



“The Mountain”

(A Journey in Management and Mentoring)

*An innovative approach to
integrating people,
processes and systems
used by Web Hosting IT.*

Executive management of the Web Hosting IT Development department has created an “on-the-job” (OJT) training program dedicated to the ongoing growth of their systems and developers. This solution grew out of the need to maintain the core values of being Results Driven, Team Oriented, Respectful of the Individual and Entrepreneurial, while still providing opportunities for Fun. This system or approach has been affectionately named “The Mountain”. The name stems from the concept behind the method - which relies heavily on analogies comparing the learning and understanding of systems with the changing perspectives you receive as you view and ascend a mountain from its various approaches¹.

This system or approach begins by visualizing a mountain. From a distance you have a basic triangle shape. As you near the mountain’s base individual objects and terrain begin to take shape; valleys, ridges, trees, etc. You are beginning to understand the diversity of what a mountain can be. This understanding is from a ‘birds eye view’ or what is more familiar in managerial circles, a view from 50,000 feet. There is value to this perspective but it does not have a direct impact on what the mountain is or how it should be cared for in detail.

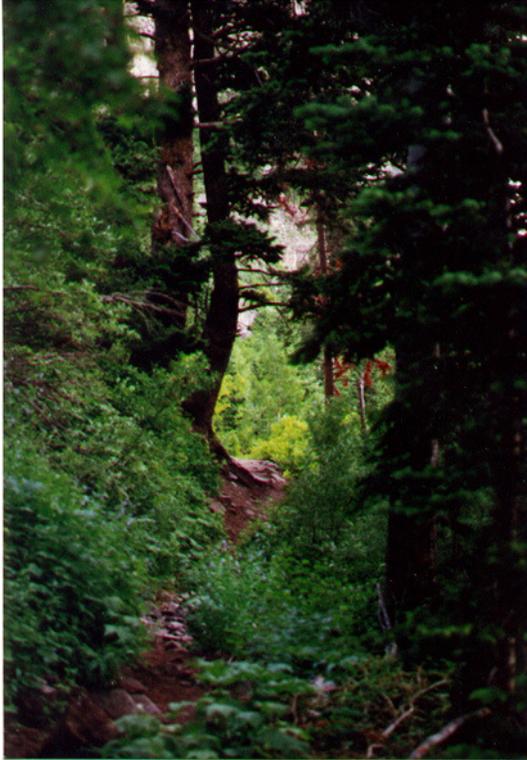
As you walk around the base of the mountain your perspective of the mountain and the individual items change; valleys become pools, meadows and brush whereas tree lines are replaced by rocks, cliffs and gravel, much like a company’s IT systems. An IT system when viewed from a customer or users perspective is its graphical interface, however the Help Desk analyst sees customer level billing questions and service issues.



As one spends more time studying the valleys, the meadows then show patterns of growth and ecological activity. These patterns when applied to IT systems may represent

¹ This analogy is highly successful in the local region due to the surrounding mountains and the high percentage of recreational & leisure activities involving them.

the way a programmer see's lines of code, data exchanges, and server connections. It's at this point that one becomes more intimately aware of how the systems of the mountain interconnect and create a cohesive balance. This understanding is quickly put to use so that the time invested in learning yields immediate returns to the business.



This is the foundation of “the Mountain” approach. In the Web Hosting IT group, every developer is assigned at least 1 specific system or aspect of a system as his or her primary area of focus and accountability. In addition, they are tasked with secondary & tertiary responsibility in connection with other systems. These responsibilities, both system and support levels (primary, secondary & tertiary), are rotated over time between team members based on skill level and interest to insure personal growth and job satisfaction. Let's look at an example:

Joe Newbody joins the Orem IT development staff. Joe attended Townsville High School where he attended several computer classes. He first joined Verio as a Customer Service agent, where after several months he applied for a programming position in Orem. Using “The Mountain” approach Joe might be given primary maintenance responsibility for the following

systems based on his current level of experience:

- Customer Service Interfaces
- Customer Service Training
- Billing Fixes

As Joe's level of experience and knowledge grows he would be given secondary maintenance responsibilities for:

- IDS reporting
- Domain Name Registrations

Simultaneously he would begin to handle new development requests for the Customer Service Interfaces (writing code from scratch versus maintaining someone else's code).

At a point when the Web Hosting IT Development management and the developer feels appropriate Joe would be given introductory exposure to other systems and responsibilities such as database programming. And again, when management feels appropriate they would actually shift his primary responsibilities to one of the “new” areas and make IDS his secondary responsibility (moving someone else into the “primary” position).

This rotation may occur quarterly, semi-annually or annually depending on the individual and organizational needs.

With every switch in responsibilities each developer's perspective, experience, knowledge, and abilities grows in an ever-increasing mountain of personal experience and knowledge. Again, imagine the mountain and walking up it in a rising spiral. Imagine the change in perspective and experience you obtain as you near the top. Just like an attentive hiker or climber you learn and have a better understanding of the overall system because you are not just being told about the mountain, you are on it. You better understand in an IT perspective how a change in a database script not only effects the database, but the GUI and therefore impacts Customer Service, customer perception, and revenue streams.

