



Functionalism: A New Approach to Web Analytics

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Introduction

Despite dramatic improvements in the reporting and measurement capabilities of common web analytic tools, the actual practice of web measurement has not shown similar advances. The results of many analytic efforts are disappointing, and the usefulness of web measurement to an organization is still very dependent on having an outstanding individual practitioner. What is more, the practice of web measurement revolves around the usage of a disparate grab-bag of tools (pathing, page analysis, affinity, segmentation, events) with no particularly clear understanding of when, how or why a tool is the most appropriate choice.

These are all symptoms of an immature practice – one hindered by the lack of a standardized method that is highly likely to provide insight into any specific web site and analytic problem. This lack of strong methodology hinders every aspect of web measurement: it hides important insights, it makes training new analysts problematic, it makes sharing approaches and insights difficult and it causes tools to multiply features in ways that are often un-helpful and unnecessary.

Over the course of nearly a decade as a web analytics consulting company, we've developed a methodology – Functionalism – that solves these problems. This approach breaks up a web site into its constituent pieces and then assigns one or more specific functions to each piece. These functions can be things like navigation (e.g. route visitors to a specific place), motivation (e.g. convince a user to do something) or information (e.g. provide a visitor with some piece of information). Based on the functions of the page, it is assigned a particular page type from a set of common templates that we've distinguished over time in the measurement of different types of sites.

Once a page type is assigned, the success of a page is measured by Key Performance Indicators (KPI's) specific to the functions it was designed for. Central to Functionalism is the concept that a measure of success for one page can be a measure of failure for a different page. By categorizing and grouping pages by function, calculating and assigning KPI's makes the failure or success of a page more straightforward and transparent. It is in this assignment of type-specific, easily measurable KPI's that the power of Functionalism resides.

The advantages to Functional Measurement emerge in several different fashions. First, because each page on the web site can be measured directly against statistics related to its function, it's much easier to determine the actual effect of design changes on the page's success. When measuring a page change against larger site KPI's (like total revenue), it is often virtually impossible to screen off exogenous effects to the point necessary to get any reasonable statistical measurement of change.

Perhaps even more important than the ability to usefully measure on a page-unit basis, is the conceptual framework that Functional Measurement places around the Design, Implement and Measure cycle. Designers, marketers and analysts can all immediately



grasp the basic concepts in Functionalism – pages are built with a purpose in mind and measurement should be focused on that purpose. Because of this, measurement can be integrated in a seamless and REGULARIZED fashion into the design process. This simply isn't the way that web analytics is conducted now.

Finally, by providing a regularized method that can be consistently applied, Functionalism dramatically reduces the need for brilliant individual practitioners. This, after all, is the real purpose behind almost any methodology – and Functionalism provides the essential ingredients to achieve this: conceptual simplicity, near-universal applicability, a direct real-world path to implementation and consistent advantages in actual measurement capability over the majority of ad hoc measurement approaches.



Four Steps to Functionalist Web Analytics

Step 1: Classification

The first step in conducting a Function-based web analysis is a rigorous classification of the pages on the site. To assist with this, we've built up over the years a library of common types – and in most cases pages on a web site are easily mapped into one of these types.

Here are the most common web types we've identified:

Engagers: Pages whose primary purpose is to interest the visitor and get them to do something/anything on the site.

Routers: Pages whose function is to move visitors into specific places on the site. One of the differences between an Engager and a Router page is that the latter is built with the expectation that the visitor has come to the page looking for a particular type of information/service. Search should often be treated as a special class of Router page.

Convincers: Pages whose function is to “sell” the visitor on a product or service.

Explainers: Pages whose job is to help the visitor understand some aspect of a product or service.

Informers: Pages whose primary objective is to provide basic news and information about a product or industry. This differs from Explainers in that content is not specific to your own particular product or service.

Billboards: Pages providing various content to visitors, but whose primary business objective is to display third-party advertisements on a Cost-per-Impression basis.

Sponsors: Pages or series of pages which are themselves revenue-producing, whose content is mostly provided by a third-party who pays for inclusion within your website.

Closers: Pages that are supposed to get visitors to enter a conversion process.

Converters: Pages that are part of whatever is necessary to gather information/agreements and get a finished lead/sale/transaction.

Re-Assurers: Pages built to re-assure the visitor about some potentially problematic issue or concern (privacy policies are a common example).



Tools: Pages that are designed to collect or provide information as part of a non-sales process (like checking an account status or finding a location). There are many different kinds of tools and for a tool-rich site tool pages need to be subdivided into more granular types.

Completers: Thank-you pages – designed to signal the completion of a process and – in some cases – drive to additional engagement.

