

# Accommodating expanding company personnel after office building space limit has been reached

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## **ABSTRACT**

For this project, the problem of needing to further hire employees after a company has reached its maximum employee limit was considered to be solved. Several options were put to use in an effort to stave off exceeding the limit thus risking business stagnation and losing projects to competitors. The objectives were met by a combination of sending employees to work from home, reorganizing the office layout, and reusing the cafeteria to make space for more desks. All these measures were taken at the expense of employee productivity/morale to various degrees, and as such, to ensure that the effect is not too drastic, an employee satisfaction survey was developed to be recurrently deployed between each process step. Other options considered, but not employed, included adding trailer space for rent and ultimately moving to a new building, the latter of which is still recommended if the hiring tendency is maintained.

## **OBJECTIVES**

- Properly accommodating expanding personnel under current building space/legal constraints
- Effectively managing to maintain employee productivity satisfaction in the expansion process

## **INTRODUCTION**

All buildings have a physical occupancy limit, constrained by space, chosen layout, and legal regulations. A serious problem arises if a company needs to keep hiring and accommodating new employees to stay in business after the point when this limit has been reached. In order to keep increasing sales by taking on more projects that require additional personnel, management has to tackle how to either make more space available for them or change the business model to find alternate solutions.

This is a problem that the company Infotech Aerospace Services is facing right now. Since it specializes in providing engineering design, modeling, analysis, and support in airplane engine manufacturing, it relies on a constant and increasing stream of projects to drive sales and keep on top of the competition. Proper managing techniques will decide whether the company succeeds in obtaining these new projects, leading to increased sales and revenue, or it falls prey to stagnancy by being unable to expand.

## **BACKGROUND**

First of all, an assessment of whether more space is actually needed has to be performed, by gaining insight from other companies and how their office space has been seeing a reduction over time [1]. Studies in areas concerning office layout are very useful when planning for reconfiguring desks, cubicles, offices and general areas as possible with the goal of creating more seating space for additional employees.

Constraints, under which any proposed solution has to fit, have to be respected and include the maximum amount of possible seating space according to office layout design, fire department building capacity regulations, and employee productivity/morale, the latter of which will unavoidably be affected whether or not the ends justify the means. In line with this, an employee survey was created to measure satisfaction with the changes, by focusing on their related disadvantages.

