Harnessing the Power of Facebook Data

MicroStrategy Gateway™ for Facebook

Companies Must Embrace the Social Network Phenomenon

The emergence of social networks has not just changed how people communicate and share information with one another. It has the power to fundamentally change business in ways that are just beginning to be discovered. The social network is no longer just an interesting technological showcase; it is a cultural phenomenon and the most disruptive technological force in society today.

Businesses, celebrities, and brands must embrace social networking as an unprecedented advertising and marketing opportunity. They must find ways to leverage the social network and the data it contains to expand the customer base, foster loyalty, and improve the customer experience.

Of all the social networks in place today, Facebook is the single most important one for business because of its size and depth of data, and because it has the most open network for business applications. Facebook is where consumers go to engage with others and where companies should be going to engage with consumers.

All Your Current and Future Customers are on Facebook

As of mid-2011, there were 750 million people on Facebook. 250 million of those people access Facebook from a mobile device and are thus constantly connected to the social network. Every day, hundreds of thousands more join Facebook and fill out a profile with their personal information. That's 750 million people around the world – and growing – using Facebook every single day and updating information about themselves, what they like, and where they've been, and connecting to their friends.

Some of these people may, in fact, already be a customer of your organization and you just don't know it. It's more likely, however, that millions of these people are not your customers. Neglecting to use Facebook as a source of new business and customer retention could mean many lost opportunities.

Current Consumer Data Resides on Facebook

Facebook has become the world's most comprehensive and up-to-date database of personal demographics and interests. Millions of socially active people rely on Facebook as their primary communication tool. This is evidenced by the fact that 48% of 18-34 year olds check Facebook as soon as they wake up.

As part of their daily communication, millions of Facebook users contribute personal information, including their name, birth date, location, education, employer, check-ins, interests, contact information, event RSVPs, and so much more. Individuals are not prompted to update this information. They do it willingly as a natural part of their social interaction and networking.

Millions of People Connect to One Another and with Companies, Brands, and Communities on Facebook

The average Facebook user is socially connected with 130 other people on Facebook. In addition, Facebook users create interest connections when he or she "likes" a Facebook page. The average Facebook user has interest connections to 80 communities, groups, companies, brands, and celebrities[1].

Interest connections form the basis for information dissemination from company to fan and also provide an invaluable "interest map" of each user. These interest maps could allow your company to personalize its messages to your fans. The result: marketing and messaging that is more relevant, delivered directly to the consumers with whom it will have the most impact.

[1] Facebook, https://www.facebook.com/press/info.php?statistics, August 2011.
[2] Schwartz Communications

Social connections between Facebook friends form the basis for viral messaging flow. Companies must harness these viral message flows to get their messages out and circulated effectively. By leveraging Facebook, companies have a tremendous opportunity to broadcast messages on a large scale and to draw consumers closer to the brand.

Companies Must Have Facebook Applications to Fully Capitalize on the Facebook Phenomenon

While Facebook began simply as a medium for sharing thoughts and content between an ever-changing network of friends and associates, it has grown far beyond that. Today, Facebook is a world-wide platform for interconnections between people and their interests, people and groups, people and events, and people and companies. It has also become a premier advertising medium and a platform for supporting third party applications.

With all of this capability, the question that companies and brands ask themselves is, "What should my company be doing in the social medium and on Facebook?"

Having a Corporate Facebook Page is Necessary, but Not Enough

The first and most obvious thing for your company to do is to establish a Facebook Page for your corporation. Once Facebook users "like" your Page, they immediately begin receiving your company's postings on their personal newsfeeds. This provides a unique and free channel for your company to reach consumer audiences with its messages.

While having a corporate Facebook Page is necessary, it is not enough. Messages delivered from a corporate Facebook Page are broadcast to an anonymous audience, preventing your organization's messages from being personalized to each individual Facebook user or to segments of users.

The limited functionality of a Facebook Page does not provide a sufficient channel for interesting interactions between consumers and a brand, or personalized access to intriguing offers, deals, and services. In addition, corporate Facebook Pages provide companies with only high-level statistics on the fans who "like" their Page. Thus, companies lack the necessary in-depth insights into their fan base needed to take action and capitalize on the marketing opportunity.