For each of these pre-defined types, there is an appropriate set of measurements (derivable from most major web measurement solutions) that can be applied to measure both the comparative and absolute success of the page.

Every web site is different, however, and it's quite possible that a web site will contain pages whose function isn't well captured by one of the pre-defined types. That means the analyst will have to map appropriate measurements to the actual function of the page. While this isn't a trivial exercise, it's often much easier once the analyst sees how other functional types are treated. As with most problems, the most difficult part is understanding how to approach the problem. Once that's determined, the actual resolution is often quite a bit easier.

It's also important to keep in mind that a page need not be limited to a single function. Many pages, for example, are designed to be both "Convincers" and "Routers" – and a site's home page is frequently expected to be both an Engager and a Router. If, however, you think that a page is an Engager, Router, Convincer and Re-Assurer then it is probably the case that you're asking a single page to do too much. One of the beauties of Functionalism is that the process of classification can – itself – be an aid to good design and clear thinking about the web site.

The process of Classification is essentially manual. Most sites will work with the set of pages from the site based on their Content Management System or Top Pages type reports from their Web Measurement system. It helps to actually bring up each page on the site as you classify it. In most cases, the classification will be obvious. In other cases, multiple functions will suggest themselves. When this happens, all of the competing functions should generally be noted for measurement.

As with so many other problems of this sort, Excel is an excellent tool for keeping track of pages and classifications. Entering classifications into a tool makes it easy to re-sort pages based on classification groups. That's convenient, because much of the later tactical reporting needs to be at the page type level.

For very large sites, the exercise of classifying pages can be needlessly onerous. There is little value in classifying pages you aren't ever going to have time to seriously study – and whose volumes are too small to admit of even Functionalist performance measurement. There is no need to classify every page - concentrate on high-volume pages



and pages that are clearly important to your site (pages that have high correlation to success goals for example).

Another technique you can use to save time is to classify groups of content by function. This technique is often quite appropriate and has the advantage that it allows you to treat a group pages (sometimes quite a large group) as a single entity with a single purpose. This would be even more useful if the common web measurement tools provided better support for building content groups.

While the best web measurement tools have some facilities for dealing with groups of content, these are frequently restricted to those marked off by directory structures in the site. And some tools have no virtually no content group analysis capabilities. The degree to which your tool supports these capabilities (and the extent to which your site structure matches your business function) will determine how often you might wish to treat groups of pages as a unit.

Finally, it's important to remember that there is no "right" answer to page classification. In many ways, the best answer is one of intention – what did you intend (or what would you like) the page to accomplish. While it's certainly within the realm of possibility that a page you intended to be a Router is actually a strong Convincer, this happens very infrequently. It's hard enough to build pages that get visitors to do what you'd like that the chances of getting a good result by accident are quite small!



Step 2: Measurement Protocol

For each Functional Type there are one or more defined KPIs that are suggested for getting the best measurement of that type of page. These suggested protocols for measurement will almost certainly require at least a little bit of site-specific tuning.

Let's take an example. One of the key measurements for a Router Page is the percentage of next pages driven from the Body of a Router Page (on first viewing and then on Subsequent views) compared to the next pages driven from Top or Left Navigation, Search, Back Button, side or bottom advertisements, and Site Exits. This is a simple thought – the job of a Router Page is to move people down into detailed content. If visitors use Search, go back to Home, or slide across the site using Top Navigation then the page hasn't done its job.

Given a page like the one shown below, the sections are fairly easy to describe.

The image shows a screenshot of the CyberTrader website. Several elements are highlighted with callout boxes:

- Back to Home:** A box pointing to the top left navigation area.
- Closer:** A box pointing to the "Open an Account" button in the top navigation bar.
- Sideways:** A box pointing to the top right navigation area, including the search bar and "Logon" button.
- Desired Routing:** A box pointing to the main content area under the "PLATFORM" heading, which includes a "A Complete Suite of Direct-Access Trading Tools" section.
- Sideways:** A second box pointing to the right-hand sidebar, which contains a list of links under "In this Section:" and a quote by Ken Tower.

For measurement purposes, however, the analyst is going to have to classify next pages (or links) according to which of these basic navigation options each actually represents. The "Open an Account" button here is an interesting and very common case. When there is a single goal dominant on a site, it is common to include a "Closing" element – a drive to conversion – on every page. Usually, it's best to include this as a separate navigational category when evaluating Routers. These aren't bad outcomes, of course, but neither are they the directly intended outcome. If you saw that a Router page was driving lots of visitors directly into conversion, you might want to re-think the role of the page and

include more “Convincer” elements. By measuring them separately, you get the best insight into the real performance of a page.

