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Learning about organizational capabilities, structures and strategies from Virtual Gaming Teams

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Abstract

The second generation of web development and design commonly referred to as Web 2.0 focuses primarily on user generated content and inter-human connections. The effectiveness of the applications and services increases with the number of people and the type of people making using of them. This concept has now extended to online computer games with the evolution of the Massively Multiplayer Online Games genre. These games are based on continuous real interactions with real people although in a virtual environment. Furthermore the game play promotes team building with complex game goals that necessitate large strong teams. Such teams often slowly turn into large communities containing hundreds of players. The online communities thus formed are consistently active and dedicated towards success. They begin to develop intricate team structures, processes, and strategies towards winning. Even the players are assigned specific roles and are part of specialized functional teams. These communities have become organizations in their own sense; they have become highly dynamic and evolving virtual organizations. An analysis and study of these communities and virtual organizations has a unique prospect of understanding the evolution and formation of an organization. Furthermore, frequent inter-organizational interactions in the game world and the easy access to self made leaders in these organizations make it a unique study on development of leadership, building organizational capabilities and organizational strategy in a dynamic environment.

Keywords: Virtual gaming, dynamic environment, organization capabilities, organization strategy, leadership

¹ This study was conducted by Hari Suman Naik under guidance of Professor Amit Gupta as fulfillment for the requirements of the Contemporary Concerns Study (CCS), Term 4, 2009, while he was a PGP (MBA) student at Indian Institute of Management Bangalore, Bannerghatta Road, Bangalore – 560076, Karnataka, India. All questions regarding this paper should be directed to Hari Suman Naik.

Introduction

A Virtual Team is a concept that has risen with the development of the internet and the gradual evolution of communication technology. Also known as a geographically dispersed team, it consists of individuals with a common purpose, with interdependent performance goals for which they hold themselves mutually accountable. Organizations with virtual teams can have their best members located anywhere in the world either working from home or working as small groups in different offices. Members usually communicate electronically and do not require meeting face to face.

The development of the Internet has also been accompanied by heavy movement towards user generated content and inter-human connections commonly referred to as Web 2.0. The effectiveness of the applications and services provided increasing with the number of people and quality of people making using of them. This concept has now extended to online computer games with the evolution of the Massively Multiplayer Online Games genre. These games are based on continuous real interactions with real people although in a virtual environment. Furthermore the game play promotes team building with complex game goals that necessitate large well coordinated teams. Such teams often slowly turn into large communities containing hundreds of players. The online communities thus formed become virtual teams that are regularly active and dedicated towards success. They begin to develop intricate team structures, processes, and strategies towards winning. Players are assigned specific roles and are part of specialized functional teams. These communities have become organizations in their own sense; they have become highly dynamic and evolving virtual organizations.

An analysis and study of these virtual teams has a unique prospect of understanding the evolution and formation of an organization. Frequent inter- organizational interactions in the game world and the easy access to self made leaders in these organizations make it a unique study on development of leadership, building organizational capabilities and organizational strategy in a dynamic environment. In this study, the popular Massively Multiplayer Real Time Strategy game 'Travian' was looked at. A typical Travian game round lasts for 10 months with around 15,000 players. Alliances or Virtual Teams get created consisting of up to 500 players. Travian offers an interesting analogy of Virtual Team formation, leadership in a scenario with a medium term goal and multiple life cycles and real world organizations in general.

Virtual Teams in Games

The World Wide Web (WWW) has changed the face of social interactions with the ease in setting up of online interactions. Contacts once made are stored forever with the help of social networking sites like Orkut and Facebook. To most people, these may only pertain to real world networks shifting online. However, there is a new emerging trend of people forming purely virtual networks with other people. This involves an activity that takes is very addictive and consumes considerable amount of time and effort. Massively Multi Player Online Role Playing Games or MMORPG as they are called have started attracting huge memberships with games such as 'World of Warcraft' even having more than 4 million members registered. These games are interesting because they are fully based on real time interactions with real people. High

amount of coordination and teamwork are essential for intra game groups called 'guilds' or 'alliances' to achieve success in these games. Guilds are up to 500 members in size and the best ones are highly cellular, with a mix of hierarchical as well as ad-hoc structures.

Multiplayer games owe a lot of their game play and magnetism to interactions among different players such as their in-game neighbors, alliance partners and enemies. Considering the large number of players and the high rate of new players joining as well as old ones deleting, the whole environment is very dynamic. Studying the formation of effective organizations, development of leadership and inter organizational interactions in such an environment is an excellent opportunity.

'World of Warcraft' is the single most popular Multiplayer Online Game currently and has been the subject of leadership research in the past². However the study done here focuses on the Massively Multiplayer Online Real Time Strategy Game (MMORTS) 'Travian' and the alliance 'Triumph' that was highly successful in a round that was played recently. At the end of the round it was a 400 member alliance out of 18,000 players around the world competing in a server and looking to win this year's round. It is believed that Travian offers some unique advantages and analogies to virtual teams in organizations that merit a study.



Figure 1 Merits of a Travian Study

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² Leadership in Games and Work: Implications for the Enterprise of Massively Multiplayer Online Role-Playing Games, http://www.seriosity.com/downloads/Leadership_In_Games_Seriosity_and_IBM.pdf

A study like this can be complete only when the researcher has experienced an entire round of the game as part of a successful alliance and observed the different aspects of it. The author was a member of Triumph and a significant contributor who interacted regularly with its members and worked with the leaders. Triumph Leaders were also interviewed and their stories documented to augment this study³.

Travian Game Play

Travian is a free Browser Based Massively Multiplayer Online Game which has around 3 million players playing across 250 servers worldwide. Each server has around 15000 players an instance of a game called a round goes on for roughly 10 months. It is a real time strategy game that goes on 24/7 for the entire period of the round.

New players can register and start playing anytime. However, there is a clear advantage of starting out early. Once a new player registers, the player can start building a village at randomly allotted coordinates in the Travian Map⁴.



Figure 2 Map showing different players in the travian world

Cooperative Play

Initially game play is about developing the resource production of the village and using it to finance the construction of the village. Very soon, cooperative play kicks in players start to interact with those around them. Travian provides an in game messaging feature so that players can message each other. Now players have an opportunity to build an army and raid the other players playing around them or they can also trade resources with other players at a profit and use it to grow. It soon becomes important for players to ally with other players around them and this considerably improves their chances of success.

Hence initially objectives are to grow faster than other players around and ensure survival against stronger aggressive players. Raiding other players successfully and on a regular basis is

⁴ Refer to Exhibit 2

³ Refer to Exhibit 7

also known as 'farming'. Skilled players farming others are able to steal huge amounts of resources which can be used to accelerate their growth.

