Applying Concepts From Performance Management: Using R to Work With Performance Data I

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Concepts in Performance Management: A Recap

You have explored issues in the last two topics of the course that are relevant as background:

- The role and nature of non-financial metrics
    - Evaluating the suitability of metrics
- Balanced scorecard/dashboard construction: Pros and Cons
- Issues associated with reward systems
    - Use of bonus pools
    - Construction and evaluation of suitable bonus pool-based incentive systems

Concepts in Performance Management: A Recap

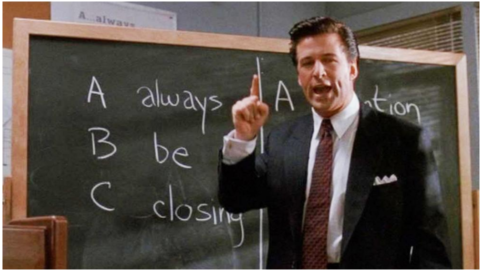
Firms hire and pay employees to do a job. Naturally, managers want to know the following: Did the employee do a ‘good’ job? Did they exert sufficient effort? Did they direct this effort toward the ‘right’ tasks?

- These questions are difficult to answer as managers cannot perfectly observe an employee’s actions (or intentions). Furthermore, outcomes (e.g., sales, profits, hours worked) are imperfect/noisy proxies for employee’s actions.
- However, managers can mitigate this ‘agency’ problem by using appropriate performance measures.

Concepts in Performance Management: A Recap

Contracts and incentive systems: Ex ante, managers can use performance measures to motivate employees to exert effort and do a good job.

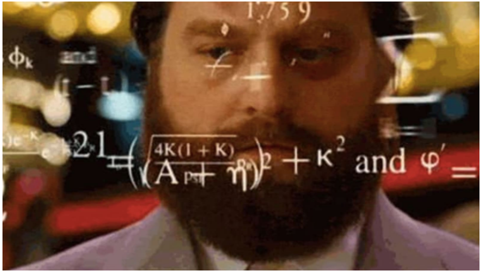
- An efficient contract aligns incentives and minimizes the risk (cost) imposed upon the employee (manager).
- Poorly-designed reward systems are costly and can motivate harmful behavior.



Concepts in Performance Management: A Recap

Contracts and incentive systems: Ex ante, managers can use performance measures to motivate employees to exert effort and do a good job.

- Bear in mind, 'complete' contracts can rarely be written (or enforced) in practice.
- We often see firms employ a range of alternative mechanisms (e.g., relational contracts, tournaments, subjective evaluations).



Concepts in Performance Management: A Recap

Performance evaluation: Ex post, managers can use performance measures to infer employee's actions (and intentions). Useful performance measures are:

- 'Informative' about the employee's actions
- Subject to minimal 'noise'
- 'Congruent' with the firm's outcome
- Low-cost to measure and verify

Concepts in Performance Management: So What?

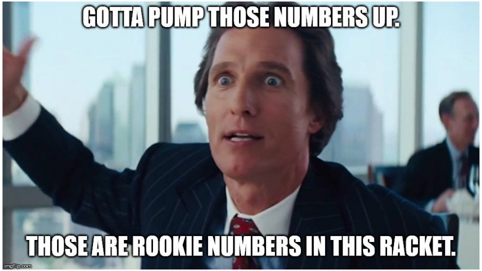
Due to poorly-designed and executed contracting and performance measurement practices:

- Firms can motivate the wrong/harmful behaviors: Wells Fargo fake accounts.
- Firms can impose excess risk on workers by punishing (or rewarding) luck: Oil shocks, CEO pay
- Firms can attract workers with the 'wrong' values: Police recruitment

Concepts in Performance Management: So What?

Due to poorly-designed and executed contracting and performance measurement practices:

- Firms can incentivize workers to take excess risks: Boeing 737 Max.
- Firms can encourage collusion or sabotage within teams of workers: Amazon peer feedback.
- Firms can incentivize workers to game or misreport measures: VW 'dieselgate'



What does this all mean? How do these concepts play out in practice?

Understanding the properties of performance measures and using these measure for performance evaluation requires managers to work with data.

- Performance measures are data, and data are costly to collect and store, tricky to clean, and challenging to analyze.
- Firms now need graduates who can 'do' data science to help design and execute performance management systems (Excel doesn't cut it).

What does this all mean? How do these concepts play out in practice?

We are going to get our hands dirty by working with a real data set of performance measures. You will learn to write code to explore and analyze this data set.

- You will see how the performance management concepts that you have studied in this class play out in the 'real world'. You will get a sense of how difficult performance management is in practice, and why firms that manage their workforce efficiently consistently outperform their competitors.
- You will learn some basic coding skills in R, plus where to look if you wish to learn more and build on these skills.