



Product Decision Support (PDS) Overview

The PDS Advantage over Traditional Market Research

November 17, 2005

Overview

Today, enterprises that offer Web-based service offerings require tools that will quickly and accurately reflect end-subscriber usage and sentiment. These *Product Intelligence* (PI) tools integrate with the service offering to collect user data – that you specify – in real-time. This captured data can then be quickly analyzed – based on criteria that you define – to allow you to modify, and redeploy, the service offering to meet the dynamic needs of today’s online services market. Furthermore, PI tools such as Autolytics’ *Product Decision Support* (PDS) do not simply help you refine your initial service offering but assist you all the way through the service offering life cycle by enabling you to determine:

- Based on subscriber trial usage and churn, is it better to offer the service on a subscription basis or as a one-time cost?
- Which key service components will make the most immediate impact on subscribers?
- At what point are the subscribers tapped out and what adjustments need to be made to both attract new subscribers and keep existing subscribers from churning from the service?
- What will best grow service revenue – adding new features or improving existing service functionality?
- What are the best marketing channels for high-value subscribers?

These questions are particularly relevant to Web-based service offerings such as online gaming, because of the size of the market, the multitude of service offerings, and the subscribers (“gamers”) the service targets. Online gaming providers must be able to quickly adapt their service to satisfy the challenges that gamers seek or risk becoming the “flavor of the month.”

This paper discusses:

- The importance of realism in a Web-based gaming service offering.
- The PDS architecture and how easily developers can integrate PDS into a service offering using the PDS SDK.
- The value of PDS in providing information – based on your service expertise and assessment criteria – to enable you to quickly make the decisions to enhance the revenue potential of your offering.

The need for realism and the PDS advantage

The mission is simple – leverage the broad reach of the Internet to accelerate adoption and broaden market penetration of products and services. PDS goes beyond traditional manual methods of collecting market research to automatically collect data during normal service use – *while the subscriber is online and gaming!*

Traditional market focus – perception is not always reality

Traditional market research, such as focus groups and surveys, are at best snapshots of individuals’ recollections of particular aspects of a product or service. Rarely is the information collected while the individual is actively engaged in using the product or service. The risk is that

the user perceives behavior that may have happened differently or not at all. Focus groups introduce another risk in that a dominant personality may inhibit or alter the feedback provided by other participants. The result is, at best, skewed data, and at worst, bad data. This is not the kind of data that you want to use in deciding how to offer the service.

Conversely, PDS, through integration and automation, tracks activity over time and corroborates user feedback/input with their actions. Consequently, you are getting a *realistic picture of what the gamer is doing right then, at that moment in the game*. This is the type of data you want to use in deciding how to offer your service.

PDS advantage – enabling you to quickly respond to trends

By enabling an enterprise to immediately monitor subscriber usage, development and marketing teams can immediately react to trends – that could impact subscriber take-rate and usage – and take corrective action. While this is particularly useful during the trial phase of a service offering, it also benefits the service as it matures and evolves to address different target audiences.

Dynamic, real-world data collection and assessment enables you to test innovations included in your service to attract new subscribers. For example, MMOG is interested in attracting more woman gamers. You may have added new characters to your game with characteristics specifically intended to appeal to woman. PDS data mining capability allows you to:

- Segment subscribers based on factors important to you (sex, age, income level).
- Designate important items of the game you consider important to these segments (character, weapon, occupation, level of engagement).
- Collect and assess data specific to these items to test innovations.
- Provide the segmented subscribers the opportunity to provide targeted feedback at specific points in the game to test innovations.

Based on the data, developers and marketing can determine how successful the innovations are and whether further service modifications are necessary.

