Knowledge Required for Certification

Thanks for your interest in the Knowledge Required for Certification by the Web Analytics Association (WAA). This document contains a detailed overview of the knowledge required to pass the Web Analytics Association certification test.

As such, this document is also a detailed overview of the educational material provided in the four online courses making up the *Award of Achievement in Web Analytics* offered by the WAA and University of British Columbia Continuing Studies (UBC).

Taking these four courses is **not required** to sit for the certification test.

However, the knowledge contained in these four courses will be required to pass the test. We expect many web analytics professionals should be able to pass the certification test without taking the courses.

Potential applicants for the certification should review this document and decide if they possess all of the knowledge required to pass the test. If further education is needed, the four WAA/UBC courses provide all the information required to pass the test.

This document generally follows the format of WAA/UBC Courses 2 – 4:

- Course 2: Web Analytics for Site Optimization
- Course 3: Measuring Marketing Campaigns Online
- Course 4: Creating and Managing the Analytical Business Culture

Each course is made up of a number of modules. In this document, for each course module there is an overview and a list of objectives and outcomes – what you should know and be able to do if you understand the material. Course 1 is an introductory course providing an "integrated view" of these same topics.

Thanks again for your interest in the WAA certification.

Raquel Collins
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Course 2: Web Analytics for Site Optimization

Introduction to Audience & Personas: Overview

This module examines the pros and cons of usability in terms of how customer needs are met. Usability studies focus on use, not the user. Many usability professionals have now moved their core philosophy to focus on User-Centered Design (UCD). Keep in mind that a usable site can't overcome an inability to meet the motivations and desires of users.

Sections in this module discuss how to do scenario design in order to improve conversion. You design persuasive scenarios by turning the information you have on your users into personas. A competitive analysis from your visitor's point of view (persona) is very, very valuable.

The Web is about links, connections, and the interactivity of information. Hypertext connects related pieces of information with pre-established or user-created links, allowing a user to follow associative trails. If you take the time to properly understand search engine algorithms, you'll discover at their core hyperlink analysis and keywords surrounding those hyperlinks have the greatest value. Good hyperlinks improve both search engine rankings and persuasion architecture

Audience & Personas: Objectives / Outcomes

Understand these concepts:

- Difference between designing for usability and designing for visitor conversion
- Difference between demographics and the psychographic approach used in persona design.

Be able to do these things:

- Grasp why personas are used to assist in designing for conversion
- Use personas to empathize with visitor needs.
- Design workable personas for a website analytics project.

Advanced Persona Development: Overview

This module discusses what people hunt and sniff around for and how they do it. The hunting and sniffing is referred to as a "scent trail," because humans track information in a similar fashion to the way animals follow a scent. This module delves into persona development and how the process of persona development can be used to train others.

If you think of a persona as a character, then you will see that each character consists of a series of layers. One layer is the character diamond. Each corner of the diamond represents a major trait in the character's personality. A trait helps shape how the character sees the world, speaks, thinks, and acts. A character diamond loosely means the combination of three, four, or five traits that govern a character's personality.

As you learn how to understand personas, you can then evaluate the effectiveness of your web site. You'll find out how well your web team empathizes with these personas.

You'll also find out if your personas be used to create persuasive scenarios that can be measured and optimized.

In business, particularly selling, empathy is the identification with and understanding of another's situation, feelings, and motives. Personas should evoke clear, focused customer empathy in the team.

A persona should have a strong character diamond and be more than an average caricature of your demographic research. There are certainly some things you can include in a persona description that will sharpen its identity, reveal its motivations, and humanize it.

Later sections in this module help you to set up persuasive scenarios in order to can track all the micro actions and see how they influence the macro actions you want your customers to take.

Advanced Persona Development: Objectives / Outcomes

Understand these concepts:

- "Scent trails" and how they contribute to effective persona design.
- "Character Diamonds" and "Masks" and how they relate to persona design.
- How to build empathy into personas for a successful implementation.
- Different elements that make up a persuasive scenario

Be able to do these things:

- Construct high quality, advanced personas that drive empathy among web team members.
- Use empathy to get team members to embrace and use personas in their work.
- Uncover, map, and report on persuasive scenarios

Fundamental Visitor Activity Analysis: Overview

This module deals with arrival analysis, also known as entry page or landing page analysis. Arrival analysis is primarily carried out by assessing the first page viewed, per visit, by a visitor entering the website, with each web page of the site being a potential entry point into the website.

Sections in the module also cover visitor departure, commonly referred to as web page abandonment or exit page analysis. The last web page viewed by a visitor, per visit, is referred to as the visitor exit page.

The lack of focus on visitor departure is often due to the interest / concern within a company to understand what visitors are doing when on the site, as well as recognizing that all website visitors will eventually leave the site.

The pages viewed and actions taken between the entry and exit of a visitor from a website are known as the visitor path. Excluding visitors who simply look at one page and then leave (entry page = exit page), every visitor creates a "path" or trail of steps taken during the website visit. Studying these paths through the website can help an analyst uncover and resolve navigational and copy issues that are leading to the success or failure of the website for the visitor.

Later sections discuss how to improve the ratio of visitors entering the shopping cart to the number of visitors completing the check out process. Evaluation of any shopping cart data will show that visitor entry metrics are normally significantly higher than the completion metrics.

Visitor Activity Analysis: Objectives / Outcomes

Understand these concepts:

- Use and importance of analyzing visitor traffic from entry point
- Process and activities for analyzing visitor departure
- Website navigation from a visitor's perspective
- Process for analyzing shopping cart abandonment, to be used as a basis for improving shopping cart conversion rates.
- Techniques for evaluating conversions

Be able to do these things:

- Interpret and analyze reports on Visitor arrival.
- Design a landing page in order to measure traffic from a campaign.
- Analyze visitor departure website data, trends and patterns and evaluate their impact on the website persuasion architecture.
- Be able to troubleshoot and optimize the sequence of events leading to visitors achieving the goals of the website.
- Conduct relevant funnel analysis of the conversion process.

On-site Search: Overview

Search is a fundamental component of your site, of the user experience and ultimately your conversion process.

As an analyst, your effort to improve your site's navigational structure must include a plan for measuring onsite search analytics and providing resources for the optimization of your content and the search solution itself. Search performance influences your entire site and should be addressed by key people in the organization. You need to prepare a plan for analyzing and optimizing your search solution's usefulness to get visitors to your organization's goals, make those conversions, and keep visitor's trust in your navigation system.