Advertising on Facebook is Necessary, but Not Enough

Similarly, many companies advertise on Facebook. Advertising on Facebook is necessary and can be a valuable marketing tool. However, advertising on Facebook is not enough.

While Facebook advertising can bring your messages and offers to a very broad population of Facebook users, these advertisements are not personalized to the individual, nor can they contain a rich array of interactivity and content (e.g. messages, multimedia, deals, coupons, loyalty perks, merchandise browsing and sales, customer service, and so on).

This lack of interactivity and content limits the potential reach and success of your company's marketing efforts, particularly amongst your loyal fan base. Your fans do not necessarily want to see ads; they want valuable and personalized content, including offers and a VIP experience.

<u>Facebook Apps are Essential to Delivering Targeted, Personalized Content, and Interactivity to Consumers</u>

The only way to achieve deeply personalized, highly-targeted messaging and interactivity with Facebook users is through a Facebook application. A compelling Facebook app can bring targeted, personalized messaging, offers, services, merchandise, and relevant content directly to consumers, bringing them closer to your brand and boosting loyalty.

Facebook's social graph, which represents the millions of connections made by users every day, can be leveraged within an app to ensure your company broadcasts messages to fans in such a way as to drive interest and promote daily interactions between that fan and your brand, putting your company front and center in the consumer's mind. Ideally, such a Facebook app would be available on mobile devices as well as the Web, so that you can take advantage of the immediacy and pervasive use of mobile devices.

<u>Creating Compelling Facebook Applications that Connect Brands to Consumers Is Challenging</u>

Facebook provides a set of open application programming interfaces (APIs) – the core API is called Graph API – that allow third parties to develop Facebook applications. These APIs provide rich functionality for reading data from Facebook's social graph and for writing "interactivity" back to the social graph, such as Facebook Likes, Comments, and Shares. Thousands of companies have built over 100,000 Facebook applications using these APIs. However, the vast majority of these applications are games, utilities, personal tools, and novelty applications.

Few businesses have created truly valuable business-to-consumer applications because the Facebook APIs and underlying data structures don't lend themselves to one-to-one marketing, campaign management and execution, cross-sell recommendation engines, or customer care. Creating an app that can truly harness Facebook's social graph data requires additional technology and data structures that fall outside of Facebook's social graph database and the Graph API. These additional data structures are needed to handle targeting, personalization, analytics, and history.

Moreover, many companies are reluctant to build business-to-consumer applications using the Facebook environment because they fear it will not be as manageable, secure, and compliant as their traditional IT environments.

To solve these challenges, MicroStrategy Gateway for Facebook provides Facebook's social graph information in an enriched, ready-to-use relational model which companies can utilize to create consumer-focused Facebook applications that are targeted and personalized.

Introducing MicroStrategy Gateway for Facebook

MicroStrategy Gateway for Facebook is a cloud-based service that interconnects enterprise IT environments to Facebook, allowing enterprises to build better Facebook applications and to inject social intelligence into existing applications. Gateway works by converting Facebook information into a set of data structures that can be stored in a relational database system, making it inherently and instantly suitable for data-rich Facebook apps. As a result, MicroStrategy Gateway plays a critical role in the development, ongoing operation, and potential success of your Facebook app.

Every Facebook application requires explicit permissions from each user to access his or her Facebook data. After a user grants his or her permission to gather this data via your Facebook app, Facebook grants a "token" to the app, enabling it to collect Facebook data via their Graph API.