Another benefit of immediate realism in market research is ensuring the quality of the data received. If the subscribers fail to provide useful feedback, the data will not satisfy its objective. PDS enables you to assign quality control values to the data that, if not met, causes the subscriber to be removed from the feedback segment. For example, you want to receive feedback daily, you want the subscriber to be consistent in their feedback pattern, and you want it to correlate to others providing feedback (not deviate too greatly from the bulk of the feedback you receive) to make it actionable. If the PDS Quality Control feature is enabled and any of these criterion are not met, PDS automatically removes the subscriber (and replaces them with another, if you have configured that capability).

The PDS advantage – capturing the data you need

For a data capture tool to be effective, it must capture the data *you* need to assess the service offering. Since you know your application better than anyone, this means providing the capability to easily specify which data to collect. PDS, through its API, allows developers to easily specify the data to collect, and *when to collect it*. This context-sensitive collection capability is the heart of PDS.

Multiple levels of data capture

The key to PDS data capture is defining the ‘scope’ of the subscriber feedback to collect. In assessing a service, there are multiple items, or instances, within the service for which you would like to capture subscriber feedback. When you define, or structure, the scope of the data capture for these various instances, there are two characteristics that impact the scope definition:

- Granularity – how broad or how narrow you want to define the scope of the subscriber feedback. Scope granularity can be broad – like capturing the gamer’s general feeling about the visual graphics capability of the game – or narrow, like whether a weapon fires fast enough for the kill capacity a gamer seeks.
- Context – the stages in the game within which you want to capture the feedback. You may capture instances with broadly defined scope at multiple points of, or throughout, the game. More narrowly defined instances may be captured in one or few places.

Ease of capturing the data - internally

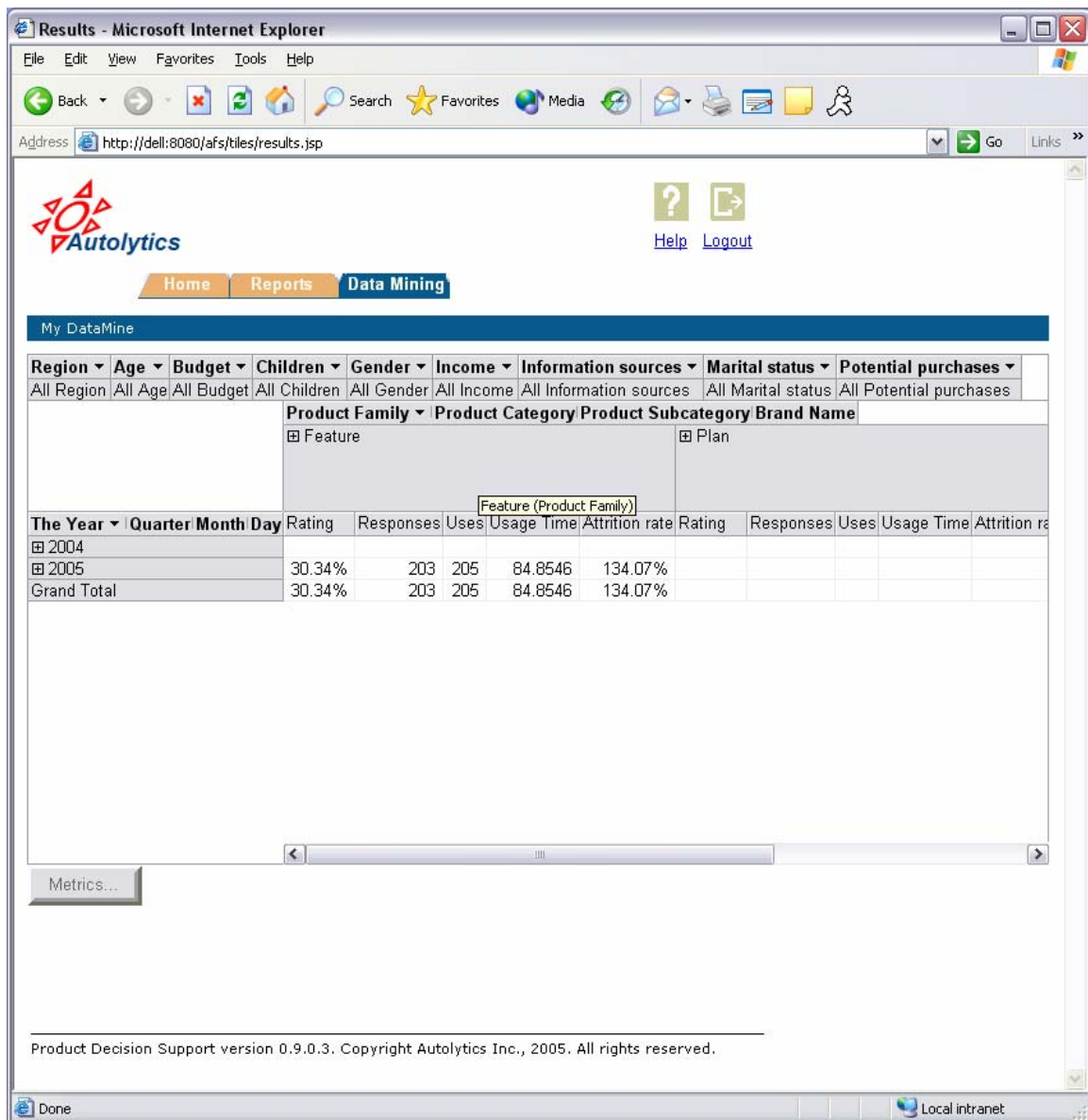
The SDK provides the means for defining the data to capture as scope variables. In effect, these scope variables become dynamic “tags.”

