**Introduction/Overview**

TopCoder is a competition based software programming company which uses communities to develop programs for their clients. While they are currently the only company like this, they do face competition currently and could start to see similar companies emerge in the future. TopCoder is unsure of what approach to take in order to strategically align themselves with their mission while providing the best value to their customers while simultaneously attracting the best talented programmers via competitions which provide financial incentives to the winners.

**Company Background**

Topcoder was founded by Jack Hughes in November of 2000 with an innovative concept to improve the quality and usefulness of software program. Jack recognized that this innovation was directly linked to a global economy and that the skills and talents harnessed within these highly skilled individuals could make a difference. Jack Hughes recognized this need early on as co-founder of Tallan Inc. which was a web-based solutions firm.

Topcoder is an online community of online professionals that serves as the largest competitive software development company with over 200 countries represented. Topcoder operates through creating objective ratings on individuals in the programming industry. They created a community for these various programmers by hosting online tournaments and employer connections. Topcoder hosts a variety of programming competitions and tournaments that involve hundreds of competitors that are divided amongst rooms with multiple coding rounds.

Contestants must write codes in Java to solve a set of algorithmic problems to be reviewed by Topcoders tournament server. There are several coding rounds, typically three, containing problems of varying difficulty ranging from easy to difficult. Each coding round is timed and usually lasts approximately one hour. Points are then assessed for the time each team took to solve a problem and difficult problems are awarded considerably more points than easy problems. Topcoder created this form of recruitment in hopes of gaining key financial sponsorships. The registration process is similar to that of well-known job search sites like Monster Jobs or Career Builder. Additionally Topcoder asks participants if they are interested in searching for jobs or simply looking for a challenge.

**Problematic Issues and Concerns**

*Problem #1* - Clients were afraid to give TopCoder work with any sensitive data.  With contests being open to any member of the TopCoder community, this created concern for companies that had trade secrets within their programs or sensitive data.  TopCoder had confidentiality agreements in place and also kept the company's name out of contests, but there was only so much that they were able to do.  Companies understandably did not want their secrets or sensitive data released to an unknown online community, so TopCoder needed to find a way to handle these sensitive projects.

*Problem #2* - Elite programmers only made up only .5% of the TopCoder online community.  Nearly 83% of the community was not active at all in any programming; they were simply members interested in TopCoder but did not actually participate in any contests.  TopCoder needs to find out a way to weed out the individuals that are not actually interested in the programming and focus more of their efforts on the elite programmers.

*Problem #3* - Scheduling of contests sometimes lead to elite programmers not being able to participate in all of the programming opportunities.  If two large contests were going on at the same time, the good programmers would have to choose which project they wanted to work on in order to not waste their time and effort on another project.  TopCoder needs to schedule their projects in such a way that their elite programmers will not have a conflict with participating in all of the top projects so as to utilize the best talent accordingly in order to retain their high quality image.

*Concerns* - While these issues have been problematic in the past and the company is still trying to correct them currently, the company now faces new concerns. 1) Would community members stick with TopCoder if a new competition-based software development company emerged? 2) What would happen if a company started to develop software in the same way as TopCoder? 3) Would the TopCoder community remain intact?

**Competition**

TopCoder has been issued eight U.S. patents on various aspects of running online programming contests in a distributed community setting; giving them a leg up within their specialized industry. Regardless, they still face competition in other various aspects. Companies like Google have hosted competitions similar to that of Topcoder. However, it seems that Topcoder is the industry leader for competitions as a business model. Google Code Jam is a competition administered by Google in which algorithmic problems are provided with fixed time specifications for completion. Programming language and development environment are tools used to solve these complex problems, resulting in identification of top engineering ability for potential employment at Google.

CareerBuilder and Monster Jobs are Topcoder’s most likely competitors in the job search realm. In 1995, NetStart Inc. was founded, which later became known as CareerBuilder.com in 1998. Aside from serving as a career search engine CareerBuilder also offers tools to improve your job eligibility and skill sets. For example: CareerBuilder offers customized consulting advice, talent networks, and compensation portals that provide real time data based on requirements such as education, experience, industry, location, and company size. CareerBuilder has become not only a specified job search engine, but a research tool that provides potential employees with valuable information.

Monster Jobs was established in 1999 when The Monster Board and Online Career Center merged. Monster Jobs has many similarities to Career Builder with regards to offering job service accessories, such as related articles and tips for success. Supplementary materials consist of online communities, advice, and many other resources to help you throughout your job search and ensure success once the perfect match is found.

With the current setup of TopCoder, there are not many barriers to entry in this market, nearly any startup company could obtain programmers and do similar contests to TopCoder; within the limits or their patents.  TopCoder needs to find a way to distinguish themselves in order to limit the copycat competition of this internet age.

