# IPO READINESS MEETS SARBANES-OXLEY COMPLIANCE

BOB SCARBOROUGH, CHIEF EXECUTIVE OFFICER, TENSOFT, INC.

mployees and investors create today's dynamic, high-growth fabless companies. Teams are formed to create great products, as well as great companies. The path from the first research and development (R&D) project to the initial public offering (IPO) is a roller coaster of market and product ebbs and flows. Racing toward an IPO, building the company status and rewarding the hard work of a team, requires attention to the full array of requirements placed on a public company.

Many factors determine a company's readiness for an IPO. Figure 1 summarizes and simplifies what is really a complex and varied set of requirements. Product, market and company readiness factors are critical. Company size, public appeal of the company, products, competitive positioning, a defensible market position, forecasted revenue growth and the market's appetite for the company story have been consistent factors for fabless companies. The operational requirements for going public include adequate financial performance, company management, systems and infrastructure to support public company reporting and executive decision making, and systems and processes in the company that align the day-to-day activities with the required reporting and executive objectives. One of the most significant changes in these requirements has been the increase in infrastructure needed to meet the demands of compliance.

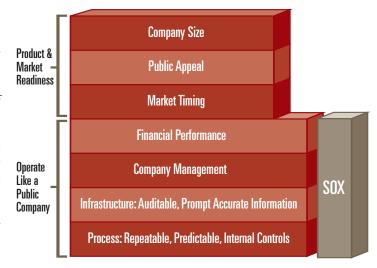
Today, a big part of being IPO-ready includes understanding Sarbanes-Oxley (SOX) requirements for public companies and establishing company guidelines, processes, systems and procedures to keep these requirements in mind as the company grows. SOX applies to all public company requirements and is now factored into a company's pre-IPO path, making it necessary for private companies to plan ahead for SOX compliance, even to the point of operating like a public company well before they file an IPO. This article outlines several basic milestones and stages in a company's development and where SOX matches and merges with these stages.

The goal of this article is to map business process and infrastructure requirements to the growth path of a fabless company, to overlay the SOX compliance requirements with these process requirements and to look at a few ways companies can leverage this infrastructure and these compliance models to improve overall business performance.

A great deal of negative discussion about SOX has surfaced in the industry – some of it justified and some of it a natural reaction to a significant change in compliance standards. The untold story, if one applies some of the natural outcomes of SOX thinking to the implementation of a public company infrastructure, is the uncovering of systematic operational efficiencies that can be leveraged for greater productivity and improved data quality.

# SARBANES-OXLEY

Most companies have a general understanding that SOX compliance relates to documenting, auditing and operating a business based on standards. The



#### Figure 1. IPO Readiness Factors and SOX

specific details for standards and implementation vary from company to company and auditor to auditor. SOX compliance centers on three key sections of the Sarbanes-Oxley Act -302, 404 and 409 - with section 404 being the most critical.

Section 302, Corporate Responsibility for Financial Reports, focuses on the process of corporate officers reviewing financial reports and verifying that the data is accurate. Sub-certification by relevant managers is a standard part of this process.

Section 404, Management Assessment of Internal Controls, covers internal control structure and procedures for financial reporting, which is really "How do we make sure the information is real and controlled by our processes?" This section assesses the effectiveness of internal control procedures and the assignment of responsibility.

Section 409, Real Time Issue Disclosures, is the least developed (in practice) of these three sections. It focuses on forward-looking reporting for events with a material impact on financial position.

Fabless companies deal with SOX issues specific to their industry. A survey of Tensoft's customers revealed that the number one issue for auditors was the remote location of inventory; auditors cannot walk the plant or stockroom to see existing inventory and validate the system count. This requires the company to document and prove methodologies for validating inventory around the world, which depends on vendor systems. However, reporting is not enough. Processes are also required for the audit of distributed inventory, vendor/company integrated physical inventory processes and the validation of vendor data integrity.

