

Controlling is not enough

Modeling Process II

401.661 Advanced Construction Technology



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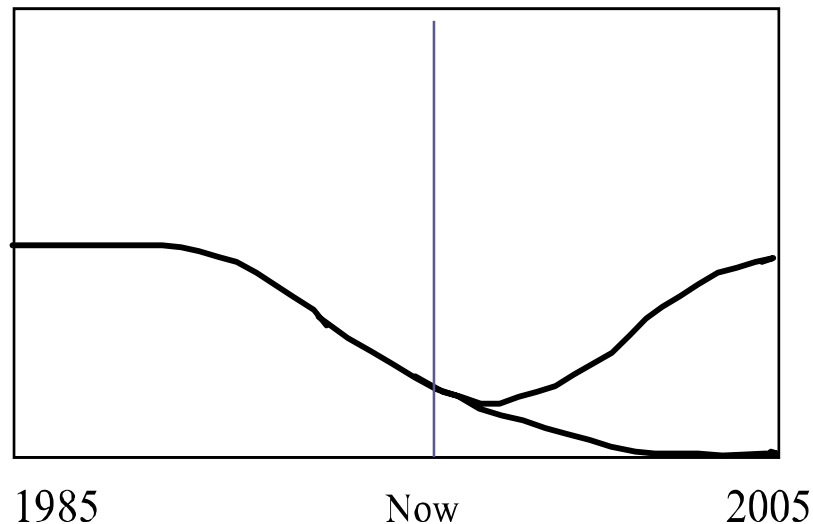
Modeling Practice II

Telecommunication Company

Problem Statements

Recently, the service quality of MStelcom, a leading telecommunication company in Korea, has been declining. In spite of a series of phone rate adjustments, the company is now facing a danger to lose its customers.

Service Quality



MSTelcom wants to find policies that can turn the situation around.

→ Then HOW?

Workers

Fixing Worker



Installations Worker

Service Quality

- Complaints
- Time to Resolve Complaints
- Attractiveness



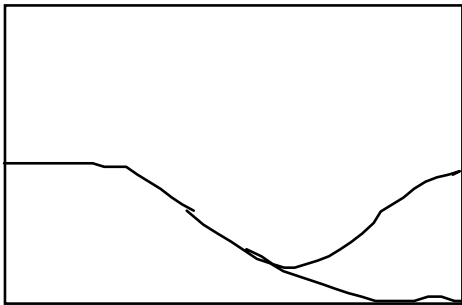
Variables

- ◆ **Service**
- ◆ **Demand for new phone lines**
- ◆ **Customer needs**
- ◆ **Rates**
- ◆ **Speed of resolving complaints**
- ◆ **Workforce**
- ◆ **Complaints**
- ◆ **Phone lines**
- ◆ **Number of services**
- ◆ **Customer satisfaction**
- ◆ **Workforce morale**
- ◆ **Profits**
- ◆ **Costs**
- ◆ **Points**
- ◆ **Competition**

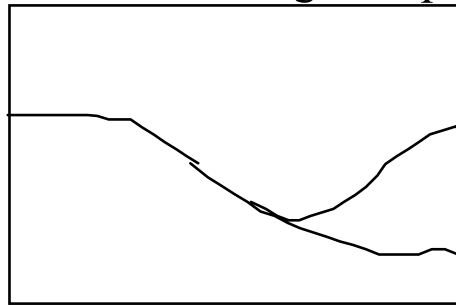
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Reference Modes

