# Lean Six Sigma Green Belt Project

## **Quality Associates International South East Asia**



**Project Number: GBWEB001** 

**Project Name: Web SEO** 

**Project Lead: Dave Kelly** 

Project Team: Web Development Team, Marketing

**Team, Sales and Accounting** 

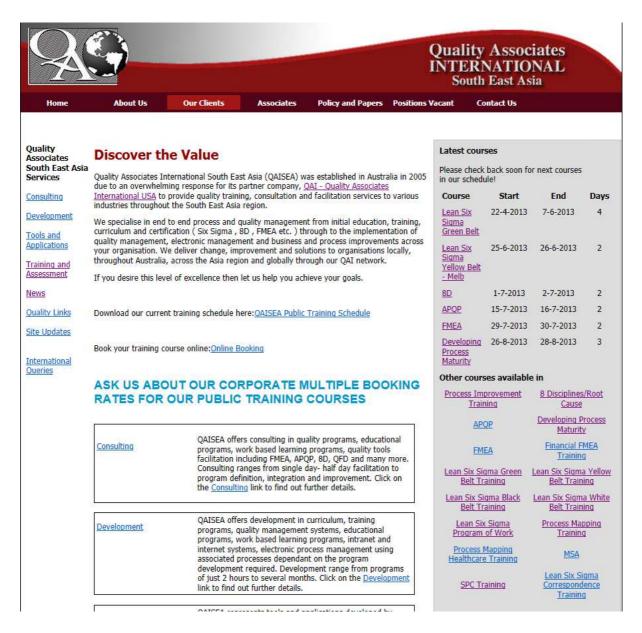


Fig. 1 – Quality Associates International South East Asia Website

## **Acronyms**

B2B - Business to Business

BCB – Business Curriculum Blueprint

CODN – Cost of Doing Nothing

DK – Dave Kelly

GB - Green Belt

GFC - Global Financial Crisis

ICB – Industry Curriculum Blueprint

LD – Lee Dawson

PCB – Professional Curriculum Blueprint

ROI – Return on Investment

SEO – Search engine Optimisation

## **Project Information**

**Background:** The Web SEO project is being investigated in response to the onset of the GFC and a perceived lack of new business and hence new business diversity that may protect the company from fluctuations in the market with a broader client base. The chief goals of the project are to investigate whether the website can deliver new business, whether the existing traffic at the website is sufficient to deliver new business and investigate whether changes in the website structure will deliver a higher number of visits, hits and hence queries and hence sales. The DMAIC approach has been chosen as the method to investigate and deliver this project as the current level of hits, visits and sales on the website have not met business expectations.

**Project Number: GBWEB001** 

Project Name: Web SEO

Project Goal: Increase web sales, increase web hits, visits, queries. Broaden the customer

base through web

**Project Owner**: Dave Kelly

Start Date: January 2009

**End Date**: July 2010. If project is deemed successful further measures and increased investigation should follow along with continued measurement as deemed by the data collection plan and potential changes to the data collection plan in the project.

**Category**: Sales, IT, Marketing

**Problem Statement:** 

## **Object**

**Quality Associates Website** 

## Defect

Returns no sales for the organisation

## Consequence

Resulting in loss of sales and sales turnover and a lack of understanding of the rolled sales throughput of the website and the correct measures to deliver higher sales and correct decision making.

#### Statement

The Quality Associates Website Returns no sales for the organisation resulting in loss of sales and sales turnover and a lack of understanding of the rolled sales throughput of the website and the correct measures to deliver higher sales and correct decision making.

## **Problem Description:**

Sales from online presence have never met expectations or required levels for Return on Investment.

The level of training intake is not consistent throughout the year and numbers have not reached expected levels.

There is no process for the introduction of new products and training to the market.

Hypothesis I: Increased traffic to website(s) and direction of traffic to purchase of online training and products will increase the level of sales and sales online.

Hypothesis II: Increased organisation of scheduling of training, customer satisfaction follow up (organizational and individual), targeted training requirements and aligning materials and assessments with national and international competencies and certifications will increase the level of participation in training and organizational alliance for training delivery.