Other industry-specific issues relate to:

- Standard Costing for Products This covers timing for variance expense recognition, categories and recognition models for product costing, as well as detailed support for production expense.
- Revenue Recognition Issues This covers distributor revenue recognition and related ship and debit contracts, cooperative advertising, warranty impacts and charge backs. The revenue processes need to be documented, auditable and consistent.
- Other Inventory Management Needs This covers reserves on inventory, obsolescence, market cycles for inventory valuation and related issues.

The overall impact of SOX requires a process-oriented view of one's company. Controls and safety mechanisms should surround the process that guarantees consistent results. Controls can be based on information technology (business systems) and people – although people-based controls require more audit scrutiny. The focus is on predictability, auditability, transparency, compliance, data integrity and documentation. A couple of simple guidelines for business systems are integration, security and traceability. Every system that is not integrated will bring more audit scrutiny. Every area where defined responsibility and access is not matched will also bring scrutiny. It's also important to note that while undocumented systems may save short-term dollars, eventually they can significantly increase the cost of SOX compliance. The appropriate use of IT, process and proper documentation lowers overall cost and improves compliance performance.

## FABLESS COMPANY GROWTH

For the purposes of discussion, pre-IPO fabless companies will be grouped into three categories: pre-product, product acceptance and volume production. Each stage progressively moves the fabless company closer to an IPO, closer to compliance requirements and closer to the need to run the company as if it is already public.

#### The Pre-Product Stage

This stage focuses on product development and R&D. The company is dealing with the challenges of product development, engineering, product marketing and customer requirements. All resources in the company are dedicated to this task; building the company infrastructure is a secondary consideration.

From a business operations standpoint, the key is budget and spending management. This is done for stewardship of the investment dollars, as well as to ensure that spending meets the requirement to get the product completed. Usually, two or three senior managers do budgeting at the executive level. At this stage, processes and controls are built into the people running the organization.

## The Product Acceptance Stage

This stage focuses on early customer adoption and product testing. Fabless companies are very creative at this point, trying to win market acceptance. The focus is often on system prototypes that incorporate product, board production, trial and evaluation kits, and doing whatever it takes to ensure that product capabilities are understood and accepted by target customers. Customer service and the operations team focuses on getting the product to the customer on time, no matter what. Sales and marketing organizations are ramping, and company organization is growing more complex.

During this stage, the company starts down the path of building corporate infrastructure and controls. Systems are needed to manage customer service and customer order scheduling. The operations team needs to understand and manage vendors, evaluate vendor performance, start understanding production yields and cycle times, and ensure adequate product tracking. The financial team starts to manage revenue, multi-national operations (if not required in the R&D stage) and inventory valuation or cost analysis. Funds management is still important, and the executive team will keep a watchful eye on the monies dedicated to holding inventory.

At this point, a process perspective will be extremely helpful in several ways. Processes will ensure an effective use of business software, will push the company to define key processes and will help when compliance is required. Moderation is expected in building these controls and documents, given the strain on internal resources. Key processes to define include product revenue/expense recognition, customer order acceptance processes and operational processes for production management. Controls need to move from people to systems and be formalized for procurement approval and sales acceptance. Information systems and processes should be aligned so they support efficient operations, company controls and future compliance. This is the time not only to develop synergistic systems and processes, but also begin to document the implementation process. The benefit to documentation is that as more people are hired, training time and costs will be reduced. Additionally, taking the time to initiate documentation at this point will be much less expensive than attempting to recreate SOX and training documentation in the next stage.

## The Volume Production Stage

The transition from pre-product, to acceptance, to volume production can be short or long. The company's focus moves away from board or prototype production and back to efficiently growing product sales. The risk/reward ratio changes; with greater potential revenue comes greater potential risk. Inventory may be overbuilt or underbuilt compared to realized demand. Product line complexity often grows with multiple package or configuration options for end customers, with sales opportunities for previously discarded bins, and with all other opportunities to promote sales of core products.