Rather than your company trying to learn Facebook's APIs and formatting that data into something usable, you can use MicroStrategy Gateway. MicroStrategy Gateway uses the permissions given to your company to extract your app users' data from the social graph database. It places that data into a relational data model and provides this structured data to your company. The data is refreshed on a scheduled, ongoing basis so you always have the most up-to-date consumer information.
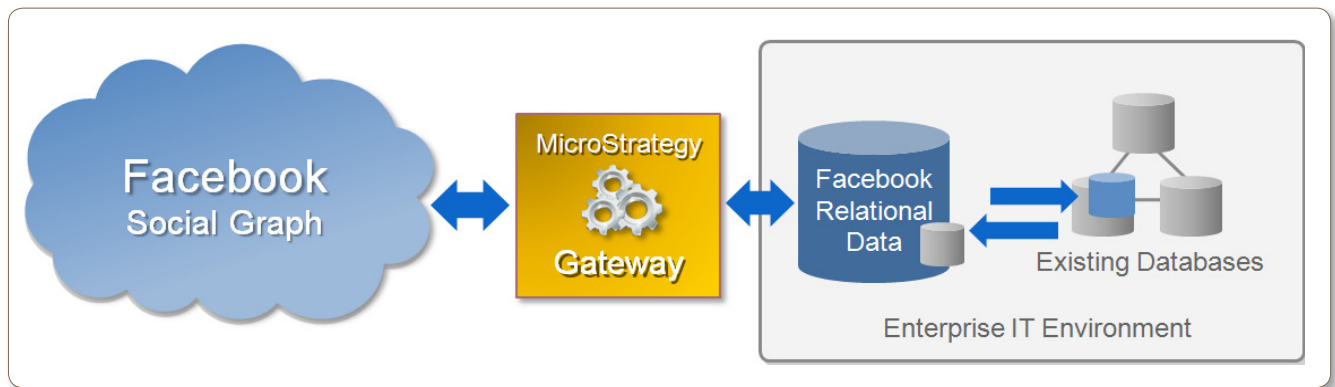
Figure 1: MicroStrategy Gateway interconnects Facebook data with the enterprise IT environment, allowing companies to create data-rich Facebook applications using existing IT disciplines and tools.

A significant benefit of having a relational model at the heart of your Facebook app is that Facebook apps can make much richer and simpler queries against a relational database. And, because your developers are far more accustomed to operating with a relational DBMS, they can develop Facebook applications faster and with more predictable performance using Gateway and relational storage. This enables your Facebook applications to be managed in a sound way, using your existing and well established IT tools and procedures.

By providing a bridge between Facebook data and your enterprise IT environment, MicroStrategy Gateway opens the door to a wide range of application development. For instance, with MicroStrategy Gateway, your company has the opportunity to integrate your enterprise data into your Facebook applications, because both Facebook data and enterprise data are managed in the same relational data technology. This integration presents significant value to your organization.
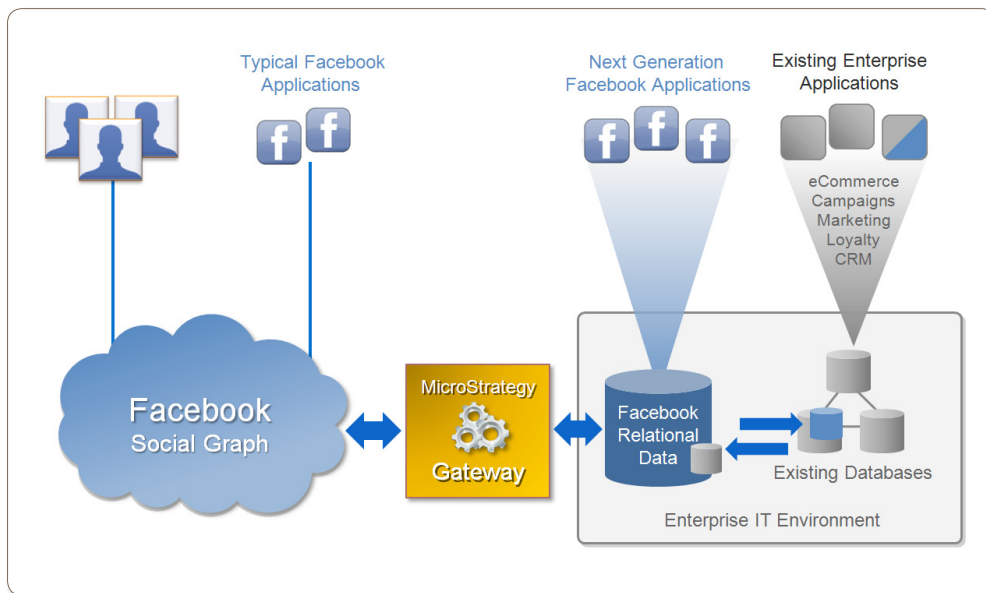
Figure 2: MicroStrategy Gateway is a cloud-based service that brings Social Intelligence to enterprise applications. With Gateway, your organization can easily leverage Facebook data to improve Facebook applications.