Sections in this module discuss how to set up your search solution for analytics. You can make sure your search log details include relevant data about the search such as the number of pages returned and the search terms used. If you rely on the default log file format, you may not get the information you need.

As one of your key navigation devices, the search engine should be an integral part of any medium to large sized site. It should be instantly available everywhere. If users are having trouble finding or using the search form, then they may miss much of what your site has to offer. Your site will miss out on this short, but interactive dialog with your visitor.

This module includes a case study that deals with onsite search.

On-Site Search: Objectives / Outcomes

Understand these concepts:

- Importance of analyzing a site's onsite search behavior
- How onsite search affects website conversions and website optimization development and architecture practices.
- Basic measurements for onsite search performance
- How results of the onsite search form impacts user behavior

Be able to do these things:

- View onsite search as an interactive navigational element similar to sitemaps and navigational bars.
- Evaluate and analyze results of onsite search to optimize search results
- Identify the measurements for evaluating and improving the search form

Navigation and Site Analysis: Overview

To support the web development team, the analyst must take a detailed and strategic approach to implementing a system that helps to evaluate and improve the site design. The web analyst needs to be involved in the earliest phases of site development providing background research from prior logs in the case of a site redesign, be able to advise on information architecture development and Content Management System (CMS) selection if a content management system is in use, and be prepared to analyze minimal logs to extrapolate the full potential of a new metrics solution.

Sections of this module discuss supplemental navigation systems, which include sitemaps, indexes and guides. These are external to the basic hierarchy of a website and provide complementary ways of finding content and completing tasks. Supplemental navigation systems can be critical factors for ensuring usability and find-ability within large websites.

Later sections discuss how forms analysis is a direct measurement of conversion, for both e-commerce and lead generation purposes. Web forms create an exchange of information and value. If people must spend any amount of time filling out a web form, you must offer something in return and communicate to the visitor that benefit.

Navigation and Site Analysis: Objectives / Outcomes

Understand these concepts:

- Primary factors to consider in design for evaluation
- Role of the web analytics professional in a web development team
- Supplemental navigation components and reasons they are used
- Metrics relevant to these site components.
- Forms analysis purposes and requirements
- Purposes and applications of forms analysis

Be able to do these things:

- Create a plan to implement metrics in a site redesign
- Describe analyst's role in the team responsible for the development or redevelopment of a website.
- Assess web structure and design compensating for limitations in tracking methods and analytic tools.
- Explain why and how supplemental site navigation (site indexes, guides and maps) is used
- List and describe the basic requirements of initiating forms analysis.
- Create and implement metrics for forms analysis

Content Analysis: Overview

In order to understand website content grouping, it is important to realize that all website content should have value and a purpose in communicating with the target audience (visitor). At the same time, website content needs to be organized so as to improve the effectiveness of the website. The goal is to understand content relevance and how this can be best structured within the website to move (persuade) the visitor along a path to conversion. This would also take into account the "call to action" on a web page and the linking strategy used within the page.

Content-heavy sites are websites in which new content is generated in significant volumes on a daily basis. Websites of this nature typically generate the content internally or use the website community to generate the content or alternatively some form of content feed, and tend to rely on advertising support, a subscription base, or sometimes both as a revenue model.

Sections in this module discuss how to identify key performance indicators (KPIs) that can lead to additional insight that improves website performance, leading in turn to a more successful subscription or advertising model. The success of these models is contingent on growing the monthly visitor base to a critical mass point, whereby monthly repeat visitors combined with new visitors, generates the page views or requests required to sustain the revenue model.

Later sections cover different types of Intranets: those used as a "library" or store of content, those used to provide service to employees, and those used actively to run or manage business operations. Intranets have additional requirements that should be discussed in some detail because they are generally used by employees and suppliers who are familiar with them, as opposed to consumer websites where often the user has never used the website before.

This module includes a case study on Intranet content analysis and a site optimization strategy project.

Content Analysis: Objectives / Outcomes

Understand these concepts:

- Usefulness of content grouping within the site
- Why content groups should be aligned with personas / task
- How grouping site content affects visitor behavior
- Methods of measuring content popularity and effectiveness
- Difference between Intranet and web site Content Analysis

Be able to do these things:

- Apply content grouping to understand visitor behavior
- Appropriately use a content audit for the categorization of content and for the grouping of similar content items
- Use content naming structures to ensure useful measurements of content effectiveness
- Analyze content relevancy over time
- Apply business goals / task scenarios and personas when grouping content
- Apply key performance indicators to monitor the effectiveness of a content site and to identify areas of particularly high or low value within that site
- Assess and develop the metrics used in Intranet Content Analysis

What to Watch Out For with Site Technology: Overview

As an analyst, you may not be responsible for addressing / fixing the following issues, but you should know something about them so you can monitor them and be able to communicate with the IT department to get them resolved.

- Typical visitor tracking methods, such as IP address tracking, cookie tracking and registration/login tracking
- First-party vs. third party cookies
- Browser types and operating systems
- ISPs and geography
- Server errors
- Spurious traffic
- Data cleansing
- Screen sizes

This module also discusses how some site technologies significantly complicate online measurement by using frames, Flash and AJAX. The ability to measure rich media interactions is increasingly important as the digital marketing landscape continues to evolve. The key to successful measurement under any circumstance is a thorough knowledge of the application's content and structure.

Later sections cover how to get good reporting on a dynamically generated web site by communicating with the IT regarding what you need in terms of setting up the site to comply with reporting requirements. Understanding dynamic site measurement helps you to communicate with IT and understand your vendor's documentation on this topic.

Web Site Technology: Objectives / Outcomes

Understand these concepts:

- Technical issues that may affect analysis of data
- Major differences between Flash and AJAX, and how each is measured
- Measurement problems associated with frames
- Content management technologies currently in use which complicate online measurement

Be able to do these things:

- Use knowledge of technical issues to ensure your analytics are as accurate and helpful as possible
- Explain the methods available for measuring Flash interaction
- Explain how CMS and Dynamic pages are tracked, and how to modify tracking methodologies to allow for CMS or Dynamic pages.