The company now needs full operations support. Customer service moves beyond on-time delivery (OTD) at any cost, to defined success metrics. Outsourced logistics management must be addressed and streamlined. The operations management group needs planning tools. It starts to focus on product cost reduction and increases the time spent on vendor performance metrics. The finance group's complexity grows as well, requiring distributed budgeting, more sophisticated inventory and cost role analysis, along with defined compliance with external reporting standards.

Compliance and operating like a public company now has significant executive visibility. Business systems need to be in place or the company will be running to catch up. Internal and system processes require management, controls, security, defined responsibility, transparency and data integrity. At the same time, information is more widely distributed, as more people need access to an increasing variety of data. Key business and systems processes need to be documented for finance, operations, customer service and information technology. Forward-looking companies are also evaluating key decision metrics and performance indicators and are driving information to the executive team to help guide the rapidly growing company.

## LEVERAGING COMPLIANCE AND INFRASTRUCTURE

The compliance pendulum has swung far in favor of strict controls and documentation. Most commentators believe the pendulum will swing back, with auditors, the federal government and companies developing a shared understanding of reasonably stable requirements. Most companies view compliance as one more cost of business and view public company controls as an inevitable, but not always desirable, requirement.

What is often missed is the opportunity to improve operational efficiency, as well as operational effectiveness, while building in systems and controls. The key is to focus on effective process design, the match of systems and people, and integration. The easiest way to see the possibilities

is to look at specific examples. Two are offered below.

## **Executive Dashboards**

Common executive information requirements include booking, billing, backlog, product margin, cash, yield or cost improvements, and OTD. Every company has 10 to 50 key metrics that are watched to ensure the corporate ship is heading in the right direction. Almost every company has people between the business software and the dashboards that executives view. People extract the data, reformat the data, correct or scrub the data, and create visuals from the data for executive presentation.

Step back from this reality and look at this from a compliance perspective. Adding people into this process adds potential for error. The process will need to be audited and defined if it impacts forward-looking analysis or financial reporting. Now step back and look at this same reality from a process and system efficiency perspective. Why isn't the data coming directly from the business systems that generate the data? This efficient data collection improves information quality by making it more visible and more broadly scrutinized.

#### **Inventory Count**

Materials move through the supply chain as quickly as possible to defined inventory points. Vendor systems have various strengths and weaknesses. Maintaining quality inventory counts across the supply chain is challenging; inventory cycle counts are performed inconsistently. At the same time, most planners depend on spreadsheet models and data on the vendor site, or a supply chain system driven only from customer data.

Integration with vendor data is the only way to keep up with the material velocity in the production process. Instead of spreadsheets, systems are needed to track inventory and consolidate and organize the information consistently. A quality infrastructure will ensure that vendors follow internal procurement policies, financial policies and operational policies. This drives validation from the company perspective, instead of the vendor perspective. Beyond moving back to process efficiency, as well as compliance, consider how the vendors and the company can cooperate on inventory count validation. Could count sheets or vendor portals that integrate the vendor into the cycle count process improve the accuracy of data and controls, as well as streamline the processes?

# SUMMARY

Public company policies, procedures and compliance are required for every fabless company on the IPO path. Matching the incorporation of business systems and compliance efforts to the stages of company growth can help to minimize the pain and expense when the company must operate as if it is public. Beyond this, incorporating process and compliance thinking into intelligent system design and deployment offers opportunities for greater corporate efficiency.

#### About the Author

Bob Scarborough is the chief executive officer of Tensoft, Inc., a San Jose, California software firm that focuses on providing integrated supply chain software solutions for the fabless semiconductor industry. The company's Fabless Semiconductor Manufacturing (FSM) product integrates seamlessly with Microsoft's Dynamics GP financial software to create a complete, end-to-end solution for the fabless industry. Bob holds a B.S. from the University of Maryland and MBA from the Anderson School at UCLA.