

Transaction Cost Analysis in Marketing: Looking Back, Moving Forward

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Locating TCA Within Marketing

4Ps

Product

Price

Promotion

Place (channels)

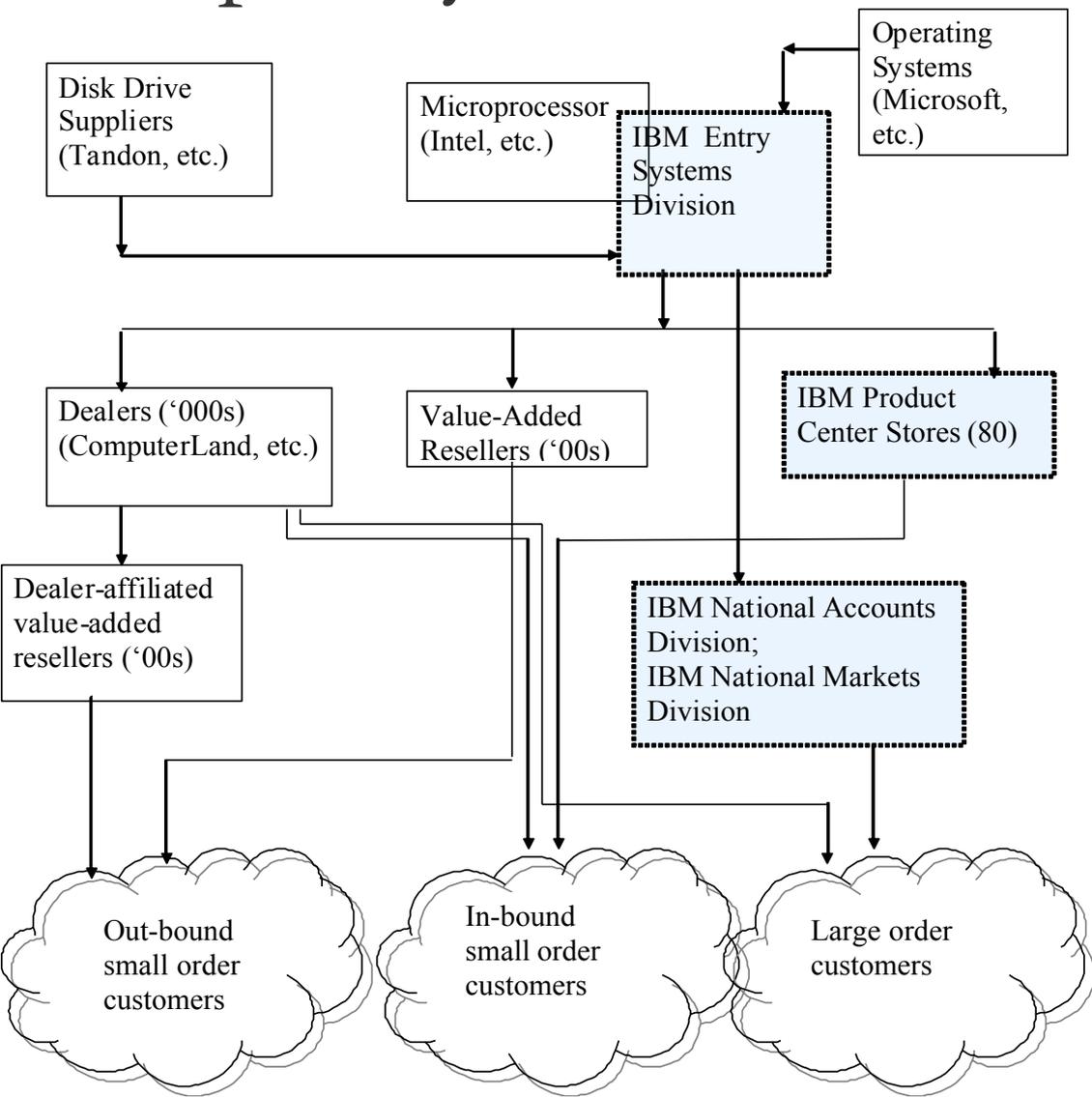
Place (channels) is the least well understood despite its complexity and importance.