The experience gained over the course of traveling on the mountain is the asset of greatest worth. The individual's passage is more important than knowing exactly where they are on the mountain or exactly how many miles have been traveled to arrive there. The intellectual property they have obtained while working with the business is filled with understanding aspects of the mountain like how to avoid getting wet while crossing streams or avoid scratches while traversing thickets of brush.

This approach to systems support and developer growth relies heavily on open communications between programmers. It also requires a common Vision of what is being accomplished and why. Each member of the team needs to understand that they are on the mountain and are expected to move up it as quickly as they can while learning as much as possible in each aspect of the mountain. They are then expected to be prepared to share their new learning with others on the mountain who have a similar vision. Should a programmer have a question they are free to ask one of their peers or a more seasoned developer for assistance. These communications not only build camaraderie and teamwork, they also teach communications and interpersonal skills.

Other attributes of this approach:

- It expands the pool of available talent to handle systems, which helps alleviate personnel resource issues (vacation, illness, etc). You have 8 programmers trained, capable and experienced to handle any 1 persons absence.
- It expands the pool of resources to handle emergency projects & requests. The Orem development staff has the ability to "throw" 100% of their developers at any given request which thereby decreases the overall turnaround time.
- It provides a steady growth curve for the developers.
- It helps foster appreciation for the diversity of contributions made by different individuals within the group.
- It assists in providing better understanding within IT of the diverse areas of the business ie. Accounting, Sales and Customer Care.

- Mentoring allows the mentor to increase in personal knowledge and training skills.
- It develops a well-rounded, foundation of knowledge and talent for each individual.
- It is inexpensive to setup and keeps costs down.
- It assists a 'high end' team member to appreciate the implications of their actions taken higher up on the mountain that have potential for an adverse effect in the lower areas.

Below is a skillset matrix currently in use at the Verio Orem facility. In this matrix each individual has ranked themselves on a 1-10 scale on their ability in each of 5 levels of system design with each of the 8 system development areas within the department. The individual scores (for each system) are then added to give one individual score representing that's persons overall level of understanding in that area. The maximum in any one area is 50.

Entry	Title	Name	Web Dev.	Provisioning	Billing	Reports	Network	Admin	DBA	Presentations
Dec-00	mgr	Adam Smith	a2b1c3d1e1 8	a1b2c2d1e1 7	a2b2c1d1e1 7	a5b3c1d2e1 12	a8b8c7d6e5 34	a2b2c1d1e1 7	a7b8c8d7e5 35	a1b1c1d1e1 5
Oct-99	jr dev	Ben Jones	a6b6c5d3e2 22	a6b6c5d3e2 22	a3b1c1d1e3 9	a4b1c1d3e5 14	a1b3c3d2e3 12	a1b1c1d1e4 8	a1b1c1d1e1 5	a2b3c3d1e3 12
Jan-98	sen dev	Chris Samuels	a8b5c5d7e5 30	a7b8c7d8e8 38	a1b1c1d1e5 9	a7b6c6d7e8 34	a1b1c5d7e7 21	a1b1c1d1e5 9	a2b3c3d1e3 12	a8b6c8d7e8 37
Dec-01	sen dev	David Davis	a5b5c3d3e2 18	a9b8c8d9e7 41	a9b9c9d9e9 45	a3b3c4d2e1 13	a3b2c3d3e1 12	a5b6c5d5e5 26	a9b8c8d9e5 39	a6b4c4d4e2 20
Oct-03	sen dev	Ethan Ellis	a1b5c3d3e5 17	a5b9c8d6e7 35	a3b3c6d5e5 22	a4b9c10d6e9 38	a4b4c7d7e7 29	a4b5c7d5e6 27	a3b5c5d5e5 23	a4b7c7d5e7 30
May-02	sen dev	Frank Kolla	a5b5c5d4e4 23	a6b8c7d7e7 35	a1b1c1d1e2 6	a3b6c5d4e5 23	a8b8c8d9e8 41	a4b3c4d2e4 17	a5b2c2d4e3 16	a9b9c9d9e9 45

- 1 awareness/knowledge of area
- 2
- 3
- 4
- 5 learning > producing
- 6 producing > learning
- 7
- 8
- 9
- 10 master

- a Maintenance (bug fixes, minor issues)
- b Develop
- c Design
- d Mentoring
- e Consulting

As you can tell by the above this approach of moving people from one set of responsibilities to another expands the individuals understanding of the business as a whole by providing insight into the different perspectives of each “side of the mountain”. Again, it also increases the knowledge base and talent pool for each system. Instead of having just one or two developers with knowledge of a system, every developer has knowledge - with varying levels of expertise, providing management with a great deal of flexibility in handling issues and projects. When added all together you have a cohesive, flexible and responsive organization that can deliver on any size request quickly and thoroughly.