Table 1: Procuring resources

| Procuring Resources | Process | Comments |
|--|---|---|
| From developing resource fields in own village | Reinvesting whatever initial resources are given to you back into resource fields | Slow process |
| Trading with neighbors | Establishing good relations among neighbors and a strong merchant network | Slow process and signals the player as a potential raid target |
| Raiding other players (farming) | Build an army faster than your neighbors and attack as soon as possible! | Fast process Requires more involvement from the player and some skill |

Formalizing cooperation

After the initial stage, players are able to expand by settling into new villages or conquer other players' villages. By this time, players also develop the ability to destroy other villages. Travian has an in game feature that allows players to enter into alliances with other likeminded and skilled players. Interaction among players in alliances is the essential component of Travian that makes it so popular. A huge part of user interest is sustained during this part of the game by the neighboring players both friends and enemies. Coordinated game play is a basic element of success. For example: There are designated attack and defense teams set up within alliances. An attack from a much stronger enemy player gets announced in the alliance forum and a combined defense put up with the help of reinforcements easily defeats the attack. Similarly, small scuffles or rivalries with players and small alliances spur the game along as players compete with each other in expanding their villages and army as their survival depends on it.

In the middle stages of the game, there are considerable players in the alliance and the map is covered by 4-5 main alliances. The alliance leaders themselves start planning for 'end game' as they start consolidating the other players that are out there. The game goes into merger and acquisition mode as good independent players who are willing are quickly offered entry to the alliance or farmed and destroyed. Smaller alliances too are poached, by either offering entry to all the good players or by attacking and destroying players in their leadership who don't comply and then offering entry to the others. This is often referred to as "Recruit the Best, Farm the rest".

End Game and the World Wonder

For many players who are playing this game for the first time, survival and then domination by being a part of a successful alliance is the main incentive for playing this game. Towards the end of the 10 months, game play becomes a race called 'The End Game'. The largest and most powerful alliances attempt to conquer the whole game world by becoming the first alliance to construct a Wonder. This is a long elaborate process that needs the cooperation of hundreds of

players. The alliances themselves by now will have merged to be a part of 2 or maybe 3 huge groups. This concept is also facilitated by an in game diplomatic feature where alliances can be confederate with each other. The game term for such a large confederacy is a Meta. Although Metas are just a bunch of alliances confederated with each other, they can have complex structures and leadership within. In the server that is looked at, there were two Metas at the end of the game. ART and WAR. ART had a combined number of 3000 players when the server ended.

Each Meta will have designated attack teams to attack the enemy Metas' wonder in an effort to slow them down. All other players keep supplying defense and resources to the wonder to ensure that its construction never halts. There are around 10 wonders distributed among the Metas vying for the top spot during End Game. Game play strategy turns into not letting the enemy know which the real wonder site is and which a fake one is. Concentrating defense and resources on the real wonder could well make the difference between winning and losing.

In the end no matter which team wins/loses, the cooperative play and the alliance feuds offer a lot of excitement and a sense of achievement. Being simple and easily playable Travian is slightly addictive and it's this feature of Travian that may put off certain people and cause them to quit. The game makers themselves are regularly updating the game by providing more of a role playing experience and introducing new elements of game play to keep up user interest. As a lot of the experience is derived from the type of people you play this game with, their skill level, their attitude and their maturity, it would do good for the makers of games like Travian to provide incentives for retaining good players and features that make player interaction more enjoyable.

My Travian Story

I started playing Travian from September 2008 till July 2009. I had joined roughly 3 months late into the round. The initial steps were to start out learning about Travian rules and game play. I joined a bunch of other new players in a small alliance. As the game progressed and I got better, I moved about a few petty alliances and started 'farming' other players, I joined the alliance TK after a while and I was with them until the game ended.

TK short for Triumph-Koar was a merger of two alliances in the South West that joined early on in the game after they had a quarrel with a powerful alliance called ABC. Now, senior players and leaders from ABC, Triumph and Koar had played together last round under an alliance called SWAT which had won the server last round. A lot of good players from SWAT ended up in ABC this round and they had issues with TK and started a war against it. The war was bad for TK, but they decided to fight till the end and take ABC down with them. ABC leaders realized that the war was taking too long and was ruining their chances of a successful End Game. TK and ABC ultimately came to a truce and formed a confederacy which was slightly dominated by ABC. There were however many internal conflicts as ABC players kept trying to show their superiority over TK. This was solved diplomatically by the leaders by reshuffling teams and adopting a new banner which integrated the players called ATCK. After uniting with ABC, ATCK became the most powerful team in the South West quadrant of the Travian world.

Game play then moved into different directions. Some wings of the alliances focused on expanding to other territories and taking on the other large alliance called WAR. Others focused on internal policing by ensuring dominance in the South West by destroying or assimilating all the other alliances. ATCK was very successful in this and quickly built up a reputation for being one of the most aggressive alliances Travian had seen.

As End Game approached, WAR consolidated its position by uniting with other neighboring alliances. However, they triggered a war by supporting one of the alliances ABC was attacking. This resulted in three Metas: ATCK, WAR and Rangers playing in the server. Soon, Rangers and ATCK (ABC and TK) joined in a confederacy to form A.R.T. End Game finally was a contest between A.R.T and WAR. There was one small alliance called Loner which also took part in End Game. This alliance was loosely associated with ABC and then later on with WAR. End Game was hard fought and went on for more than one and a half months. Towards the end WAR realized that they could not win the round on their own and they supported Loner. The War-Loner Meta finally won the server on the last day beating A.R.T by just a few hours.

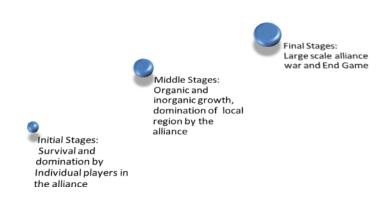


Figure 3 stages of alliance growth through game life cycle

As an individual player, the goal initially is to grow faster than other players around. This is easily achieved by farming neighbors as soon as you can. In case there are better players around then the goal changes to survival and having good relations with the neighboring players who are stronger and to farm the rest of the players around. Having an alliance is helpful during the initial stages to deter other aggressive players.