Optimizing for Conversion: Overview

This module describes how to use intentional scent trails on your site to improve conversion when people click on search engine result links. To optimize scent trails, make sure that when the intent is transparent, the scent trail on any chosen term matches that intent. It doesn't matter if the trail starts with PPC (pay-per-click) or organic search. Prospects usually hope to find one of two things: the answer they seek or a link that takes them to the answer.

Optimizing a website for the search engines is an excellent goal, but getting higher rankings in the search engines only means your links will be clicked on more often. You can get all the clicks in the world and still not convert visitors – just ask those who have gone out of business “buying traffic” and never making a sale or conversion to goal.

Sections of this module look at several kinds of reports that help you to understand how visitors are arriving at your site. The first set, for example, that people look at is usually the Referrers – sites that have links to your site. It is also valuable to look at the highest volume of search phrases.

This module includes a practicum that analyzes email and how scent trails are broken or created.

Conversion Optimization: Objectives / Outcomes

Understand these concepts:

- The relationship of visitor behavior via organic search engines and visitors' subsequent activity
- How the source of the visitor impacts conversion.
- How landing page content affects visitor conversion.
- How web analytics metrics can help to identify search engine / keyword traffic and define strategies to optimize search engine rankings

Be able to do these things:

- Describe the “scent trail” approach to understanding search engine behavior and how it relates to visitors' subsequent activity
- Determine a site's effectiveness in maintaining the interest of organic search engine visitors and use that interest to drive conversion
- Test and measure conversion by visitor source
- Create and modify landing pages to improve visitor conversion
- Increase the natural rankings of site pages in search engines and the conversion rate of these pages based on the visitor behavior associated with them.
- Create and modify web pages that continue the scent trail from clicks on organic search listings

Tracking Visitor Behavior and Value Over Time: Overview

This module deals with how you can track changes in customer behavior and use this information to forecast trends in the value of the customer. Forecasting customer value is a core concept when trying to understand Engagement and for managing Customer Retention. These changes in customer behavior and value over time are called the Customer LifeCycle. LifeCycle Metrics are used to discover behavior that is "not as expected" and flag management that action may be needed with the segment.

One LifeCycle Metric is called Latency. Latency refers to the average time between customer activity events, for example, making purchases, calling the help desk, or visiting a website. You can use this metric to trigger changes to the web site or campaigns for customers who appear to be disengaging from the business.

A second LifeCycle Metric is called Recency. The more recently a customer has completed an action, the more likely they are to complete it again, relative to other customers whose last completed action was not as Recent.

In the context of marketing: Recency simply reflects the power of the Customer LifeCycle. As customers pass through different stages of their relationship with you their needs change. You can optimize the web site and Marketing by understanding these changes and reacting to them with communications tailored to the stage of the LifeCycle the customer is in.

You can also use Latency and Recency to rank the Potential Value (value in the future) of visitors, customers, and campaign segments. Combined with an understanding of the Current Value of the visitor or customer, you can use these metrics to map all visitors and customers to the visitor / customer value model. The map can be used to predict the value of various Marketing activities and forecast the profitability of the business.

Visitor Value Over Time: Objectives / Outcomes

Understand these concepts:

- Portfolio approach to customer value management (Visitor Value Model)
- LifeCycle and Friction as they apply to CRM modeling and forecasting
- How Latency and Recency map the Customer LifeCycle
- How Latency and Recency can be used together to predict the outcome of visitor campaigns

Be able to do these things:

- Apply this LifeCycle analysis to the allocation of marketing resources
- Predict customer behavior and use these predictions to design programs for optimizing visitor and customer value
- Use Latency and Recency to rank the potential value of visitors and customers
- Use your own customer's behavior to tell to you the most important (and profitable) time to market to them

Course 3: Measuring Marketing Campaigns Online

Measuring Beyond the Click-Through: Overview

Point-Per-Click and Affiliate advertising are an investment that is easy to justify since you only pay for actions. Essentially, no traffic means no cost – some might call that a no-lose proposition.

However, it is important to target successful keyword programs and specific affiliates by applying science to the process of selection. You have to go beyond looking solely at unique visits by finding KPIs that answer your true KPQs (Key Performance Questions):

This module helps you to decide what outcome you are aiming for in order to identify the right keyword and affiliate candidates. In performance evaluations, you must consider direct "recent" conversions (single visit) and delayed "latent" conversions (multiple visits). In particular, latent conversion analysis can impact the decision making process.

This module includes two case studies: Improve and Optimize PPC Campaigns Using Web Analytics and The Impact of Tuning Keywords to Ad Copy in PPC Campaigns.

Measuring Beyond the Click-Through: Objectives / Outcomes

Understand these concepts:

- How to improve search engine and affiliate marketing through effective keyword and site selection and analysis
- Recent Conversions and Latent Conversions
- Metrics needed to perform conversion analysis
- Fixed metrics and calculated metrics
- How keyword planning can improve ad copy and landing pages

Be able to do these things:

- Assess and improve keyword performance using recognized metrics
- Evaluate how latent conversion analysis impacts search engine and affiliate marketing strategies
- Identify and implement actionable KPIs in a web analytics solution to optimize / improve Pay-Per-Click and Affiliate campaign results
- Perform keyword performance analysis and measure its impact on generating website traffic.

Proper Set-Up and Maintenance of PPC Campaigns: Overview

Through the use of keywords and phrases, a high degree of relevance can be achieved in linking the display of the PPC advert to an Internet user's interest. A PPC marketer has the ability to influence click-through rates through keyword / phrase selection, the text used in an advert, the frequency of advert display, advert position, campaign reach and the time the advert is displayed. This can be categorized as pre-click initiatives.

The pre-click initiatives are however, not the only factors that dictate the success of a campaign and return on investment (ROI) maximization. The actions of Internet users post-click, the website persuasion process in motivating conversions, the number of visits required to complete a conversion and other actions all have a direct impact on PPC campaign success.

There are many post-click initiatives, such as keyword / phrase performance, conversion beyond the entry page and other campaign related variables, which need to be optimized so as to maximize success rates and boost return on investment.

As a direct marketing tool, PPC marketing campaigns generally have goals and objectives associated with them that are conversion oriented. The website owner is looking to drive traffic to the website and once there, have the visitor complete an action, such as buy a product, subscribe, download information, etc. In this way, the role of micro-sites and landing pages becomes a means with which to gauge visitor insight and improve PPC campaign performance.

