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Evidence from Fast Fashion Industry

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Abstract

Many companies turn agile in response to the rapid changes in market, technology, and workforce. An agile organization consists of many amoeba teams - small teams responsible for their own operation decisions and performances. We identify the challenges in managing amoeba teams based on evidences from a leading online fast fashion company. One challenge lies in achieving a desirable team structure with each team member assigned to a unique role: a designer, a marketing-sales operator, a support. The fully staffed (3-person) teams significantly outperformed the understaffed (2-person) teams that required shared roles. Furthermore, the reduction in productivity not only came from human capital constraint, but also team incentive design. Specifically, a regressive team bonus plan created disincentive for a 2-person team to accept the third member. Another challenge is on the bonus allocation among the team members to balance pay leadership with concern for parity. Among the 3-person teams, those with sales leadership (the marketing-sales operator receiving the highest bonus) significantly outperformed those with design leadership. This reflects the importance of market orientation in the fast fashion industry. However, pay disparity within a team undermined some teams' performance. Overall, these results underscore the importance of new management practices for agile organizations.

Key words: Agile organization, Amoeba teams, Team management, Incentive plan

The advances in information technology, including Internet and mobile devices, have accelerated the information exchange between sellers and buyers. As a result, online consumers have become increasingly impatient. Windows of opportunities to engage customers can disappear without a quick response.¹ Meantime, companies have improved the capability to collect data and predict market needs. However, the new information capability will not lead to improved profitability unless the companies adapt their internal organizations accordingly.² If information does not flow smoothly within an organization (e.g. from sales to design) or employees does not collaborate in a timely matter, a company cannot be data-driven in translating information into meaningful business outcomes such as new products for emerging needs or better inventory decisions to reduce backorders.³

The demand from the employees are also changing. In addition to faster turnover and shorter job tenure happening in the workforce, a recent CNBC report (March 5TH, 2019) shows that Millennials and Gen Z's are increasingly focused on self-development of skills and responsibilities, as well as flexible work roles. Such trend is likely to continue after the Covid-19 pandemic and work from home policies.

Many companies turned their organizations agile in response to the pressures from customers, employees, and technologies. Surveys conducted by Deloitte and McKinsey showed that 90% of senior executives considered going agile as their high priority.⁴ A core feature of an agile organization is empowered teams with end-to-end accountability.⁵ These teams are market-facing, each containing a small number of the specialists from critical functional areas and responsible for their own operational decisions and performances. Although the term "agile organization" became mainstream only in recent years with Jeff Bezo's famous "two pizza's rule" ("if a team couldn't be fed with two pizzas, it was too big"), similar concepts and practices have

existed much longer. A well-known example is amoeba management method pioneered by Inamori and implemented by approximately 700 companies including Kyocera and Japan Airlines.⁶⁷ Amoeba management stipulates that the entire organization must be divided into small units ("amoebas") and each amoeba should be an independent accounting unit that can buy and sell. This enables and motivates the specialist employees within an amoeba team, e.g. a sales and a designer, to share information and reach quick solutions in response to the dynamic market. In contrast, in the conventional structure with function departments, the communications are often hampered by the need to go through the department managers.

The emergence of agile organizations and particularly the focus on small amoeba teams are expected to bring new challenges in team management. Common team management issues include team size, team structure, and incentive designs. Extant literature suggests that team size may have a curvilinear relationship with productivity that too few or too many members reduce performance. Large teams incur higher coordination cost, relational loss and motivation cost of social loafing, whereas small teams lead to more engagement, accountability and productivity. But how small can teams get and how to manage them effectively?⁸

Psychology research shows that 3-person groups are necessary and sufficient to perform better than the best individuals and 2-person groups on highly intellectual problems.⁹ In fact, a surprising new study published in *Nature* finds that small teams (consisting no more than 3 person) do more innovative work than large teams do in science and technology. In the business world, small team management, though an iamilpular cnce, in laci empi0 0 0.24(1)0.2 () JTJ ET Q 1 1 sc 71

Iucrative in seeing the big picture than a larger group of specialists with narrow perspective; On the other hand, boundary in such small team setting is less clearly defined, and team members may fall into the "transparency trap" of reducing productivity and stalling innovation, especially when responding to an urgent need. ¹¹

Transparency also poses new challenges in incentive design. In typical agile/amoeba organizations, because incentives are calculated based on team performance and individual contribution term after term, team members have more knowledge and more anxiety on each other's salary over time than in traditional organizations. While pay disparity is common in most workplaces, it may have positive or negative impact on productivity. For example, a recent research shows that finding out their managers got paid more would make employees work harder than who did not find

own profits and losses. Each team had their own physical spaces, sitting nearby in cubicles and communicating face to face. A fully staffed team consisted of *three* people, a designer, a sales operator, and a support. The other functional areas, including marketing and visual production, were organized by the conventional department system.