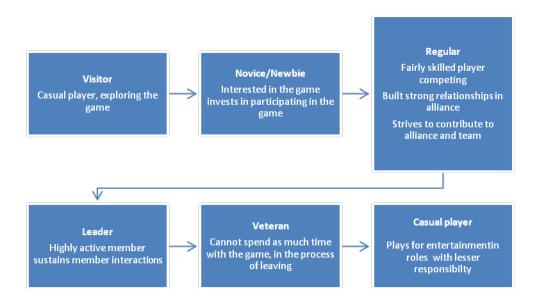


Figure 4: Individual player's transition through the game lifecycle⁵

Organizational Structure

| Entrepreneurial Stage | Collectivity Stage | Formalization Stage | Elaboration Stage | Next step | |
|---|---|--|--|---|--|
| Formation of alliance through old members Horizontal Team structure | Consolidation of alliances Emergence of leadership Organic and Inorganic growth Building an organizational heirarchy | Setting up internal systems Functional team structure Standardizing processes | Loose mergers with alliances SBU type organization Heavy formalization | Developing small elite teams Restructuring of teams Slow decline Up till completion of game Small alliance within | |

Figure 5: Transformation of TK Alliance through the Organization lifecycle (Greiner Model)

⁵ Adaptation of Membership life cycle for online communities by Amy Jo Kim, 2000

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Successful alliances that compete till end game go through a lot of organizational changes through their life cycle. It was seen that they roughly follow the Greiner Model as outlined above. In the survival stage alliances are horizontal and dependent on individual stars in the team. They slowly become functional as they gain more skilled members. Formalization causes redistribution of members to make up specialized teams as they go into the growth stage. As the alliance approaches end game, the goals are clearly defined there are loose associations with other alliances. The alliance gets an SBU like team structure. With each consolidated alliance acting like a business unit. Over time, alliances may restructure and integrate all their members or slowly decline until they reach the completion of the game.

Insights/Learning

- Virtual Teams and organizations in dynamic environments need systems that allow quick restructuring
- Formalization and establishment of hierarchies is a function of stability of environment and clarity in functioning. As the knowledge level increases, organizations convert their non-routine tasks to routine tasks by standardizing their processes. However, with a dynamic environment, the organization needs to restructure itself or have smaller horizontal structures within it's hierarchy

Team Division

TK was led by Lord Hildegrim in its growth stage. He was a highly capable leader who accelerated TK's growth and structured it into teams. Under him there were specialized teams formed as follows:

- TK! Attack Octopus: As the name suggests refers to TK's elite attack wing
- TK! Defense Squid: Players who focused on providing defense
- TK! Support Whale: Players who focused on providing infrastructure to support large armies

Each team had leaders and we were subdivided into smaller battle units such as the Attack team was divided into Sea Snakes, Bad Barracudas, Hammerheads and Sting rays

Each unit/Team was of roughly 5 members each. Teams formed mainly location specific. Players' in-game level was also taken into consideration to distribute the teams evenly with at least one senior player who acted as the team leader.

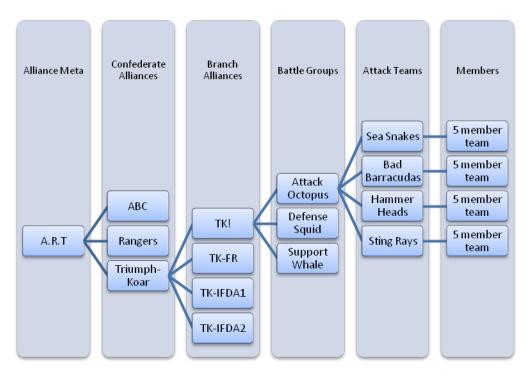


Figure 65: Alliance Structure (Not complete, only the attack octopus and its heirarchy shown)

Virtual teams in general are expected to form a matrix structure with members assigned to multiple projects. It meant that although members retained their reporting lines they were accountable to the project managers for their specific inputs to the project. Dual reporting was avoided due to additional difficulties that can arise when prioritizing tasks and resource allocation. ⁶

In Travian, matrix like structures appears in the beginning of the game when roles aren't clearly defined. Individual members maintain multiple capabilities to be flexible and adapt to the rapidly changing environment. Once the environment stabilizes with relative peace and security to the players, they specialize in different aspects of the game. The members in a team are then assigned specific tasks around which capabilities are built. However with high inorganic growth an SBU like structure is likely and this can lead to complications until the next restructuring. In our case, there was a need for integration to bring some unity into the Meta. As End Game had a very simple goal to most players of sending resources and defense to the Wonder, there was a lesser need to have functional teams. Tasks became routine. This resulted in a massive restructuring based on location and proximity to a wonder.

The Framework for departmental technologies has been applied to the various tasks in the alliance.

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⁶ Global virtual teams for value creation and project success: A case study, Liz Lee-Kelley , a, and Tim Sankeya

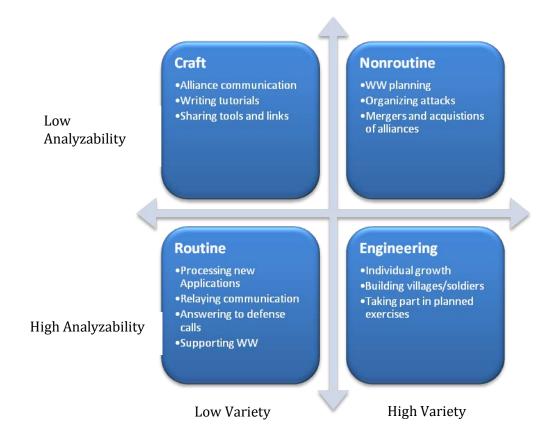


Figure 7:6 Routine Non-routine framework for team members

Growth and restructuring

When it came to inorganic growth, ABC and TK added entire 'wings' to themselves by consolidating defeated alliances. Wings that joined kept their names and profiles but went under the ABC or TK banner. For example, an alliance called IFDA joined TK and formed TK-IFDA. TK leadership consisted of a core group of members called the Illuminati. They generally consisted of wing leaders and sometimes Battle Group Leaders.

As end game started, TK joined another large alliance called Rangers. This was a loose confederacy and we did not integrate with them. However towards the end of the game, there was large scale restructuring among ABC, TK and its wings. We formed the wings under the name ATCK, by dividing the players on a purely location basis. This was done to improve teamwork for end game. Command although delegated to wing leaders was still majorly central because of the simplicity of the game play during end game. Players now had only one goal to support their respective wonders by sending across resources and troops.