Later sections in this module help you to identify "click fraud" in PPC and Affiliate programs. With a sophisticated web analytics tool, you can create customized reports on traffic sources and look for fraud-like behaviors.

This module includes an email assignment that involves analyzing PPC and landing pages.

Setting up Pay-Per-Click Campaigns: Objectives / Outcomes

Understand these concepts:

- Different types of PPC and Affiliate campaigns
- Pre-click initiatives, PPC measurements, and performance indicators
- How micro-sites and landing pages affect PPC campaign management
- Click fraud and its detection by using web analytics

Be able to do these things:

- Use performance indicators and web analytics to improve PPC campaign performance
- Evaluate implementing landing pages and micro-sites to improve campaign performance
- Implement processes to identify and eliminate or reduce click fraud
- Apply for and receive credit for fraudulent clicks
- Evaluate the performance of a landing page or micro-site for any PPC campaign

Measuring Email Campaign Effectiveness: Overview

It's important for your email marketing to work in concert with your web analytics solution. Many of the really important email metrics are, in fact, web metrics that are tied back to specific email campaigns

Most email messages should have a call to action. Most of the time, this call to action will drive email recipients back to your website, whether it's to download a whitepaper, to register for a webinar, or to buy something through your ecommerce system. While all those activities can be measured using a web analytics tool, tying them back to the email that brought the visitor there in the first place is equally important.

Important email metrics include ratios, such as the click-through rate (CTR). Ratios can be compared meaningfully, allowing you to see whether one email batch was more successful than another. Ratios like the click-through rate are also known as key performance indicators (KPIs) if changes in them directly impact the business. There are a number of resources on web-based KPIs and many of these indicators can be easily adapted to measure email activity as well (see the additional readings section for more on web-based KPIs).

The assessment of every stage of the communication process involved with email becomes critical; particularly as communication relevance and communication relationship development is being recognized as an important aspect in the "struggle to avoid the instantaneous delete."

Later sections discuss campaign targeting through the use of segmentation. A segment is a specific group of customers with unique needs, specific behaviors and identifying characteristics. By segmenting prospects and customers, you can create more focused messages that improve email performance and improve metrics like open and click-through rates.

Email Campaign Effectiveness: Objectives / Outcomes

Understand these concepts:

- Basic metrics for email marketing
- How to measure email performance via key performance indicators
- Elements of the email communication process
- Marketing segmentation

Be able to do these things:

- Assess email marketing activity by quantifying it
- Determine the success of an email campaign
- Calculate KPIs to create a KPI report
- Test email communications and evaluate the results
- Use customer / prospect segmentation to build customer and prospect personae and focus messages and offers

Advanced Email Marketing Analytics: Overview

This module provides information on how email can be used to acquire new customers. To manage such a campaign effectively, you need to understand the steps your prospects go through from initial exposure to your offer down to sign-up completion, the conversion funnel.

The conversion funnel resembles a funnel because prospects will abandon the process at some point. Your goal is to identify each point along the funnel where these drop-offs occur and reduce that number of abandonments thereby increasing conversions.

Sections in this module describe how to use the intelligence gained from web and email analysis to segment your email communications with the intention of targeting customers based on interaction behavior, purchase history or LifeCycle factors.

A fundamental aspect of email marketing is the ability to develop a relationship with the target audience. To achieve this, two key factors are important, namely content relevance (is the target audience interested in what you are communicating?) and trust (you need to build a reputation in the audience's eyes, where they trust your communications and know they can rely on the communications to be informative and of value). Ignore these factors and your communications soon become the targets of the instantaneous delete / trash button. The basic metric for measure interest levels is email click through rates.

Later sections tell how email link tracking and analysis can be enhanced to gauge content popularity and be used as a tool to determine interest levels in content subject matter over a period of time. This is called Content Trend Analysis.

This module includes a discussion assignment regarding calculating the cost of increased email frequency.

Advanced Email Marketing Analysis: Objectives / Outcomes

Understand these concepts:

- Conversion funnel and customer acquisition via email
- Customer retention and customer segmentation
- The effect of Recency on response rate in email campaigns
- How content categorization and content trend analysis relates to newsletters

Be able to do these things:

- Assess the effectiveness of an email acquisition program
- Assess communication effectiveness using customer segmentation
- Create an email-based retention program to increase sales and lower costs
- Evaluate content popularity over extended periods of time
- Calculate the cost of Increased email frequency

Setting Up Application Tools and Handling Barriers: Overview

This module discusses which requirements should be considered in order to maximize the actionable intelligence that can be extracted from web analysis and email distribution solutions. You will need to discuss with your web analytics and or email services solution provider as to how their applications can be set up or fine-tuned to achieve the same results.

Email marketing has evolved from batch-and-blast simplicity to a more complex, trustworthy marketing channel. Key to this trustworthiness is deliverability. Many issues can occur, however, that may hinder good email deliverability rates and therefore the metrics tied to your email program. You will look at some of the most common issues with deliverability and ways of overcoming these barriers to improve overall response data.

This module includes a special project that works with a Marketing Campaigns Analysis Report.

Application Tool Setup and Maintenance: Objectives / Outcomes

Understand these concepts:

- Email marketing effectiveness
- Common problems that can occur during email delivery
- The purpose, expectations, schedule and assessment methods for a Marketing Campaigns Analysis report

Be able to do these things:

- Identify weaknesses in the email marketing conversion process
- Handle issues involving email delivery

Introduction to Display Advertising: Overview

This module provides information on the different types of advertising options and purchase methods. This is the first step in creating and managing a successful online campaign. You'll review ad terminology, pricing options, pricing models, and ad placement options.

Advertising metrics are typically used to measure the performance of an advertising campaign, while also providing the insight that allows the marketer to understand the different elements of the campaign and take action to improve performance.

The elements of the campaign include everything from creative (including size, formatting etc), message to market, call to action, advertising channels selected, targeting options selected, and duration / timing of adverts. The metrics do not include standard ad "pricing" methods, which of course come into play but are not really "metrics" – they are just ways to set price. Rather, these are some of the metrics used to measure behavior and determine the "real" cost or ROI of the advertising.

Careful planning is required to effectively advertise online and measure the results. The first step is to determine what is being advertised and the objectives for the ad. Next, determine where the ads will be placed (most likely your site, someone else's or both). Before the ads are designed, the banner size(s) will have to be determined, which may be dictated by the site requirements where the ads will appear.