Channels Research Streams (late 70s)

Lou Stern and his colleagues inspired empirical research into vulnerability and power in inter-firm ties; e.g. firms sought control via the exercise of power over channel partners.

Pete Bucklin and colleagues offered practice-based heuristics; e.g., convenience, shopping and specialty goods align with intensive, selective and exclusive distribution channels respectively.

Complexity of Channels Decisions



- IBM made 30% of PC in-house, bought 70% from outside sources
- Co-branding between IBM, Intel, Microsoft
- IBM-owned resellers competed with 3rd party resellers
- Different contractual resale restrictions across reseller types, but honored in the breach (massive “diverting”)
- Non-linear wholesale prices differed across types of resellers

Game-Changing Events (mid-late 70s)

Oliver Williamson blended economics, organizational behavior and sociology to offer an efficiency explanation of vertical ties between firms. Make vs buy is the canonical issue.

GTE-Sylvania doctrine acknowledged possible efficiency of non arms length vertical ties

TCA Methodology in Marketing

Census-style archival data were largely useless, so primary data were essential.

Torger Reve's dissertation (1979) laid the foundation for operationalizing and measuring TCE constructs. Karl Joreskog's statistical models combining econometrics and psychometrics applied to "key informant" survey data of organizations proved crucial.

Tracking the Origins of S-A-M

Safeguarding: Under-investment in at-risk assets

Adaptation: Exploitation of at-risk party during renegotiation

Measurement: Under-supply of non-verifiable activities

OEW's JLE 1979 paper was the most influential paper.

Initial Focus: Make vs Buy

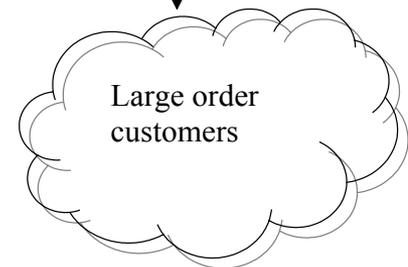
Erin Anderson's dissertation (1981) showed that agents' specific investments, rapid revisions to plans and poorly measured outputs predicted vertical integration of the selling function.

Aside: Initially rejected from Journal of Marketing Research; accepted at Marketing Science.

Among all-time most cited papers in that journal.

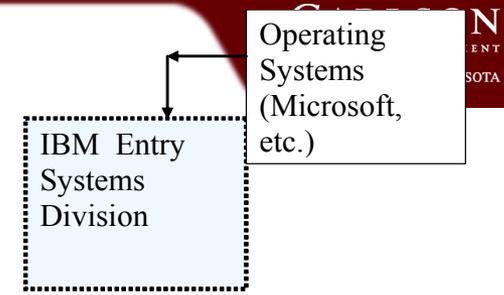
IBM Entry
Systems
Division

IBM National Accounts
Division;
IBM National Markets
Division



Initial Focus:

Make/ Ally/ Buy



Tom Noordewier's (1986) dissertation showed that relational ties improved measured productivity (% on-time deliveries), but only in volatile settings.

Jan Heide's dissertation (1987) showed that alliances and other "close" ties can be unpacked according to TCE principles.

