fellowship.
5. I don't participate in online discussions for Rotary because I can't keep up with the volume of email it generates [Reverse Coded]
6. My club is, or would be, more efficient by using online discussions to conduct Rotary business.
7. I know where to participate in online discussions for Rotary business or fellowship.

Project Partners/Matching Grants [PPMG]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.500	p < .007	1	.611	N/A	N/A	Retained	(PPMG1+PPMG2)/2

Definition: Rotarians' desire to easily find or build, project partnerships and matching grant proposals.

8. I look online for Rotary Project Partners and Matching Grants.
9. It's easy to find Rotary Project Partners and Matching Grants online.

Sharing Documents [DOCS]

KMO Sampling Adequacy			Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.598	p < .000	2	DOCS1, DOCS2	-2.539	N/A	N/A	**DELETED**	N/A
			DOCS3, DOCS4	-1.589	N/A	N/A	**DELETED**	N/A

Definition: Rotarians' propensity to share documents with others online.

10. If I need a key document for Rotary business, it's easy to find on a website.
11. I wish it were easier to share Rotary documents than by emailing them.
12. I prefer to receive hard copies of documents than electronic copies. [Reverse Coded]
13. The volume of files I receive by email for Rotary business is excessive.

Web Conferencing [CONF]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.623	p < .000	1	.804	CONF2	.864	Retained	(CONF1+CONF2+CONF3)/3

Definition: Rotarians meeting for live conferencing over the web in small or large groups.

14. I think having online meetings is a great way to conduct Rotary business.
15. Online meetings make it easier to work with international project partners.
16. I have participated or would participate in online meetings for Rotary business.

Sources of Information Question Group [SOI]

Inbound News & Information [INI]

KMO Sampling Adequacy			Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.629	p < .000	2	INI1,INI2,INI4	.771	MAX	MAX	Retained	(INI1+INI2+INI4)/3
			INI3	N/A	N/A	N/A	Moved to CID	*See CID*

Definition: Rotarians' desire to receive news and information online from around Rotary and Rotary projects at the district and international level.

17. I visit the Rotary.org website to get Rotary news.
18. I use social media websites to get Rotary news.
19. I would like to get my online Rotary news from one place.
20. I share Rotary news online with others.

Subject Matter Experts [SME]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.609	p < .000	1	.790	SME2	.831	Retained	(SME1+SME2+SME3+SME4)/4

Definition: Rotarians' desire to acquire or contribute expert information online for Rotary business objectives.

21. I'd like to learn from Rotarian experts online about best practices.
22. I'd like to learn from Rotarian experts about how to make service projects more successful.
23. I am often asked by Rotarians online for information on best practices.
24. I am often asked by Rotarians online for information about making service projects more successful.

Publicity & Fellowship Question Group [P&F]

Event Calendars [EC]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.756	p < .000	1	.802	EC1	.814	Retained	(EC1+EC2+EC3+EC4+EC5)/5

Definition: Rotarians' interest in using online calendars to manage Rotary events.

25. My club uses online calendars to announce and invite people to Rotary events or meetings.
26. My club should use online calendars to announce and invite people to Rotary events or meetings.
27. It would be terrific if I could download or subscribe to online Rotary event calendars.
28. I want my club's events to appear in an online district calendar.
29. I want to be able to search and register online for Rotary events created by my district or other clubs in my district.

Communicating with Rotary Affiliates [CRA]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.500	p < .001	1	.699	MAX	MAX	Retained	(CRA1+CRA2)/2

Definition: Rotarians' propensity to communicate with Rotary affiliates such as Rotaract, Interact, GSE/VTT, RYLA, Rotary Scholars, etc.

30. The best way to find Rotary Affiliates is on social media websites like Facebook or LinkedIn.
31. I, or my club, maintain relationships with Rotary affiliates on social media websites like Facebook or LinkedIn.

RI To-Do List Question Group [2DO]

Rotarian Directory [RD]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.757	p < .000	1	.883	MAX	MAX	Retained	(RD1+RD2+RD3+RD4)/4

Definition: Rotarians' desire to easily find other Rotarians and Rotary Affiliates in an online directory.

