Coastal Innovation Foundry
Bay Innovation Foundry

Located in Hampton Roads, Virginia, "The Foundry" is establishing a collaborative effort to address several needs of area businesses through improved and experienced workforce capabilities.

Quandary 1: The state of required technology expertise changes very rapidly and all too often, fresh graduates to not have the needed skills to be productive in their new role (if they get one).

Quandary 2: Companies often cannot afford the several weeks of incremental corporate training needed to get new hires to operational expertise levels and to maintain those levels.

Quandary 3: Companies seek experience in addition to academics but when unable to find local job talent, they often go out-of-region to seek the skill sets they need.

Quandary 4: Our area academia has a very hard time in have "the most current" curriculum simply because of what's involved to change programs "on the fly" as the technology needs change.

What is the Bay Innovation Foundry? Simply put, it is a new way of addressing and perhaps solving the on-going questions:

1. How does the workforce get experience while in school? Traditional internships can work, but those programs are often loosely managed and disorganized, netting less than favorable results. Internships are also very limited in scope and scale, so only a small number of student to company placements result.

2. Students are often challenged to get out in the job market as fast as they can, because they need the experience. However, this translates to less than ideal skills to hire.

3. Companies in Hampton Roads need to be able to leverage workforce both out of school as well as exiting military so that their growth can remain in Hampton Roads.

4. Students need to come to companies with state-of-the art knowledge AND experience in its applications.

What are the The Foundry top level objectives?

Education + Skills + Experience = Better Job Potential

Better New Hires = Less On the Job Training = Higher Efficiency and Improved Corporate Profits
Better corporate experience in the region, makes for happier businesses who stay and prosper contributing to regional economic vitality.

Working with area CIOs, they have discussed these common needs and what the shortfalls are in finding available talent locally. It is important to note that many companies go out of region and some companies will open remote offices closer to the labor pools which offer better candidates.

Programmers / Developers

Javascript web developers both on client side and server side, particularly platforms such as Angular JS.

iOS and Android native mobile app developers.

.NET web developers

PHP web developers

Java developers, specifically within SQL and NoSQL data applications

Developers with version control and DevOps experience

SaaS, PaaS, and Cloud integration

VM experience

GIS

Web Design and development

Campus and WAN infrastructure

AD management

Cyber awareness but prefer some skill

High availability solutions

Big Data

R-language developers

Cloud

AWS and Azure cloud architects

Soft Skills

Commitment

Reliability

Willingness to learn

Willingness to help others

Available Solutions on the Market

Boot Camps

Other available solutions on the market include technology boot camps. Technology boot camps are becoming the trade schools of the new era. Coding boot camps are immersing training programs that help students from all backgrounds transition into a tech career. Since 2012, these private education courses have been training software engineers with industry job placement records averaging above 65%. Recently, many new schools and new formats of training have emerged as well as government financial aid programs such as EQUIP. Many mid-career professionals are learning new software skills and landing jobs in tech by going through the boot camp model.

Barrier to entry: The cost to the students is measured in the thousands of dollars.

Staffing Agencies

Temp-to-perm jobs are a way for an employer to gauge your ability to work for the company on a regular full-time basis. Permanent (direct hire): For permanent positions the staffing agency acts as a recruiter by screening and hiring candidates for regular positions. Employees are then hired directly by the employer.

Barrier to success: They often time don't vet well and don't train candidates. Incented on quantity no quality.

Consider a regional collaboration effort. Involved parties could be:

- The Hampton Roads Innovation Collaborative (new dba for the HR Tech Council established in the late 1990s). This gives the effort a nonprofit c6 cover over related activities.
- Area business related to innovation mapping.
- A Staffing/boot camp like entity.
- Area business who work with specific key technologies like Coding, Cyber and Big Data (Analytics).
- Area tech schools whose focus is specifically technology.
- Large corporate sponsor viewed as a point of influence and gravitas in the region.
- Closed loop systems and track and report on success metrics toward improvement.

The Foundry Business Model

1. Three boot camps are established on the key skillsets employers are asking for today.
   a. Coding Camp – 12 weeks   All beyond the fundamentals taught in area colleges
   b. Cyber Camp – 12 weeks   All beyond the fundamentals taught in area colleges
   c. Big Data Camp – 12 weeks   All beyond the fundamentals taught in area colleges

2. The Bay Innovation Foundry would seek corporate partners to provide the job opening opportunities. The fees paid by the companies (upon accepting the graduating candidates) essentially reimburse the Foundry for its costs of program delivery.

3. Our education partners would be asked to provide the training room, equipment and process guidance. The "What's in it for Them" question is answered by the boot camp is part of their operation (via the collaborative). They'll get paid for the room use while first-hand seeing how their curriculum can be improved and modified by what they're observing. This is a competitive advantage.

4. Students are paid minimum wage while they attend the boot camps. These are rates that equate to a company utilizing an intern. The difference is that these interns are getting into the specifics of learning the required skills as taught by bona fide business experts.

5. All involved collaborative partners would need to agree to their compensation for efforts provided. Examples:
   a. Instructors coming from business or schools to be comp'd.
   b. Staffing agency gets a fee structure.
   c. Schools get room fees and other advantages mentioned earlier.

6. CIO Roundtable Acts as Business Advisory Panel (and customers). Their advantage is that they get to:
   a. Help determine the curriculum
   b. Can use the boot camp on their specific projects (real world)
   c. Get first picks to trained and prepared candidates

7. Staffing Agency Partner benefits in the obvious and traditional manner of placement fees for students at the output of the boot camps.

8. Graduation contests may be a possibility. Consider Cyber Challenge Competition and a Coding Challenge Competition open to our graduates upon completion of their studies. Our participating companies create the problem scenarios for students to solve. There are no prizes offered per se, but getting a jump start on one's new career might be all the prize needed.

   This is a form of business simulation which can be a real win-win.

Business Simulation space at colleges to work with business, faculty and students on real and simulated projects. Hard skills, soft skills, employment skills. Students and Teachers working with business to know business needs.	Dual purpose the Business Simulation space to also act as Business Acceleration space. Let students and faculty work with businesses on their real or simulated challenges to help them grow.

Education/Business Ecosystem
Let's Blend and Leverage

Part of what's needed is to create Ecosystems:
1) Entrepreneurial for new business and growing business.
2) **Education/Business** to demonstrate real world requirements to students.

Education/Business Ecosystem
1) Businesses working directly with educators and students.
2) Demonstrate how the job market conditions are changing and optimizing student's success in the new workforce.
3) Real and Simulated business activity (Business Simulators).
4) Mentoring.

Business simulation

From Wikipedia, the free encyclopedia

This article is about simulations for business training. For the video game genre, see business simulation game.

Business simulation is simulation used for business training or analysis. It can be scenario-based or numeric-based.

Most business simulations are used for business acumen training and development. Learning objectives include: strategic thinking, financial analysis, market analysis, operations, teamwork and leadership.

- Adding students to the Business Accelerator efforts creates a parallel Business Simulator effort.

- Students get credits and see real world business examples.

- Educators see the same, potentially closing the gaps between education and workforce.