1. Abstract

See Abstract in Appendix

2. Background

iGroups is a web-based group collaboration and project management software that has been in development at IIT by students for the past four years. iGroups is developed and maintained by the IPRO program. It includes a variety of features from e-mail to file sharing to timesheet tracking to assist IPRO teams with their tasks throughout the semester. New features have been added over time as students expressed the need. For example, discussion boards were added during Spring 2008 to facilitate group communication. IPRO 353 was formed during the Spring 2008 term to look into the possibility of commercializing iGroups. Preliminary market research and competitive analysis were done and a business plan was written. Recommendations were also provided – primarily a recommendation to launch a public beta of iGroups. This continuing IPRO's problem was to determine the best way to go about commercializing iGroups as well as to decide which recommendations from the previous semester were still applicable and needed to be executed. This IPRO was also charged with doing more in-depth research based upon what was discovered last semester.

3. Objectives

The overreaching objective of ENPRO 353 was to attempt to create value for Illinois Institute of Technology through marketing and selling the iGroups collaboration software. In order to accomplish this, the team created sub-objectives. The first of these sub-objectives to be completed was collecting and analyzing the primary market research from the students and faculty already using the software in order to understand the needs and wants of the current users. The next objective was to analyze the potential entrance of iGroups into the target market by conducting research on the size of the market and existing competitors. The team also explored the legal issues involved in marketing iGroups as a product; after finding iGroups unmarketable for legal issues, the team explored finding both a new name for iGroups (because of a standing trademark) and integration with another software - IMI – in order to achieve patentability of the software. An objective that arose midway through the project focused on creating a better iGroups through development. The final objective was laying the groundwork for a future team to be capable of marketing iGroups after proper development has taken place.

4. Methodology

This section details how our research was conducted and the process the group used.

A. See Gantt Chart in Appendix

B. In the beginning of the semester, the Primary Market Research team originally planned to organize a focus group before the midterm presentations. However, the group decided it was better to determine what the target market for iGroups was before proceeding with organizing a focus group. In addition, professor and Committee & Organizational surveys were distributed throughout the campus to determine the likability of iGroups and which new features can improve the program's performance.

The Competitive Analysis team conducted further research on collaboration softwares that companies use in their daily practices. The team determined that the programs @task and AceProject were the two primary competitors iGroups would face should it be marketed outside of IIT. Therefore, extensive research was done to compare costs, features and user satisfaction. In addition, demonstrations of both @task and AceProject were given to IPRO 353 to determine if one of these two programs will be an effective replacement for iGroups.

C. See surveys in Appendix

5. Team Structure and Assignments

The original team structure of this ENPRO worked well, with sub teams for Primary Market Research, Website Development, Naming, Intellectual Property, and Competitive Analysis. As these teams were meeting their goals, it became apparent that the teams needed to be changed, in order to reassign those with completed tasks. This decision left us with the following sub-groups:

Primary Market Research	Competitive Analysis	Website Development
Sweta Gurnani*	John-Paul Roman*	James Schweiger*
Christopher Chachakis	William Ward	Alejandro Taboada
Dev Narasimhan	Mark Cooney	Michael Greiling

* denotes sub-group leader

The removed sub-groups were removed for different reasons. The Naming sub-group was dissolved because it had accomplished its task: a non-trademarked name and a matching domain name on the internet had been selected. With no assignments left, they were dissolved. The Intellectual Property sub-group was dissolved for a different reason. When our path branched from just marketing to the four choices of marketing, replacing, selling, or keeping, the Intellectual Property team was reabsorbed in order to speed the selection process.

In the Primary Market Research team, Sweta Gurnani, Christopher Chachakis, and Dev Narasimhan all succeeded in gathering market research for the group. These were done with the surveys and focus groups that were done, which required the entire sub-group to participate. As the leader, Sweta kept the

sub-group on task, compiling the individual efforts of Chris, Dev, and herself into one usable item, whether it was a document or a presentation. She also developed the student surveys that were used. Christopher developed the professor surveys that were emailed, and analyzed the choice of marketing iGroups outside of IIT. Dev developed the organization surveys (which were not returned, giving no feedback). He also collaborated with William Ward on analyzing the choice of replacing iGroups.