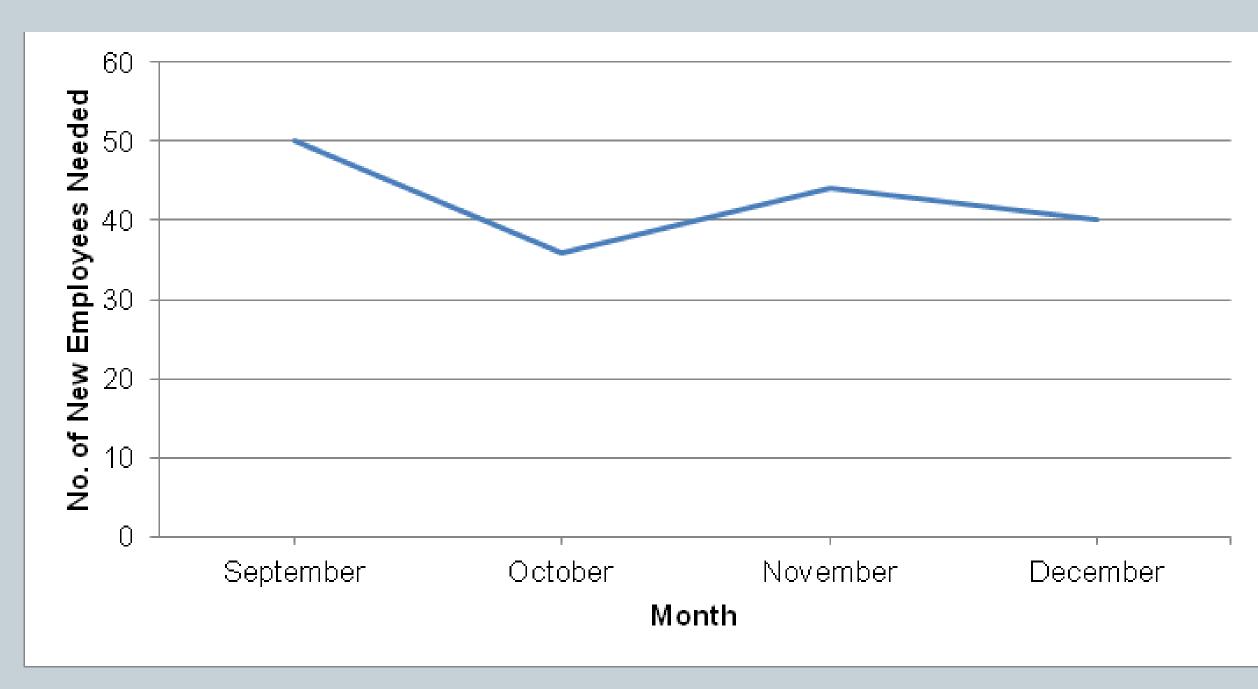


Figure 1 **Prediction of Employee Demand** 

## **METHODOLOGY**









Optimize Office Layout

Consider Further Space

## Figure 2 **Sequential Solution Steps**

The steps in Figure 2 were taken in sequence for optimization of results. The following sections highlight the different proposed ideas considered:

## **Work-From-Home Arrangements**

A vast amount of space can be freed by sending personnel home to work. This requires individual evaluations to see if it is viable for each employee. Office Layout Reorganization

The current desk layout consists of L-shaped cubicles organized either in row/columns or small square "rooms" of four. By discarding this layout in favor of long single benches, a considerable amount of extra seating space can be created, but at the expense of personal space and comfort [2].

## **Reuse of Available Space**

There are several office areas that are dedicated to uses different than seating. Not all can be turned into seating space, but some can be studied to analyze the viability of reusing them to fit additional desks if necessary. **Additional Space Viability** 

As a last resort, paying rent for additional space, preferably in the form of trailers, is an available option. If the need for space exceeds what a couple of trailers can offer, then the company should move to a bigger building.

## RESULTS

The first step taken was to create an employee demand forecast to predict the urgency with which actions had to take place, as shown in Figure 1. After this, an assessment was made to find which solutions fit our case the best. To this end, the simplest and first solution considered was sending employees to work from home. The cost of this option is low, and each employee sent home translates to a free desk that can sit a new hire.

As per the seating space, reorganization of the office layout was settled favoring long partition-free benches, but not all areas of the company will undergo the change. This involves a bit higher cost but is limited by the fire code, so not many more seating spaces can be made available.

Finally, it was decided that the cafeteria could be used to create the remaining seating space without having to spend on additional space. It provides the perfect solution to fit the remaining projected new hires, even if it represents the highest of risks to employee morale. When the employee satisfaction survey is finally rolled out, it can be used to gauge the reaction to each of the options and then compare against this.

#### CONCLUSION

Each the changes implemented will undoubtedly take a toll on employee morale. Work-from-home conditions may create resentment on those employees that are not considered for it [3], office layout reorganization could make way for distractions and affect personal space [2], and lack of a cafeteria will be the end of a basic employee benefit. For now the objectives were completed, the necessary space was created while proper measures were put in place to gauge employee reaction to each of them. But, since the next year will see the need to keep hiring personnel, the final recommendation would be to move the company to a bigger facility in the long term. This would definitely take a lot of time, effort, and cost, but it better start being considered while other options are available, in the form of adding trailers, for example, to keep hiring employees without facing a dead end.

## REFERENCES

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[2] Stephens, S. (2014). Beyond Cubed. Architectural Record, 202(9), 56.

[3] Bharadwaj, S. S. (2015). Can a Work-at-Home Policy Hurt Morale?. Harvard Business Review, 93(4), 105-109.