

Community Banks face greater analytics requirements in an environment of declining revenues

In view of the current financial crisis, improved credit analytics and credit portfolio monitoring has attained prime importance for banks. However, banks have little money to spare as profitability of community banks is particularly affected by the economic environment today. Their core income from loans and investments, which accounts for 70-80 percent of total income¹, is likely to be eroded due to a number of factors:

- 1. The worsening real estate situation:** The rising tide of defaults on housing loans and declining real estate values continue to deplete the asset bases of community banks. This has a three-fold impact on community banks - first, their income from existing loans is reduced. Second, their lending capacity, and in turn the expected income from loans, is reduced. Third, their non-performing assets build-up, negatively impacting profitability.
- 2. Reduced loan demand in a recessionary environment:** In the current recessionary environment, fewer companies are seeking to make business investments, thereby reducing a key source of loan assets and related interest income for community banks.
- 3. Tighter credit standards:** Tighter credit standards mean that fewer applicants are approved, thereby reducing the pool of potential clients.

Increased competition may further compound this situation, as the impact of new regulations by the Federal Reserve permitting the creation of new bank holding companies becomes clearer.

Even as revenues decline, community banks are faced with pressures of upping their credit monitoring and analytics in the wake of the sub-prime mortgage crisis.

This presents a dilemma - improved analytics requires added costs, whereas declining revenues require banks to reduce their expenditures.

The use of Third Party Analytics presents a solution

Instead of investing in expensive analytics software and highly skilled analytics teams, community banks can work with third party providers of advanced analytics. This offers the following benefits:

- 1. Variable costs:** Banks only need to hire third party providers as needed, thereby eliminating the need to maintain a fixed and recurring cost of a core analytics function on the bank's rolls.
- 2. Access to greater expertise:** Analytics providers focus exclusively on analytics and possess advanced and proven expertise in the area. Working with these providers will enable banks to focus on their own business of building and maintaining relationships in their communities, while analytics providers track and manage large sets of data on credit risk.

¹ "The Economy and the Housing Slump: Challenges for Community Banks," Ed Sibbald, March 2008, The Business Report

THE VALUE OF THIRD PARTY ANALYTICS FOR COMMUNITY BANKS

Examples of third party analytics include, among others:



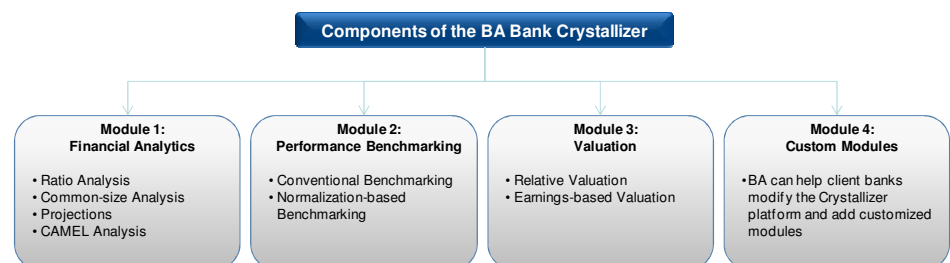
Sample benchmarking tool by Boston Analytics

As an example of third party analytics, we describe below a benchmarking offering by Boston Analytics (BA) for community banks - the *Bank Crystallizer™*.

Benchmarking is an important exercise that helps banks compare themselves against competitors, track their credit profiles, identify potential cost cutting opportunities, set performance goals, and analyze year-over-year performance trends. Benchmarking also enables banks to:

- Understand industry trends and best practices within the banking industry
- Evaluate the returns on investment with benchmarking data as a baseline
- Perform competitive analysis without the time and resources needed to conduct an internally staffed and managed effort
- Save time by relying on industry-standard metrics and years of benchmarking data

Boston Analytics' *Bank Crystallizer™* is a customizable, excel-based platform with an interactive user interface that allows banks to perform a diverse range of financial and operational benchmarking analytics with relative ease. This data is updated quarterly, allowing banks access to the latest financial and operational information. The *Bank Crystallizer™* is backed by an experienced BA team that provides technical as well as functional support. In addition to the pre-packaged modules included in the *Bank Crystallizer™*, BA develops customized modules based on banks' requirements.



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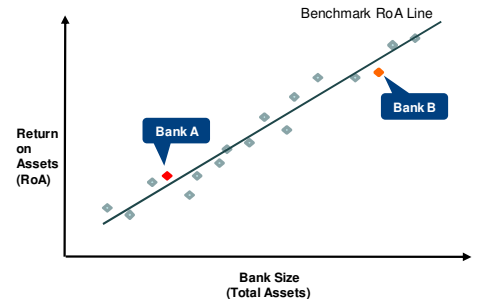
One critical problem in benchmarking is that the peer group of banks needs to be selected carefully to enable an “apples-to-apples” comparison. This often results in a reduced data set, since only banks that are very similar in size and nature are selected for comparison. Boston Analytics’ *Bank Crystallizer™* overcomes this shortcoming by using a normalization technique that allows the comparison group to be expanded to include banks of different sizes. This is done by quantifying the effect of size on performance. This approach allows individual banks to compare themselves against any bank or group of banks in the industry. Various “what-if” analyses can be performed based on the benchmarked performance, to identify the potential for improvement in a bank’s operations.

Benchmarking Methodology

- Identify variables to be benchmarked and adjusted for the size effect
- Regress the variables and arrive at the benchmark performance regression line
- Cross check for collinearity & interaction effects
- Compare companies against benchmark performance

Example

- In the adjoining graph, the line of regression serves as the benchmark RoA for banks of various asset sizes
- Banks which have RoA above the benchmark line exhibit superior performance and those below the line, exhibit sub-optimal performance
- Highlights
 - On an absolute scale Bank B has greater RoA than Bank A and would normally be considered a better performer.
 - However, after comparing the performance of Bank A and Bank B with their benchmark expected performance, we observe that Bank B has performed worse than its benchmark while Bank A has performed better



$$\text{RoA} = f(\text{Bank Size}) + \text{constant}$$

Conclusion

Banks can reduce their operating costs and improve their credit and operational analytics by working with Third Party Analytics providers. These providers possess extensive and advanced analytics expertise. They can quickly analyze and track information to monitor trends and alert banks about potential changes in risk profiles. Conducting such analytics in-house could represent enormous (and prohibitive) investments for banks.

By:

Ted Thorbjornsen, Chief Analytical Officer

Swati Chaturvedi, Vice President

Sandeep Mulay, Associate Vice President

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About Boston Analytics

Boston Analytics provides its corporate, consulting and financial clients the most current, accurate, and actionable research and analytics — so they can be first to uncover and exploit opportunities. Our work powers knowledge processes and enables effective decisions at all levels of our clients' businesses. To do what we do best, we bring together the best analytical minds worldwide, deliver a robust offering of knowledge services, and work as genuine partners.

Boston Analytics delivers an enterprise-wide knowledge advantage by providing fully customized knowledge services as well as flexible, preconfigured knowledge products and repositories. All knowledge services and products are tailored to meet the specific needs of corporations, consulting companies, and financial services firms.

Our firm is headquartered in Boston with offices in New York, London, and Mumbai.

If you have questions please contact:

Swati Chaturvedi

Vice President, Boston Analytics

Email: schaturvedi@bostonanalytics.com

or

Ted Thorbjornsen

Chief Analytical Officer, Boston Analytics

Email: tthorbjornsen@bostonanalytics.com

Website: www.bostonanalytics.com