Communication within the alliance

Communication in virtual teams usually happened through email and Net meeting. However, emails have extremely unsatisfactory feedback as members start using it as a way to postpone

communication. Net meeting is widely used and is irreplaceable in many organizations but requires better connectivity between the members.⁷

Travian in contrast has team communication that happens on a broader scale at the alliance forum and otherwise through an in-game email like feature. Separate sections were created which the players could use as discussion boards. Other sections were limited to announcements and reporting activities. Mass communication was relayed through alliance leaders and then broadcasted by using In-Game Mass Messaging. Although forums and mass messages were primarily for alliance wide and battle group communication, smaller teams and individuals usually communicated through chat clients or in some cases through telephone. At a much smaller scale, players physically close by would have face to face meetings which improved morale and trust between the players.

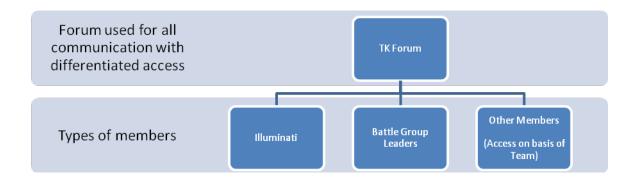


Figure 8: Classification of members for forum access

Communication was done mainly through online forums. Every major alliance generally would have its own forum⁸. The TK forum was divided into different sections with differentiated access to its members. An example of this would be 'TK! Members only coordination area' which was open for the 'TK!' branch alliance. Within this part of the forum there were different sections again for each battle group. So a member could access only his battle group section. This allowed the members to operate in cells and reduced the chances of important team information from getting leaked out. Similarly the forum is divided into different sections for various functional purposes that are open to all members. The TK member voting area was used for new recruits and alliance wide decisions. TK Battlefield coordination area had sections such as Offensive Coordination and Defensive Coordination, Farm coordination etc. This was used for large scale coordination activities when scale takes importance over information protection. Members of TK's confederacies were also given access to the forum with separate sections that was visible to them such as 'The Allied Area'.

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⁷ Global virtual teams for value creation and project success: A case study, Liz Lee-Kelley, a, and Tim Sankeya

⁸ TK used Triumph's forum at http://triumph.pressnells.net/forum/index.php

Alternatively, the forum also contained sections such as 'TK member's area' for discussions about game play, real life etc which increased interaction between members and kept them interested in playing.

Knowledge Management

Learning happened through tutorials written by Illuminati, Battle Group Leaders and Leaders of allies. Members also posted tools that would help improve efficiency in game play and improve learning for new comers. There was a separate 'Tools and Tutorials' sections in the forum which consisted of tutorials regularly updated by their authors and also where members shared their links to tools to help game play.

Insights/Learning

- Forum based communication allows team discussions and consensus making without the need of scheduling group meetings
- VOIP and chat conferences are essential for virtual teams

Virtual teams in the context of Travian consist of 3 parts: The Leadership, the Active Members and a third section of Inactive members. The number if inactive members are a good indicator to the performance of the alliance. Every alliance tries to remove as many inactive members as possible. They do so by setting strict rules about regular playing and being very harsh with violators.

Virtual Teams competing for the same resources cannot remain forever that way. In Travian as growth increases much faster when players raid other players, alliances need 'farms' i.e. weaker players that can be raided. Competing with another alliance for 'farms' increases tension between players and often results in skirmishes.

One solution is that they collide head on until a truce is reached with the loss of some good players. The 'war' is good experience for players and can boost the team morale of players. It becomes a good way to keep players engaged. The other solution is to merge both teams and weed out the weaker players. This sort of cannibalization is difficult to achieve on a repeat basis because of bonds that are created between players after extensive play.

Let us look at the interdependence between departments in a virtual organization. The type of interdependence would depend on the stage of the organization as well as on the department in the organization.

Table 2: Thomson's classification of Interdependence and management implications

| Form of Indepen dence | Incidence in Virtual Teams | Demands on Horizontal Communication, Decision Making | Type of Coordination required | Priority for Locating Units close together |
|-----------------------------|--|---|---|---|
| Pooled | Initial stages of team building Final stages: Approaching a clearly defined goal Between leaders and members | Low communication Broadcast based: Mass emails/Messages | Standardization, rules, procedures Divisional structure | Low Unaffected by virtualization |
| Sequenti al | Middle Stages of organization Building competencies, End goal defining Between members | Medium communication Forum and Discussion based | Plans schedules, feedback Task forces | Medium Mildly affected by virtualization |
| Reciproc al | Strategy Building Aligning with different teams Elite teams Between leaders within teams as well as across teams Between members of tightly knit, well coordinated teams | High communication Communication through chat clients, video conferences and phone calls | Mutual adjustment, cross departmental meetings, team work Horizontal structure | High Strongly affected by virtualization |

Need for Virtual Communities of Practice within virtual teams:

Virtual teams are created with high churn rates with a large number of first time members. A significant aspect to team efficiency depends on identifying quality contributors and bringing them up to speed as soon as possible. Teams usually adopt the same qualities as virtual communities of practice to build their capabilities

- Time savings with members in different parts of the world who can work in different time zones
- Problem solving among different members
- Developing new capabilities between members
- Leveraging and standardizing best practices
- Increase in talent by looking at a global work force
- Avoiding mistakes by learning from experienced members

Recruitment

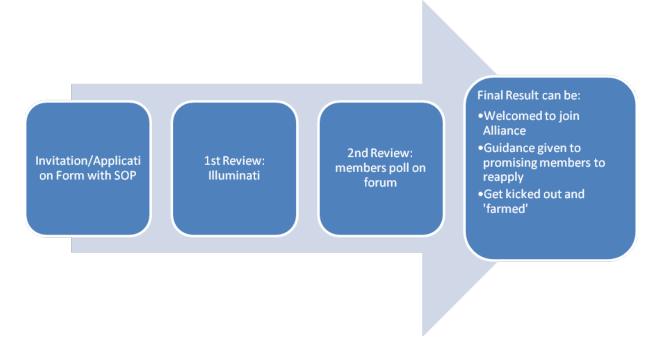


Figure 9: Recruitment at Triumph-Koar

Initially we started as a group of closed players. As the game began, it was difficult to identify good players, loyal players and potential newbie's who were evolving very quickly. TK only accepted members on invitation basis by existing players. This helped them build an elite alliance of players. Each application proposed by a TK member was put up in the forum discussed by the players and then voted upon.

Later as TK grew, and there was pressure from ABC, we went into acquisition mode by absorbing good players from other alliances either by poaching them if they did not enjoy the existing alliance they were in or by attacking their alliance and intimidating them.

Along with the hiring of new players, TK had strict standards which the players had to maintain. Failing to adhere to these standards meant that they would be kicked out and then cannibalized. This dual threat of getting eaten away was a good deterrent which ensured that players were in line and did not rebel. The only exceptions were those players who had got bored of the game and were quitting soon. They would suicide themselves by attacking others. However, strong teamwork and relationships built between different players in the alliance usually meant that it was only the loners who could behave that away. However, active loners were easily identified and they were urged to contribute to the alliance. This way any potential betrayers were identified quickly and converted to loyal team mates or else kicked out.

