Establishing Computer User Groups in a Metropolitan Area

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ABSTRACT

The greater part of technological activity takes place in large cities and towns. It is in these metropolitan areas therefore that there will be a wide spectrum of users using a variety of software tools and applications. Frequently, a positive approach to mastering a software product is to speak to and work with other users. Users often want to learn about products, share their enthusiasm for a product and discuss ways to better use the product. Many users prefer the "users group" atmosphere (Cahoon 1996). Within users groups, Special Interest Groups (SIGs) are sometimes formed to specialize on more complex or popular components of the software. The North Florida Rational Users Group (NF-RUG) was established in March 2003 for users of the IBM-Rational family of software development methods and tools. This paper provides a brief background on user groups, the general structure of a user group, membership benefits, and models valuable lessons learned relating to the successful establishment of the North Florida Rational Users Group.

Keywords: creating user groups, IBM Rational software

1. HISTORY AND ORIGINS

It wasn't until the early 1950s that computers were introduced to government agencies, universities and businesses. By 1955, the first user group emerged to share experiences and ideas with each other and with the manufacturers. SHARE was created for the users of IBM machines, and USE for users of UNIVAC machines.   (SHARE was often given the interpretation of "Society to Help Alleviate Redundant Effort.") http://ei.cs.vt.ed[u/~history/50th/30.minute.show.html.

IBM's introduction of desktop computers in 1959 enabled the rapid expansion of computers to a broader group. Banks and other financial institutions were among the first to use computers to automate their businesses. Other sectors quickly followed.

In 1961, the Professional Group on Electronic Computers created technical committees to support special interest groups. In 1962, a Logic and Switching theory committee joined forces with the AIEE committee already in operation, and in April 1964, after a few more mergers, the Institute of Electrical and Electronics Engineers (IEEE) was officially recognized. This is one of the most prominent user groups today within which many special interest groups operate.

Later in 1964 users groups within the IEEE merged to form the Computer Group, which grew to a membership of 11,000 by 1966. In 1971, the Computer Group became the Computer Society and the membership multiplied exponentially. The number of committees grew, as did the number of conferences and meetings, programs and languages, magazines and publications, and efforts to formalize computer science in the educational system. In the late seventies, the Computer Society was funding many technical conferences some with the Association for Computing Machinery (ACM).

With the development of networks in the seventies and, more importantly, the marketing of personal computers, the population of users continued to increase both in number and in diversity. This increase fueled the growth of user groups and sent a message to manufacturers that computers and their accompanying software needed to become more user-friendly. In 1981 IBM introduced a PC that appealed to the non-engineering community - and the number of users skyrocketed.

The introduction of the user-friendly PC underscored the importance of software development. Applications such as word processing and spreadsheets made computing easy and efficient while graphics and games made it fun. The development of computer communication systems soon encompassed work and play.

Software was developed for homes, personal use, and businesses, and soon the process of software development came under scrutiny. In recent years, software developers in many cases have been migrating away from the conventional waterfall approach to an architecture-centric, iterative approach. One company that pioneered development of tools to support this process was the Rational Software Company, now owned by IBM. The North Florida Rational Users Group (NF-RUG) focuses on the Rational Unified Process (RUP) and the IBM-Rational suite of tools. The NF-RUG web site is located at http://www.nf-rug.com/

2. GENERAL STRUCTURE AND THE CONSTITUTION

As with any society or organization, user groups have a general structure. Such groups are frequently based on the initial vision of a few people who are passionate about a particular topic, theme, software tool, methodology etc. These few people approach other energetic professionals to spark sufficient interest in creating a Board of Directors. This may be the most critical and most difficult activity in initial formation of a user group. Directors must dedicate considerable time and effort to the development of a user group and are very rarely compensated financially. Their commitment often derives from a desire to enhance personal, professional and local business organizations.

The board typically conducts initial research to determine if sufficient need and desire exist to form a user group. If the determination is positive, a few more interested individuals may be invited to join, and the board can then decide upon it name, frequency and location of meetings, and a constitution. The group name should reflect the focus of the user group. Both the frequency and location of the meetings are heavily dependent on the size of the group, and may change as the group's population increases. The constitution serves as the user group's operational guide.