Chances are you’ve looked at the exit rate for your “Router” pages already. And you may already have looked at “Back-out” rates (most often a return to home). And if you are really good, you’ve probably also looked at “Search” rates. But the most common failure of a Router Page is actually sideways navigation – using the Top Navigation to go to another area of the site without any drill-down. Since top navigation isn’t obviously bad in the way that site exits are (or Search might be), most analysts never think to classify and aggregate links in this way.

The specific KPI’s for each page type are described in the page type templates included at the end of this paper. Most of these KPI’s are straightforward in their application and require almost no additional work. The classification of routing we described earlier is one of the exceptions.

Some of the other KPI’s that require additional work include:

Exit Propensity: Basic exit rates are often very un-informative when it comes to understanding page behavior. There are many reasons for this – almost all covered in the Functionalist paradigm. First, many high exit pages have specific jobs that make visitor abandonment natural. “Completer” pages (Thank you pages) are a classic example of this. “Engager” pages and “Converter” pages also tend to have exceptionally high exit rates. By comparing Exit rates within a paradigm, you get a much better sense of actual performance. In addition, we like to measure exits (within type) by depth of access. Web Sites tend to be an interest funnel – visitors are most likely to exit on the first page and are less likely to exit with each subsequent page viewed. The vast majority of web sites demonstrate this basic tendency. To counteract this effect in measurement, you can measure exit rate for pages grouped by average depth of access. We call this depth and type weighted Exit Rate the Exit Propensity and it’s a vastly better measure of exit performance than any other alternative.

Engagement Links: These present essentially similar issues to router links – you need to classify the links on the page.

Entry Rate and Entry Propensity: Like Exits, entry propensities can measure the degree of independence and integration of a particular page or set of pages, by gauging the intention and focus of the visitor. Particularly when compared to exit propensity and entry rate, entry propensity can measure how popular or effective a particular tool or explainer can be, contributing to long-term visitor loyalty to the site.

Dead-Ends: Also called back-outs, these are cases where a visitor re-traces a path back to a preceding page. This is a common behavior on sites, and there are site designs (not usually optimal) that actually encourage this. One of the most common back-outs is to the home page. Where a measurement solution doesn’t provide the capability to measure



back-outs generically (usually the case), the easiest solution is to focus on specific back-outs that are especially likely given where the page fits in the navigation scheme.

Re-Surface Routes: It is frequently useful to measure the visitor behavior of pages when they are being re-accessed. This can be a difficult issue for measurement Adaptation (making your measurement solution capture what you want) but it is also an issue for the Measurement Protocol in that you'll need to decide whether this is likely an important enough behavioral pattern to merit measurement. If it wasn't difficult to do in most tools, this might not be an issue. But since Re-surfacing behaviors are actually very hard to track with many tools, it's important to consider when it is actually worthwhile to make the effort.

Most analysts do not have the resources to study each page of a site individually, however, and the web analytics tools out there encourage analysis of many pages at once. Once the principal functions of pages have been identified, however, this categorization can be applied to the same KPI report across many pages. For example, one can download into Excel a list of pages with exits and visits directly from a web analytics tool, even by cutting-and-pasting. A quick calculation (exits/visits) might reveal the following chart:

Page	Exit Propensity
newhouse.com/mortgage_calculator	95.93%
newhouse.com/find_a_house	63.82%
newhouse.com/branch_locator	63.70%
newhouse.com/todays_interest_rates	62.04%
newhouse.com/homepage	60.42%
newhouse.com/our_affiliates	56.93%
newhouse.com/start_here	56.72%
newhouse.com/real_estate_outlook_July	56.07%
newhouse.com/about_our_services	53.51%
newhouse.com/search	51.86%
newhouse.com/Thanks_for_Registering	50.95%

A list like this – or, as more often the case, a list ten times this length – might be somewhat unintelligible. These are all high exit propensities, but does this mean that each page needs optimizing? If Functional Categories are applied to each page (an easy task in MS Excel), how to interpret this data becomes more clear:

Page	Exit Propensity	Function	Evaluation
newhouse.com/mortgage_calculator	95.93%	Tool	OK
newhouse.com/find_a_house	63.82%	Router	Poor
newhouse.com/branch_locator	63.70%	Tool	OK
newhouse.com/todays_interest_rates	62.04%	Informer	OK
newhouse.com/homepage	60.42%	Engager	Poor
newhouse.com/from_our_affiliates	56.93%	Sponsor	OK
newhouse.com/start_here	56.72%	Closer	Poor



newhouse.com/real_estate_outlook_July	56.07%	Informer	OK
newhouse.com/about_our_services	53.51%	Explainer	Poor
newhouse.com/compute_closing_date	51.86%	Tool	OK
newhouse.com/Thanks_for_Registering	50.95%	Completer	OK

Tools, Informers, Sponsors, and Completers should be expected to have a high Exit Probability, so seeing them high on this list should not be worrisome. But Routers, Engagers, and Closers should have a low exit propensity, so these are the pages to look at based on this table. This straightforward example shows a relatively quick and easy way to apply functionalism to web analytics while staying very close to the original data from your web analytics solution.