In the Competitive Analysis team, tasks were more broken up. John-Paul Roman, along with compiling team data, gathered feedback from users of our competition's software. After changing our market, Mark Cooney discovered our current competition, and did a comparison between iGroups and @task. William Ward, after finding our new competition, did a comparison between iGroups and AceProject. He also collaborated with Dev Narasimhan to analyze the choice of replacing iGroups.

In the Website Development sub-group, James took the role of head programmer, implementing the features that the market desired. Michael Greiling assisted in the development and the designing of a new interface for iGroups. He also helped to discover the new name that is recommended for iGroups: CoreGroups. Alejandro Taboada proved invaluable as he acquired a test version of our competition, @task, and helped to test it out. He also assisted in finding the new name for iGroups, and analyzed the choice of keeping iGroups at IIT, without any marketing or replacing.

6. Budget

	Amount	*Units*	*Item(s)*
1	$15		Candy for student survey respondents
2	$45	200	Copies of surveys at Kinkos
3	$150	15	Jimmy Johns lunches for focus group
4	$150	15	$10 Potbellys gift cards for focus group
5	$10		drinks for focus group's lunch

7. Results

Throughout the semester, the team pursued several avenues to gain insight into how iGroups is perceived by its users as well as where iGroups might fit into the web collaboration software market. The subgroup that handed out surveys to IIT's student population got an understanding of how students use iGroups and what features they think might be useful that iGroups doesn't currently have. For example, the team learned that many students preferred the document storage, editing and collaboration features of Google Documents over iGroups. Meanwhile, another subgroup sought to learn what other collaboration

applications - potential competitors to iGroups - are being used by businesses and universities. This research yielded market leaders in the industry and gave the team perspective into aspects such as marketing, pricing and feature sets that are useful for users.

Project milestones included determining competitors in the group collaboration space and deciding that iGroups users would be best off with the current site (and constant development) rather than replace iGroups or sell it.

Goals that were not met include obtaining input about iGroups from IPRO instructors and two other schools, Auburn University and Michigan Tech, which have been demoing iGroups. The team thought that instructors, who manage and moderate the IPRO as a whole and perform administrative functions, would have unique insight that other users would not be able to offer. The team did not receive many responses to surveys from instructors or meaningful input from either school that used iGroups.

In general, ethical, moral, cultural and scientific issues did not obstruct the progress of this IPRO. However, one ethical issue that did come up during the course of the IPRO surfaced when the team positioned iGroups when communicating with potential competitors.

8. Obstacles

The main obstacles presented to the team were caused by an initial lack of direction in the project. The team wasn't able to specify a concrete objective since the beginning, and this led to a scattered investigation on the possibilities of commercialization. The team proceeded to dwell on branding, marketing campaigns, and almost struck on collaborations with companies that could've enhanced the overall experience of iGroups. But all of these, useful as they were, couldn't aim to anything less specific than the commercialization of iGroups.

Despite this fact, the challenge steered the group into considering the options that constitute our current objective. In concrete, the primary, and secondary market analysis led to deliberate on whether iGroups was ready to be commercialized. This also opened grounds for a third option, which consisted in actually replacing iGroups as an economic option for the university. All of these served as a reminder of how not having an objective can be also be beneficial, if approached the right way.

This challenge could've been prevented if a substantial plan had been laid out from the beginning of the term, or less likely, if the previous team had put more effort into the project when it was in their hands. Therefore, more information could've been available, and the actual commercialization wouldn't be put to a stall. Notwithstanding, stalling turned out to be good for the project, and the development of iGroups was at its best when this situation was overcome.