MicroStrategy Gateway Helps Organizations to Develop Better Facebook Applications

By providing enriched relational data on which to build Facebook apps, MicroStrategy Gateway empowers your organization to quickly reap the benefits of its Facebook apps. With a tight integration between the enterprise environment and Facebook apps, your company can deliver highly personalized and relevant content to consumers, conduct sophisticated analytics, and integrate enterprise and Facebook data to provide 360-degree service to consumers.

Organizations Can Create Better Facebook Applications by Applying Deep Personalization

For the last two decades, trends in marketing have included more segmentation, better targeting, and increased personalization, all leading to the ideal state of one-to-one marketing. For the first time, social networks contain a wide enough range of up-to-date data to make one-to-one personalized marketing a reality.

The most compelling business-to-consumer applications are those that deliver truly relevant content and services that are personalized to each user. Such Facebook applications need ready access to a users' profile information, their interests, their Likes, Events, and check–ins so it can intelligently choose the best content for each user. That information is provided by MicroStrategy Gateway using the familiar SQL query language.

Organizations Can Create Better Facebook Applications by Applying Sophisticated Analytics on Consumer Data and Delivering Superior Service to Facebook Users

The Facebook social graph provides a source of CRM data unlike any database before it. By aggregating this wide range of Facebook data into a relational database, MicroStrategy Gateway provides a mechanism to derive valuable insight about your

5

Facebook application users. Your Facebook applications can apply complex and sophisticated analytics to your data and derive unique insight about each and every Facebook application user. This allows next-generation Facebook applications to go way beyond basic data display, to include real-time recommendations and affinities.

By combining information such as 'likes," location check-ins, and event RSVPs, your company can begin categorizing and marketing to specific groups of consumers. For instance, certain consumers may fall into categories such as "Young adult sports fan" or "Active, middle-aged men interested in the outdoors." This information, in the hands of your marketing team, has the potential to produce highly successful, targeted, and personalized campaigns.

Organizations Can Build Better Facebook Applications by Integrating Enterprise Data into their Facebook Applications

Most enterprises maintain a wealth of information about each of their customers and store that information in enterprise relational databases. Consider all the customer-focused applications used by your executives, as well as your Sales, Marketing, and Operations departments. These may include applications focused on customer relationship marketing (CRM), loyalty programs, event programs, customer support, e-Commerce, and special incentive programs.

In addition to Facebook's social graph data, now organizations can incorporate existing enterprise data from other enterprise systems into their Facebook apps so as to provide a highly personalized service to the Facebook user. This allows Facebook applications to have a 360-degree view of the users accessing your company's Facebook app. With a comprehensive view of a consumer, your organization can cater to his or her personality and provide special deals and offers that encourage retention and build loyalty.

MicroStrategy Gateway provides the relational foundation that allows for this integration between your enterprise data and Facebook's social graph data.

MicroStrategy Gateway Enables Faster Development and Better Operation of Your Facebook Applications

With the new social era of marketing, achieving speed-to-value with marketing is more critical than ever. Your organization must move swiftly to build compelling Facebook apps in order to capitalize on the tremendous marketing opportunities at hand. It is also essential that any applications you build operate efficiently and easily, to encourage widespread use of the apps and to provide meaningful services to consumers.