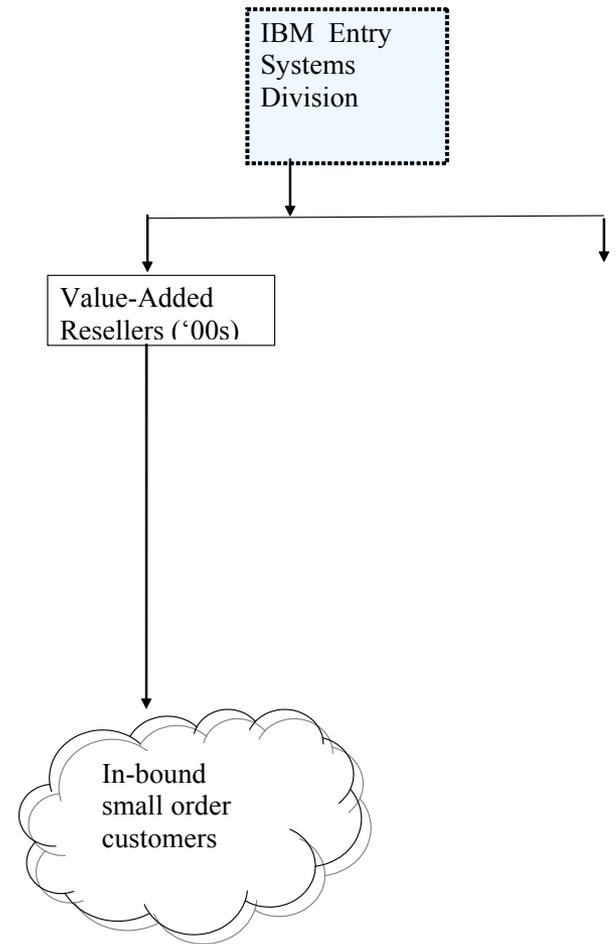
Takeaway: Non-verifiable activities are as important as specific investments. Adaptation to disturbances are difficult to explain. Norm perceptions are fragile.

Horse Race :

Power/Dependence vs S-A-M

Heide and John (1988): Small 3rd party resellers develop (seemingly wasteful) strong downstream social bonds with end-users to safeguard their upstream at-risk investments.

Dependence avoidance (power) logic of Pfeffer and Salancik (1978) is empirically trumped in these data.



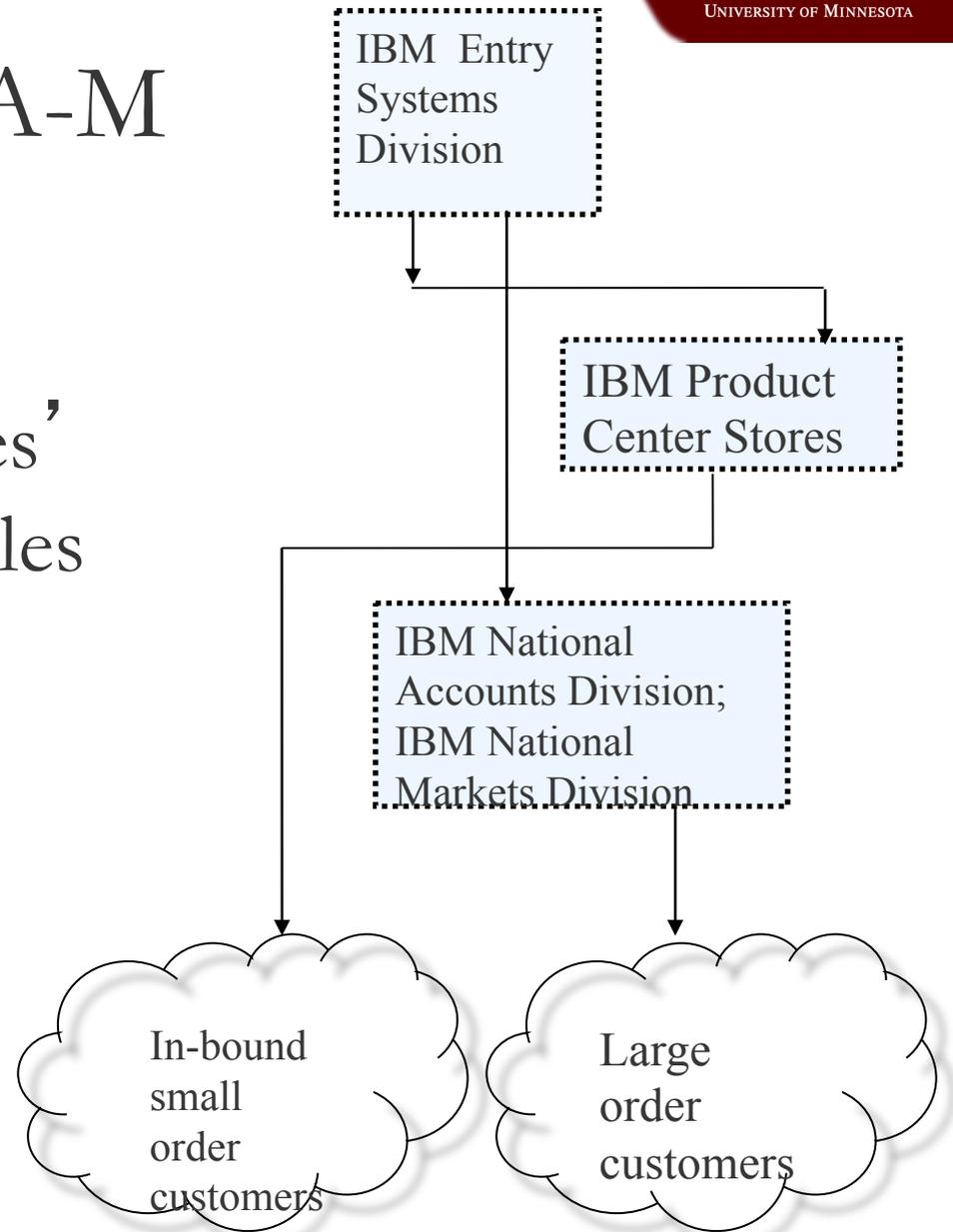
Horse Race:

Agency Theory vs S-A-M

John and Weitz (1989):

Employers pay flat wages/
salaries to induce employees'
effort on poorly verified sales
tasks

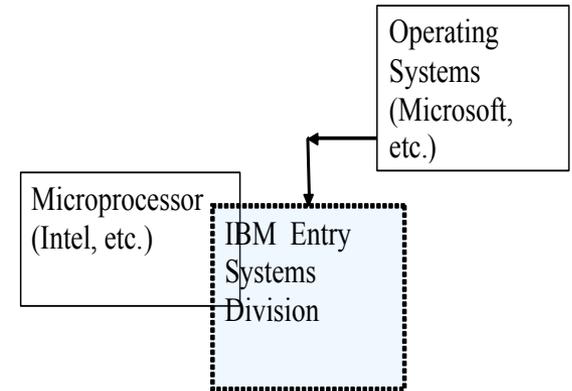
Takeaway: AT's
incentive-insurance
trade-off is empirically
trumped in these data.



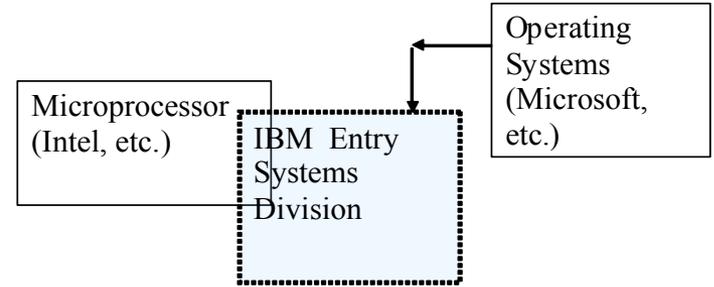
Co-Existence:

Branding Theory and S-A-M

Branding theory predicts assortative matching in co-branding, yet Mrinal Ghosh finds little-known component suppliers are more likely to write co-branding contracts with well-known OEMs in response to their customization investments; e.g. *Zenith* fuel injectors in *Nissan* trucks.



Co-Existence: PR and S-A-M



Stephen Carson's dissertation (2000) showed that clients induce more creative, (but poorly measured) RD&E work by sharing IP ownership rights with contractors, which occurs in the presence of costly ex-post bargaining.

Co-Existence: Porter Meets OEW

Microprocessor
(Intel, etc.)