It is really important, and worth mentioning for a second time, that the obstacles presented during the semester were mostly considered opportunities of development by the team. This cannot be understated, as the team found themselves more motivated when the objective of the project materialized. It probably serves as an example of the software usefulness, but the team had great communication and collaboration through iGroups at all times. Tasks were handed out easily, deadlines were met, and the overall project turned out to be a success in terms of our objective.

The most important challenge the next team will have to face, is to follow up with the valuable information and developments the current team has gathered this semester. The most detrimental effect on this types of projects is to ignore previous research and documentation, unless it is incomplete or one-dimensional. Therefore, it is urged that the following team's first task is to read the final report on this term (before the course starts if possible) to ensure continuity.

9. Recommendations

In conclusion, over the course of the semester we have found that IIT's iGroups software is not worth marketing at this time because we have insufficient data to determine it's usefulness in the educational institution market which we have targeted. It is also not worth replacing iGroups with another product in our IPRO department because iGroups is already well and uniquely tailored to serve the purposes that the IPRO teams require. It would not be very time and cost effective to attempt to adapt another software for use in the program.

Therefore, it is our recommendation that iGroups be kept and that we continue to develop it in house, adding features as required by the IPRO department as well as polishing and maintaining the current feature set. We recommend that our interface changes and feature additions from our team's public version of the site be incorporated into the version used by the IPRO department and that the public version be maintained and hosted at IIT for the use of students outside of the IPRO department. It would also be beneficial for the development team to work toward integrating iGroups with the rest of the IIT student web application suite so that it can be easily utilized for group collaboration projects.

Once the software has proven it's worth and it is determined that students find this software useful in their non-IPRO classes, then we can return to the concept of marketing the product to other institutions at a later date. It is recommended that IPRO 353 be continued to oversee this transition and monitor its effects.

10. References

www.attask.com
www.aceproject.com
www.imiinnovations.com

11. Resources

Team Member	Hours	Task	Deliverable(s)
Alejandro	4.5	ideas for new names	New names for trademark-ing, Recommendations
	21	Working on presentations, reports, poster	Presentations, Reports, Poster
	8	Competitive research/Industry research	Recommendations, Business Plan, Final Report, Presentation
Bill	21	Competitive research/Industry research	Recommendations, Business Plan, Final Report, Presentation
	10	Working on slides, final report, practicing	Presentations, Reports
Chris	17.5	Surveys, Analysis, Focus Group	Recommendations, Business Plan, Final Report, Presentation
	8.5	Working on slides, practicing	Presentations, Reports
	5	Uploading minutes	Team Minutes
Dev	18.5	Surveys, Analysis	Recommendations, Business Plan, Final Report, Presentation
	12	Working on presentations, reports, poster	Presentations, Reports, Poster
Jim	68	coding/research	Website
John-Paul	10	Working on Presentation, Project Plan, Ethics	Midterm Presentation, Code of Ethics, Project Plan
	10	5 Forces, SWOT, Value Chain	Recommendations, Business Plan, Final Report
	12	Competitive research	Recommendations, Business Plan, Final Report, Presentation
	10	Working on reports, slides	Final Presentation, Report
Mark	27	Researching competition	Recommendations, Business Plan, Final Report, Presentation
	1	Working on slides	Midterm Presentation
Mike	39.5	Coding	Website
	2	looking up IP issues	Legal Issues - Final Report
	5	Working on slides & Practicing	Final Presentation
Sweta	10	Working on legal issues	Legal Issues - Final Report
	12	Working on midterm presentation/report	Midterm Presentation
	15	Working on final presentation/report	Final Presentation & Report
	5.5	Focus group	Recommendations, Business Plan, Final Report, Presentation

12. Acknowledgements
Our IPRO was assisted by the following parties:

APPENDIX

IPRO 353
Web Based Groupware for Team Collaboration

Objective

The goal of IPRO 353 was to determine whether the group-collaboration software, iGroups, can generate a return on investment, and if so, how?