MicroStrategy Gateway Helps You Develop Facebook Applications that Connect to Relational Data

Typically, developing data-rich Facebook applications requires technical expertise and extensive experience in using Facebook's Graph API. With MicroStrategy Gateway, your organization's developers don't need to take a crash course in Graph API development. Instead, your developers can connect your app to relational data that has been collected from Facebook by MicroStrategy Gateway.

In this way, your developers can apply their existing expertise and experience in building SQL-based applications, eliminating the costly trial-and-error learning curve and lessening the level of technical expertise required.

<u>MicroStrategy Gateway Lets You Deploy Facebook Apps that Have Predictable High Performance</u>

IT professionals have been monitoring, managing, and optimizing the performance of relational databases for a long time. They know the techniques, tools, and tricks of delivering predictable high performance. By harnessing your Facebook app data within a relational database, MicroStrategy Gateway lets IT professionals use their well-honed skills to deliver high-performing applications and puts the data access technology completely in the control of the enterprise rather than in the shared Facebook infrastructure.

By employing a sophisticated set of algorithms to connect intelligently and efficiently with Facebook, MicroStrategy Gateway also plays a critical role in delivering top-end performance to your apps. In part, MicroStrategy Gateway achieves this by dynamically monitoring and adjusting its data access to Facebook apps. When it detects high Facebook app traffic conditions, MicroStrategy Gateway reduces its flow of data automatically, helping to ensure consistent performance for extracting data from Facebook.

<u>Building Apps with MicroStrategy Gateway Ensures that Your Facebook Apps Are Enterprise-Compliant</u>

A key barrier that stands between companies and their Facebook app data is that there are many fundamental differences between Facebook's collection of information in the social graph model and companies' structured enterprise IT environments centered on relational databases.

The social graph model is optimal for Facebook. It is ideal for populating Facebook Walls, Feeds, and Pages with a wide array of information that is constantly being updated, added, and removed. By its very nature, Facebook is an organically-growing environment with millions of connections between people, companies, and brands in constant flux. The social graph is not suitable for high-volume enterprise or consumer apps that aggregate thousands of users, interactions, and a large quantity of data on a daily basis.

By contrast, companies have very structured IT environments that include relational databases on which they build enterprise applications. Enterprise IT environments have evolved complex sets of policies and procedures to ensure security, smooth change management, data consistency, and regulatory controls and adherence. Enterprise IT policies and procedures are based on traditional information technologies like relational databases where the data management is handled by the enterprise itself. MicroStrategy Gateway for Facebook provides your enterprise with the ability to continue using proven policies and procedures with new Facebook applications.

<u>MicroStrategy Gateway Enriches Facebook Data to Ensure it is as Complete as Possible</u>

While Facebook contains an extensive range of information about individual's basic demographic information, their interests, and social interactions, it is still incomplete. Many Facebook users fail to fill out all of their profile information. Even if they complete their profile, the data may not be in the format your organization needs. For example, a user might input their Hometown but zip code information is not captured.

