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Now is an exciting time to study managers

- 1776: Adam Smith notes that successful managers would set the "rules of the game" that would align incentives of labor with the goals of the firm
- 1970s/80s: Lots of theory, not much evidence on what managers do
- 1990s: Early data and evidence (e.g. Baker, Gibbs, and Murphy 1994)
- 2000s: Field experiments (e.g. Bandiera, Barankay, and Rasul 2010), big survey data and experiments (Bloom and Van Reenan 2007, 2010)
- 2010s-25: Multi-firm experiments, detailed investigations of one firm, multi-firm administrative data collected by cloud services... also extension of Bloom's work (e.g. Bender et al. 2018; Cornwell, Schmutte, and Scur 2021)

Roadmap

- 1. Provide three principles of the "economic perspective of managers"
 - Technological determinism
 - Skill distinction
 - Managerial self-interest
- 2. Introduce "people managers" vs "project managers"
 - Theoretical treatments
 - Broad evidence from LinkedIn
 - "Vignette" evidence from a large bank
 - Examples from the empirical literature
- 3. Recent work on what managers do
 - Hire, retain, train, motivate, monitor, allocate
 - Ouite extensive recent evidence on each
 - These papers nicely align to the principles three big principles

Principle 1: Technological Determinism

In the long run, competition leads firms to converge around an efficient production technology, either by firm adaptation or creative destruction. What workers and managers do ultimately depends on how they fit into these technologies

Three Principles 0000000000000000

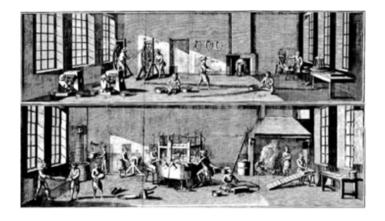


Figure: Adam Smith's Pin Factory



Figure: An Indian Garment Plant, from Bloom et al. QJE 2013



Figure: Modern car factory

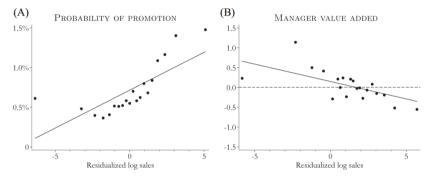
- The best evidence managers matter: the existence of managers themselves
- Markets exist where the price mechanism dominates
- Firms exist where agency dominates (see e.g. Alchian and Demsetz 1972, Gibbons 1999)
- Firms do so by imparting managers with real authority (e.g. Aghion and Tirole 1997)
- Much evidence on "persistent productivity differences," also by present company! (ask Daniela Scur about her paper on school productivity)

The Three Principles

Principle 2: Skill distinction

In the short run, managers may exert discretion over how work is carried out, who is selected to do tasks, and how to motivate workers. This potentially involves the application of many skills in many situationally unique combinations. Just as workers can be a good or bad match for a firm, workers and managers can be a good or bad match for their position in the firm.

- People skills matter for outcomes like turnover (Hoffman and Tadelis 2018)
- People and technical skills may be complements (Deming and Kahn 2018)
- However, firms use promotions as both an incentive in addition to matching
- In general, firms cannot simultaneously optimize over both



 $\label{eq:Figure II} Figure \ II$ Correlates of Worker Sales Performance

Figure: Benson, Li, Shue QJE 2019

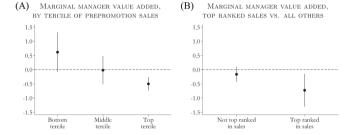


FIGURE III

Manager Value Added for Marginally Promoted Workers, by Sales Performance

Figure: Benson, Li, Shue QJE 2019

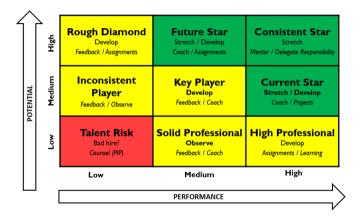


Figure: Benson, Li, Shue forthcoming AER



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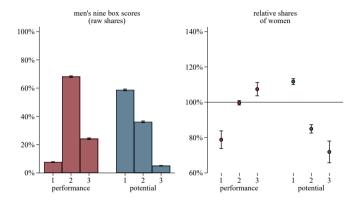