**Situation Analysis**

A challenge the technology field is currently facing is a reduction in interest in science, technology, engineering, and mathematics. Additionally, the Computer Research Association and the University of California reported a reduction in computer science enrollment which is reaching double digits. Hughes is committed to developing and fostering interest in these fields domestically and has developed Defense Advanced Research Project Agency. The system is designed to target middle and high school students interested in the science, technology, engineering, and mathematics fields; featuring contests, activities, and web based shows.

**SWOT Analysis**

|  |  |
| --- | --- |
| **STRENGTHS**  Unique Recruitment Approach  Demonstrated Success and Skilled Programmers  Competition Program  Ranking System for Community  Coding Competitions  Superior Cost, Quality, Speed, and Flexibility | **WEAKNESSES**  Most programmers may not be interested in wasting effort  Competitions are open to all members of the community  Security Issues  Contest Scheduling Conflicts  Clients still need internal development work after TopCoder |
| **OPPORTUNITIES**  Access to elite programmers throughout the world  Many people are desperate for work TopCoder Direct | **THREATS**  Ease of entry for competition  Lack of interest in certain projects  Overload of projects at once |

**Analysis of Alternatives**

*Option #1 - Hire Top Performers Full-Time:* It is very clear that most of the projects are coded by a small percentage of the online community.  Over 80% of the prize money is awarded to 5% of the online community. Therefore, TopCoder could choose to hire those top programmers full-time or contract the work to them specifically, rather than in a competition setting. This would be beneficial because it represents the top talented programmers to be chosen. However, this could pose a threat to the competitive environment that TopCoder facilitates and could allow for lost new talents. Another alternative is to hire these top performers as Platform Managers so that they can give input when needed but also facilitate competitions.

*Option #2 - Increase Incentives for Contests:* Many community members are no longer entering contests simply because the work effort required is not worth the reward.  Others do not want to put time and effort into a contest if they were not guaranteed some type of reward.  This option would not only address these concerns but also allow TopCoder to utilize the long-tail members; these members are those who have never won competitions but participate for the learning experience.  TopCoder stated that these members were important, as hopefully one day they would contribute to software development. This option could potentially be costly to the company. However, in order to retain top talent, TopCoder must attract top talent and top talent is seen in those who are worth the extra monetary rewards.

*Option #3 - Keep the Current Program:* The program that TopCoder currently has in place is obviously working with great success and could survive pop-up competitors.  With a few minor tweaks, TopCoder could choose to just ignore some of their problems and continue on with the success that they are currently experiencing. The problem with this approach is that it does not address the rapidly changing environment they are currently experiencing. This could also leave a narrower gap between what they are doing and what competitors are can mimic.

**Conclusion and Recommendation**

After considering all of the alternatives, we feel that Option #2 would be the best strategy to pursue.  We viewed the reduction of prize values in 2008 as a mistake and a decision that needs to be rectified.  It decreased the incentive for many community members to participate in the competitions and members no longer wanted to waste their time for such low monetary reward. This is a critical mistake because lost top talent can be a result and top talent creates the highest quality programs. Considering the fact that TopCoder’s competitive advantage is the highest quality products, this action taken can dramatically alter the course of the company.

Another advantage to choosing this option is because it addresses their concerns listed above: will community members stick around if a new competition-based software developing company emerged and would the community remain intact. By increase the financial incentives, the community and its members would realize that the rewards are great and therefore worth sticking with TopCoder which would breed loyalty. The demographics of the community would be largely driven by financial rewards and therefore this option should succeed in palcing themselves strategically against competition to promote loyalty to the company.

This strategy will also allow TopCoder to focus on its core members; single males in their 20's.  Hiring members on as full-time employees would limit TopCoder’s ability to continually use the skills of this revolving demographic.  We understand the issue that some companies are not comfortable with the business model due to information sensitivity, but we feel TopCoder's ability to develop premium products will outweigh the risk and companies will jump on board, especially when considering the superior prices.

Up until this point, there have been concerns about the confidentiality issue but there has never been an actual incident of foul play.  TopCoder has proven itself as a premium company thus far.  To increase confidence in this model, we would also recommend that TopCoder have a more rigorous selection process for members.  Screening members with a little more scrutiny would be beneficial for TopCoder when it comes to putting companies at ease about protecting intellectual property.

TopCoder has experienced success in its relatively short history because of its new and unique business model.  We feel that deviating from this strategy would be a poor decision even after considering the risks.  We believe that TopCoder can realize growth and success in the future by maintaining this strategy.