Insights/Learning

• Teams in organizations can use poll based recruitment to select candidates themselves who form a better fit to that team

TK consisted of ordinary members and a core group of members called the Illuminati. The Illuminati made most of the decisions for the alliance while some decisions were democratically voted upon by all members. Other than the illuminati, some members were also made battle groups leaders and they had authority in their battle group. While the Battle Group leaders were allotted by the Illuminati based on their skill level and eagerness to take up new tasks, the Illuminati themselves consisted of players who have either been with TK from the start or were existing TK members from previous servers.

- Core leadership of any good alliance consisted of experienced players who are game experts
- Enthusiastic players who are fast learners and respected get absorbed into leadership roles
- There is a shortage of leadership talent due to the time and effort it takes along with being a skilled player



Figure 10: Individual's Trasnsition to leadership positions

During this server, the main leaders that took center stage were: Lord Hildegrim, Cheetaz and Charles. All three worked at different aspects of the game. Cheetaz took over the administrative aspects and managed the alliance. Lord Hildegrim revamped the alliance and converted it into a lean mean hungry unit. Charles formed the long term planning and strategy and drove the alliance after Lord Hildegrim.

Lord Hildegrim

- Took overall leadership
- Built overall strategy for TK
- Reorganized TK and built elite teams for End Game

Cheetaz

- Managed TK
- Liason for communication with confederates
- Leader of TK's internal policing wing

Charles

- Successor: Took over during End Game
- Represented TK's wonder during End Game
- Gave direction to TK after LH

Figure 11: Important illuminati and their contribution

Lord Hildegrim led the alliance for most of the growth phase and then suddenly was unable to continue playing Travian. Possible reasons could be real life issues or burn out. Cheetaz continued to help manage TK in his absence. As End Game approached Charles who was much more involved with End Game, had interacted with ABC players and showed necessary ambition, took charge and led the alliance in collaboration with ABC leadership

Insights/Learning

Classic case of burn out of a leader and succession. There were no clear succession plans laid out. Cheetaz the default successor in this case did not want to lead the alliance and hence there was a temporary void in leadership. This was filled in by Charles who had the necessary ambition, skills and network to lead TK.

Leadership of Lord Hildegrim

Lord Hildegrim was a major factor behind the success of TK till end game. After dividing the alliance into teams, he had tasks set up for each team along with tasks for each individual player. This played a huge part in sustaining player interest in the game. Also new players had their game strategy panned out for them and they had to only focus on short and medium term goals set up by their leaders. The massive efforts put by Lord Hildegrim in organizing the alliance earned him a lot of respect and loyalty with most players ready to do anything for him.

Leadership Characteristics

- 1. Illuminati the council of leaders of TK is usually formed by existing network of players usually those who have played the game earlier.
- 2. New players may be inducted into the Illuminati if they show very good performance and are very active in the forums and team building.
- 3. Battle Group Leaders are sometimes leaders of smaller alliances that have joined TK

- 4. Respect is gained by players when they help the team through the following:
 - a. Writing useful tutorials
 - b. Planning attacks, organizing team play and suggesting useful tools
 - c. Directly helping out players by sending out defense or attack when requested
- 5. The Leaders who performed well
 - a. Spent a lot of time organizing teams and setting up tasks to keep team engagement high
 - b. Easily accessible to all players with a very good network
 - c. Led by example. The Leader was one of the top players of the alliance
 - d. Clearly defined the strategy of the alliance and had planned each stage for the alliance
- 6. Regularly updated the alliance with necessary internal and external information
- 7. In alliances with experienced players
 - a. Leaders gauged the pulse of their team and played according to their style example: ABC was filled with very aggressive players and played to Dominate. Redbosn (their leader) waged the most wars to keep up this playing style

Leadership Strategies followed in Alliances

Small Alliances:

- 1. Aim for domination in the local area or survival and relocation depending on the area the alliance is in.
- 2. If unable to scale up with good members, grow individually to become eligible to join a major alliance later

Medium Alliances:

- 1. Organize communication for prompt offense and defense calls
- 2. Ensure everyone in the team participates in alliance wide calls
- 3. Build alliance further by recruiting good players
- 4. Ensure alliance doesn't get dragged into unnecessary wars and stays clear of larger alliances
- 5. Clear the area of local bullies who target weaker players by first recruiting them and if not then defeating them.

Large Alliances:

- 1. Build battle groups, delegate group work to the Battle Group Generals
- 2. Plan out tasks for the BGs and set monthly goals for them as well as organize large scale attacks involving multiple Battle Groups
- 3. Acquire good players from smaller players

End Game Preparation

1. Build essential teams for Defense, Offense and World Wonder Hammer support.

- 2. The focus moves towards the World Wonders as victory depends on successful strategies to capture and build World Wonders in collaboration with other alliance leaders
- 3. Regular communication about World Wonder news and inspirational messages to the alliance that urge members to contribute

Delegation in the online context/ Participative Leadership

Participative Leadership is essential in the Virtual Team context. Members are part of the team when they feel that the content and consequences of the work is consistent with the member's values and ideals. Members play for team glory and for team relationships. Involving others in the decision making process becomes necessary to keep up team morale. Autocratic leaders quickly become unpopular and cause attrition within their ranks. Trust is an important factor in virtual teams as members from across the world work together with little direct incentives like salary etc.

Insights/Learning

- As organizations progress, leaders handle the strategic decisions for the organizations and leave management to their subordinates
- Leadership in voluntary organizations can avoid sharing all problems with members unless their buy in is necessary

Alliances in Travian usually have a council of leaders. This constrains the leaders to make decisions on the basis of the culture of the alliance. Hence it is hard for one leader to stand out and take up all the decisions. Having a close group or a council also gives individual leaders legitimacy. Convincing the group of leaders ensures the support of all the sub groups the leaders are a part of into the decision.

