Overvalued Software Products and Undervalued Analysts?
The Value of a Great Analyst in Business Analytics

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Overvalued software?

• Gartner, Forrester and other firms generate large revenue streams providing software advice
  – Revenue is derived from sellers (software companies) and from buyers (customers of software)
• These reviews often focus on the “best” solutions and on functionality
• This can be useful information, I have used these firms at times, but only as a moderate source of decision-making
Overvalued software? Automated analysis only exists in movies!

• There is strong evidence against the feature/functionality arms race encouraged by these firms
• Insufficient emphasis has placed on ease of use, speed to results and the critical role of great analysts in success
• Relevant analytics simply don’t happen in companies without analysts
• Tools don’t produce exceptional analyses, great analysts produce exceptional analyses!
Software or analysts?

• If forced to choose between
  – Lower cost software with great analysts
  – Higher cost software with average analysts
  – I would always select the lower cost software with the great analysts

• Based on my work with ~ 50 companies, I estimate that a great analyst outperforms an average analyst by 300% in productivity
It is better to have a few great analysts than many average analysts

• Great analysts will
  – Connect with the business
  – Work on the highest value questions since they understand and listen to the business
  – Think strategically, transforming and streamlining the analytics process over time throughout the company
  – Bring in the right tools when needed and dispose of useless tools if supported
  – Communicate results in a meaningful manner and socialize analytic thinking
  – Seek out new possibilities to improve the company via relevant analytics
Great analysts are the key to high-performance and low management overhead!

• In short, they will do awesome work with modest managerial oversight!

• This is why after just a few months at Netflix, I realized this is the only type of analyst they would hire
  – In fact, they would wait months or even years rather than hire an average analyst
  – If they mishire, they will not hesitate to correct the mistake, they believe poor performers are that detrimental to the company
Sample analyst projects and value to a mid-sized public company per year

• I will illustrate an estimate of analyst value per year using three factors
  – Project type
    • Strategic- game changing for a part of the business
    • Tactical- typical requests of directors and executives typically finish in a few days or weeks
    • Day to day questions- minutes or hours to answer ongoing questions
  – Typical $’s returned per project type
  – Summarize the results for each project type across each analyst quality type
Analyst projects completed per year (mid-sized public company)

- Great analysts complete approximately 50-100% more tactical projects and day to day questions in a typical year.
- The critical difference are the number of strategic projects great analysts complete – 1 to 3 more than those of average or even good analysts.

Average project value
(mid-sized public company)

- Based on work I have reviewed over the years (performed by two analysts at multiple companies), my estimates show great analysts outperforming good and average analysts by 50-200% in results
  - Strategic projects identifying additional revenue improvements or cost savings of $100-200k for great analysts
  - Tactical and day to day questions $4,000-$45,000 more per project or question
- This difference is often overlooked in my opinion
- This is why well-trained analysts are critical, even great analysts need training!
Combining projects completed and average value, examine annual value

**Annual Project Value Generated**

<table>
<thead>
<tr>
<th>Analyst Quality</th>
<th>Strategic ($'s)</th>
<th>Tactical ($'s)</th>
<th>Day to Day Questions ($'s)</th>
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</thead>
<tbody>
<tr>
<td>Great</td>
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<td>Good</td>
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<td>Average</td>
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</table>

**Annual Projects Completed**

<table>
<thead>
<tr>
<th>Analyst Quality</th>
<th>Strategic (2 weeks - 2 months)</th>
<th>Tactical (2 days - 2 weeks)</th>
<th>Day to Day Questions Answered (1 - 8 hours)</th>
</tr>
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<tbody>
<tr>
<td>Great</td>
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**Average Project Value**

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A great analyst is worth millions more ($$$’s) than an average analyst per year!

• Staggering results!
  – One great analyst creates even more value than my casual observations indicated
    • Great analysts outperform good analysts by almost 300% and an average analyst by 700% in value!
    • $3m vs. $1.2m vs. $460k!
Costs of employing an analyst

<table>
<thead>
<tr>
<th>Analyst Quality</th>
<th>Salary</th>
<th>Benefits</th>
<th>Bonus</th>
<th>Management Overhead</th>
<th>Other Overhead</th>
<th>Total Cost</th>
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- What is the cost of a great analyst?

Cost to Employ (in K)
Great analysts cost twice as much to employ, but what about the ROI?

- Taking costs into account, great analysts are a clearly superior investment
  - Almost double the ROI of a good analyst and triple the ROI of an average analyst
Why aren’t more companies waiting for and hiring great analysts?

• They are simply hard to find
  – Job searches of 4-12 months are common, even for great companies!

• They won’t stay around at poor companies given the current growth in analytics importance

• Hiring managers with limited analyst backgrounds don’t understand how big the outcome difference is!

• Some companies are simply overly cost focused rather than return on investment (ROI) focused, so great analysts won’t be interested.
Some final thoughts

• Create a bonus structure and pay scale to attract and retain the best analysts!

• Why will companies spend $30k or more for minor software upgrades but balk at spending $2,000 on training for their analysts? This is a very poor choice in my opinion.

• Buy analysts high end hardware and dual large monitors, the return is huge for a few thousand $’s!
Some final thoughts

• There is some value in Gartner, IDC, and other firms- but don’t fall into the software arms race trap!

• See Bob Cringely for a contrarian view of firms like Gartner: "What does Gartner really DO?"

• **Tools DO matter**, but they have been emphasized excessively over the people who use them!
  – Find a balance between tools and analyst investment
About the Author

A dynamic leader and educator in the field of data visualization, business intelligence, advanced analytics, and data warehousing, Stephen McDaniel helps organizations gain the most from their data, analysts, and analytics investment.

Through Stephen’s blog, Freakalytics.com, and his books, “Tableau: from Data to Insights to Innovation in Just 8 Days“ (forthcoming, July, 2009) and “SAS for Dummies“, McDaniel expounds combining common sense and the right tools around the often frenetic world of business analytics.