

Mapping Your Corporate Geomorphology

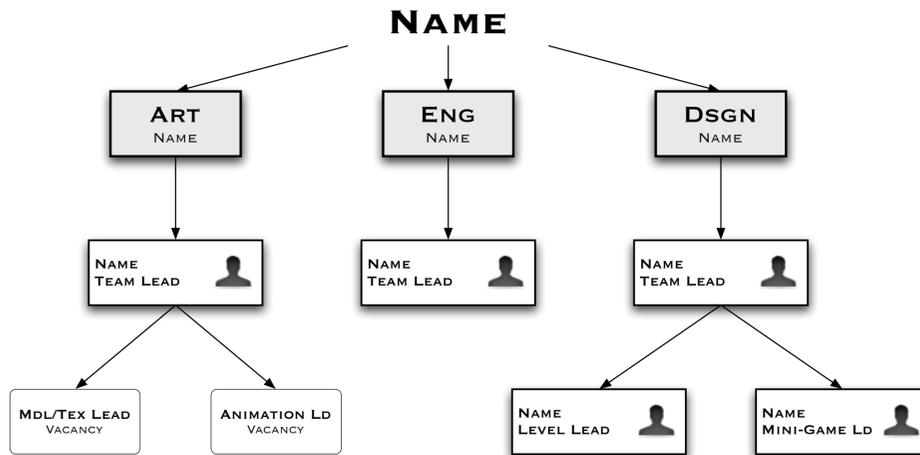
What's in a Map?

Maps can tell us about our organizations, our projects, our teams, our technologies, what we do well, what we do poorly, and provide us ways to think about change. Maps also suppress things. Their utility derives from their ability to provide an abstract view of the world. **Maps are a representation, a cutting, a sample of reality.**

A formal organizational map can tell us certain things about the formal structure of a company. These maps also leave significant details abstracted away. The goal of an organizational map is to show simply and directly who reports to whom officially. While they may bear little resemblance to reality, they still have utility for our companies.

Maps are representations of and abstractions of a perceived reality. As such, it is important to remember that they are not the real object which they refer to; they are simply tools to think with.

PROJECT/COMPANY



An Example: A Pre-Production Art / Engineering Conflict

The following is an example based on difficulties between an art and engineering team during the pre-production phase of a project. The lead technical artist, located at the site of turmoil, asked me for guidance. Rather nebulously, a problem had been identified and labeled "communication." Though it was part of the problem, it was not our fault-line. **We collaborated, discussing both of our observations, and realized that the fault-line was actually based on disciplinary difference of understanding** what makes the project tick.

We identified four different ways in which the project was being viewed, and mapped them. Each represents different perspectives of the same problem and its subcomponents. They were separated by scale (left pair of images are higher scale and right are lower), and in content (art or code). We found that artists were typically interested in understanding the game in a way that favored artistic aspects (represented by the satellite images). Engineers were primarily concerned with implementation (represented by the road maps).

One possible resolution would be to simply lay the maps on top of one another, making a hybrid. However, this would not be a helpful solution. Attempting to teach your artists about all of the engineering aspects and vice versa, would be both cumbersome and likely impossible. The utility of specialization is that they should not need to know everything the other knows. Different scales and content is useful. Homogeneity should not be the goal.

The higher scale "engineering" map to the lower-left illustrates the viewpoint of the engineering lead. Based on the map, it is obvious that this person's greatest knowledge will be the overall functionality of a system. They will likely have less knowledge of the system's lowest level of functionality (represented by the lower scale "engineering" map to the upper-right). At the same time, nor will a lead artist have the details of lower scales. But these acknowledged differences are necessary for the project to come to completion.

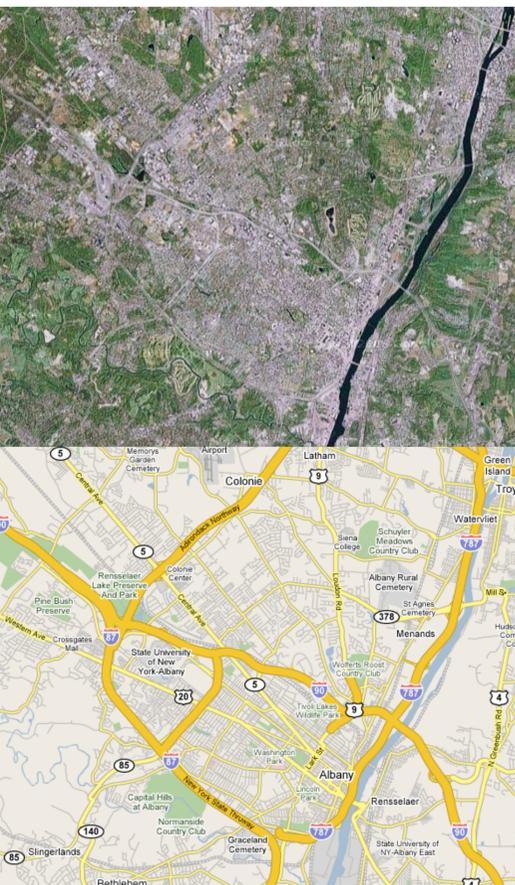
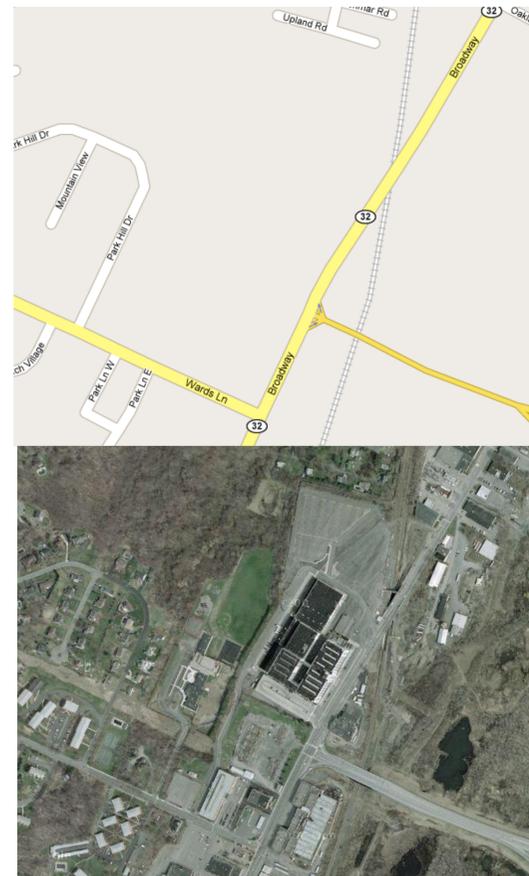
The solution was to encourage all parties to understand the utility and "correctness" of each interpretation. While engineers might control the flow of art assets into the game, artists wanted some information about why an engineer was saying "no." Engineers also needed to understand why artists were attempting to create certain effects or models. **We encouraged both groups to understand the differences in their viewpoints and scales people were working at.** This approach provided a new language for discussing future collaborations.