32. I would like access to an online directory of Rotarians.
33. I would like to be able to search an online directory for Rotarians who share my Rotary interests.
34. I would like Rotary affiliates to be able to find me in a Rotary directory.
35. I would be willing to list my vocational and Rotary service project experience online and allow other Rotarians to search for my contact information on my Rotary profile.

Consolidate/Integrate Databases [CID]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.772	p < .000	1	.753	INI3	.801	Retained	(INI3+CID1+CID2+CID3+CID4+CID5)/6

Definition: Rotarians' desire to reduce duplication efforts for reporting in to RI and district leadership, or otherwise consolidate ongoing communications.

36. My club Secretary has to report the same information to the club, the district, and Rotary International.
37. My club Secretary is frustrated with the amount of duplicate work Rotary requires.
38. It would help me if I could get all of my Rotary information from one place with only one user ID and password.
39. It would help me if basic Rotary Information was synchronized across Rotary websites.
40. I would use online Rotary resources more if they were easier to navigate and more intuitive.

From INI: ***I would like to get my online Rotary news from one place.***

Dislocated Information [DI]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.792	p < .000	2 DI2,DI3,DI4,DI5,DI6	.874	DI6	.888	Retained	(DI2+DI3+DI4+DI5+DI6)/5
		DI1	N/A	N/A	N/A	**DELETED**	N/A

Definition: Perception that Rotary information is dislocated or too dissipated to be of use.

41. As a rule, I wait for Rotary information to be passed to me rather than getting it myself. [Reverse Coded]
42. It frustrates me to have so many different places to get critical Rotary information or documents.
43. Information about what's happening in Rotary is spread out across too many websites.
44. I need to visit multiple websites to gather all the Rotary information I need.
45. I have trouble finding club and district websites and Facebook pages.
46. I have trouble finding major Rotary project websites such as PolioPlus or ShelterBox.

Unclassified Constructs or Filter Questions

Privacy [PRIV]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization	New Abbr.
.527	p < .000	2	PRIV1,PRIV2	.683	N/A	N/A	Retained	(PRIV1+PRIV2)/2	OPRIV
			PRIV3,PRIV4	.939	N/A	N/A	Retained	(PRIV3+PRIV4)/2	RPRIV

Definition: Rotarians' online communications privacy concerns

47. It's very important to me that my online communications are private.
48. I am comfortable making online purchases or donations with organizations I trust.
49. I would trust Rotary to protect my personal contact information if I supplied it to them online.
50. I trust Rotary to protect my financial security if I make online donations or payments.

Email Traditionalists [ET]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.500	p < .004	1	.639	N/A	N/A	Retained	(ET1+ET2)/2

Definition: Rotarians' propensity to use of email versus other forms of electronic communication.

51. I prefer to use email to communicate rather than social media websites like Facebook.
52. I don't have time to visit Rotary websites and prefer to use email to communicate with other Rotarians.

Club Engagement [CE]

KMO Sampling Adequacy		Components	Chronbach Alpha	Alpha if deleted		Decision?	Operationalization
.674	p < .000	2	CE1,CE2,CE3,CE4,CE5	.907	CE3	.938	Retained	(CE1+CE2+CE3+CE4+CE5)/5
			CE6	N/A	N/A	N/A	**Moved**	Moved to SMP

53. Rotarians would be more engaged with their clubs' members if they used social media websites like Facebook, Twitter, and LinkedIn to communicate.
54. Rotarians would be more engaged with their clubs' activities if they used social media websites like Facebook, Twitter, and LinkedIn to communicate.
55. If we're going to recruit younger Rotarians, Rotary clubs have to establish an active presence on social media websites like Facebook, Twitter, and LinkedIn.
56. Rotarians would be more engaged with their district's activities if they used social media websites like Facebook, Twitter, and LinkedIn
57. I often participate in district level activities and projects.
58. I belong to a Rotary online community.

The nature of this question 58 was changed from stating levels of agreement/disagreement to a yes/no filter question.