The constitution should contain a mission statement that encapsulates the focus, purpose, and organizational status of the user group (i.e., for profit or non-profit; governmental or non-governmental; private or public). The constitution might optionally include accompanying values and vision statements. Additionally, it must spell out membership criteria. While most members typically live in the same geographic area, some user groups allow members to meet via Internet applications or telephone. Care must be exercised to avoid any perception of discrimination. In some cases, applicants may be required to undergo an approval process, and honorary memberships may be granted. In some cases, there may be a limit to the number of times a denied applicant can re-apply, and/or a mandatory wait period between applications. Provisions may also be made for asking a member to leave the user group. All these features must be specified in the constitution.

It is the initial Board of Directors that develops the constitution, and the composition of future boards and terms of office must also be specified in the constitution. Officer titles may include president, vice-president, secretary, and treasurer. Titles may alternatively be Chairperson of the Board, Program Director, Communications Director, Financial Director, and sometimes Directors at Large. In some cases, there may be multiple vice-presidents, each of whom may preside over special interest groups or committees.

The directors assume responsibility for various facets of the group's operation and administration including finances, membership, programs, and communication. The Board of Directors is typically headed by a chairperson who may have veto power. And, to support smooth operations, job descriptions for each board member should be included in the constitution.

Except for interim founding directors, officers and directors should be chosen by the membership in a transparent and fair election, and a limit should be set on the length of each term and number of terms (whether consecutive or not) an individual can occupy a specific position. Boards also generally have an odd number of seats to avoid ties and other potential voting conflicts. Also elections should occur in staggered years to allow for continuity of leadership.

The constitution may likely authorize the formation of special interest groups (SIGs) and special committees within the organization. The constitution should explain the process to be followed when starting a new sub-group and any associated requirements and limitations, including the extent of autonomy. General membership meetings should be held regularly and should follow a predetermined, published format. The constitution specifies a hierarchal list of officers who should preside over these meetings, circumstances under which meetings can be cancelled or postponed, and conditions for special meetings. Guest speakers may be invited to speak at meetings, and the group may sponsor or promote forums and symposia.

The Board's activities must also include initial and sustained financial decisions, the most important of which are the sources of financial support. Groups may levy membership dues, approach the manufacturer of the target system or software for sponsorship, plan for regular fundraising events, and other creative and innovative activities. Within the constitution, allowances must be made for revisions and amendments to both the bylaws and the constitution itself. Once the constitution is complete, recruitment for general membership may begin. The first general meeting should be carefully planned, advertised, and conducted.

3. MEMBERSHIP BENEFITS

Individuals matriculate to a user group only if membership is perceived to be beneficial to them. One clear benefit is the opportunity to socialize and network with other professionals with similar interests. But there are more. User groups may provide a forum for discussion where members can learn the answers to questions or to pose problems encountered during installation, updating, programming, or simply using the product or topic around which the user group is structured. The larger the numbers in a group, the more likely there will be people with the same or similar questions or problems. Synergy will naturally develop. Often times, discussions uncover helpful tools, hints, shortcuts, and lessons learned. Members may well exhibit different expertise levels and desire to contribute in various ways: leader, participator, presenter, consultant, or observer. Special Interest Groups may provide a forum within which specific topics can be addressed. Some members may be novices seeking general information; others may be quite mature and can serve as providers of information or join together to address very specific topics.

Some businesses choose to support the employee membership because knowledge and experience gained can be shared with other employees. Frequently, a business may sponsor a number of employees when such participation in a users group promises clear benefit to the organization. Social bonds created within the user group may also benefit the business. Further, individual and corporate membership policies may influence membership numbers.

Some user groups periodically publish newsletters, and this can benefit the membership. Newsletters may summarize recent group events, announce upcoming meetings, point out changes within the group, provide SIG activities, and more. Newsletters may also help keep members informed on other important issues by presenting industry news, latest advances or setbacks, and even popular rumors. Newsletters may also review newly released

products together with helpful tools, hints, and possibly even short tutorials. Such publications may include advertisements for job opportunities or products.