Table 3: Normative decision (vroom and yetton) model in alliances

| Decision Procedure | Description | Occurrence in Virtual Teams | Examples |
|-----------------------|--|-----------------------------------|--|
| A1 | Make the decision yourself with your own information | Medium- High | Leader is a valuable contributor in a small teams Initial stages of team building |
| A11 | Obtain information from subordinates and make decision | Medium- Low | Leaders are much more aware of team goals than members. However members sometimes know more about team mates than leaders |
| C1 | Share problem with subordinates individually and then make the decision | Very Low | Leaders cannot risk alienating members by going against their decisions |
| C11 | Share the problem with a group, obtain their inputs and then make a decision | Very Low | Leaders cannot risk alienating the entire group by going against their decision |
| G11 | Share problem with subordinates as a group and reach a consensus solution | Medium- High | Usually the case Both in small groups of leaders (council) Team wide decisions by conducting a poll etc |

Power Sources for leaders

The basis for power for Leaders in Virtual Teams is the strength of the organization they have built. As members incentive for working for the virtual team would be heavily participative and for achievement, the above power sources do not have much value if the organization does not have a good reputation or a show promise to its team members.

The best source of power in this context would be Expert Power. As most members are new and are looking to acquire skills, there is a lot of importance given to experts in the domain. Legitimate Power is seen in virtual organizations with a strong culture and tradition. Titles are easily recognizable in discussion forums where most of the team activities take place. However, this is also limited because of the high churn rate seen in virtual teams. Rapidly growing teams are able to reward members with positions in the team. This can be a source of power for leaders. Over the lifecycle of the team, good leaders command strong feelings of affection, an admiration and loyalty between their team members. Given the importance to building trust relationships, referent power becomes one of the best sources of power in the virtual scenario.

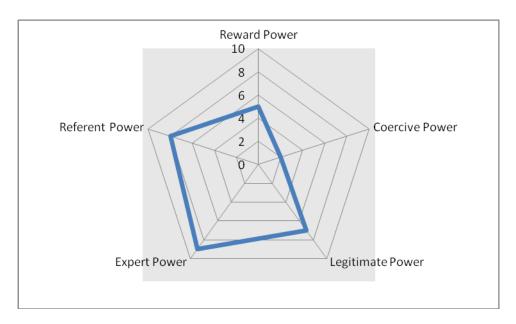


Figure 12: Power Types and sources (French and Raven) FOR virtual teAms

Lord Hildegrim a Leader of Triumph mentioned earlier had built strong referent power.

Articulate a clear and appealing vision

•Built long term and short term strategies to make an elite alliance and posted it on forum

Explain how the vision can be attained

•Built organization to match strategies, setup goals and timelines

Act confident and optimistic

•Never hesitated, always optimistic in any communication

Express confidence in followers

- •Followers were rewarded for discipline and team work
- Process was rewarded with praise rather than outcome

Use dramatic, Symbolic Actions to emphasize key values

Destroyed specific enemy targets to signify dominance and aggression

Lead by example

•Among the top 5 best players of the alliance

Figure 13: Referent power through Transformational Leadership from Lord Hildegrim

Insights/Learning

- Relationship can be observed between nature of organizational tasks (routine/non routine), current labor market (high supply/demand) and the type of leadership that's needed (transactional or transformational)
- For example the high end software industry, with non routine tasks and a high demand for employees would require transformational rather than transactional leadership.

Sustaining user interest

From a gaming perspective, there have been a few studies looking at leadership skills in World of Warcraft⁹. Although motivation has the obvious benefit of resulting in higher performance, virtual teams have the danger of losing valuable resources when they lose motivation. Team members who quit once very rarely return as they wouldn't fit into the dynamic environment of virtual teams. The conclusion is that motivation in virtual teams is generally intrinsic, in terms of the enjoyment in playing the work itself and experiencing a sense of achievement ¹⁰. Members are also sometimes extrinsically motivated and are looking for external rewards like money and praise. There are members who show high levels of activity and commitment to showcase themselves among their team members. At the same time, players perform well when there is a potential to capture loot during raids etc.

The key here for leaders would be to understand each player with frequent communication and look for motivation clues. The context also influences an individual's motivation at any point of time. Motivation clues are also useful to assign tasks to members in order to match with their strengths and motivational characteristics.

Insights/Learning

- Members who leave a virtual team find it difficult to get back because of the
 dynamic nature of the virtual organization. Similarly employees in organizations
 such as those related to cutting edge research, that drop out find it almost
 impossible to get back in because their skills are out of use or they have lost their
 contacts.
- High churn rate is also seen in industries with a supply demand mismatch. When there is a high demand for employees, employee performance and attrition will depend on intrinsic forms of motivation. Managers need to identify the right motivation clues and assign tasks accordingly.

⁹ Virtual worlds, real leaders: Online games put the future of leadership on display http://www.seriosity.com/downloads/GIO_PDF_web.pdf

¹⁰ Motivations in virtual teams: Lessons from online worlds, http://www.leadingvirtually.com/?p=23

Conclusion

Studying organizations and leadership through the context of a multiplayer game was useful as a simulation for real world situations and as a sand box for applying organizational theories. The development of virtual teams gives an insight into real world organizations and how they would react to dynamic situations.

The wide usage of virtual teams in these games gave an understanding on the working of virtual teams, challenges involved in building virtual organizational structure and development of leadership.

The analogies brought out here can be used in the following:

- 1. Virtual teams working remotely on projects such as developing software or technology communities of practice
- 2. Virtual Classroom Projects for distance education
- 3. Game makers can use this to make more interesting games by providing features for improving game play through organization building and leadership
- 4. Can be used for developing virtual team or collaborative software. Example: Meta Team

Future work in this area needs to look at expanding the scope of virtual teams and the different control mechanisms that can be applied to make virtual teams mainstream in today's organizations. Currently virtual teams are mainly voluntary with lesser means of providing extrinsic motivation to team members and lesser accountability. Also the technologies evolved with these games such as forums, broadcast messaging, multi player audio and chat lines are ahead of what businesses currently use. Hence it makes sense for businesses to adopt these techniques and change the environment within to promote leadership and quickly adapt to dynamic environments.

Exhibit 1: Active players on Travian:

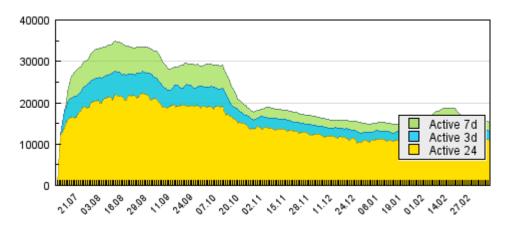


Exhibit 2: Official Travian tutorial: 11



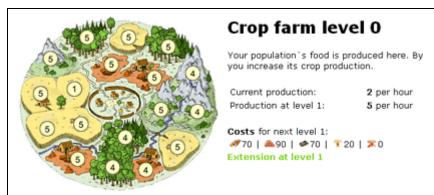
This is how you start...

...and later your village could look like that.

In the beginning your small village will have just one building.