Social Media Platforms [SMP]

59. Please indicate which Social Media websites you use:
    a. Facebook
    b. LinkedIn
    c. Twitter
    d. Google Plus
    e. 人人网 (RenRen)
        i. No responses in the pilot data, however this is really only appropriate for the Chinese region.
    f. Other (Please specify)

Please state your level of use with respect to the following statements:

60. I use Facebook:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

61. I use LinkedIn:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

62. I use Twitter:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

63. I use GooglePlus:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

64. I use Other Social Networking Websites:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

Demographics

65. Which avenues of service do you work with?
    a. Vocational Service
    b. Community Service
    c. International Service
    d. Club Service
    e. New Generations

66. How Long Have you Been a Rotarian?
    a. Less than 1 Year
    b. 1-3 Years
    c. 4-7 Years
    d. 8-10 Years
    e. 11-15 Years
    f. 15-25 Years
    g. More than 25 Years

67. Are you now, or have you ever been, an officer in a Rotary Club or District?
    a. Yes
    b. No

68. What District to you currently belong to?

69. What country/countries are you a citizen of? (Multiple Selections Allowed)
    a. If you are a citizen of more than one country, please also tick this box.

70. What Age Group Do You Belong To?
    a. 18-29
    b. 30-39
    c. 40-49
    d. 50-59
    e. 60-69
    f. 70 or more

71. What's your Gender?
    a. Female
    b. Male

Appendix C – Final Quantitative Question Items

Discussion & Collaboration Question Group [D&C]

Brainstorming/Idea Generation [BIG]

Definition: Rotarians' desire to brainstorm or generate ideas online from/with other Rotarians outside their clubs.

1. I use the internet as a way to get ideas and information for Rotary.
2. I share Rotary ideas and information on the internet with other Rotarians.
3. I don't know where to begin searching online for Rotary ideas and information. [Reverse coded]

Discussion/Message Boards [DB]

Definition: Rotarians' desire to participate in discussion forums for both business and personal reasons. Includes features and functions, such as voting/polling.

4. I participate, or would be willing to participate, in online discussions for Rotary business and fellowship.
5. I don't participate in online discussions for Rotary because I can't keep up with the volume of email it generates [Reverse Coded]
6. My club is, or would be, more efficient by using online discussions to conduct Rotary business.
7. I know where to participate in online discussions for Rotary business or fellowship.

Project Partners/Matching Grants [PPMG]

Definition: Rotarians' desire to easily find or build, project partnerships and matching grant proposals.

8. I look online for Rotary Project Partners and Matching Grants.
9. It's easy to find Rotary Project Partners and Matching Grants online.

Web Conferencing [CONF]

Definition: Rotarians meeting for live conferencing over the web in small or large groups.

10. I think having online meetings is a great way to conduct Rotary business.
11. Online meetings make it easier to work with international project partners.
12. I have participated or would participate in online meetings for Rotary business.

Sources of Information Question Group [SOI]

Inbound News & Information [INI]

Definition: Rotarians' desire to receive news and information online from around Rotary and Rotary projects at the district and international level.

13. I visit the Rotary.org website to get Rotary news.
14. I use social media websites to get Rotary news.
15. I share Rotary news online with others.

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Definition: Rotarians' desire to acquire or contribute expert information online for Rotary business objectives.

16. I'd like to learn from Rotarian experts online about best practices.
17. I'd like to learn from Rotarian experts about how to make service projects more successful.
18. I am often asked by Rotarians online for information on best practices.
19. I am often asked by Rotarians online for information about making service projects more successful.

Event Calendars [EC]

Definition: Rotarians' interest in using online calendars to manage Rotary events.

20. My club uses online calendars to announce and invite people to Rotary events or meetings.
21. My club should use online calendars to announce and invite people to Rotary events or meetings.
22. It would be terrific if I could download or subscribe to online Rotary event calendars.
23. I want my club's events to appear in an online district calendar.
24. I want to be able to search and register online for Rotary events created by my district or other clubs in my district.

Communicating with Rotary Affiliates [CRA]

Definition: Rotarians' propensity to communicate with Rotary affiliates such as Rotaract, Interact, GSE/VTT, RYLA, Rotary Scholars, etc.

25. The best way to find Rotary Affiliates is on social media websites like Facebook or LinkedIn.
26. I, or my club, maintain relationships with Rotary affiliates on social media websites like Facebook or LinkedIn.

RI To-Do List Question Group [2DO]

Rotarian Directory [RD]

Definition: Rotarians' desire to easily find other Rotarians and Rotary Affiliates in an online directory.