Step 3: Adaptation

One of the most attractive features of Functionalism is that it is not built on top of any proprietary or esoteric measurement system. Most Functional analysis can be conducted from any of the common enterprise web analytics tools. There is no doubt that tools could better embody Functional concepts – and this would make analysis easier – but there is no reason to think that you will have to scrap your existing measurement solution.

In Step 3, you need to adapt your tool and the statistics it provides to the KPI's required for a Functional analysis. In most cases, this process is not especially difficult – but the vagaries of each tool will always necessitate some mapping.

In our routing example above, for instance, you'll need to decide how you are going to perform the analysis. Two obvious methods are using link based analysis or next page based analysis. Not every tool provides good link click reporting – so you may be forced into next page analysis. This usually isn't a problem and next page reporting has the advantage of being cleaner (in terms of naming conventions) and of capturing events (like back to home) that might otherwise be missed.

Analysis of first time vs. subsequent routing is quite a more difficult. In HBX, you might use an Event Sequence and in SiteCatalyst you might use PathFinder or a Data Warehouse request. In neither case, however, will the answer simply fall-out in a trivial fashion. And some web measurement tools won't support this break-out at all – so you'll be stuck lumping first routes in with subsequent routes.

The choices you make about Communication (reporting measurement) will also effect the amount and type of work you need to do for Adaptation. To measure individual pages, you don't typically need to worry about anything other than the stock problems of Adaptation – how to get the right numbers from your Measurement solution.

Moving Functionalist reporting to a higher level may not be so simple, however. Suppose you want to measure your overall site effectiveness at engagement by measuring the percent of prospects who reach either a Convincer or Converter page¹. A large site may have hundreds of each of these page types spread across dozens of Content Areas. Attempting to create a unique visitor ratio presents a considerable challenge to any of the commonly available web measurement tools.

Similarly, not all tools make it easy to provide reporting on pages grouped by an outside classification of page type. The tools that work best for this are those that allow for reports to be built in Excel. This allows for a manual classification to be overlaid on top of the reporting so that there is no necessity to build the site classification scheme into the tag (though this will sometimes be useful).

¹ We're indebted for this example to the Public Site Team at Charles Schwab.

If your tool doesn't support this kind of reporting, then you may need to limit how much of the Functionalist model is represented in your Management Reporting. Fortunately, as already mentioned, this in no way limits your ability to deploy Functionalist analysis in the tactical evaluation of key web site components.



Step 4: Communication

There is not (and never will be) an absolute standard of performance for web sites or their functional components. It is impossible to say that a Router page should send 75% of its visitors into the Routing Area and that if it fails to do so the page needs work. Sites vary too much in the quality of their visitors, the demands they necessarily make on visitors and in the environment (brand, campaigns, marketplaces, etc.) that surrounds them to set any one performance bar.

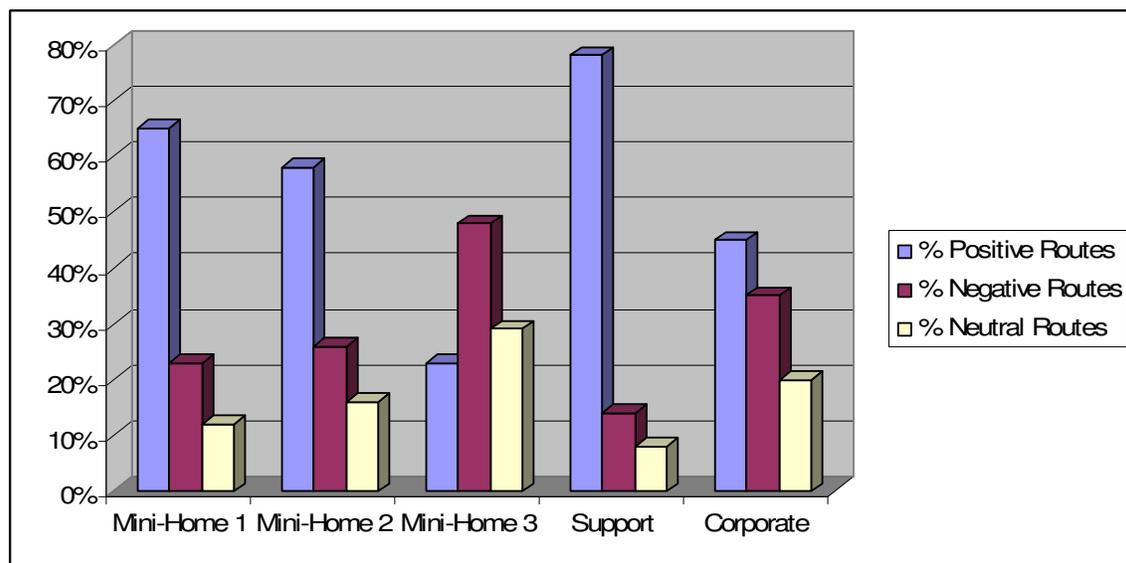
However, Functionalism can be (and is) tremendously effective in isolating comparative performance on the units of a single web site (or group of related web sites). Given mostly similar sourcing and environment, functional performance is very comparative. Since the primary purpose of Functional analysis is to direct the design process internal to a site, this is really all that is required. By comparing performance within a class of pages, it is simple to identify the best and worst-performing pages.