You'll learn about comparing click-through ratios, types of banner ads, banner ad coding and tracking, and unique landing pages.

Online (Display) Advertising Overview: Objectives / Outcomes

Understand these concepts:

- Online (display) advertising
- Advertising placement terminology and purchasing methods
- Metrics that apply to display advertising
- Types of banner ads and banner ad strategy

Be able to do these things:

- Summarize the various purchase methods for online advertising
- Calculate the most effective ads
- Combine advertising and purchase options to actualize real ROI for your online advertising goals
- Use advertising and web metrics to enhance the campaign decision making process
- Form an ad strategy that involves banner ads

Understanding What Can Be Tracked and Measured: Overview

This module provides information about Adservers, which are powerful technological tools that, when used correctly, can benefit both advertisers and publishers. It is almost impossible to effectively run an online advertising campaign without an adserver.

Adservers are generally sold in two major ways: as an ASP (application service provider) service, or a local installation of the adserving technology – in simple terms, the later tends to bring greater cost efficiency for larger sized clients – the greater the volume of your online marketing inventory or campaign, the more cost-efficient a local installation of the adserver tends to be. The cost, as mentioned, is usually linked to the amount of advertising that will be handled by the adserver – the larger the campaign (on the advertiser side) or inventory to be managed (on the publisher side) the greater the overall price (although economies of scale are common practice and marginal costs decrease with greater volumes).

The new advertising standard involves establishing optimal campaign result metrics and tracking display advertising return via appropriate (not necessarily click) indicators. In addition, behavioral and contextual advertising is growing in popularity and how tracking and analysis can be used to optimize this form of targeted advertising.

Sections of this module discuss how technology and marketing is moving beyond defining a product demo presented in Flash as a “rich” experience to making the entire customer experience on the website a “rich” experience. With AJAX and Flex, we have truly arrived in the world of Rich Internet Applications (RIA).

The premise of RIAs is that they are going to bring “desktop” type rich experiences to our websites and provide our customers with significantly better experiences.

Later sections discuss the key to maintaining a successful online marketing initiative. This includes the development of dashboards that filter the data, presenting only the necessary Key Performance Indicators (KPIs) to the right target audience.

What can be Tracked and Measured: Objectives / Outcomes

Understand these concepts:

- Adserver types: sell-side adserver and buy-side adserver
- The various forms of ad display targeting
- How ad display targeting can be used to improve campaign
- Rich Internet Applications (RIAs)
- The different types of campaign dashboards and their intent

Be able to do these things:

- List the important factors in selecting an Adserver
- Describe how to track display and affiliate advertising
- Identify the relevant web metrics associated with ad targeting
- Explain how to define, implement and measure visitor behavior of RIA applications
- Determine the appropriate dashboard for each marketing vehicle
- Create an effective dashboard that tracks campaign performance

Tracking Brand, Buzz and Public Relations: Overview

This module explains differences in buzz, buzz marketing, and word of mouth marketing. For online marketing purposes, buzz is the discussion of a brand, product, or issue in a public on-line place.

Measuring buzz can provide insight, protect your brand, help to detect and track rumors, Measure interest in competitive offerings, and Increase effectiveness of marketing expenditures.

In recent years, many advances have been made in the area of online public relations and how web analytics can be used to optimize online PR to attain marketing objectives. PR can help to build a brand, build product awareness and more importantly today, reach the target market in a cost effective manner.

This module takes a close look at testing. Testing has shown that press releases can create significant spikes in site traffic, and generate hundreds or even thousands of back links. Those involved with link-building strategies will certainly appreciate the value those new links can deliver

When planning a brand campaign, you'll learn to consider behavioral, branding and voice of customer metrics. Web analytics is an important component to understanding level of engagement, but research and buzz monitoring are also valuable methods for capturing success of a campaign and driving marketing insights.

This module includes a case study on how Press Releases can improve online marketing campaigns.

Brand, Buzz and Public Relations: Objectives / Outcomes

Understand these concepts:

- Buzz and appropriate measurement techniques
- Online PR channels / portal sites and how to optimize them
- The components of brand campaign measurement

Be able to do these things:

- Assess the impact of buss through the use of off-site, on-site, and off-line techniques and tools
- List the key metrics required in measuring online PR
- Create a plan for the analysis of branding campaigns

Offline / Online and Qualitative Data: Overview

As the Internet continues to mature, the boundaries between on-line and off-line -channels begin to blur. Marketers are developing hybrid techniques that leverage the strengths of each medium. However, the boundaries still present challenges for the analyst attempting to measure the effectiveness of these cross-channel marketing efforts.

With some careful planning, and a little extra effort on the part of the development team, systems can be implemented that will aid in the tracking of on-line usage that originates from off-line sources. Once this data is available, off-line sources that impact on-line performance can be integrated into the reporting process, evaluated and optimized for performance.

This module discusses the many types of qualitative data at your disposal including brand buzz, customer satisfaction, net promoter indices, visitor engagement, stickiness, blog-pulse, etc.

You'll receive information about how Customers/Visitors interact with your "web presence," which is the most important qualitative data point. Visitor interaction can lead to actionable insights faster while having a richer impact on your decision-making.

Clickstream data can tell us What happened on our website. Qualitative data gives us insights into the customers mind and help us understand Why. Getting a read on why your customers take certain actions can be quite helpful, and should be the first place to start your own foray into the world of qualitative metrics.

You'll also learn how to foster a culture that has well-established processes / methodologies to help companies truly hear their customers and listen to what is being said. This culture in of itself can be long-term strategic advantage to any business.

This module includes a case study on the role of Web Analytics when integrating online and off-line campaigns.

Offline/Online and Qualitative Data: Objectives / Outcomes

Understand these concepts:

- Benefits of capturing and tracking off-line marketing to online activity
- Quantitative analysis to gain insights into website customer perspectives
- Survey bias

Be able to do these things:

- Assess which option for capturing off-line data is best suited to your campaigns
- Interpret website Customer Perspectives through quantitative analysis
- Apply quantitative analysis of customer perspectives to the marketing process
- Use surveys to expand marketing analysis

Course 4: Creating & Managing the Analytical Business Culture

Creating an RFP: Overview

Web analytics products are classified as software applications. As such, and irrespective of the implementation method, each product has specific technical features and requirements. As part of selecting a Web Analytics product or vendor, it is critical to understand these technical aspects and identify which ones are applicable or feasible for your organization.