Hypothesis III: A process of introduction of new products to the market will deliver an upfront and sustainable audience (individual and organizational) and leverage and uplift Hypothesis I and Hypothesis II

## Objectives:

Measures to be decided on baseline figures:

- An increase of 15-25% on website traffic
- An increase of 10-20% on purchase
- An increase of 10-20% on training uptake and organizational alliance.

#### General objectives are:

- To increase the volume of traffic on Australian websites
- To increase the volume of traffic to qaiseaonlinetraining.com
- To increase the purchase of online training through web marketing and standard marketing
- To increase online completion rates (queries)
- To increase the purchase of standard training and consulting as a follow on from online completion

- To increase the purchase of standard training and consulting from web based marketing, trade show marketing, cold mail outs and advertising.
  - o Update of general objective at Define Tollgate
    - To increase the purchase of standard training and consulting from web based marketing
- To introduce a new style of learning via correspondence to capture small and medium enterprises in the market.
- To create avenue for new products to enter the market
  - o To introduce, market, sell and deliver Financial FMEA
  - To introduce, market, sell and deliver SEO
  - o To introduce, market, sell and deliver Curriculum Blueprints suite
    - Business Curriculum Blueprint
    - Industry Curriculum Blueprint
    - Professional Curriculum Blueprint
  - o Update to objective at Measure Analyse Tollgate
    - Remove and place in separate project

#### **Baseline Measures:**

- Sales
- Sales Enquiries
- Web Data
  - o Hits
  - o Visits
  - o Unique Visits
  - o Page Views
  - o Time on Site
  - Average Stay Length
  - o Bandwidth
- Page Rank
  - o Targeted Pages

Measures can be obtained from;

- Website Statistics automated
- Google Rankings
- Web CEO

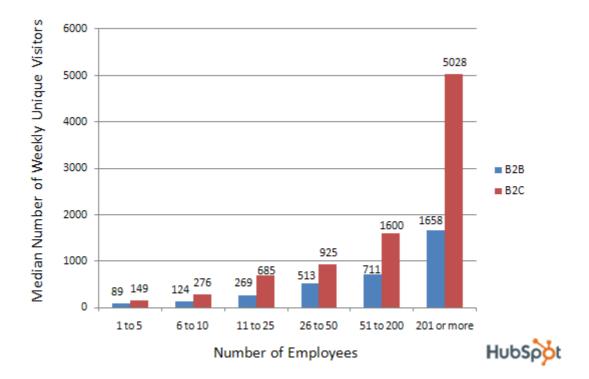
## **Benchmarking**

http://blog.hubspot.com/blog/tabid/6307/bid/5092/How-Many-Visitors-Should-Your-Site-Get.aspx

Marketers and small business owners we speak with at HubSpot often ask how many visitors their site should be getting.

The answer depends on several variables including size of company, industry, and the type of product or service the company is selling. To provide a general benchmark, I pulled together some aggregate data on website traffic based on company size and type.

The chart below shows the median weekly unique website visitors for 1,324 HubSpot customers for the 7 days ending September 10, 2009. So, if you're a 6-10 person B2B company and you're getting 124 unique visitors a weekly you're about average for similar companies.



A few notes on the data: The median was used as opposed to the average since a few sites with large numbers of visitors skewed the average up in each category. Therefore, the median serves as a better benchmark for typical companies in each segment.

I broke out the data by size of company based on number of employees and also by whether the site is for a B2B or B2C company. Not surprisingly, companies with more employees tend to have more website visitors. Also, B2C companies have more visitors than B2B companies regardless of size. However, it's interesting to note that the difference in visitors between B2C and B2B sites seems to be more pronounced in larger companies:

- B2C companies with over 200 employees had 203% more unique visitors than the B2B with over 200 employees.
- B2C companies with 1 to 5 employees had only 67% more unique visitors than the B2B with 1 to 5 employees.