Some user groups are supported by the manufacturer of the system or software because benefits most definitely accrue to the sponsoring company as well as to individual memberships and corporations. The user group can serve as an advertising arm for the sponsoring company, because user groups expand the user base by spreading the word and promulgating product use. It is particularly beneficial to the sponsoring company when they receive feedback from the user group's forums and discussions.

4. ESTABLISHING A USER GROUP FOR THE RATIONAL UNIFIED PROCESS (IN NORTH FLORIDA)

Why a Rational User Group?
In recent years, developers have begun to turn toward use-case driven, architecture-centric, iterative development processes. Each iteration starts with gathering (or refining) requirements, and moves on to analysis, design, implementation, test, and assessment. At the conclusion of each iteration, an executable emphasizing a block of functionality is produced for the team managers and/or customers to test and evaluate. Such a process supports early risk assessment and management. Developing software iteratively is considered one of the six key best practices (Kruchten 2004) commercially proven to increase the chances of a project's success (particularly when all six are used in combination).

The Rational Software Corporation enlisted the help of Ivar Jacobson, Grady Booch, and James Rumbaugh who were pioneers in the development of Use Cases, Objectory, a process – which evolved into the RUP, and several similar class/object modeling approaches. While each of these 'three amigos' had unique contributions, sometimes variances took the form of different notations to model similar phenomena. Nevertheless, this Rational team developed and honed the Rational Unified Process (RUP) that supports best software engineering practices to ensure predictable, repeatable and successful software development. IBM-Rational currently markets the RUP as a useful business tool, and the RUP has become an industry standard, with many companies employing this process and related support tools and products, thus significantly increasing the demand for expertise. One such company is Blue Cross Blue Shield of Jacksonville, FL, where the Capability Development Factory and Virtual Office Director, Ricardo R. Garcia, realized the necessity for employees to be well trained in the RUP and associated technologies. He started searching for supporting user groups and other IT societies and, finding none, decided to approach IBM-Rational. He offered that a Rational Users' Group in the North Florida region would be welcomed with open arms due to widespread and growing RUP usage, and IBM-Rational's powerful suite of integrated and complementary tools.

The NF-RUG – Initial Activities
Board of Directors. The Rational User Group in North Florida got its start when Mr. Garcia approached an individual at a large consultancy and a professor of computer and information sciences at the local public state university in December 2002. These three then approached a select group of other people, and an initial Board of Directors of North Florida Rational Users Group (NF-RUG) was officially born. A request for a license and a tax id were quickly obtained. The first few meetings were strictly organizational during which the directorships and responsibilities were outlined as follows:

Chairman – Call and cancel meetings accordingly and preside over these meetings. Chairman is the prime constituent of the Board of Directors. The Chairman is a signatory on the group's account and may sign financial documents if necessary. This individual is the primary contact with IBM-Rational.

Program Director – Plan and organize the meetings. The Program Director is next in line after the chairperson and may preside over meetings in the chair's absence.

Membership Director – Process new applications and maintain records of members and the membership list. The Membership Director is also responsible for special interest groups and elections. This

director is next in line after the program director.

Communication Director – Ensure all members are kept informed and receive the group's published material. The Communications Director is also responsible for recording and publishing minutes of meetings and all external communications.

Financial Director – Administer all financial matters. The Financial Director is a signatory of the group's accounts. This individual also collects and records dues and fees and prepares budget proposals.

Directors at Large – Assist directors and serve as liaisons between directors and any committees or special interest groups.

Constitution. Before the board approached potential members and sponsors, a name for the Group was determined and the constitution was developed. The constitution contains a simple mission statement: "*The North Florida Rational User Group (NF-RUG) provides opportunity for knowledge sharing, education, and guidance for product direction in order to achieve maximum business value*." The NF-RUG board members are to work on a voluntary basis, and meet every Tuesday at 5:30pm for an hour - occasionally by conference call. (See Section 6 on Updates for meeting changes.)