At the highest level, Functionalist Reporting should focus on two things:

- The comparative performance of content by type.
- The trended performance of types over time.

The first of these is designed to pinpoint the top targets for design effort. The second measure is designed to provide feedback on the effect of design changes and the degree to which incremental improvements are actually working.

Charts like these provide a simple, immediately understandable snap-shot into what is working and what isn't:



One of biggest advantages to Functionalism is the degree to which it makes fairly complicated measurement procedures immediately understandable to both designers and marketers. The best Functionalist reporting is designed to collapse most of the various measures into as a simple a representation of success at the core function as possible.

In addition to providing a powerful means of identifying acceptable standards of comparison for a site (no mean achievement), the Functionalist mindset can help a site define KPI's that make significantly more sense in terms of its real business.

The ultimate goal of a site is, of course, conversion. Many sites have a significant off-channel component that can be extremely difficult to measure. Customer Research (on or offline) can help plug this gap – but there are significant limitations in the ability of each to map real customer behavior and attitudes. Simple conversion proxies (like site visits or viewed x number of pages) are also valuable but often misleading. Replacing these definitions with Functionalist measures can make much clearer the extent to which visitors on the site are doing what you want them to.



Visitor Segmentation

Current web analytics theory (if not always practice) says that visitor segmentation is at the heart of good analytics. Proper visitor segmentation can (and should) be integrated into your Functionalist approach.

However, one of the things we've realized in the course of many real-world engagements is how difficult it can be to build "intentionality" into an analysis. Persona-based models of behavior have many advantages – including how nicely they square with traditional marketing approaches. But they can be demonically difficult – often impossible – to implement/measure with the real-world web analytics tools that are available. However, where actions on a web site (or information contained about customers) does allow for meaningful visitor level segmentations to be built, these should definitely be applied to the Functionalist KPI's.

Some of the most common splits that are well worth attempting including Customers v. Prospects, Repeat Customers v. 1st Time Customers, Repeat Prospects v. Single Visit Prospects, Direct Converters v. Multi-Session Converters and Customer Support visitors. This is not meant as anything approaching an exhaustive list – and the range of possible segmentations is much greater than the number of web sites since each site will likely have at least a few segmentations that are uniquely of interest to that business.

The visitor segmentations that you use will be dependent on the exact nature of your business and your web site. In most cases, what you'll want to do is look for places on the web site that are strong clues to type or intention. By coding visitor populations based on those places, you should be able to carve out fairly usable visitor segments. You can then apply your Functionalist KPI's to each segment.

There are also many possible Functionalist-Based segments, where functionalist designations serve as the basis of a visitor segment. For example, a segment can be created to look only at visitors who see Tools, Informers, or Sponsors. Their subsequent multi-session behavior can indicate the relative value of pages that might otherwise be peripheral to your overall business goals. Similarly, Explainers and Closers are often visited in a different session from the session where the conversion takes place. Only a visitor segment, separate campaign, or creative conversion rules will capture this behavior and ultimately reveal the value of these pages.

In many cases, you'll decide that a page simply doesn't apply for a given segment. That's useful knowledge in that you can ignore its KPI's for that segment (but you'll probably want to look at why the segment is hitting the page). Equally likely is that you'll decide the KPI's for a single segment are all that you care about – allowing you to ignore the overall page performance and just measure the KPI's for one visitor type.

Just as there is no one right set of segmentations, there is not single set of right answers about related issues regarding segment exclusivity and segment duration. In some cases,



especially when used for management reporting, it is very nice to have mutually exclusive segments that add up to a whole population. This is less commonly advantageous when doing analysis.