We will show you how to expand your village so that it becomes a mighty and prosperous city on the next page.

¹¹ http://www.travian.com/index.php (International server) http://en.wikipedia.org/wiki/Travian

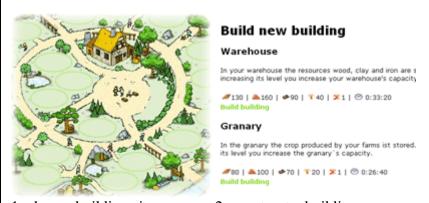


1. choose a resource field

2. extend the resource field

There are four different types of resources in Travian: wood, clay, iron and crop.

Before you expand your village's buildings, you should develop some resource fields to increase your resource supply

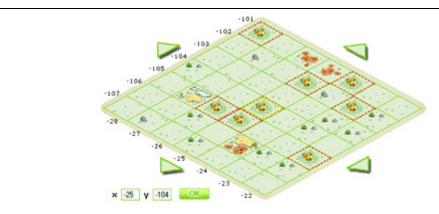


1. choose building site

2. construct a building

After taking care of your resource supply you can start the expansion of your village.

A warehouse and a granary enable you to store more resources. A cranny saves your resources from getting stolen by enemy raiders.



Your village and your neighbors

You are not alone in Travian. You interact with thousands of players in the world of Travian.

The players in your surrounding are most important to you. Thanks to the map you have a good overview of who they are.

The navigation bar



- 1. **Overview:** Here you find your resource fields
- 2. **Center:** In the village you can build buildings
- 3. **Map:** Here you can have a look at your village's surrounding and your neighbors
- 4. **Statistics:** Ranking of all players
- 5. **Reports:** Information on happenings in your village
- 6. Messages: Send and receive messages

Now you know everything important about Travian. After registration you can start playing!

Exhibit 3: Final list of Confederacies as ATCK approached End game:

| ART-WWs | ATCK-8 | ATCK-N |
|---------|----------|-----------------|
| ATCK-1 | ATCK-9 | ATCK-SWA |
| ATCK-10 | ATCK-B5 | ATCK-UA# |
| ATCK-11 | ATCK-BLD | ATCK-UA* |
| ATCK-12 | ATCK-CRD | ATCK-UA= |
| ATCK-2 | ATCK-D.A | ATCK-UAH |
| ATCK-3 | ATCK-DZ | ATCK-UAL |
| ATCK-4 | ATCK-FA | RangerE7 |
| ATCK-5 | ATCK-GLT | RangerK4 |
| ATCK-7 | ATCK-H&Z | RangersK |
| | ATCK-MKD | |

Exhibit 4: Sample Recruitment Form

OFFICIAL ABC/TRIUMPH/ (ATCK) APPLICATION FORM

14th Edition (July 03, 2009)

Applications will be auto-rejected if they are incomplete, **AND/OR** do not meet our requirements:

- 3 villages at least
- Population equal or greater than 1000+200*months of account-existence AND greater than **2000**
- Villages in SW
- Troops equal to or greater than population
- Some exceptions *may* apply if you have an army of considerable size (compared to your population)

Please **copy** and answer *all* questions listed below *truthfully* and post your answers in this thread in the form of a reply.

Please be prepared to answer any further inquiries regarding your account and set L Blacksmith (http://s3.travian.com/spieler.php?uid=32775) and/or Ikan gila (http://s3.travian.com/spieler.php?uid=13053) as a sitter to verify your claims and troop-count.

Please note that we are a democratic community and will vote on your application. Therefore, processing your application may take up to 3 days. The status of your application will be updated constantly in the **Application Updates** section of this thread, as well as directly in your application.

You will also be notified via IGM if your application has been **APPROVED** <u>only</u>. Further instructions and comments will be included in the IGM.

<u>Application Questions</u> (please copy all of the following code and answer in the empty row below each question)

[quote][b]In-game name & [u]profile link[/u]?[/b]

[b] Why do you wish to join TK?[/b]

[b]How active are you?[/b]

[b] What is your play style? (Aggressive, Defensive, Both)[/b]

[b] How long have you been playing Travian?[/b]

[b] How long have you been playing in [u][i]this[/i][/u] server (com3)?[/b]

[b] What is your current population?[/b]

[b]What is your current Troop Count? (please list all the number of troops of each type, in each village)[/b]

[b]Have you been attacked recently? If so, by whom? (please state the player name and profile)[/b]

[b] Have you been attacking and/or farming any members of TK and/or ABC?[/b]

[b] Who in TK can vouch for you?[/b]

[b] Why did you leave your previous alliance? [/b]

[b]Is there anything you might want to add? (optional)[/b]

ABC/TRIUMPH (ATCK) reserves the right to edit any terms stated above without any notification. All changes made will be in effect immediately, also rendering any previous versions of this form invalid.

Exhibit 5: Sample Notification sent out to Attack Teams by Lord HILDEGRIM (Leader of



Sea Snakes: All cats must play.

« **on:** February 28, 2009, 12:36:40 PM »

Ouote

Your Goal -

- **1.)** Destroy your target.
- 2.) make him delete.
- **3.)** Make him run crying to this mama.

General Tactics:

- 1.) We will attack as one. This is a massive hit on a large number of WaR targets by us and the Battle Cells. Don't ask what other teams are attacking. Just know that this is a full alliance maneuver.
- 2.) We will defend as one. Be sure to pay attention to the defense coordination area. We expect there to be a lot of defense requests from the front lines. If you have incoming attacks be sure to make a thread there following this example:

http://triumph.pressnells.net/forum/index.php?topic=4.0

Only call for defense if it appears to be cats. Raids and fast attacks should be dodged so we can give all our defenders to those most in need.

- **3.) DO NOT SCOUT first.** Mass scouting will give away our attack plan. Once 100s of attacks are launched your scouting reports will mean nothing anyway. Scouts should only be sent in after cats are on the way if you want to send them. If you want to scout a real target be sure to scout some fake targets also to throw them off.
- 4.) Fakes are important. Many members of WaR are being targeted by fake attacks by someone. Even those that have real attacks coming. With all the fakes being sent it will cause so much chaos that they won't know who to defend. It is imperative that you send as many fakes as you can to your assigned targets Fake targets.

Sea Snakes

Nemo.hr--Team Leader Hellhung HaCh **Ayrton-rides**

Badz

Twisted 132

L. Blacksmith

Allys

Your Targets

Target to Crush:

These targets have been assigned to a different group to send fakes at. Your goal is to hit with the real stuff.