Insert Figure 1. A Diagram of Organization Structure

Role #1: Product design. The company offered fashion products for all four seasons: summer, fall, winter, and spring. The average shelf life of a product was 14 days. As common in the fast fashion industry, this company was a follower of the fashion trend. Their designers drew inspirations from a huge database of product designs. Successful designers often tested "sample

Role #2: Marketing-sales operation. Each team's marketing-sales operator managed the team's online sales. During a fashion season, a team's sales operator decided what products to be available in the online shelf, which products to participate in the company-wide promotional events, and when to move some products to the discount channels. The sales operators constantly interacted with customers, monitored product sales, and checked market trends. The sales operators became particularly busy during the season-changing months - the time to handle remaining inventories of the old season and put on products for the new season.

Role #3: Support. The support person coordinated with the company's visual department in creating the shots for each product design. This involved identifying the right photographers and models and scheduling the work according to the designer's requests. The support person also worked with the production and logistics departments to schedule the production of design samples, pre-season orders, and in-season orders. This support person made sure that all stages of pre-season productions carried out seamlessly, and all the products ordered during the season available on time. Usually, an understaffed (2-person) team did not have a teammate designated for the support role. The designers and sales operators had to share the support duty.

Regulating the teams

The division manager regulated the teams through budget, inventory, and pricing decisions. First, the division manager decided the operating budgets for the teams to limit the risk. The budgets restricted the number of new products a team could introduce and the amount of inventory a team could carry. The size of budget typically increased with a team's past performances, thus reflecting the company's confidence in the team's ability in product design and sales operations.

The division manager monitored the product sales of all teams and identified the bestselling products. The teams were permitted to make additional orders for the best-selling

quota design reflects the management belief that the learning curve slowed down after two years and became saturated after five years. Finally, the company adjusted sales quota by a season index (winter, spring, summer, and fall). Season index ranged from one to two; the sales quota for a team in the high season was twice as much as that in the low season.

The company offered a *regressive bonus rate scheme* that was standard for all the teams.¹⁴ The regressive scheme contained lower bonus rates for higher buckets of above-target profits, ranging from 3% to 0.2%. The bonus scheme ensures that the total bonus earning always increases with the amount of above-target profit. Although the bonus was much lower for the higher buckets, the company believed that its employees earned more than the market level.

The team members shared the team bonus according to a pre-specified allocation. The company's Human Resource department, along with the division manager, decided the allocation percentage for the team members. The team member allocated with the highest bonus percentage was generally perceived as the team leader. In deciding the bonus allocation, the company considered each employee's attitude, ability, and contribution. Naturally, team size affected

member team. The rest 41 observations had team size at

On average, the teams added about 20 new SKUs each month. This ranged from zero when no new product was added to the online shelf during the month, to 160. Finally, the average discount rate was 10.1%, with the range from 2.38% to 21.4%.

To explore the challenges in team management, we examine the correlation between team performance and team characteristics. We have run a series of regression analysis with team monthly sales as DV and explanatory variables including team size, team leadership, and team pay disparity. The control variables including team experience, number of new SKUs, and discount rate, and month fixed effects. We include the regression results in Table 2, where Design Leader is an indicator that equals to 1 if the team's designer was the team leader and 0 if the sales operator was the team leader, 3-person Team indicator is equal to 1 if the team had 3 members and 0 if the team had 2 members, and Pay Disparity is the range of bonus percentages in allocation. For control variables, we present only the result for Team Experience which is a team characteristic. Not surprisingly, all else being equal, the more experienced teams produced a significantly more sales than the less experience teams. We checked the robustness to different DVs (monthly sales, the log transformation of monthly sales, sales units, sales rankings (ranking all teams from 1 to 58)) and alternative samples (excluding the months when a team experienced either addition or turnover). The results are very consistent.

Insert Table 2. Team Performance vs. Team Size, Leadership, and Pay Disparity

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The dominance of 3-person teams over the 2-person teams reflects the substantial benefits of specialization over a small loss in coordination cost. In a 3-person team, individual roles are clearly defined by design and each team member works as a specialist. In contrast, a 2-person team is understaffed as two people need to fill three roles. In our observations of 2-person teams, either one or two people would take more than one role and work as a generalist. For instance, a designer also coordinate

department. This structure offers flexibility in staffing; for instance, when one sales operator leaves the company, the department manager can find another to temporarily cover up. However, under the Amoeba structure, a specialist in another team would be unwilling to help, nor would the other members of the team be willing to accept a specialist from the other team.