IBM Entry
Systems
Division

Shantanu Dutta's dissertation (1990) demonstrated that monopolists in the lab offered royalty-free "second source" licenses to competing firms to safeguard customers' at-risk investments, but desisted at sufficiently high levels of rents.

Mrinal Ghosh's dissertation (1997) showed that firms with stronger downstream market positions were less likely to develop "closer" supplier ties to induce specific investments

Looking Forward

Two thoughts

1. Taking non-standard preference seriously (loss aversion, reference points, etc. in an organizational context; e.g., Arrunda, 2009)
1. Quantifying value of alternative policies (folding in EIO techniques)

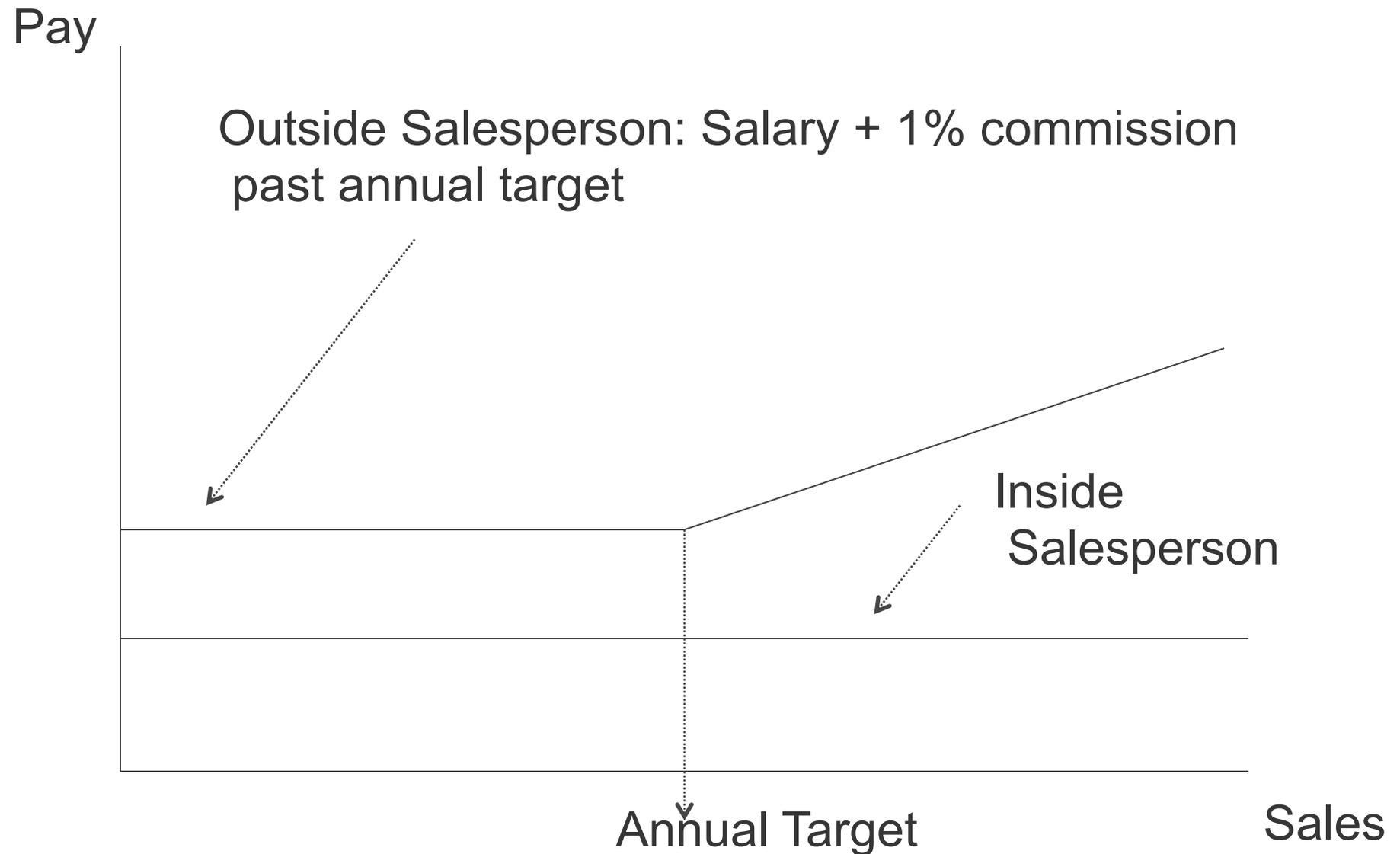
Structural Analysis of a Field Intervention