Two groups of customers were filtered out of the analysis:

• Customers with less than five unique visitors per week were filtered out of the analysis since those customers often have not fully launched their websites or have not installed the HubSpot tracking software.

http://www.thatsjustbrilliant.com/posts/brilliant-marketing-campaigns-ideas/benchmarking-web-traffic-analytics.html

Being able to see how many visitors my sites receive is one of the biggest motivating factors for me to continue improving my websites. Some of the stats that I like to look at are the number of visitors, how many pages each view on average, the average time spent on the site, the conversion rate, and how many visitors are new vs. returning.

All of these numbers are interesting by themselves but are much more interesting when compared against the competition.

Based on Google's Benchmarking stats, here are the averages for medium sized websites for a 30 day period, which is the category that most websites fall into:

- 3,722 visits per month
- 48.07% bounce rate (people that don't view a 2nd page)
- 12,164 pages viewed
- 2 minutes and 22 seconds spent on the site per visit
- 3.27 pages viewed per visit
- 62.92% first time visitors

From what I've seen, repeat visitors view many more pages than new visitors, so if your new visit percentage is high, then chances are that your pages viewed per visit is lower than the average. Also, new visitors bounce much more than repeat visitors. New visitors are also much more apt to click on your ads, but repeat visitors tend to end up as your subscribers.

Potential Measurement Action – investigate google analytics for effectiveness in measurement and benchmarking.

## Targets:

| Measure            | Current<br>State   | Benchmark   | Measure<br>Type                           | Crit | Target  | Notes                                     |
|--------------------|--|---|---|------|---|---|
| Sales              | No Sales<br>(\$0)  | Management meeting set this at as an aim \$2K per month based on current sales. 45-50K annual         | Manual                                    | Υ    | \$2000/month<br>average<br>within 12<br>months  | Stratification<br>potentially<br>required |
| Sales<br>Enquiries | Minimal –<br>Not<br>tracked  | Management<br>meeting set<br>this at 10 per<br>month to<br>deliver \$4K<br>in sales                   | Manual<br>Web based<br>form<br>Queries    | X    | 10 per month within 12 months. Increasing beyond the life of the project                  | Stratification<br>potentially<br>required |
| Hits               | Low Skewed by Angus and Robertson use of website Adjusted to 527 average after removal of skew data. | 20,000 per<br>month.<br>Measure is<br>not<br>considered<br>key critical X<br>to queries<br>and sales. | Automated<br>Web<br>Statistics<br>Package | X    | 10,000-<br>15,000   | Stratification potentially required       |
| Visits             | Low Skewed by Angus and Robertson use of website Adjusted to 123 average after removal of skew data. | 3722 per<br>month   | Automated<br>Web<br>Statistics<br>Package | Х    | Initial target<br>1500-2500<br>per month<br>Secondary<br>Target<br>3000-4000<br>per month | Stratification potentially required       |

| Measure                               | Current<br>State  | Benchmark          | Measure<br>Type                           | Crit | Target               | Notes                                     |
|---------------------------------------|---|--------------------|---|------|----------------------|---|
| Unique<br>Visits                      | Low Skewed by Angus and Robertson use of website. Adjusted to 35 average after removal of skew data.                        | 149 per<br>week    | Automated<br>Web<br>Statistics<br>Package | X    | 500-700 per<br>month | Stratification<br>potentially<br>required |
| Page<br>Views                         | Low Skewed by Angus and Robertson use of website. Adjusted to 243 average after removal of skew data.                       | 12164 per<br>month | Automated<br>Web<br>Statistics<br>Package | X    | 5000-10000           | Stratification potentially required       |
| Time on<br>Site/Ave<br>Stay<br>Length | Low Skewed by Angus and Robertson use of website. Current data skewed and is ignored. Baseline at start of data collection. | 2:22               | Automated<br>Web<br>Statistics<br>Package | X    | 1:30-3:00            | Stratification potentially required       |

