The Computerworld Honors Program

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Laureate

CATEGORY:
Collaboration

ORGANIZATION:
Pyramid Analytics

ORGANIZATION URL:
http://www.pyramidanalytics.com

PROJECT NAME:
Pyramid Analytics

PROJECT OVERVIEW

With the introduction of “Rich Internet Applications” (or “RIA”) over the last couple of years, there has been a gradual move towards shifting traditional desktop applications to the web or “cloud”. The complexities involved in matching features and performance cannot be overstated. Against this backdrop, Pyramid Analytics has designed a new data analytics platform for the web that takes the leap into the RIA paradigm. The result is an easy, intuitive application that is both comprehensive and sophisticated – allowing thousands of users (corporate or otherwise) to communally share and analyze the ever-growing pools of data and information. By deploying a true “desktop” experience through the web, Pyramid has made it possible to harness the power and efficiencies of cloud computing in an arena that is traditionally too big and complex for web applications (see Appendix 1 for an example of the user interface). The objective of the platform is to empower global organizations to expose their large data stores to data consumers without a technical background and with little or no training in business intelligence applications. The platform is designed to assimilate any type of data, and has been used in a myriad of corporate, non-profit and other situations. In the corporate world, this amounts to sharing key information with corporate management, line managers and other employees in an effort to share and collaborate on the decision making process. In the non-profit arena, data intelligence extends beyond management information. Often there is a need to expose deep, complex informational stores to the users both in and outside the organization without the usual technical complexities associated with similar projects. Access to specific data stores (especially public ones) will enhance a critical goal of the internet itself - to provide the platform for the greatest ever sharing of knowledge. Simply put, in the information age, Pyramid Analytics is building one of the next generation information-gathering tools.

SOCIETAL BENEFITS

Data accumulation is one of the hallmarks of the digital age. Many platforms

are available for analyzing and reporting on data. Unfortunately too few make data truly accessible. Pyramid's application empowers non-technical people with the information embedded in data through the simplicity of the web and cloud paradigm.

PROJECT BENEFIT EXAMPLE

As described above, a core goal for the platform is to empower global organizations to expose their large data stores to non-technical users. These users could be internal or external to the organization. As such, the application needs paradoxically to be easy to use and secure while still providing sophistication and bona fide statistical analytics. The applications for such a platform are endless. For example, several non-profit health organizations in the US and the Middle East have used the technology to understand disease patterns; and the correlations between income, ethnicity and disease prevalence. Using the information buried in their own data stores with public census data, these organizations have been able to improve their abilities to determine and detect who will be sick and why. They have also used the tools to determine better allocations of tight resources; direct new health programs based on historical patterns; and make arguments to government and regulatory bodies about the best directions in which to drive healthcare initiatives (see example analysis in Appendices 2 and 3). In many situations local doctors and administrators at clinics can review the data separate from the central administration. By sharing the information gathered in the "center", these health organizations not only inform their agents they also provide a conduit for getting intelligent feedback based on the experiences of the "front line". Pyramid provides a mechanism to share the same level of access to data to geographically dispersed teams that is available to the head office – without any of the complexities of deployment and the degradation of performance and sophistication.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

Like many other data analytics tools, Pyramid's bioXL product makes data accessible. But the Pyramid product makes it far easier for decentralized data access, with non-technical people having an opportunity to share in the process. At a Middle Eastern HMO (as described previously), analysts completed a large data mining exercise and determined that their rate of mammography scans was particularly low in some poorer areas. Using this data, they set up a broad initiative to encourage and incentivize females in these regions to undertake the scans. As their program progressed they would use the same technique to monitor performance and compliance. Initially, the program only had partial success. To improve their success rate, remote onsite clinicians used the results of these analyses to extract and focus on specific regions to determine if there were localized causes for the partial results. After analyzing the specifics, clinicians found several key issues including: poor address data because of shifting populations; females having no consistent access to proper information and/or communication; inappropriate targeted messaging for specific groups – just to name a few. Equipped with these data points, the remote teams were able to solve highly localized problems in near real-time with specific patients, and improve their success rate by almost 35% within a few months. Despite the good high-level analysis and usage of information, it took a collaborative effort and decentralized usage of information at the local level to make a dent in the problem.