Figure: Benson, Li, Shue forthcoming AER

- Fahn and Klien (forthcoming JOLE) theoretically model a rationalization of the Peter Principle based on exploitation contracts
- Weidman et al (WP) have a rich lab experiment replicating the Peter Principle and showing that testing can improve the quality of matches to manager-like skills
- Dual career ladders remains a good topic for further research

Principle 3: Managerial self-interest

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Just as managers manage self-interested workers, principals manage self-interested managers. Managers may respond to monetary or nonmonetary incentives, but their interests are not presumed to be equivalent to the firm's. This poses a dilemma for firms because managers possess potentially-valuable local information, but delegating decisions to managers also enables bias. Principals set policies to encourage managers to apply local information productively.

Principle 3: Managerial self-interest

- Managers are self-interested, and it's up to the firm (the principal) to align the manager's incentives
- Managers will otherwise pursue an objective like, "maximize my own benefit, subject to the contraint of being caught and fired"
- Some of my favorite evidence are papers that show managers trade friends for productive workers in the prescence of incentives (Bandiera et al 2010, Hjort 2014)

Basic Idea

- **People managers** are primarily responsible for hiring, training, motivating, and retaining... but they are less-so contributors themselves.
 - Locus of responsibility is with the worker.
 - Performance is measured at level of the subordinates
 - Manager productivity typically estimated with AKM models
- Project managers pursue a collective objective with a project team. They may have input over hiring, but there's a lot of learning by doing, monitoring, and task allocation on the job.
 - Locus of responsbility is with the manager
 - Performance is measured at the level of the team
 - Manager productivity typically measured at the level of the project team/ establishment/ firm

Vignette

Table 1: People/project manager typology within a large bank

	Wealth Management	Risk Management
Type	People managers	Project managers
Common job description terms	Hiring, termination, and performance reviews of direct reports; onboard- ing; reporting; leadership; coaching; directly and indirectly supervising; performance measurement; driving enablement priorities; employee en- gagement; communication	Defining and implementing a risi framework; development of recovery plan; developing stress-testing state ments; ensuring regulatory compli- ance model; oversight; quality assur- ance; ensuring consistency; advising senior management
Structure	11.89 subordinates per manager	4.39 subordinates per manager
Subordinate pay	47.9% incentive pay $(100%$ for wealth advisors)	4.2% incentive pay
Manager pay	24.0% incentive pay	7.5% incentive pay

NOTES: Common job description terms come from our review of job descriptions and job advertisements. Structure reports the average number of subordinates reporting to first-line managers in the corresponding division. Subordinate pay is the average share of incentive pay (including individual and group-level commissions and bonuses) for workers and managers.

Figure: Benson and Shaw, Forthcoming ARE

LinkedIn

Table 2: Top skill elements within management skill clusters

Rank	People Management	Project Management
1	Management	Project management
2	Leadership	Strategic planning
3	Training	Team leadership
4	Team building	Negotiation
5	Human resources	Project planning
6	Performance management	Business strategy
7	Employee relations	Strategy
8	Employee training	Budgets
9	Hiring and onboarding	Product development
10	Employee engagement	Business planning

Notes: The table combines hiring and onboarding into one skill and the project management and strategic planning skill clusters into one cluster labeled project management.

Figure: Benson and Shaw, Forthcoming ARE

 $FIGURE \ 1 \\ LinkedIn \ skill \ clusters \ and \ their \ connectedness \ among \ managers$

LinkedIn Skills Network

- People managers is most tightly connected to the cluster sales/business
 development/account management, followed by marketing/marketing
 strategy/customer relationship management. Notably, sales and marketing are
 arguably the areas where results are most easily measured at the level of the
 individual contributor. Other functions most commonly listed with people
 management skills are those for which individual performance is relatively measurable.
- Project managers are most uniquely connected to safety management systems/mining/occupational health (the second most co-listed cluster is cited 22.8% less often), engineering/project engineering/commissioning (20%), and testing/automation/electrical engineering (19.8%). The five largest skill clusters that most commonly co-list project management are all in engineering or energy.