| Measure        | Current<br>State  | Benchmark                                 | Measure<br>Type                           | Crit | Target                           | Notes  |
|----------------|---|---|---|------|----------------------------------|--|
| Bandwidth      | Low Skewed by Angus and Robertson use of website. Current data skewed and is ignored. Baseline at start of data collection. | Unknown                                   | Automated<br>Web<br>Statistics<br>Package | X    | 100-200MB                        | Stratification potentially required  |
| Page Rank      | Not Measured All Initial Benchmark beyond first 3 pages in Google with the exception of QAISEA search.                      | Top 20 as<br>per<br>reference 2<br>page 7 | Manual<br>Web CEO<br>Google<br>Tests      | X    | 1-20 for<br>selected<br>searches | Stratification potentially required Specific data searches may be part of the data for the control area in this project. |
| Bounce<br>Rate | Not<br>Measured   | 48.07%                                    | Automated<br>Web<br>Statistics<br>Package | Х    | 40-60%                           | Stratification potentially required  |

## Y=f(x)

Initial investigations have yielded the following critical success factors and measures. These may change throughout the life of the project and in the control phase of the project.

Sales = Enquiries + Visits + Unique Visits + Page Views + Hits + Time Stay + Bounce Rate + Page Rank

Search phrases may also be considered here but may be considered out of scope for this project based on time restrictions.

# **Project Scope & Dependencies**

| Business Area                                      | Description of   | Target  | Impacts  |
|--|--|---|--|
| Online training systems (Memotrainer)              | Dependency Reliance on Memotrainer for set up of sites and training in development of online training. | Set up of all courses<br>on both qai and<br>qaisea sites.   | Dave Kelly  Marten DePrez  Stefan van den Tol  John Vernier  |
| Web<br>Development<br>(KEY)                        | Development of<br>websites dependent on<br>Australian Development<br>Team                              | Australian Website and ancillary websites fully developed for easy update and review.                       | Dave Kelly<br>Ben Townsend                                   |
| Search Engine Optimization – Web Development (KEY) | Dependent on timeframes of search engines and web crawlers to develop consistent data.                 | Reporting on and action plans based on SEO principles and results.  Reporting on conversion rates to sales. | Dave Kelly  Google, Yahoo – all  designated search  engines. |
| New Course Development – Research and Development  | Six sigma lead dependant on the development of new courses as Dave Kelly is the SME in these areas.    | Financial FMEA, BCB, ICB, PCB, SEO  | Dave Kelly (All)   |
| Marketing<br>Products                              | Dependant on marketing team and US Office sign off   | Develop capacity in<br>Australia to create<br>marketing on new<br>and existing<br>products                  | Dave Kelly Ben Townsend                                      |

| Business Area                                  | Description of Dependency             | Target   | Impacts                           |
|--|---------------------------------------|--|-----------------------------------|
| Trade<br>Conference                            | Location, cost and appropriateness of | 2 Trade Conferences per year                                       | Dave Kelly                        |
| Review   | trade shows                           | Set up measurement of website post trade show spike                |                                   |
| Marketing – Cold<br>Mailing                    | NA. Due to lack of resource           | NA. Due to lack of resource  | NA. Due to lack of resource       |
| New Product<br>Process - Process<br>Management | Existing SOP and Process Mapping      | Develop Process  Maps and Product  Embed with  Marketing Processes | Dave Kelly Lee Dawson Dave Worley |
| Management                                     |                                       |  |                                   |

# **Project Metrics**

| Costs     | Web Development SEO Research and Development Administration of Queries and Sales (potential for successful process change in web development) | Drivers | <ul> <li>Page Rank</li> <li>Increase Web Queries</li> <li>Increase Web Sales</li> <li>Increase Visits</li> <li>Increase Page Stay</li> <li>Increase Unique Visits</li> <li>Increase Page Views</li> </ul> |
|-----------|---|---------|---|
| Bus. Plan | Outlined in Business Case and Project Plan  | Drivers | Outlined in Business Case and<br>Project Plan   |

