

A **SWStrategies** White Paper

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## **Increasing Software Product Development Bandwidth**

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### **Introduction**

This white paper is an effort to bring to the forefront the challenges faced by small and medium businesses with custom product development; and to present a unique, viable and effective solution. Let us consider the make and mode of a typical business that falls in the realm of this discussion.

A typical software product development organization in a small company has between ten and twenty employees. This organization is typically divided into two to four groups each led by a senior level engineer. The head of the organization is typically a Vice President level person with significant technical and management skills. The development organization is tasked with supporting the growth of the company by delivering high quality software on-time and under budget.

### **Problem Statement**

Most small and medium size IT organizations operate on relatively fixed budgets. Yet as the business grows, the number of requests for IT support increases. This presents a Catch-22 situation where demands from the business outpace the IT budget. This problem is felt most acutely when a company has a need to reengineer or significantly enhance its product line in order to get to the next level.

### **Common Options**

Companies have tried different options to reconcile this undesirable situation. These efforts fall under two major categories:

#### *Scale Internally*

This approach consists of adding more employees to the existing development organization. However, once the organization reaches a threshold of about twenty employees, the returns tend to

diminish dramatically, resulting in *decreased* efficiency.

Software development organizations tend to have two to four **key resources**. These are the senior level engineers with the capacity to work independently, analyze each situation, make strategic decisions, and then deliver solutions. These resources are often the bottleneck to progress. They are so busy with important projects that they don't have time to train others to help with the workload.

Another possibility is to build a parallel development organization. However, this strategy results in duplicate cost and adds significant burden to an already tight budget.

### ***Scale Externally***

Some organizations choose to scale by outsourcing some (but not all) development work to external resources. However, this kind of outsourcing requires significant management effort – from the same key resources that are already overburdened with projects. Without proper management attention, outsourcing is unlikely to result in success.

Even more importantly, the typical outsourcing model lends itself to an operational scaling rather than a strategic one. Most outsourcing companies are not able to operate at a strategic level.

Another limitation is that the current outsourcing players do not cater to small and medium size companies.

### **SWStrategies Solution**

SWStrategies provides an innovative solution to this problem by providing

a *parallel and independent* development organization, including competent leadership. This new organization, with its own Vice President level head, allows the company to increase the development bandwidth and sidestep the problems described above. SWStrategies has the capacity and the know-how to staff this development organization with the skill set needed for full lifecycle product development.

### ***Strategic Support***

SWStrategies offers Vice President level personnel that are capable of interacting directly with line of business executives at a strategic level. These personnel understand the business goals, help build the strategy to achieve these goals, and make decisions to build optimal software. SWStrategies is able to take a marketable concept and turn it into a saleable product.

### ***No Management Overhead***

SWStrategies takes full responsibility of development projects – from idea through delivery. Having well defined software engineering processes in place facilitates a smooth delivery.

### ***No Impact to Existing Dev Team***

SWStrategies performs independently without distracting the in-house team. At the same time, SWStrategies coordinates with the existing development team as needed. SWStrategies works with the company on product documentation, training and knowledge transfer needs.

### ***Professionalism***

SWStrategies resources are seasoned professionals, who produce quality work, handle intellectual property delicately, and maintain the highest level of integrity.

***Experience***

The core consultants at SWStrategies have experience in all stages of SDLC and have a proven track record of successfully completing several projects on time and under budget. SWStrategies takes pride in the expertise of the current consultant base and in the rigorous process of hiring new consultants.

***Cost Effective***

At the strategic level, SWStrategies enables the client to achieve economic advantage by completing the tasks that would otherwise not be handled by in-house development organization. On the operational level, SWStrategies provides competitive rates for development and includes the services of a Vice President level person with no additional cost. This provides for a cost-effective solution on par or better to the resource costs associated with hiring in-house employees, without any of the corresponding management issues or employment commitments.

***Flexibility***

SWStrategies approach enables the client to grow or shrink on demand to meet the changing needs of the business.

**Summary**

Small and medium size companies find it exceedingly difficult to enhance the development bandwidth beyond a certain threshold, resulting in potentially huge opportunity cost. SWStrategies LLC provides a unique

approach, especially suited to the small companies to mitigate this problem.