Basic Organization and Tasks

IPRO 353 delegated responsibilities to small groups. During the first half of the semester, the tasks the groups worked on were: primary market research, secondary market analysis, naming, website/marketing, and legal issues. During the second half of the semester, the tasks the groups worked on were: primary market research, secondary market analysis, and the website.

Accomplishments

IPRO 353 made significant progress. We determined our target market to be focused primarily on academia but also includes small committees. We determined our place in the industry by conducting competitive analyses. We also obtained a better understanding of customer needs through surveys and focus groups. A public version of iGroups was created in an effort to allow iGroups access to non-IIT students and faculty. iGroups was also redesigned and a Gantt chart feature has been implemented.

Critical barriers and obstacles

The primary market research team had a difficult time getting survey responses and adequate focus group attendance. The subgroup also experienced information barriers with professors and students. The secondary market analysis team experienced information barriers in regards to getting information about other companies/competitors. The legal team's obstacles were in regards to user information security. Changes in our target market definition made some marketing work obsolete and/or redundant. Technical issues involved learning new code (PHP) as well as contacting the iGroups coordinator.

Conclusion

It was decided that the marketing of iGroups will be delayed. iGroups will be kept within Illinois Institute of Technology to further improve the program. Additions to iGroups, including Instant Messaging, can easily be made by developers. Once iGroups is commercially appeasable, it will be easier to cater to our target market.

Next steps

While we have had a lot of success this semester, there is still a lot that that needs to be done. iGroups should be further polished from its current feature set and improved in regards to usability within the iPRO department. iGroups should be promoted to all

students for non-iPRO projects. iGroups should be integrated into IIT's student web application suite (via the myIIT portal). We hope that future semesters can get professors from various departments to encourage its usage for collaborative projects. In the future, students should re-visit the idea of marketing the software if they find that the software becomes useful outside of the iPRO department.

Faculty & Advisors: Nik Rokop and Christopher Lam
Team Leaders: Sweta Gurnani, Business; John-Paul Roman, Business
Team Secretary: Christopher Chachakis, CPE
Student Members: James Schweiger, CS; William Ward, Business; John-Paul Roman, Business; Dev Narasimhan, BME; Christopher Chachakis, CPE; Sweta Gurnani, Business; Michael Greiling, CS; Mark Cooney, ITM; Alejandro Tabaoda, AE

Professor Survey

iGroups is IIT's personal collaboration software that is used exclusively for Interprofessional Projects (IPROs). This technology is constantly in development, and there are currently plans to release it to the public, specifically to those working within the education market (students, professors, administrators). Your feedback will allow us to know what to improve on, as well as letting us know who would like our product, and what they would use it for. As with any survey, your responses are treated as anonymous. Thank you from all of us at ENPRO-353.

1. To which educational department do you belong?
_____

2. What do you like about your current collaboration software?
_____
_____
_____

3. How important are the following features in a collaboration tool? (1 being not important, 5 being very important)

File sharing between members	___
A message board/forum	___
A permanent record of old submissions	___
An editable calendar	___
Built in e-mail system	___
A picture board	___
A contact list for the members	___
An editable "to-do" list	___

4. Have you ever heard of software named iGroups? (Y/N)   ___

5. Based on these features, would you be willing to use iGroups? (Y/N)   ___

6. How interested are you in collaboration software that contains the following features?
(1 being not interested, 5 being very interested)

Co-browsing (multiple people controlling the same page from different locations)
                                                                                    ___

Co-authoring (multiple editors of the same document at the same time from
          different locations)   ___
Real time IM (appearing as you type, rather than hitting 'enter')   ___
Side by side viewing of uploaded photos   ___
Draw/highlight with the cursor   ___
A list of who's currently logged in   ___
Audio/video capabilities   ___

7. Would you be more likely to use iGroups with these features implemented?(Y/N)
                                                                       ___