Segment duration (the amount of history you need) is even more variable. Every business has a different sales-cycle. Certainly one of the factors that every web marketer should be looking to understand is how long (time and sessions) it takes visitors to go from new prospect to converted customer. Even on operational or community sites, there is a similar path moving from new user to power user. Understanding the duration and intensity of this cycle for your business will help answer questions about how long your web analytics segmentations need to persist.



Summary

So much about the current state of web measurement is frustrating – to both practitioners and web marketers. Traditional analytics has focused on either simple measures of page performance (like exits or top paths) that are too misleading in most cases to be useful or on relationship to ultimate conversion, a much better technique, but one which is frequently impossible to do with any statistical meaningfulness.

There are huge sets of web analytic KPI's but no process for understanding when and how to apply them. There is the inevitable demand for more data, better ties to customer behavior and the usage of alternate methods (like online surveys) that are all supposed to provide the insight web behavior doesn't.

These demands aren't unreasonable. They all make a certain amount of sense – but none of them will really provide a significant improvement in your web measurement unless and until web analysts and your marketing managers and your web designers all have a way to think about measurement that makes sense.

The Functionalist approach outlined here is the fruit of many years of actual, hands-on web analysis. It is designed to be applied in the real-world, with real-world tools already in the hands of most analysts. It is designed to provide a framework within which analysts can not only do their work, but can communicate their work out to the rest of an organization. It is built in a way that allows every player in the web marketing team to use it – both conceptually and practically – to do their job better.

It is, in our experience, a dramatically better way to do web analytics.



Functionalist Templates

Page Type: **Engagers**

Functional Description: A page whose primary job is to grab the visitor's interest and get them to do something (almost anything!) on the web site. In general, the pre-supposition to an Engager page is that there is little known about the intent of the visitors landing here. Where more is known about what a visitor desires, there is usually a specific set of directions that the page is expected to drive toward and the page is generally better (or also) classified as a Router.

Sample Type: One of the most common types of Engager page is the Home Page on many web sites.

Functionalist KPI's: % **Engagement Links** (links to directed content – generally this excludes search), Exit Rate, Exit Propensity (a session depth-weighted measure of exit likelihood), Subsequent Page Consumption, Subsequent Success, % Return Visitors, Organic SE Entry %.

Notes: Many pages on publishing sites are essentially engagers. There is no particular desire for a visitor to move in a particular direction but there is always value to having a visitor consume more.

Measurement Issues: Engager pages are frequently Landing Pages. One of the questions in measuring effectiveness that often gets raised is how much engagement is due to a page and how much is due to general brand awareness among visitors. One helpful technique for isolating the actual engagement effectiveness in pages (and magnifying the effect of changes to make them more visible) is to segment a population group that is as neutral as possible. We have had good luck using population groups sourced from non-branded Search Terms.



Page Type: **Routers**

Functional Description: Pages whose primary purpose is to move visitors into particular sections of the site. The presumption is that there is fairly substantive information about what the visitor might be interested in and these alternatives are presented as navigational elements in the body of the page.

Sample Type: Pages accessed as the top page from a top-level navigation bar are often primarily router pages.

Functionalist KPI's: % **Body Routes**, % Routes by group (body, top, back), Exit Rate, Exit Propensity, % Re-surface (% of visitors who drill-down then come back up to the Router Page), %Re-surface Body Routes, %Re-surface Routes by group, %Re-surface Exits.

Notes: Routing page performance is often one of the most important elements in overall site performance. And unlike home pages, the linkage patterns from Router pages don't always get much study. Where analysis reveals particularly abysmal routing performance, this may indicate that a lot of detailed information isn't necessary - closing information and drives might be more appropriate. Where re-surface behavior is common, understanding the re-surface routing may suggest dynamic ad serving strategies on re-surface to effectively remap a router into a closer.

Measurement Issues: By far the trickiest aspect of router pages is measuring (and separating) re-surface from initial land behavior. This isn't always an issue, and before bothering with a more complex analysis, the analyst should check and see the percentage of visits that contain multiple pages views of a Router.



Page Type: **Convincers**

Functional Description: Pages whose function is to “sell” the visitor on a product or service.

Sample Type: Most product detail pages and pages accessed from Routers are “Convincer” pages.

Functionalist KPI’s: **Rate of Subsequent (multi-session) Drives to Closer/Converter**, Rate of Subsequent affiliated success completions, Rate of immediate drives to Closer/Converter, Rate of same-session drives to Closer/Converter, Rate of same-session drives to affiliated success, % affiliated Routes.

Notes: For many (perhaps most) sites, conversion is a multi-session process. This means that the performance of Convincers cannot reasonably be measured using single session statistics. This is not always the case, so one of the most important background measurement tasks you’ll need to perform is to understand the extent to which successful visitors are multi-session visitors. Where conversion cycles are commonly multi-session, the most common behavior pattern in actual conversion sessions is to bypass “Convincer” pages altogether – making them appear completely useless. A related issue is the decision to measure against drives to the Closer/Converter or to actual completions. Measuring to Closer/Converter drives (exclusively) can lead to a site that is very aggressive in driving traffic (perhaps not well-qualified) into a conversion process.