Getting in the Trenches

Maps are based upon perception. A map disconnected from observational data has very little utility. **The first key to using maps to improve our organizations is to base them on observation.** Without a foundation in empirical reality, our maps are of little use.

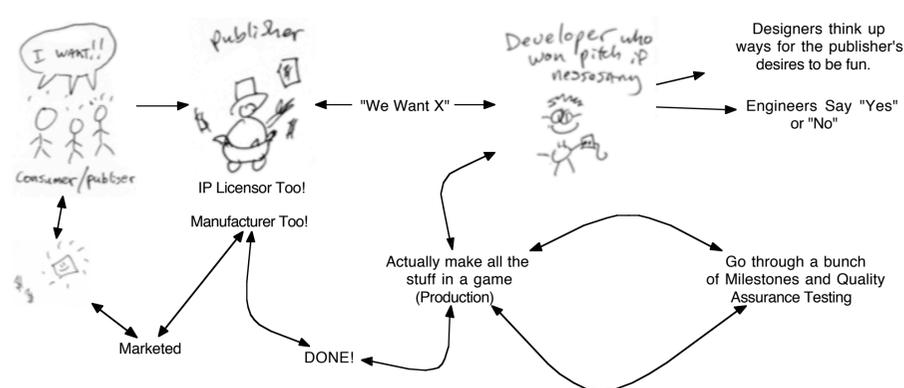
Organizational change is often attempted without first examining current conditions. A desired ideal is simply posited. Maps should be based on careful observation and analysis to provide insight into how easy or difficult change may be. The implementation of change can also be facilitated by maps.

Maps that have been particularly useful for game development examine communication channels, project assignments, asset pipelines, conventions, employee skills, staffing needs, and industry positioning. Maps based on observation can improve our understanding of internal, external, present, and future organizational trajectory.



Be Respectful of your Existing Maps

The second key to successful use of maps is to seriously consider your existing conditions. Moving a team member from one team to another, hoping to gain the benefit of more manpower on a project, can be complicated by significant differences between the production pipelines of two groups, and the additional ramp-up necessary. Some existing limitations are so severe that they can dramatically complicate a project. However, if you are constantly observing, mapping, and thinking critically about these issues in your company, you are far more likely to be successful.

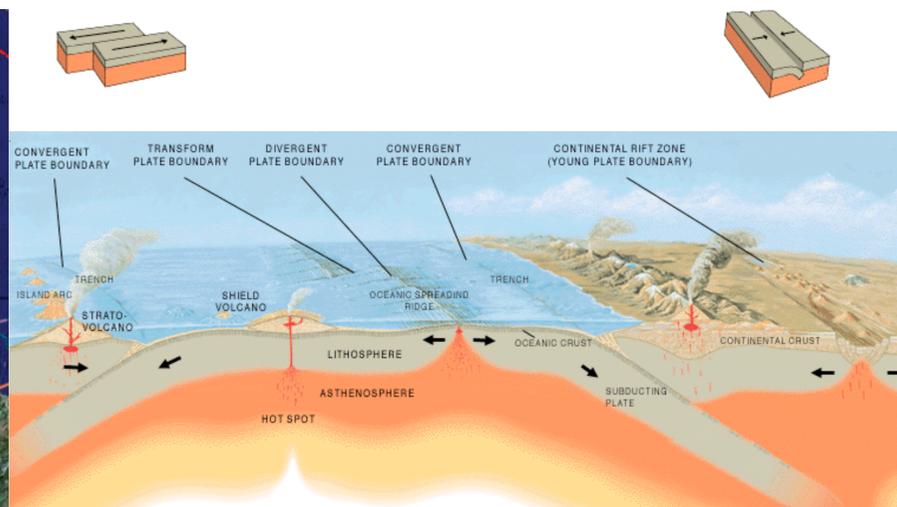


It's About the Fault-Lines!

An excellent use of maps is to understand the real world based limitations of organizations and how to positively influence change.

The third key to using maps is to pay special attention to fault-lines. They can be numerous, and derive from diverse areas, disciplinary training, corporate position, personalities, communication styles, office layout, tool chains, or external competition.

Experimenting with what and how you map your organization can reveal new fault-lines.



Poster Session Time:
Wednesday, March 7, 2007, 1:00 - 2:00PM

Primary Takeaways:

1. What does our company look like?
2. Why does our company look this way?
3. What are the consequences of this typology?
4. How can we make our map better?



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