Firm uses a two stage sales process to solicit business from trade show exhibitors. Each outbound salesperson has an assigned territory, and is supported by an inside salesperson.

Lead Generation: Using a database of upcoming trade-shows, the inside salespeople calls prospects to set up appointment for the outbound salesperson. Measured output is number of appointments generated each month.

Conversion: Outbound salesperson visits prospect on site to close the sale. Measured output is sales booked each month.

Current Pay Plans



S-A-M:

Stronger Incentives go with Clearer Measures

Task	Metric	Weak incentive (pay unrelated to output measure)	Intermediate incentive (pay related partly to output measure)	Strong incentive (pay solely on output measure)
Shelf space for new product	ACV	\$ per hour worked by broker	\$ per hour plus pay per ACV point	\$ per ACV point
Dealer service quality	Satisfact- ion Survey Scale	Fixed monthly fee to dealer	Monthly fee plus incentive per scale point	\$ per ACSI point
Operating System Developm- ent	KLOC	Time & Materials contract	Time & Materials plus \$/KLOC	\$ per KLOC

Additional Theory:

Complementary vs Substitutable Stages

If the stages of the selling process are purely substitutable, then pay incentives only for the task with the clearer output measure.

If the stages of the selling process are purely complementary, then pay incentives to both stages regardless of clarity of measures

Our firm? Managers think lead generation and conversion are both substitutable and complementary

Field Intervention

Changed outbound salesperson to salary plus lump-sum bonus for monthly target plus 0.6% commission beyond monthly target. Previous plan was salary plus 1% commission over annual target

Changed inside salesperson to salary plus commission per appointment.

Obtained data for previous two years and six post intervention months

Traditional Evaluation

$$y_{it} = \beta_0 + \beta * POSTD_t + \sum subjectdum + \sum perioddum + \varepsilon_{it}$$

	Monthly Sales	Monthly Appointments
Pre	100	100
Post	133	117

Structural Analyses

Many other plans could have been used.

E.g., recall we introduced a bonus for outbound salespeople for target achievement. What if we removed the bonus and only paid a commission over target?

What if we had a fixed compensation budget? How to distribute this between inside and outside salespeople?

Requires “structural” estimation techniques to get at a) responsiveness of effort to incentives and b) extent of complementarity between leads and closing tasks

Results

1. Estimated responsiveness of effort to incentives, and the degree of complementarity between stages
 2. Used estimates from (1) to Compare the following would-be plans:
 - a) **No inside commissions;** bonus plus commissions beyond target for outside salesperson
 - b) Pay inside commissions; bonus for outside salesperson for target achievement
 - c) Pay inside commissions; commissions beyond target for outside salespeople.
- Plan (a) is worse than (b) or (c). Why?

Insights

It is important to pay some incentive to the inside salesperson as in (b) and (c)?

Because only about 70% of the effort is substitutable. The rest is complementary. More conversion effort can overcome insufficient appointments, but not totally.

For illustrate, an outside salesperson achieves 1.8% more in sales with 1% more money in incentive pay, but but giving the inside and outside salesperson each 0.5% commissions increases sales by 4.3%

If budget is limited, pay the outside salespeople first as 70% of the task is substitutable.

Conclusions

TCA has become the dominant lens for understanding inter-firm ties. S-A-M finds robust empirical support, and has won important horse races, and co-exists/adds insight to complementary theories.

Going forward,

1. We need to study human behavior in organizational contexts taking into account our hard-wired tendencies.
2. We need to proffer quantified advice about policies to managers using structural analysis techniques.