To better understand the various technologies in a product, the web analytics product is seen as consisting of three different, logical layers: 1) reporting and visualization, 2) processing analysis and integration, and 3) clickstream data collection.

Over the past 8 years, web analytics vendors have offered their products in multiple delivery models and through different pricing options. This module describes the pros and cons of each model and having a clear understanding of the pricing models is essential in identifying the optimum model for your organization.

Failure to understand these models may result in selecting a solution that costs significantly more than what was budgeted for or, more significantly, the complete inability to implement the selected solution.

As the web channel continues to increase in value to the organization, the demand for integrating it with the rest of the organization will increase. Even for pure dot com companies, other systems exist within the organization that could benefit from integration with the web analytics application.

Many systems exist within the modern enterprise. These systems manage the various operational aspects of the enterprise. Most common examples include: Finance systems, Sales Systems, Human Resources Systems.

This module helps to determine which systems need to be integrated as part of the requirements gathering.

Creating RFPs: Objectives / Outcomes

Understand these concepts:

- The technical features and requirements in a web analytics tool
- Clickstream data collection categories
- Service delivery models for web analytics
- Various enterprise data integration scenarios
- The typical sales cycle for web analytics products
- Issues to look out for during the vendor selection

Be able to do these things:

- Identify a list of vendors and/or products that meet your organization's technical requirements
- Create the technology subset of RFP items
- Identify the service model for your company's requirements
- Identify enterprise data integration requirements
- Build a timeline and identify required resources during the various stages of the sales process
- Avoid common mistakes in selecting a vendor

Critical Implementation Strategies and Tactics: Overview

This module helps you to understand what data is required for the reporting process. A solid data collection plan will enable you to provide business users and stakeholders with the required reporting. Data is not limited to traditional clickstream data. It includes data from surveys, A/B testing, usability studies and similar activities that aim at understanding, analyzing and enhancing the performance of the web site.

The process outlined below represents a detailed overview of the steps that can be part of the sales cycle. While at first sight they may seem lengthy and involved, careful inspection would show that we may go through them in one fashion or another. Depending on the size of your organization, you may be able to skip some of these steps or combine them.

- Selecting the team
- Preliminary internal requirements gathering
- Independent market review – Building the long list of vendors
- Building of the vendor's short list
- Building the RFI
- Selecting 2 finalists
- Build the RFP
- Conducting a proof of concept
- Contract award.

While web analytics is relatively new, reporting is a well established activity in any business. Parallel to the growth of web analytics, significant growth also occurred in the Business Intelligence (BI) sector. The BI industry has not completely embraced the web analytics area. While some cases do exist where traditional BI players have invested in web analytics, due to the unstructured nature and complexity of the web channel and due to market fluctuations, web analytics generally existed outside the BI tools.

This has given rise to an interesting situation in the organization; the existence of multiple reporting platforms, one for the web and one or more for everything else.

This module includes a quick overview of the various data sources with a focus on the traditional clickstream data collection methods. Topics also covered include quantitative vs. qualitative data, panel-based vs. site data, and client side vs. server-side data collection. Later sections in this module discuss key reporting features and data export and import capabilities.

Implementation Strategies and Tactics: Objectives / Outcomes

Understand these concepts:

- Various models for data collection including quantitative and qualitative data
- The key differences in how vendors offer reporting and data export

Be able to do these things:

- Identify when to use each data collection method and issues associated with each collection method
- Investigate different reporting requirements, including those that involve non-clickstream data sources
- Assess reporting capabilities and how they relate to the business requirements

Organizational Structure and Behavior: Overview

This module examines the core description of a Web Analytics Manager and possible placements for that position in an organization. The first section concludes with the proposed best placement for this position.

Looking through the multitude of job descriptions for the Web Analytics Manager position, you'll notice commonalities in the activities, scope, work product, tools, qualities, and pedigree. This is important to the advisory network in the company across various organizations in order to maintain a look ahead at potential hurdles as well as integrating the manager's function into colleagues' consideration and plans.

A later section discusses how analytics brings accountability to people's work. Often for the first time, people are being held directly accountable for their decisions. But accountability breeds fear, because some people will feel that their jobs are threatened. There is a proper way to handle these emotions and this should be done up front, before producing reports that might be viewed as a "threat".

Assuming you are successful at addressing this primary and very important "fear of failure" topic, and especially if you are a manager, you then have to keep building and enhancing the analytical culture in the business area. One thing to watch out for is becoming too "numbers focused" at the expense of creativity; make sure you keep "both brains" at the table. Don't let the newly empowered left (analytical) brain smother the right (creative) brain. You want to encourage new ideas.

This module includes a discussion assignment called the Analyst's Enigma.

Organizational Structure and Behavior: Objectives / Outcomes

Understand these concepts:

- The role and the responsibilities of the Web Analytics Manager
- The impact of web analytics on the corporate culture
- How the presentation of new facts and data is critical to your success as an analytical manager

Be able to do these things:

- Analyze the interactions of the Web Analytics Manager in a cross-functional environment within an organization
- Manage the corporate culture issues and encourage an environment where analytics are embraced
- Define the importance of planning for presentations and preparing presentations based on the audience

Role Definition: Overview

This module helps you to determine who will make a good web analyst. It is more a question of mindset and personality than it is of rote skills or past experience. Of course, hard skills and past experience make a difference, but you'll quickly find that experienced web analysts are in high demand, and are demanding increasingly higher salaries. As a result, the most efficient way to build your organization is to hire one solid analyst, if you can find one, then focus on building a team of people who, based on mindset, personality, and key non-analyst skills, can be quickly groomed to be solid web analysts. To do this, you have to look at candidates not for what they've accomplished but for what they're capable of.

Web analysts are in huge demand these days as more and more companies are realizing the importance of this role in driving their online businesses. While this is requiring that the position and responsibilities of the Web Analyst be well defined, the number of individuals who can fill these requirements is literally dwarfed by the demand. It is important that companies become as creative as possible in trying to fill their web analytics resource needs.

This module also discusses where to find web analysts and source pros and cons.