Example empirical approach: People managers

(from Benson, Li, Shue 2019)

A manager's performance is her value-added to subordinate performance (Abowd et al. 2002; Lazear, Shaw, and Stanton, 2015)

$$Log(1 + sales_{imft}) = \delta_i + \delta_{f \times t} + \delta_m + Xb + e_{imft}$$

- Estimate a regression at the worker-month level
- Worker i, under manager m, in firm f, in year-month t
- Control for worker FE, firm x time FE, tenure and team size
- Manager performance = δ_m

A good manager is one under whom subordinates have higher sales, relative to their performance under prior or later managers, adjusted for firm-time trends.

Instrument strategy: use firm's promotion rates (excluding own manager's promotion) as an instrument to identify marginally promoted workers.

Examples of papers that look at people managers

- Lazear, Shaw, and Stanton (2012) tests whether individual productivity of tech services workers varies across bosses, and estimates the MRPL for managers also corresponds to variation in their wages
- Benson, Li, and Shue (2019) find that the productivity of sales workers declines after they receive a new boss who was formerly a better sales worker

Examples of papers that look at people managers (Bertrand and Schoar 2003)

For all of the corporate variables y_{ijt} considered above, except investment to cash flow sensitivities and investment to Q sensitivities, we estimate the following regression:

$$y_{ijt} = \beta X_{it} + \delta MBA_j + \eta Cohort_j + \gamma Tenure_j + \alpha_i + \lambda_t + \epsilon_{ijt}$$
(3)

where i indexes firms, j indexes CEOs, t indexes time, X_{it} is a vector of firm characteristics, MBA_j is a dummy variable that equals 1 if CEO j completed an MBA and 0 otherwise, $Cohort_j$ is the birth cohort of CEO j, α_i are firm fixed effects, λ_t are year fixed effects and ϵ_{ijt} is an error term. Also included in equation (3) is a control for the number of years the CEO has been in office, $Tenure_j$. This control should account for possible entrenchment or career concern effects. Finally, we allow for clustering of the error term at the individual manager level.

Examples of papers that look at project managers

- Adharvyu (2023) find general indicators of a manager's ability to provide attention and control are strong predictors of productivity on the manager's assigned production line
- Metcalfe et al. (2023) estimate the manager-specific component of performance on a retail store's performance (no individual data, but two store-level outcomes)
- Bertrand and Schoar (2003) estimate the CEO/CFO-component effect on publicly-traded *firms'* performance and practices

How can managers create value?

- **Hiring**. Better managers hire better workers.
- **Retention**. Better managers retain workers (or better workers).
- subordinates over time.

Training. Better managers increase the permanent productivity component of

- Motivation. Better managers increase the time-specific component of subordinates.
- Monitoring. Better managers detect shirkers.
- Allocation. Better managers observe workers qualities and their potential match for other jobs.

Hiring

- Hoffmann, Kahn, and Li (2018) use data from job testing provider to find managers underperform algorithmic hiring recommendations.
- Mocanu (2022) finds formal job testing procedures enhanced matches and reduced bias among Braziliam civil servants.
- Benson, Board, and Meyer-ter-vehn (2024) finds managers get better signals of same race hires (esp for Hispanics)
- Others find a "price for prejudice" in hiring, and select on "cultural fit" with manager (Kuhn and Shen 2013, Shukla 2022)
- Benson and Lepage (WP) find managers update productivity beliefs across races based on idiosyncratic personal hiring experiences

Hiring, my take

- You could imagine a theoretical setup whereby "high ability" managers get a more precise signal of a job candidate's productivity
- My view- not really good evidence for this
- Rather, there's far clearer evidence (e.g. from referral literature) that you get private signals of ability just by observing people on the job, not in interviews

Retention

- Hoffman and Tadelis (2021) find better "people managers" (based on a test) had lower subordinate turnover in a large high tech firm
- Friebel et al. (2022) did a field experiment at retailer with 193 shops that effectively led managers to reallocate attention to turnover, possibility at expense of other activities (multitasking applies)
- Alan et al. (2023) finds female turnover is lower under female managers, due to greater investments in female bosses in social relations
- Fenizia (2022), using data on managerial rotations among Italian civil servants, finds 1SD better managers enhance office productivity 10%, largely through selective attrition
- Sajjadiani et al. (2023) finds positive workplace climate reduces high performer turnover contagion