Measurement Issues: Many measurement tools are still quite limited in their ability to measure cross-session performance. The easiest way to get this measure for most sites/systems is to create visitor segments based on visitors who visit the Closer/Converter/Completion pages. By comparing visits to “Convincer” pages in these segments to same page visits for the entire population you get a reasonable cross-session measure of “subsequent” drives.



Page Type: **Explainers**

Functional Description: Pages whose job is to help the visitor understand some aspect of a product or service.

Sample Type: Customer Support pages, FAQs, System Requirements pages, etc.

Functionalist KPI's: % Search Next Steps / % Search Next Steps all Site non-home, Exit Rate, Exit Propensity, affiliated Route %.

Notes: Explainer pages are difficult to measure because they often aren't tied to a specific outcome on the site. However, for sites with Search functionality, it is often illuminating to look at the percent of times visitors resort to broad search from an Explainer page. This is generally a measure of dissatisfaction with the information provided. It is also important to realize that most non-support Explainer pages occur within a larger framework of navigation – so they are also expected to continue routing within an area.

Measurement Issues: Isolating the set of Search Terms from an Explainer page is often a good way to understand potential sources of dissatisfaction. For Customer Support pages, it can also be helpful to think about the page as a “Completer” as well as an Explainer.



Page Type: **Informers**

Functional Description: Pages whose primary objective is to provide basic news and information about a product or industry

Sample Type: Industry News pages, Market Update pages.

Functionalist KPI's: Entry Propensity, Exit Propensity, Visitor Return Frequency, Page View Consumption of non-Informer pages, attrition, % of Organic SE entry, subsequent conversion.

Notes: Like tools, these sets of pages can stand alone as a source for site traffic. The independence, integration, intent and focus of these pages can tempt site designers to expend a lot of resources towards their optimization and attractiveness, but their ultimate objective must remain visitor retention and ultimate conversion.

Measurement Issues: It can take a long time to measure attrition and return frequency, and for particularly dynamic pages such as RSS feeds and hot topics, traffic is usually based more on what topic is being discussed rather than any design considerations. And, like tools, there will always be a percentage of visitor traffic whose only interest is the informer pages. These pages should be measured with some caution, therefore, as site designers and analysts might get very excited by high click-through and entry rates without realizing that the value of these pages lies in their more long-term results.



Page Type: **Billboards**

Functional Description: Pages providing various content to visitors, but whose primary business objective is to display third-party advertisements on a Cost-per-Impression basis.

Sample Type: Pages heavy with banner-ads; pages which host Google AdSense ads.

Functionalist KPI's: Page Views, Page View Consumption, Visit %, Visitor %, Page View Consumption in&out of Billboard pages; CTR to advertisements vs. lost traffic; attrition, visitor return frequency.

Notes: Basic traffic measurements such as page views are central to the performance measurement of these pages. Click-through-rates to these advertisements, however, must be carefully balanced with lost site traffic, particularly in the case of Google AdSense, which optimizes and pays on a cost-per-click basis. A fat check from Google every month is a tempting goal, but not at the expense of your e-commerce. Sites which optimize for ad-revenue can often see attrition rates start to soar and visitor loyalty tank.

Measurement Issues: It can be difficult to track Click-Through Rates to advertisements in most web analytics tools, since these are necessarily off-site links and are thus lumped together as site exits. The Best-Case scenario, where a visitor clicks on an ad but then back-buttons back to your site, is often invisible to web measurement without special tagging. And reconciling analytics data with data from your advertising providers is always a challenge.



Page Type: **Sponsors**

Functional Description: Pages or series of pages which are themselves revenue-producing, whose content is mostly provided by a third-party who pays for inclusion within your website.

Sample Type: Pages “brought to you by X”, pages “from our affiliates”.

Functionalist KPI’s: Page Views, Page View Consumption, Visit %, Visitor %, Page View Consumption in&out of Sponsor pages; CTR to sponsor pages; dead-end rates, visitor return frequency, SE Organic Entry %; Exit Propensity.

Notes: These pages are like separate sites-within-your-site. The principal page of these sponsors often acts as a separate mini-router and engager. While the primary objective of these pages is reached as soon as a visitor finds them, consumption of pages outside of sponsors is important to your overall site performance. Minimizing Exit Propensity while increasing CTR to sponsor pages is an important optimization process.