Role Definition: Objectives / Outcomes

Understand these concepts:

- The personalities, backgrounds, and skill sets likely to lead to a talented web analyst
- The different avenues for finding a great web analyst

Be able to do these things:

- Recognize a "good fit" even if a candidate has never been a web analyst
- Find the best web analyst for your company

Stakeholder Education: Overview

This module discusses how to educate stakeholders on using web data to establish a program of continuous testing, thus ensuring future growth of the website.

A section in this module describes the process by which education must take place. It is not enough to provide the end-user with a canned report and show them how to run and print it for themselves. Training must be delivered in a give and take process; the web analyst must PICK the plan.

- Pinpoint the goal.
- Identify the audience
- Choose appropriate metrics
- Kick off the final product

In addition to mastering the PICK process, it is critical that the Web Analyst also be able to provide high-value training regularly, in an efficient and consistent manner.

In this module, you also discuss how to manage reporting requests, and explore the three key activities in maintaining your queue of requests. Then you can introduce a process for implementing these activities.

More so than any other function, web analytics needs cross-functional support. As organizations become more data-driven, resistance to this change is inevitable. Perception is reality and no one wants their job to become more complicated. The key to overcoming these obstacles is, in fact, to make cross-functional team members' jobs easier and make your peers look good in the process.

You'll also discuss internal case studies that the address challenges above by celebrating the successes that are the result of using analytics to drive the business.

Stakeholder Education: Objectives / Outcomes

Understand these concepts:

- How to educate a stakeholder
- The analysis request management process
- How to create a structured case study

Be able to do these things:

- Develop a tailored education plan, identify audiences, and write testing goals
- List data points needed in a report request
- Explain why it's important to communicate project status to stakeholders
- Conduct a case study program

Focus on Business Objectives: Overview

This module contains information about the most important tasks for a web analytics manager. Without a clearly defined set of business objectives, it will be nearly impossible to create and manage an analytical business culture as these are the building blocks for executing a successful web analytics strategy.

There is one central question that must be answered in order to achieve the above: "Why does the website exist?" There are generally two buckets. There are internal reasons why the website exists (i.e. objectives focused on driving the business) and external reasons why the website exists (i.e., objectives focused on addressing customer needs).

The cross-functional nature of the web analytics manager's role means that he or she must have the ability to navigate an organization from both a functional and hierarchical perspective when creating deliverables. Very few items that the web analytics manager is responsible for can be created in a vacuum. Likewise, deliverables are often reviewed by a number of individuals across the organization. You can see that being able to interact and maintain positive relationships with influencers and stakeholders has a direct correlation to your success in creating and managing an analytical business culture and as a web analytics manager in general.

Discussion in this module includes how to manage expectations, pay attention to your timing and always have a "help me help you" attitude. You must have the approval of the influencers and stakeholders of your organization. Be sure to tap into their expertise to assist you while you are still developing a given strategy or deliverable. Involving these people early in the planning process is important. People may feel patronized by a last ditch request for feedback at a point where you are unable to act upon it anyway.

Focus on Business Objectives: Objectives / Outcomes

Understand these concepts:

- The rational for the company website and how it contributes to the organization
- Internal and external objectives of a website
- The process of interviewing influencers and stakeholders and what should be considered in the course of the process

Be able to do these things:

- Plan and execute the process of defining a set of internal objectives for your company
- Obtain necessary input from those who can help you to win acceptance and support from stakeholders

Functional Ownership for Web Analytics Data: Overview

This module delves further into the skill required of the Analytics Manager. Some skills center around understanding the context of the data that is recorded (i.e., the position within the buying cycle), interpreting the data into meaningful concepts, patterns, correlations or causes when appropriate; and communicating these understandings back to the business units, owners or organization.

You'll learn how role of the Analytics Manager now spans the understanding of marketing, layout, merchandising, to some degree logistics or inventory as well as sales analysis. The AM has the critical role of deciding how the tags should be used to track marketing activity. As analytic packages have matured over the years, most have developed multi-part tagging capability. This provides a wonderful array of possibilities for the AM. However, it also adds complexity that needs to be addressed before confident tracking can occur.

One section discusses why most merchants have a difficult time understanding how analytics can help them beyond the tools they already have.

Imagine if the local department store knew how customers flowed through their store. What if they knew which displays they looked at and for how long? What could they do different or more effectively if they new the specific sequence in which customers shop? Wouldn't they like to know everyone who picked up the new shirt, but put it back after looking at the price? These kinds of things and more are possible to know in the ecommerce realm. The Analytics Manager has the role and responsibility to track this behavior effectively and be able to translate it into something meaningful.

Functional Ownership for Data: Objectives / Outcomes

Understand these concepts:

- The role of the web analytics manager as it relates to cross-functional responsibility and accountability
- The responsibilities of the marketing function and their differences from those of the web analytics managers
- The responsibilities of the merchandising function and their differences from those of the web analytics managers
- The responsibilities of the usability function and their differences from those of the web analytics managers

Be able to do these things:

- Work with other functions to drive adoption of analytical principles in your organization
- Describe specific tasks involved in helping the marketing department achieve accountable objectives
- Describe specific tasks involved in helping the merchandising department achieve accountable objectives Incorporating

Web Analytics Elements into Existing Processes: Overview

Your ability to report on web site activity is directly related to and dependent on the data you collect. Collecting the data depends on understanding the process through which the web site is built and or changed.

This module discusses how web analysts needs to conduct their own testing and QA. Once the site is deployed, web analysts need to ensure that they are aware of any changes made to the site that can impact the reports being generated.

How business processes need to evolve in order to incorporate web analytics elements is a frequently discussed topic these days. Organizations are quickly realizing that on a relative basis, implementing analytics tools and generating reports is a piece of cake compared to finding experienced resources and training their employees to truly internalize and operationalize web analytics.

The website release process in particular needs to evolve, and the web analytics manager can facilitate this transformation. In this section, similar concepts will be applied to the campaign management process. Together, these two process transformations will allow organizations to make significant strides towards adopting an analytical business culture. This is not only due to the new processes themselves, but also the result of having actually gone through the steps necessary for completing the transformation.

Incorporating Web Analytics: Objectives / Outcomes

Understand these concepts:

- Key components of a standard Website release process
- Business Requirements Document, Functional Requirements Document, Technical Design Document
- How analytics brings new cultural challenges to the business setting that must be met in the development process

Be able to do these things:

- Apply the website release framework and modify it for your business
- Create your website release process to accommodate web analytics requirements
- Work through cultural issues when you plan the process and create an environment where analytics are embraced

Product Roadmap for KPI Dashboard: Overview

This module discusses how key metrics need to be customized to the goals and function of your company's website and the company's management objectives.