Retention, my take

- Retention is a arguably an "easier" outcome to measure, vs hiring or productivity
- Retention is usually positively correlated with productivity where data are available
- We should be emphasizing selective retention, which is a bit harder (e.g. Fenizia 2022, Sajjadiani et al 2023)

Training

- Sandvik et al. (2023) find mentoring enhances productivity of subordinates, but treatment effect is largely among those who would opt out!
- Wu and Liu (2021) find managers trained in mentoring, and treated with algorithmically predicted turnover rates of subordinates, were able to reduce turnover
- Espinosa and Stanton (2023) find that centralized training reduces managerial attention to training, leading them to allocate time to other productive activities
- Adharvyu et al. (2023) find that providing soft-skills training to front-line workers enhances productivity among co-workers
- There's a much larger literature on high performance work systems on importance of training and complementary practices (e.g. Ichniowski et al. 1997)

Motivating

- Interpretation: the manager increases the productivity of subordinates at the period the manager is assigned to the worker
- This is the most common and natural approach, used in AKM/ manager value added (Lazear et al. 2015; Benson et al. 2019; Weidmann 2024)
- Positive assortative matching is a natural prediction if high ability managers and workers are complements (e.g. Rosen 1981; Tervio 2008; Gabaix 2008)
- Surprisingly little evidence of positive assortative matching, and the reverse may have more empirical support (Adharyu 2020; Metcalfe 2023; Cowgill 2024; Bandiera et al. 2009).
- Negative assortative matching may be more characteristic of weak incentives, so managers hire preferred workers subject to a minimum performance constraint (e.g. Bandiera et al. 2009)

Monitoring and evaluation

- Monitoring interpretation: a high ability manager is more likely to detect shirkers (e.g. in Shapiro-Stiglitz). This makes them higher productivity.
- Evaluation interpretation: manager gets a better signal of what the worker is good at
- Minni (WP) finds better people managers match people to their talents
- Haegele (WP) finds managers have an incentive to obfuscate high potential workers to talent hoard
- Benson, Li, Shue (2025) find managers' ratings of potential predict future performance
- Adharvyu (2022) and Weidman (WP) find measurements of managers' people skills enhance their ability to reallocate workers across tasks

Monitoring and evaluation

- Monitoring interpretation: a high ability manager is more likely to detect shirkers (e.g. in Shapiro-Stiglitz). This makes them higher productivity.
- Evaluation interpretation: manager gets a better signal of what the worker is good at
- Benson, Li, Shue (2025) find managers' ratings of potential predict future performance
- Many other papers find the same (Adharyu et al 2022, Frederickson et al. 2017, Moers et al. 2006, Grabner et al. 2024, Kunneke et al 2024)
- Big takeaway: managers private learn workers' ability by observing them on the job

Allocation

- Allocation interpretation: Basically a job search model with a job-worker match productivity component, but within the firm. Better managers may get more precise private signals of potential match quality components
- Minni (WP) finds better people managers match people to their talents
- Haegele (WP, but likely AER) finds managers have an incentive to obfuscate high potential workers to talent hoard
- Adharvyu (2022) and Weidman (WP) find measurements of managers' people skills enhance their ability to reallocate workers across tasks
- Big takeaway: Lots of good new work in this area. And we still have more to learn about what makes a good manager

Concluding remarks

- Three principles of the economics of managers: technological determinism, skill distinction, and managerial self interest
- People managers are distinct from project managers
 - Management depends on locus of accountability; subordinates vs manager
 - The distinction emerges in theory, empirical approaches, LinkedIn, observation
- Managers could potential create value through hiring, retention, training, motivation, monitoring, or allocation; recent papers have provided themes
- It's an exciting time to study managers
 - Theoretically, they make economic decisions in the shadow of market prices
 - Empirically, new data beget new opportunities

Concluding remarks

Thanks! Alan Benson bensona@umn.edu

Paper is available on SSRN and NBER:
Benson and Shaw, 2025, "What do managers do? An Economist's Perspective."
Forthcoming, Annual Review of Economics.

Benson and Shaw