Managerial implications. Meeting the staffing challenge requires new practices in employee recruiting and training. In the data, some teams had two members throughout the entire year. This was partly because the company did not have the pipeline of competent specialists. Another reason for the persistent understaffing was the existing members' unwillingness to accept the third member. Adding a new and inexperienced member may reduce the team performance per employee. Moreover, the regressive team bonus scheme, which provided a diminishing bonus rate, reduced the team's incentive to increase sales. Furthermore, adding a third member could significantly reduce each team member's percentage share of team bonus. A back of envelope analysis using the average statistics from Table 3 indicates that the members of an average two-person team would be worse off adding the third member.

consistent with the amoeba culture. In the context of staffing, such a scheme would motivate the 2-person teams to accept the new member and thus help these teams to reach full potential.

Challenge #2: Balancing the leadership with equity in incentive design

An employee's compensation depends on the size of team bonus determined by the regressive team bonus scheme and the bonus allocation percentage within the team. The division manager worked with the HR department to decide the allocation for each team. The allocation decision has two conflicting goals: leadership and equity. On the one hand, the teammate with the highest allocation percentage was implicitly regarded as the team leader. Monetary compensation, in addition to earning economic values, reflects the recognition of an employee's contribution to team performance. Thus, the allocation for the team members should be differentiated and the team leadership should be identified according to the relative contributions from the team members. On the other hand, the bonus allocation creates pay disparity within a team. Team members with lower allocations perceive smaller return from their efforts and thus can be more reluctant to collaborate or expend extra efforts when needed. Such impediment to efforts would reduce the team's performance.¹⁵¹⁶ The problem of pay disparity is not unique to the amoeba organizations but it definitely becomes much more salient within the small teams.

Design or sales team leadership? Since the design and sales operation are two primary team roles, all teams were led by either a designer or a sales operator. Designers are most familiar with the product features and they lead the teams in product development. A team cannot succeed in a season without its designer creating some best-selling products. During the season the sales operators become more prominent as they interact with the customers and know the market feedback. A team's success depends on correctly sensing the market trend and quickly

with sales leadership substantially outperformed those with design leadership.

else being equal, those teams with a small pay disparity earned more monthly revenues of RMB 167, 324, in comparison to the teams with a medium and large disparity. The results are robust when excluding the observations with changes in team members.

The results offer some (weak) evidence that a team's performance could benefit from a very small disparity. In a small team, pay inequity is very transparent and salient to the teammates. With small income disparity, the teammates perceive the compensation as virtually equal. Thus, the disparity matters only to the extent that a team's members can be perceived as equal based on bonus allocation percentages.

Managerial implications. Despite the benefits of sales leadership discussed above, not all the company's 3-person teams were led by the sales operator. As the company was growing and new teams were formed, they created some 3-person teams consisting of an experienced designer and a less experienced sales operator. Given the same level of total team experience, on average a team led by a more experienced sales operator outperformed those led by a more experienced designer. Continuing the suggestions for the first challenge, the company should proactively recruit and train the new employees in anticipation of turnovers. Moreover, this effort should put greater emphasis on the sales operation role.

Among the two-person teams, however, team performance is no longer significantly related to the leadership role being sales versus design. Since each team member's role turns to be more general and less specialized, the comparison in their relative contributions becomes ambiguous. As a result, the effects of leadership designation discussed earlier are no longer

Transitioning such teams to a 3-person structure to reach the full potential would require additional considerations.

	All Observations				Months without change in team members	
	(1)	(2)	(3)	(4)	(5)	(6)
	Sales	log(Sales)	Sales	log(Sales)	Sales	Sales
Design Leader	-379, 404 ^{***}	-0.14 ^{**}	-375, 616 ^{***}	-0.15 ^{**}	-357,673 ^{***}	-334,478 ^{***}
	(-3.657)	(-2.270)	(-3.598)	(-2.381)	(-3.060)	(-2.841)
3-person Team	809, 590 ^{***}	0.59 ^{***}	736, 804 ^{***}	0.54 ^{***}	833,470 ^{***}	750,440 ^{***}
	(5.556)	(6.559)	(4.947)	(5.913)	(5.005)	(4.301)
2-person Team	449, 592 ^{***}	0.23 ^{**}	376, 314 ^{**}	0.19 [*]	443,084 ^{**}	363,955 [*]
Design Leader	(2.657)	(2.243)	(2.188)	(1.772)	(2.329)	(1.854)
Team Experience	10, 294***	0.01***	9, 913 ^{***}	0.01***	10,319***	10,480***

Table 2. Team Performance vs. Team Size, Leadership, and Pay Disparity

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