Measurement Issues: Ideally, a separate variable needs to be set up in order to roll-up sponsored pages. Since these pages and their designations change frequently according to sponsorship sales and resulting contracts, frequent tagging changes might be necessary, although these are, in practice, difficult to arrange. Since content on these pages is usually determined by the sponsors, there is also limited optimization possible to decrease exit rates.



Page Type: **Re-Assurers**

Functional Description: Pages built to re-assure the visitor about some potentially problematic issue or concern (privacy policies are a common example). The function of a re-assurer page is to get a visitor to re-join a process.

Sample Type: Privacy pages, secure shopping pages and why we need this information pages are all very common re-assurers.

Functionalist KPI's: Process Re-Join Rate, Exit Rate, Exit Propensity, Percent Process Viewers / Percent Re-Assurers.

Notes: The group of visitors who access Re-Assurers is almost always the least confident/qualified – so success rates for these pages are usually poor. One of the things to be aware of is the percentage of process viewers who check out a Re-Assurer. If this percentage is quite high, then it may make sense to move key information directly into the process. If, on the other hand, usage is very low and not successful then it may sometimes make sense to simply remove the pathways.

Measurement Issues: Re-Assurers are sometimes coded as rollovers or popups. It is often necessary to insure that these pages are tagged. In addition, popups often confuse pathing analysis in measurement solutions. Where a popup is present, make sure that you correctly analyze next steps from the original page.



Page Type: **Converters**

Functional Description: Pages that are part of whatever is necessary to gather information/agreements and get a finished lead/sale/transaction.

Sample Type: Shopping Cart pages are the most common example.

Functionalist KPI's: Step-Drop off, Exit Rate, Affiliated Content Exit Rate, Re-Assurer Exit Rate, Avg. Step Time, Avg. Step time on Progression, Cross-Session Step-Drop Rate.

Notes: One interesting aspect of Converter drop-off is identifying how the drop-off takes place. Is it simply site exit, or are visitors going to re-assurer pages or back to convincer pages. These are often especially interesting when cross-tabulated with source – and can help identify places where you might need to bolster your information or pathways prior to driving conversion.

Measurement Issues: For the most part, Converters are fairly easy to measure. In some cases, intra-field abandonment can also be interesting – but this is less common than you might expect. Depending on the nature of the conversion process, it's also important to find out the degree to which a conversion process is multi-session. Where multi-session behavior is common, in-session drop-off rates can be misleading. Because measurement tools frequently do a poor job of handling multi-session behavior in their funnels, we often use visit or visitor numbers for each page to create the basic step-drop off statistics.



Page Type: **Tools**

Functional Description: Pages that are designed to collect or provide information as part of a non-sales process (like checking an account status, executing a trade, paying a bill, or finding a location). There are many different kinds of tools and for a tool-rich site tool pages need to be sub-divided into more granular types.

Sample Type: Mortgage Calculator, Store Lookup, Mapping, etc.

Functionalist KPI's: Organic SE Entry %, 1st Step % (% of visitors whose first action is the tool – indicative of pre-determined desire to use the tool), Entry visitor qualification, Exit Rate, Exit Propensity, Affiliated Content Routing, Subsequent Conversion, Direct Conversion, frequency of use, and attrition.

Notes: Tools are created on a site for a whole range of reasons. In some cases, they are meant to be draws to a site – ways to get potential prospects in the door. Other times their function is to keep people on the site – visitors will want to do X within the context of their visit we'd better give it to them. In still other cases, they are services that generate revenue. And, of course, some tools have functions covered by other classes of page (wizard tools are essentially Routers for example). Naturally, the function of the tool will impact the appropriate ROI's for it.

Measurement Issues: Many tools are, by default at least, a black box to web measurement. You know a visitor went in and you where they came out. What happens in between is a mystery. In many cases, "black-box" tool analysis is perfectly adequate. But if the tool is extensive, you'll probably need to consider internal tagging. This usually isn't wildly difficult – but it also something that is much easier said than done – and much easier to do during implementation than after a tool is out the door.



Page Type: **Completers**

Functional Description: Thank-you pages – designed to signal the completion of a process and – in some cases – drive to additional engagement.

Sample Type: Order or Lead Confirmation pages.

Functionalist KPI's: Site Re-Engagement Rate, Exit Rate.

Notes: You're done. You got the order. Now there's nothing left but saying Thank You. Not so fast. Completers represent one of the most oft wasted spaces in the web channel. If you've just generated a lead or gotten a customer, there surely ought to be something else you'd like them to know: training, classes, options, support...something. Most Completers do a terrible job of re-engagement. And even a very good re-engager is going to have a very high exit rate. That's why it's so important to treat this as a specialized type of page.

Measurement Issues: This is usually a very straightforward next step analysis.