In early 2003, NF-RUG became a registered Rational User Group, as all Rational User Groups, is an independent, user-run organization – run by the users for the users. Of the twenty-six IBM-Rational user groups world-wide, twenty-one groups are found in North America and five are located in Europe, the Middle East, Africa, and in the Asia Pacific areas. See http://www.rational-ug.org.

Financial Support. Concurrent with completing the constitution and establishing official recognition, the board focused on financial aspects of starting and maintaining the user group. While the NF-RUG is a non-profit organization, monthly membership meetings cost money. The principal funding source is individual annual membership dues, and the initial individual dues range from $20 (for students) to $50. A basic

annual corporate fee was designed and implemented at the $250 level, which provided for three free individual memberships and a reduced rate of $35 to all other corporate members. (A couple of corporations also reimbursed the employee $35 fee.) (See Section 6 on Updates for corporate sponsorships.)

IBM-Rational and Sponsorship. It is important to note that IBM-Rational has been very supportive of the NF-RUG, by providing marketing support and occasional guest speakers for the general monthly membership meetings. They also have recently created links on their host website to the NF-RUG (and all user groups) and provide much information in their newsletters. Representatives from IBM-Rational have met with the Board to discuss these and proposed web-site enhancements.

The IBM-Rational web site offers space and many other useful links to other user groups. In the first few months of existence, the NF-RUG had created its own regional web-site in order to display the constitution, provide contacts to the board members, post copies of presentation slides, announce meetings, and similar activities. The NF-RUG is now in process of transitioning onto the IBM-Rational web site. It is anticipated that once the transition of files and links is complete, the local site will be abandoned in favor of the IBM-Rational site. The NF-RUG also plans to ask for the donation of a low-end notebook computer that can be used to support administrative activities during the monthly meetings.

First Meeting. After a few months of planning, organizing, and initial fine-tuning, the board decided the NF-RUG was ready for its first general meeting. Individuals were invited to attend the inaugural meeting via word of mouth and mass emails. Additionally, the *Jacksonville Business Journal* and the *IBM Rational Newsletter* were used. The group also sent notifications to local universities where job-anticipating students are eager to make contacts with practitioners and learn about real-world activities.

The first hour of the monthly meeting consists of a brief business meeting (welcoming new members / attendees, citing

the mission of the NF-RUG, etc.) followed by networking and (recently) SIG round table discussions. After a short break, an hour-long presentation including a question and answer session is provided by a guest speaker. The NF-RUG posts the presentation slides onto the website for future reference and for those who were unable to attend the presentation.

The NF-RUG came together very quickly and with great success. Since the first meeting, membership has increased to over one hundred fifty members with a mailing list approaching 300. These numbers make the NF-RUG the largest IBM-Rational user group in North America. Formal meetings are held on the first Tuesday of every month, with the exception of the summer months (July and August) from 6:00pm to 8:00pm at the University of North Florida University Center. Attendees are provided with adequate, free parking and hors devours, and the meetings are timed conveniently at the end of the business day.

5. SPECIAL INTEREST GROUPS

Initially the NF-RUG focused on attracting well-known industry experts several associated with IBM-Rational to speak at the monthly membership meetings. Members heard presentations from Walker Royce of IBM, and most recently from Ivar Jacobson and his daughter, Agneta, of Jaczone AB. Other industry professionals have provided a rich assortment of stimulating presentations. Talks have included Best Practices, the RUP, Use Case development, Designing the Human Computer Interface, Testing in an OOSE Environment, Aspect-oriented software development, Managing Software Requirements with Requisite Pro and other topics. In early January 2003, Ivar Jacobson provided a full day of presentations and discussions in Jacksonville. At the time of this writing, Per Kroll, and Grady Booch will be visiting in the near term.

Although internationally well-known speakers and regional practitioners continue to be willing to travel and present to the group, and individuals such as Ivar Jacobson, Per Kroll, Walker Royce, and Grady Booch are clearly huge attractions to the membership, the Board of Directors was keenly aware that the membership needs

more. As the NF-RUG has started to mature and members continue to become more comfortable with each other, out-sourcing, job transfers, and workplace issues spanning a variety of development process activities continue to emerge.