Ease of capturing the data - subscriber

When the subscriber right-clicks their mouse, or performs some other hot-key action, the game briefly pauses and a feedback menu appears. The gamer is presented drop-down menus and asked to select the scope and category of feedback being provided and to select a rating from 1 (poor) to 5 (excellent). A text box is also provided, should the gamer want to provide free-form text feedback (for example, “too hard to use”). When assessing and grouping the data, the PDS uses pattern matching to consolidate the comments into common sentiments. Alternatively, pre-determined comments could be used instead (should you wish to limit the range of comments provided by the gamer).

Your advantage – analyzing the data

As mentioned previously, PDS captures and warehouses the data. At this point, you are able to use *your expertise* to analyze the data for trends that could affect various aspects of the service offering. PDS provides a data mining capability that relates the captured information to subscriber information, allowing you to segment the data to suit your needs.



Results - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media

Address http://dell:8080/afs/tiles/results.jsp Go Links

Autolytics Help Logout

Home Reports **Data Mining**

My DataMine

Region	Age	Budget	Children	Gender	Income	Information sources	Marital status	Potential purchases
All Region	All Age	All Budget	All Children	All Gender	All Income	All Information sources	All Marital status	All Potential purchases

Product Family	Product Category	Product Subcategory	Brand Name
Feature			Plan

The Year	Quarter	Month	Day	Rating	Responses	Uses	Usage Time	Attrition rate
2004								
2005				30.34%	203	205	84.8546	134.07%
Grand Total				30.34%	203	205	84.8546	134.07%

Metrics...

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You can also use any number of online analytical processing (OLAP) tools to further assess the data. Between PDS data capture and mining capability, and OLAP tools, you have all you need to answer those critical questions that affect the service offering and take the corrective action to enhance the offering.

Summary

This paper has described the Autolytics *Product Decision Support* product and the value PDS can bring to your service offering. The PDS data capturing capability and the simplicity of its API provides marketing and developer teams the information they need to best determine how to market and offer a service. Online gaming success depends on quickly understanding subscriber behavior and trends and reacting just as quickly to address those trends, be it from the game itself

or the related marketing and sales activities. Traditional market research does not quickly, or reliably, address these needs. What does address these needs is the PDS advantage: *capturing the data you want – when you want – for as long as you want – to enable you to enhance your service offering.*