During the initial analytics implementation process there were most likely measurement objectives defined by a core committee supporting the vendor selection process. Regardless of which path you choose in managing your time and efforts focused on KPI reporting, you should always separate macro-level and micro-level reporting. Success metrics displayed in the form of KPIs should provide organizations with a roadmap to those micro-metrics that provide insight into how specific actions contribute to that success.

For e-commerce sites, the first step should be mapping how the purchase process is supported by the web channel. For other types of sites, such as content or information sites, the process to be mapped is one of customer engagement. The ideal dashboard will focus on the handful of key metrics that track acquisition, retention and loyalty behaviors.

A section of this module describes the importance of key management executives, who are stakeholders in the website operations, to see what metrics they want to track.

Streamlining all reporting vehicles for internal data distribution can be a challenging task and involves a multifaceted process. Web analysts will have to consider all levels of company staff from support positions to top level executives, and, moreover, stakeholders with varying ranges of web knowledge.

One size does not fit all in web analytics; dashboards can and should take on different formats. The practices in this section will help you create and modify reporting processes allowing users to benefit from increased efficiency and consistency.

Functional dashboards can provide users with relevant and actionable insights that empower them to make effective decisions in an efficient manor. Many different members within an organization can benefit from insightful analytics, provided they are delivered relevant data. Relevancy in this context is that the information disseminated throughout the organization is distributed based on the position and level that users hold within the organization.

Product Roadmap for KPI Dashboard: Objectives / Outcomes

Understand these concepts:

- The Dashboard and how to assess it for meeting the company's needs in charting the critical milestones that lead to desired customer behavior
- Data distribution, standard naming conventions, standard formats
- Hierarchical model for stakeholder reports by organizational role

Be able to do these things:

- Define and defend behavioral and attitudinal metrics in the dashboard, including industry benchmarks and advanced concepts
- Demonstrate how to implement a structured environment for internal data distribution
- Map which KPIs should be disseminated to each stakeholder

Determining Where to Focus Efforts: Overview

This module deals with how to prioritize areas in which the website can improve. You'll learn how to focus on your site's most important elements and get your team to agree on the priorities. You can start by creating a list of initiatives and opportunities, then monetizing the potential effect of each one. This requires assessing the upside of each site change, assigning a dollar amount to each, and comparing them to one another.

Discussion in this module includes understanding how analytics brings new cultural challenges to the business setting that must be met. You'll also learn how to work through cultures issues and create an environment where analytics are embraced. This means that you have to understand how to get people into an "accountability status" for what they are supposed to do.

Determining Where to Focus Efforts: Objectives / Outcomes

Understand these concepts:

- How analytics brings new cultural challenges to the business setting
- Dynamic Prioritization process

Be able to do these things:

- Assign a value to the desired site behavior
- Work through cultural issues that are impacted by web analytics in order to create an environment where analytics are embraced

How Reporting Drives Investigative Analysis: Overview

This module addresses how important it is to resist the urge to explain trends at face value, and instead strive to understand the underlying dynamics of the trends. Many web analytics managers acknowledge that they're drowning in data. It can take so much time to pull reports, review them and focus on the most important trends. Adding the step of questioning the trends is something you may not feel you have time for, but it's essential to channeling the data to guide you instead of trip you up.

There's a lot of talk about cross-functional teams in the management of the analytical culture, and root cause is the reason for this, because root cause is often cross-functional in nature. Having a cross-functional mentality in place ensures that these complex root cause issues are addressed without finger-pointing. In a good cross-functional team, there is no blame, only learning and continuous improvement. If you don't chase down the root cause of your issues, the problem likely will continue, creating pain for all members of the team.

Reporting Drives Investigative Analysis: Objectives / Outcomes

Understand these concepts:

- The importance of finding the underlying dynamics of the trends rather than explaining trends at face value
- The Six Sigma approach to problem solving

Be able to do these things:

- Employ additional tools and solicit input from your organization to identify the cause-and-effect dynamics effecting trends
- Assess the true causes of a problem

Managing Downward and Upward: Overview

This module addresses how important it is to be proactive about driving the analytical mission – as opposed to reacting to it. This means communicating well – and a lot of this may be accomplished via email – up and down the organizational ladder.

By managing those above you, you'll be able to guide your company's decisions in the right direction and, hopefully, to create a fulfilling job for yourself. Although your efforts may not bear fruit immediately, you must keep in mind that companies often change their policies. When that time comes, your ideas will be on the table.

Managing Downward and Upward: Objectives / Outcomes

Understand these concepts:

- The kinds of staff communication that may occur before an analytical project
- What kinds of approaches work best when dealing with senior levels of the company

Be able to do these things:

- Empathize with people moving to a more accountable business model
- Generate excitement and interest in senior managers for the analytics effort

Emphasizing Planning and Communication: Overview

This module deals with the importance of improving site efficiency. To ensure maximum site and campaign performance, you must develop performance goals and measure your progress against these goals. However, these goals should not be set without a firm understanding of current performance. This is where the practice of establishing baselines begins. This module helps you to understand why baselines are important and how to use them when performing impact analyses.

In order to achieve maximum results, a testing strategy should be developed. Creating a testing strategy will enable you to test your site and your site content, and will allow you to determine which design has the greatest impact on your site visitors. This type of insight into visitor behavior allows you to continually improve the overall effectiveness of your site navigation, site content, and site promotions thereby increasing the overall performance of your site. Testing should be considered an essential part of your overall site optimization strategy and a key initiative of any successful online business.

Data can be dangerous when not fully understood by its recipients who may ultimately make bad decisions based on their incorrect interpretation. Therefore, this module stresses the extra care that you need to take in preparing, distributing, and following up with data sent across the enterprise.

Planning and Communication: Objectives / Outcomes

Understand these concepts:

- The importance of testing in the site optimization process
- Limitations and benefits of various data sources for establishing baseline metrics
- The most optimal ways to prepare an organization for data sharing
- Effective formats in presenting data to disparate groups

Be able to do these things:

- Create and define baseline metrics for impact analysis
- Develop a testing strategy and implement test results
- Prepare an effective and actionable scorecard
- Communicate data effectively across the enterprise