## **Project Resources**

| Business<br>Sponsor | Lee Dawson      | Hrs. / Wk. | 0.5  | Duration | 6 months                        |
|---------------------|-----------------|------------|------|----------|---------------------------------|
| Program Owner       | Dave Kelly      | Hrs. / Wk. | 1    | Duration | 6 months                        |
| Program<br>Manager  | Dave Kelly      | Hrs. / Wk. | 9    | Duration | 6 months and ongoing in control |
| Web Developer       | Ben Townsend    | Hrs. / Wk  | 8    | Duration | 2 months                        |
| Web Host            | Nathan Fletcher | Hrs / Wk   | 0.25 | Duration | 6 months                        |

Total Hours over 6 months is 322 hours based on the base hour rate over the organisation of \$75 is a total potential spend of \$24,150. This is comparable to a 3-6 month campaign in associated press in relation to our business services.

## **Project Milestones**

| Milestone   | Target Date   | % Benefit |
|---|---------------|-----------|
| Removed skewed data from website                            | January 2009  |           |
| Transfer Angus & Robertson application to securequality.com | January 2009  |           |
| Automatic Data Collection Statistics                        | January 2009  |           |
| Australian Website Design                                   | February 2009 |           |
| Australian Website Development                              | February 2009 |           |
| Australian Website Optimization                             | March 2009    |           |
| Website Cutover/Go Live                                     | March 2009    |           |
| Ancillary Website Development (securequality.com)           | April 2009    |           |

Please see project plan document for more detail on project requirements and milestones.

# **Assumptions / Success Factors**

| Assumptions      | Websites can be easily accessed and updated              |
|------------------|--|
|                  | Access to external SEO processes available               |
|                  | Budget available for development section of the project. |
| Critical Success | PageRank in Google                                       |
| Factors          | High quality material on webpage                         |
|                  | SEO written webpages                                     |
|                  | Increased Web Statistics                                 |
|                  | Increased Sales  |

# **Project Risks**

| Risk  | Probability | Mitigating Action  | Owner                              |
|---|-------------|--|------------------------------------|
| Traffic to website remains static   | 5%          | <ul> <li>Alter web strategy until organic search yields top 20 page rank</li> <li>Alter products delivered</li> <li>Deep dive into search criteria by customers to deliver targeted results</li> </ul> | Dave Kelly                         |
| Purchase of product remains static  | 5%          | <ul> <li>Alter web strategy until organic<br/>search yields top 20 page rank</li> <li>Divert funds into trade shows,<br/>print and other media</li> </ul>  | Dave Kelly                         |
| Contamination of Data by<br>Angus & Robertson use of<br>Website with web application<br>tool. | 1%          | Remove application and place in<br>another website. Divert webpage<br>for a period of one month then<br>remove.  | Ben<br>Townsend<br>& Dave<br>Kelly |
| Design and Development Phase runs over estimated allotted time                                | 25%         | <ul> <li>Contingency of a further 2 weeks development</li> <li>Run site as developed on key search items</li> </ul>  | Ben<br>Townsend<br>& Dave<br>Kelly |

## **Business Case**

## **CODN**

Web Sales remain at zero

No diversification of client base

Marketing requirements remain with local audience and not with region and global requirements.

Impact of GFC and economic downturns directly related to current client base impacts.

Industry diversification not achievable to nullify impact of economic downturns.

#### Costs

#### Hours

Estimated 322 across the board. Cost \$24,150.

## Web Hosting

Current allocated budget \$500

## **Associated Software**

Dreamweaver \$1,000

Web CEO \$500

SQL Server \$2000

Google Analytics \$0

Total Software Budget \$3500

## **Total Expected Costs**

\$30,150

25% Development Contingency - \$6,000

## **Total Costs with contingency**

\$36,150

## Returns

Expected Returns - \$25,000-\$50,000 within 12 months. Increasing over the subsequent years.

## ROI

Expected return within 12 months of project release.

Return point at \$36,150 – Monitor returns on both costs and contingency basis.

## **Reference Documents**

- 1. MS Project Web SEO Project Plan
- 2. Get to the top on Google Viney, D. Nicholas Breasley Publishing ISBN 978-1-85788-502-6
- 3. Getting Noticed on Google Norman, B.,ISBN 978-1-84078-332-2