8) a) In your opinion, what is the best group project program other that iGroups, such as Yahoo!
Groups and Blackboard?
_____

b) What is it that you like about it? Where do you feel that it is lacking?
_____
_____

9. What would having this sort of software help you with?
_____
_____
_____

10. How much would you be willing to pay for iGroups (if anything)?
_____

11. Would you be willing to purchase add-ons to utilize iGroups more effectively?
          (Y/N)   ___

12. What features, besides those listed in this survey, would you like to see in collaboration
software?
_____
_____
_____

ENPRO 353 Organizations and Committees Survey

iGroups is IIT's personal collaboration software that is used exclusively for Interprofessional Projects (IPROs). This technology is constantly in development, and there are currently plans to release it to the public. Your feedback will allow us to know what to improve on, as well as letting us know who would like our product, and what they would use it for. As with any survey, your responses are treated as anonymous. Thank you from all of us at ENPRO-353.

1. What organization are you affiliated with? _____
2. Have you ever taken an IPRO? (Yes/No)

[If you answered no, please skip to question 6; otherwise, proceed to question 3]

3. What tools were most beneficial in iGroups?
   _____
4. What tools were least beneficial in iGroups?
   _____
5. What tools would you like to see that are not currently integrated into iGroups?
   _____
6. How important are the following features in a collaboration tool? (1 being not important, 5 being very important)
   ___File sharing between members
   ___A message board/forum
   ___A permanent record of old submissions
   ___An editable calendar
   ___Built in e-mail system
   ___A picture board
   ___A contact list for the members
   ___An editable "to-do" list
7. Would your organization/committee be willing to use iGroups? (Yes/No)
8. How interested are you in collaboration software that contains the following features? (1 being not interested, 5 being very interested)
   ___Co-browsing (multiple people controlling the same page
       from different   locations)
   ___Co-authoring (multiple editors of the same document at the
       same time from different locations)
   ___Real time Instant Messaging (appearing as you type, rather
       than hitting 'enter')
   ___Side by side viewing of uploaded photos
   ___Draw/highlight with the cursor and have other people in
       different locations be able to see it in real time
   ___See who's currently logged in
   ___Audio/video capabilities
9. Would you be more likely to use iGroups with the aforementioned features being implemented? (Yes/No)

10. a) In your opinion, what is the best group project program other that iGroups, such as Yahoo! Groups and Blackboard?

_____

b) What is it that you like about it? Where do you feel that it is lacking?

_____

12. What type of applications in your organization would iGroups aid in?

_____

13. How much, if anything at all, would are you willing to pay for iGroups?

_____

14. Would you be willing to purchase add-ons to utilize iGroups more effectively? (Y/N)

Competitive Analysis
Research Industry (75 days)
Research Competitors (75 days)
Competitive Analysis (75 days)

iGroups Public Beta
Website Design and Concept (21 days)
Implement New Designs (42 days)
Determining New Features Feasibility (7 days)
creating Gantt chart Feature (19 days)

Intellectual Property
Research Program Patents (6 days)
Contact Professor Stone (2 days)
Meeting Professor Stone (1 days)
Conduct Legal Research (12 days)
Follow up meeting with Professor Stone (1 days)
Collaborate with Law Students (8 days)

IPRO Deliverables
Project Plan (20 days)
Minutes (10 days)
Website (29 days)
Code of Ethics (14 days)
Midterm Presentation (7 days)
Midterm Peer Review (2 days)
Abstracts, Poster, and Presentation (12 days)
Final Report (12 days)
IPRO Deliverables II (1 days)

Naming
Decide on a New Name (25 days)

Primary Market Research
Decide on Primary Market Research Ventures (3 days)
Academic Surveys (2 days)
Contact Surveys (8 days)
Contact Potential Focus Group Participants (32 days)
Organize Focus Group (32 days)
Conduct Focus Group (2 days)
Compile and Analyze Results (5 days)
Conclusions Report (3 days)