27. I would like access to an online directory of Rotarians.
28. I would like to be able to search an online directory for Rotarians who share my Rotary interests.
29. I would like Rotary affiliates to be able to find me in a Rotary directory.
30. I would be willing to list my vocational and Rotary service project experience online and allow other Rotarians to search for my contact information on my Rotary profile.

Consolidate/Integrate Databases [CID]

Definition: Rotarians' desire to reduce duplication efforts for reporting in to RI and district leadership, or otherwise consolidate ongoing communications.

31. My club Secretary has to report the same information to the club, the district, and Rotary International.
32. My club Secretary is frustrated with the amount of duplicate work Rotary requires.
33. It would help me if I could get all of my Rotary information from one place with only one user ID and password.
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36. From INI: ***I would like to get my online Rotary news from one place.***

Dislocated Information [DI]

Definition: Perception that Rotary information is dislocated or too dissipated to be of use.

37. It frustrates me to have so many different places to get critical Rotary information or documents.
38. Information about what's happening in Rotary is spread out across too many websites.
39. I need to visit multiple websites to gather all the Rotary information I need.
40. I have trouble finding club and district websites and Facebook pages.
41. I have trouble finding major Rotary project websites such as PolioPlus or ShelterBox.

Unclassified Constructs or Filter Questions

Online Privacy (General) [OPRIV]

Definition: Rotarians' general online communications privacy concerns.

42. It's very important to me that my online communications are private.
43. I am comfortable making online purchases or donations with organizations I trust.

Rotary Privacy Protection [RPRIV]

Definition: Rotarians' propensity to trust Rotary to handle their privacy concerns.

44. I would trust Rotary to protect my personal contact information if I supplied it to them online.
45. I trust Rotary to protect my financial security if I make online donations or payments.

Email Traditionalists [ET]

Definition: Rotarians' propensity to use of email versus other forms of electronic communication.

46. I prefer to use email to communicate rather than social media websites like Facebook.
47. I don't have time to visit Rotary websites and prefer to use email to communicate with other Rotarians.

Club Engagement [CE]
Definition: Rotarians' views on social media with respect to club engagement, and their own level of district engagement.

48. Rotarians would be more engaged with their clubs' members if they used social media websites like Facebook, Twitter, and LinkedIn to communicate.
49. Rotarians would be more engaged with their clubs' activities if they used social media websites like Facebook, Twitter, and LinkedIn to communicate.
50. If we're going to recruit younger Rotarians, Rotary clubs have to establish an active presence on social media websites like Facebook, Twitter, and LinkedIn.
51. Rotarians would be more engaged with their district's activities if they used social media websites like Facebook, Twitter, and LinkedIn
52. I often participate in district level activities and projects.

Social Media Platforms [SMP]

53. I belong to a Rotary online community.
    a. Yes
    b. No

54. Please indicate which Social Media websites you use:
    a. Facebook
    b. LinkedIn
    c. Twitter
    d. Google Plus
    e. 人人网 (RenRen)
    f. Other (Please specify)

Please state your level of use with respect to the following statements:

55. I use Facebook:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

56. I use LinkedIn:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

57. I use Twitter:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

58. I use GooglePlus:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

59. I use Other Social Networking Websites:
    a. Throughout the day
    b. Once or twice daily
    c. Every few days
    d. Rarely
    e. Never

Demographics

60. Which avenues of service do you work with?
    a. Vocational Service
    b. Community Service
    c. International Service
    d. Club Service
    e. New Generations

61. How Long Have you Been a Rotarian?
    a. Less than 1 Year
    b. 1-3 Years
    c. 4-7 Years
    d. 8-10 Years
    e. 11-15 Years
    f. 15-25 Years
    g. More than 25 Years

62. Are you now, or have you ever been, an officer in a Rotary Club or District?
    a. Yes
    b. No

63. What District to you currently belong to?

64. What country/countries are you a citizen of? (Multiple Selections Allowed)
    a. If you are a citizen of more than one country, please also tick this box.

65. What Age Group Do You Belong To?
    a. 18-29
    b. 30-39
    c. 40-49
    d. 50-59
    e. 60-69
    f. 70 or more

66. What's your Gender?
    a. Female
    b. Male