MicroStrategy Gateway offers a solution to this dilemma. Gateway provides enrichment routines that use cross-reference logic and external databases to enrich the Facebook data – filling in missing fields such as age or gender, as well as augmenting the database with additional information, such as geographic detail.
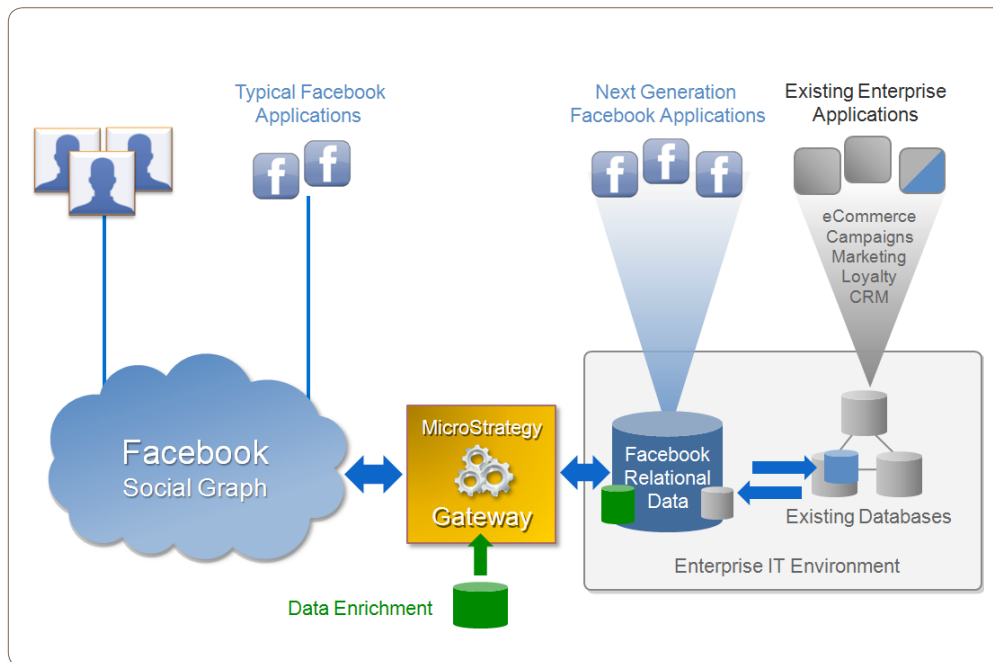
Figure 3:MicroStrategy Gateway™ can enrich Facebook data with data from other sources.

By Operating in the MicroStrategy Cloud, MicroStrategy Gateway Provides Immediate Service, Minimum Risk, and Maximum Capability

MicroStrategy Gateway operates in the MicroStrategy Cloud and is managed completely by MicroStrategy. MicroStrategy's world-class hardware, software, and administrative resources are used to set up, configure, and maintain MicroStrategy Gateway. This empowers your organization to focus solely on achieving the most benefit possible from your Facebook applications.

MicroStrategy Gateway is Immediately Available for Your Facebook Applications

Because MicroStrategy provides your organization with Gateway, including data enrichment, hardware infrastructure, network infrastructure, and system management, your organization does not have to.

In only a short time, MicroStrategy Gateway for Facebook is up and running, and ready to deliver your Facebook app users' data to you. With the relational data model that Gateway provides in place, your organization can get started improving Facebook apps and building new ones knowing that MicroStrategy is supporting MicroStrategy Gateway every step of the way.

MicroStrategy Invests in Facebook Expertise, so Your Organization Does Not Need To

A key benefit of MicroStrategy Gateway's cloud-based offering is that MicroStrategy can make the investments in engineers, expertise, and close technical relationships with Facebook on behalf of all Gateway customers at a level that is impossible for any single individual company to do. MicroStrategy engineers can be counted upon to know the latest details of Facebook technology, upcoming API changes, algorithms governing data access, and performance characteristics.

8

This means your organization can be confident in the operation and performance of your app as time goes on. It also means that you can concentrate primarily on the value-added aspects of your Facebook application, to ensure consumers are offered a valuable, compelling app and continue to interact with your brand daily.

Maximize Your Impact in the Social Era of Marketing with Facebook Applications Leveraging MicroStrategy Gateway

Every company should be developing Facebook apps. MicroStrategy Gateway provides the ideal mechanism to develop the most impactful Facebook apps and inject social intelligence into existing enterprise applications.

Using MicroStrategy Gateway, companies can build better Facebook apps easily and quickly, and deliver apps that provide a steady, high level of performance. All of this is provided with comprehensive Facebook data extraction services from MicroStrategy, who manages MicroStrategy Gateway from within the MicroStrategy Cloud, ensuring your company incurs minimal effort and costs every step of the way.

Facebook apps built using the data provided by MicroStrategy Gateway are game-changing. They are a critically important aspect of the next wave of marketing, which integrates social intelligence into both enterprise and consumer apps. These apps not only enable your organization to leverage the rich and continuously refreshed data contained in Facebook, they empower you to build apps that foster customer and brand loyalty and provide better service to consumers. As such, MicroStrategy Gateway for Facebook helps ensure that your organization makes the very best of the valuable data it harnesses from Facebook.