

Case Study: Impact of Attrition on Ongoing Projects

Project Name:	Community Exchange Web Application
Key Requirements:	To develop a community portal based for a specific community group. The focus of the web application was to help members communicate with each other as well as exchange ideas using features like blogs and forums.
Technology Used:	<p>Software/Tool:</p> <ul style="list-style-type: none"> - PHP - MySQL <p>All custom features were developed on an integrated platform developed using open source software Drupal and vBulletin.</p> <p>Platform: Linux</p>
Key Features	<ol style="list-style-type: none"> 1. Network functionality with features like friends and groups. 2. Internal Messaging system with option of sending messages to friends and groups. 3. Forums for discussion. This was developed by using open source vBulletin 4. Blog functionality for each user. Option of limiting view of blog to limited (invited) members only. 5. Option of creating events and inviting people. Message board for announcement of these events. 6. Admin functionalities for managing the users, community, country, industry.
Role	We worked on this project as our client's web development partner.
Resourcing	<p>This was a fixed cost project with following team structure.</p> <ol style="list-style-type: none"> 1) Project Manager 2) System Architect 3) Developer 4) QA 5) Designer <p>The estimated time for the project was 3 and a half months.</p>
Risk Involved in the Project	Our system architect, due to family reasons, decided to relocate himself in another city. He gave the company a notice period of 2 weeks.
Mitigation Steps taken by HyTech	<p>Following were the mitigation steps taken in the project.</p> <ul style="list-style-type: none"> - The reporting manager, after talking to the concerned system architect and realizing that retaining the employee was not possible, raised a job requisition request to HR to fill this position. - From the commencement of the project, we had a senior developer as a back-up resource. The senior developer was then assigned on the project as full time system architect. - Since the developer had been in the project from the beginning of the project as a back-up resource as well as Documentations that our matured ISO certified SDLC process supports and the knowledge transfer done in two weeks helped the new system architect to have a faster learning curve for the project. - The project manager and QA resource utilization percentage

	<p>increased (more than what was estimated for the project – this was done without any additional cost to the client) during the learning phase for the new system architect.</p> <ul style="list-style-type: none"> - Unlike other projects where we do effort and schedule variance calculations based on milestones and not on weekly basis, for this project we monitored the health of the project on weekly basis too. The project was monitored effort variation for 2 weeks before and 4 weeks after the system architect left. (Please see table and chart below) - There were some impact on the project once the system architect left (please see the chart below to see the effort estimation details for 2 weeks before and 4 weeks after the system architect left); however the impacts on the project were overcome by putting more effort by the team members and so there were minimal impact on the schedule of the project.
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Calculation of Effort Variance (Matrix Procedure)

I. Effort Variance

Formula Used

Effort variance = (Planned effort – Actual effort)/Planned effort X100

	Estimated Working hours (for the team)	actual working hours (for the team)	variance
Week 5	40	41	2.5
Week 6	40	42	5
Week 7	40	47	17.5
Week 8	40	46	15
Week 9	40	43	7.5
Week 10	40	41	2.5
Total (for the above 6 weeks)	240	260	8.3

**The effort information is representative only to protect the confidentiality.

Note: The planned effort was calculated based on the assumption that there are 8 working hours in a day. The table shows estimated working hours per week for the entire team.