The Board realizes that special interest groups constitute an essential component of the NF-RUG and in many respects form the heart and soul of the membership. These were developed to maintain high, personal interest of the membership during periods of rapidly-changing technology, outsourcing, and related, dynamic changes. To maintain member interest and relevance, the NF_RUG must constantly maintain its finger on the pulse of individual needs. It is a shared belief that the membership requires specific, focused platforms to facilitate interchange, learning, and topics of high interest to individual members – particularly those using or who are planning to use IBM-Rational tools. It was further recognized by the Board, that without the SIGs, the NF-RUG would lose its relevance to many members and entropy would occur. Only if the membership continually has its technology needs met will it prevail and serve this membership.

In an open discussion during a general meeting, the board surveyed the membership to reconcile individual desires and an initial set of SIGs were established. These are: Business Modeling and Requirements; Analysis, Design, and Testing; and Project Management. As part a monthly general meeting in the Fall of 2003, the membership broke into three round tables, each of which was spearheaded by one of the board / adjunct board members. Attendees were invited to join one of the three start-up SIGs and were asked to 1) develop a mission statement, and 2) identify specific topics that the SIG would like to address, and 3) select a facilitator. Results were presented at the end of this meeting and are available on the website http://www.nf-rug.com/ Very briefly:

Business Modeling and Requirements
Mission Statement: Create a practical, learning environment that promotes real world application of business modeling and requirements definition. This group anticipates focusing on the documentation of

the business processes that must precede detailed development activities. It is comprised mostly of business analysts, many of whom are dissatisfied with traditional modeling and development paradigms but several of whom are relatively new to the RUP or domain modeling in particular and the object oriented paradigm in general.

Project Management
Mission Statement: Sharing real world experiences of the RUP and Rational Tools. This group expects to emphasize project and process management. Members are concerned with tracking changes and controlling their impact.

Analysis and Design and Testing
Mission Statement: To share ideas / solutions to build quality products. This group, the largest by far, will focus on project development. Most members are developers – analysts, designers, and programmers. These members use a number of IBM-Rational tools. Since the numbers in this group were larger than the other two, it is anticipated that those interested in testing may form a fourth SIG.

6. UPDATE: ISSUES AND OPPORTUNITIES

The NF-RUG is a relatively new group and, despite its successful beginnings, has experienced some growing pains as the maturation process takes place. The most significant issues are provided below.

Stability of Board Membership.
Within the few months of getting started, one board member (a Director-at-Large) resigned for personal reasons. The board quickly received four highly-qualified applications for the single open position. The board did not want to eschew the other three candidates, so a decision was made to invite them to serve as adjunct members. While these new adjunct members would not possess voting rights, they were clearly pleased with this decision and agreed to provide general assistance on an ad hoc basis. Unfortunately, before the newly elected board member could contribute, he was transferred from the geographical area. By vote, the Board asked one of the three adjunct members to assume this vacant position, retaining two adjunct members.

Within the next two months, two additional board members resigned due to job transfer and heavy work commitments. The two adjunct members were pleased to assume these duties. When the need for additional adjunct board members was announced at the monthly meeting, a number of individuals quickly stepped forward, and the vacancies were quickly filled. While board membership was once again stable, the issue of turnover remains. In retrospect, some of the turnover appeared to be directly tied to the original organization of the Board: a greater than expected administrative workload and weekly face-to-face meetings.

Distributing the Administrative Load.
Maintaining the attendance database, emailing the monthly announcements to the membership, and tracking counts for reservations for the monthly meetings and related activities proved to be a very heavy burden for the Communications Director. While one of the Directors-at-Large had assumed some of this responsibility, this workload turned out to be considerably more than that which was expected. This position was one of the ones early on that became vacant, and it was clear these duties needed redistribution. Maintaining correspondence related to the membership database was moved to the Membership Director and one of the members-at-large now formally assists the Communications Director in meeting other communications-related responsibilities.