Landing Time: Sunday May 3 (23:00 GMT)

Target:

Annex88 823 (16|-273) Annex6 821 (27|-280) Fear Factor_1 821 (26|-287) Annex9 820 (24|-284) Annex888 814 (16|-274)

Fakes

Annex1 1010 (29|-280) South Star (Capital) 912 (26|-281) Annex8 864 (15|-273) Avanpost 846 (13|-250)

Notes for Battle Group Leaders:

- ~ Please MM the link to this post to all your members.
- ~ Do NOT MM real target info.
- ~ Use IGMs to check on individual members to be sure they are participating.
- ~ If any of your group are not on this forum get them on here ASAP. If they don't check in here or look at the defense coordination area they are not helping anyone.

Note for Battle Group Members:

This is the stuff war games are made of. Let's show them the power of this fully operation TK. Have at them.

Good Hunting...

Exhibit 6: Sample Defense call

In posting a request for defensive assistance please follow the following template:

Subject:

DEF: Village Name (XXX|YYY)

or, if all the villages DEF: Player Name

In the post, list:

- * Which Village Name (XXX|YYY)?
- * How many waves of attacks are there?
- * What exact time, in GMT, will the attack hit for each wave?

(The Travian website incorrectly mixes up GMT and UTC. look up your GMT here: http://wwp.greenwichmeantime.com)

- * What level is your granary?
- * What is your current crop production?
- * What is your wall level?
- * What troops you currently have to defend with?
- * What villages are the attacks coming from?
- * When did the attacks originate or what's the likely makeup of the attack waves?

Repeat for each village being attacked.

Here is an Example:

Subject: Def:Purple Town (-100|-50)

Defender:

Purple Town (-100|-50)

Tribe: Romans Alliance: Triumph! Owner: Purple Boy Population: 325

3 attacks:

1 Incoming attack at 5:32:56 GMT 1 Incoming attack at 5:32:57 GMT 1 Incoming attack at 5:38:26 GMT

Grannary 8 +101 crop production Wall 4 Defenders: 28 Legionnaires320 Praetorians30 Scouts70 Phalanxes

Attacker:

Green Town (-150|-50)

Tribe: Romans Alliance: Brown Owner: Green Boy Population: 670

Slow movement - could be cats or rams.

Exhibit 7: Letters from Travian Server 3 Leaders, 2008

Here are my thoughts and comments of the primary actors of the server:

1.- The winner Loner:

Impressive and unexpected victory. They managed to survive the Ranger's assault during midgame with every resource possible: Defending, sniping, counter-attacking, 0 popping/chiefing enemy hammer villages, asking reinforces from other metas, etc... Every single tactic this game has, Loner used it to survive.

Where they really excelled and what eventually led them to victory was Diplomacy. They are the living proof of the importance of Diplomacy on the game. They always were in good terms with the other 2 strongest metas on the server. Confed'ed with WaR while remained friendly with ABC. When the battle between WaR and ABC started, they didn't attack ABC nor got attacked by them despite of teh confed with WaR. When the endgame race took place, they barely participated on it. But, somehow finished getting all the support of the WaR meta, even above WaR's own WWs. WaR and Loner leadership planned for endgame considering in all times that ABC wouldn't attack Loner and thus, leaving Twyst's WW unharmed and simming up for victory.

All and all, an unseen victory and probably the most incredible win on Travian that i've heard so far. Kudos to those dedicated players that knew how to dance and stay under the radar among giants.

2.-ABC + TK = ATCK:

The returning champions. Probably the most dominating alliance on the server. Strongly led by lady Aelia and Redbosn at the beginning of the server never really stoped fighting someone. First they fought within the SW to merge all the actors there and dominate the quadrant using small independant battle groups of 5-8 players all formed by Redbosn and Slone. Then, they fought the NW meta using geo-wings and ABC's attack team led by red him self which eventually caused the breakdown of that meta and the brief forming/disbanding of the "North" meta. Finnally, with redbosn AWOL the fights with the SE started. A council was in place but had little to none power/influence on ABC. Some wing leaders/prominent players stepped up and actively started leading the meta. A confederation with Rangers (ART) took place to balance quadrant domination with the other metas.

Since ATCK never stoped fighting, their hammers proportion was pretty high which resulted in being the strongest alliance offense-wise. Allthough some might argue that they weren't as effective when attacking the other WWs as they could've been. The job was done and the enemy WWs were more damaged than their own causing the other power on the server to actively give up their own WWs and to switch support to Loner's WW. Bitter end for ATCK considering that, in their eyes, they were the best and did not get the final prize.

3.- WaR-FWH:

Without doubt, the best organyzed meta on the server. In any other server, or against any other enemy, WaR would've won this hands down.

Mostly new-comers, pretty soon dominated their quadrant after merging with FWH. Firmly led by Angus Grim and a solid council, they were pretty much calmed in the SE growing their armies. Minors and un-challenging battles with Rangers took place during mid-game wich allowed them to show the server their fighting skills and the size of their hammers. Special mention to WaR-FWH 4 attack team, it was a well oiled killing machine.

During "North" disband, they picked up a group of 100-150 players from the NW including the elite players of that meta.

Confeded Loner soon after. During end-game confeded the last un-allied meta (Unite) that had no end-game chances due to lack of cinstructions plan.

Did an excellent performance attacking ART's WWs. However, they ran out of offense power and both Unite and Loner didn't have enough fire power to damage Ranger's WWs properly. Eventually realize that they had no real chance of winning with their own WWs and decided to go full support on Loner's WW and virtually the win.

4.- Rangers:

The largest Meta of the server. A "particular" alliance formed by a collection of players on the NE (and some in the NW). They ruled under the assumption that: "If you are a ranger, you are not a farm and you'll have full support from us no matter how small or active you are". Led by Cupcakes and SOB at first and then by SOB and Shadowalker, they managed to hold together those 1500 players for 9 months. That is, by itself, an impressive achievement.

Fought Loner most of the server and reduced the Loner meta (named at that time Elements) from 180ish players to 21 (some bad mouths say that Loner is actually run by the same 5 or 6 players managing the 21 accounts).

Probably the most underestimated alliance on the server was a major factor from the beginning until the end.

I want to openly acknowledge friends and foes for an excellent server.

I also want to take this oportunity to apologyze to all those ABCers that gave me the honor to lead them. I did my best for ABC to win this server, and i was always truth to my beliefs. In my eyes you are all winners since you won ALL the wars you fought on this war game. I'm truly sorry we didn't get the final prize but no one can't take away from you what you've done and your personal achievements.

You can always contact me if you want to. Here are my contact information:

skype: elorente

msn: el_bili@hotmail.com

It was always a pleasure.

Thetan