CashCast: Stochastic Financial Analytics for Cash Flow Forecast

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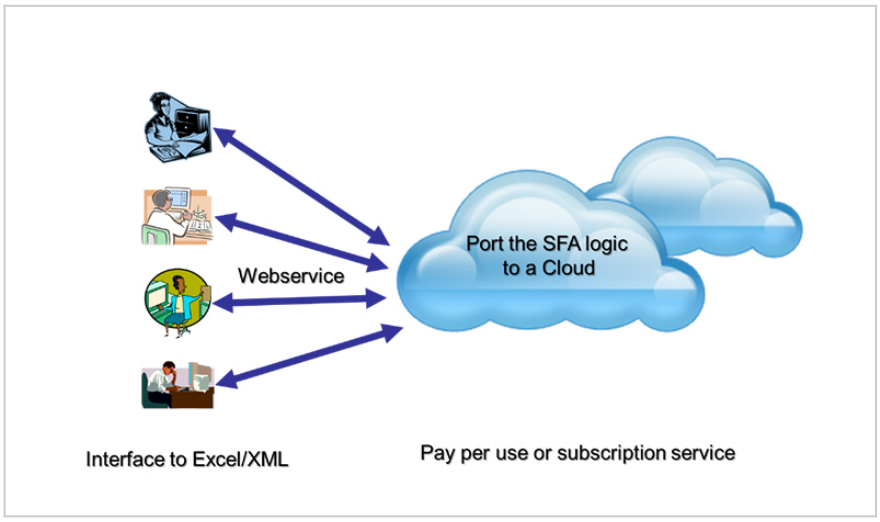

SFA as a web service

Technology Summary

The research team has developed a stochastic financial analytics (SFA) tool that has been found to provide accurate cash flow forecast while being computationally efficient in tests based on two subject matter experts (SMEs). As the stochastic dynamics of cash flow evolves every day, the forecast can be updated every time an invoice is paid. The proposed model has been back-tested using empirical data from small manufacturing firms and found the forecast accuracy to be considerably superior to other techniques commonly used. Furthermore, in computer simulation experiments, the proposed model is found to be largely robust to supply chain dynamics, including when subjected to severe bullwhip effect. The proposed model has been implemented in Excel, which allows it to be easily integrated with the accounts receivable aging data, making it practicable for small and large firms.

Application & Market Utility

Providing SFA as a web service will enable SMEs to leverage the SFA innovation without needing the expertise in-house. Based on information collected from financial accounting professionals, the labor cost of cash flow forecast would be approximately $400 per week. A price point of $100 per month for SFA and a market penetration of 5% of small manufacturers could translate to $1,250,000 monthly revenue. Further growth would be likely through other verticals and through channel partners including established accounting, bookkeeping, ERP, and treasury software vendors.

Next Steps

Research team seeks collaboration for future development and licensing.

TECHNOLOGY READINESS LEVEL 4-7

Seeking

Investment | Licensing | Research

Keywords

- stochastic financial analytics
- cash flow forecast
- financial accounting
- cloud based service

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