Changing Board Meeting Times.
Meeting times have been reduced to accommodate work schedules of board members, as meeting every week appeared to be an unnecessary burden. The first adjustment from weekly, face-to-face meetings was to completely eliminate one meeting – the one a week after the general meeting. Rather, there would be a two-week break between the monthly general meeting and a single face-to-face meeting half way through the next month. Then, a face-to-face meeting one week later (just prior to the next general monthly meeting) was replaced by a 'conference call meeting.' The face-to-face meeting was designed to

address all the significant activities of the group, while the conference call meeting prior to the next monthly meeting was to solidify any last minute details prior to the monthly general meeting.

This too has changed. There is now a single, two-hour business meeting midway through the monthly cycle. Email is used to address any other matters that might arise. Busy work schedules, significant traffic problems late in the day, and personal problems contributed to these adjustments. All board members now seem quite happy with the latest arrangement, and this mid-month meeting integrates some social activities in with addressing the business matters.

Acquiring Major Corporate Sponsorship.
Based on recommendations of one of the board members who is a vice president for marketing in his consultancy, an improved source of sponsorship was suggested, implemented, and has been successful. The NF-RUG now offers a range of sponsorships each with specific benefits: an annual Executive Corporate Sponsorship ($2500) which entitles the corporation to full membership for all employees; an annual Corporate Sponsorship ($1250) which entitles the corporation to ten free individual employee memberships plus $35 for individual numbers exceeding ten, and an annual Basic Corporate Sponsorship, which remains at $250, which entitles the corporation to three free memberships plus $35 for numbers exceeding three. This important initiative has recently resulted in sponsorships from Blue Cross Blue Shield of Florida at the Executive Corporate Sponsorship level and from Ajilon Consulting at the Corporate Sponsorship level. A number of other companies have indicated their desire to participate at the Basic Corporate Sponsorship level. It is hoped that sufficient corporate memberships will be secured so that individual membership fees may be suspended in the future. Apart from the new sponsorships, a move is underway (at the time of this writing) to provide free membership to all students (with presentation of Student ID card). The NF-RUG recognizes that many students have limited financial resources and should be encouraged to attend the monthly meetings to mingle with and hear the concerns and

issues of professionals for whom they may be working in the near term.

Special Interest Groups.
The SIGs are still evolving to a steady state with considerable sentiment to establishing a fourth SIG for testing. Critical mass each meeting is an imperative, so the creation of additional SIGs must be undertaken with care. In the most recent meeting, a number of analysts and programmers drove from Gainesville, FL, around 80 miles away, to openly discuss a number of issues this development team is experiencing.

Continuous Flexibility.
The NF-RUG is run by the members for the members. It is specifically the membership that maintains ultimate authority on both the structure of the group and any changes in emphasis or technology that may arise. If, for example, the membership articulates a desire for an additional SIG to address a new technology, or, perhaps, a change in the annual election process, the NF-RUG will respond positively. The board fully realizes that the only real constant is 'change.'

7. CONCLUSIONS

This paper has presented some of this history and background of user groups in metropolitan areas with special emphasis on the first steps taken by the IBM - Rational Users Group in Jacksonville, FL. Creation of a user group requires considerable time and dedication of the Board of Directors members. It has become clear that despite great intentions, personal occupations and private lives directly impact one's ability to contribute on a reliable basis.

While the NF-RUG has been very successful, a number of issues have become quite clear, the foremost of which is the stability of the board membership. Changes to board responsibilities, meeting times, and specific board member responsibilities have been adjusted to more equitably distribute workload. This is essential for the continuity of leadership and direction that only a stable board can provide.

The SIGs are rapidly becoming the lifeblood of the NF-RUG, as more individual comments appear to reflect their practical value. Considerable effort with SIGs is anticipated

in the very near term. Continuing to attract and publicize nationally recognized and internationally well-known professionals to speak is vital. Marketing (advertisements, newsletters, web-sites, emails, etc.) are indispensable, and recent financial initiatives are beginning to occur.

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