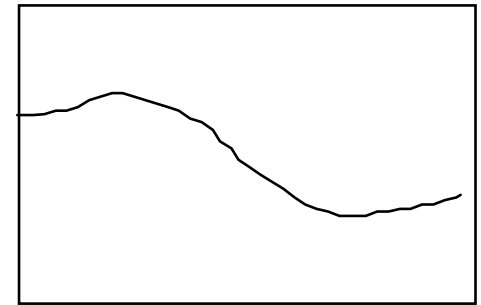
Service



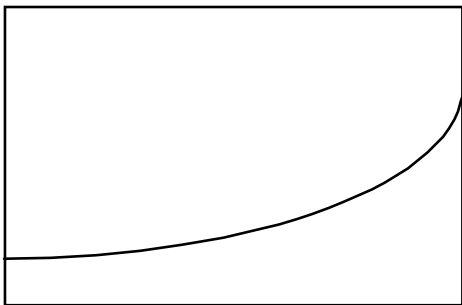
Speed of Resolving Complaints



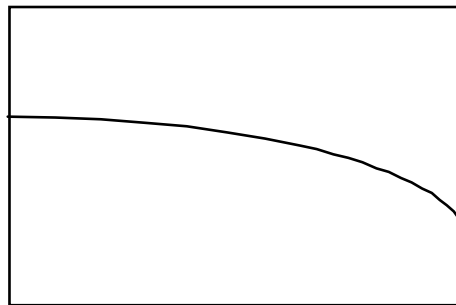
Workforce



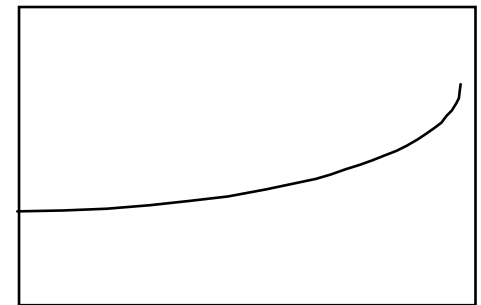
Phone Lines



Rates



Customer Needs



1985 Now 2005

1985 Now 2005

1985 Now 2005

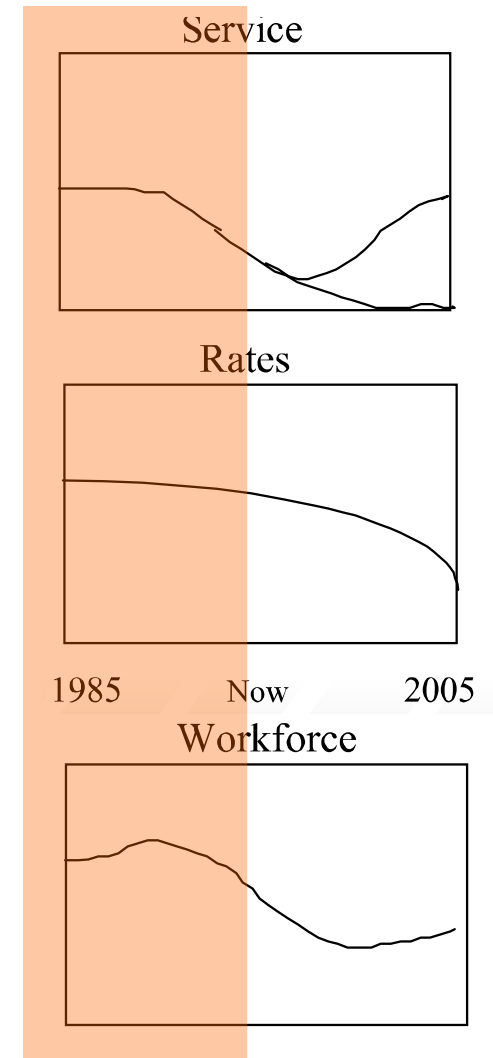
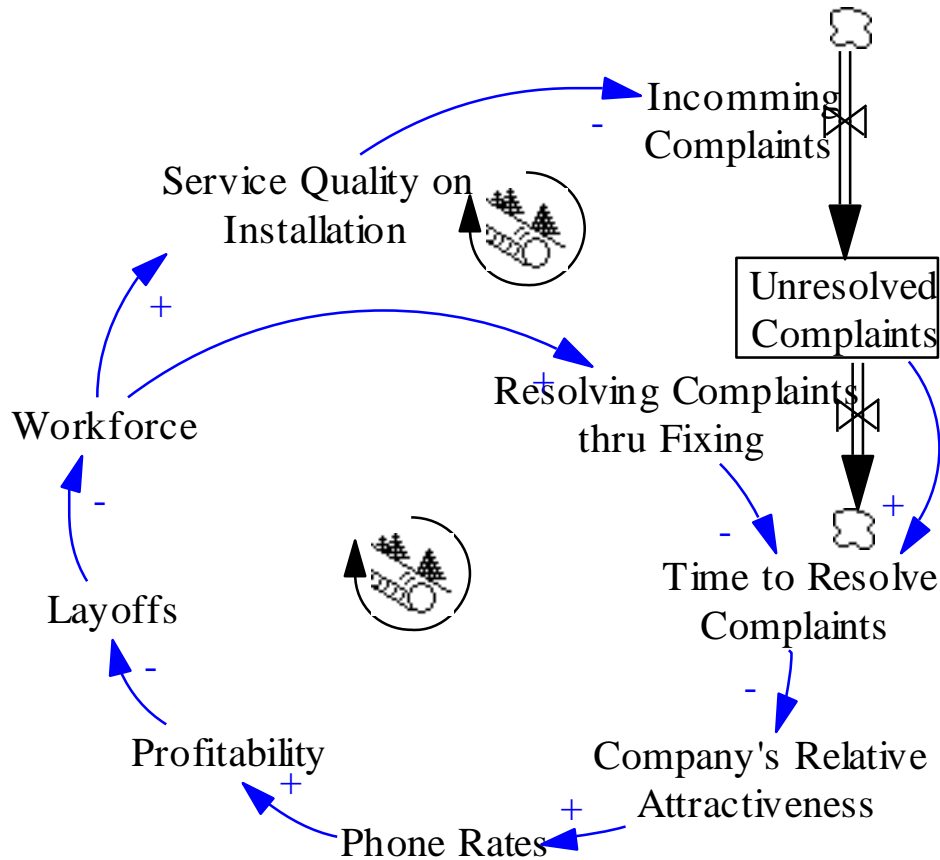
Momentum Policies

Lay off workers (fixing and installations).

Try to have the company grow faster than the penalties.

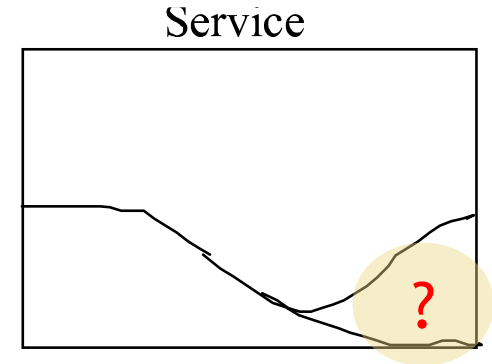
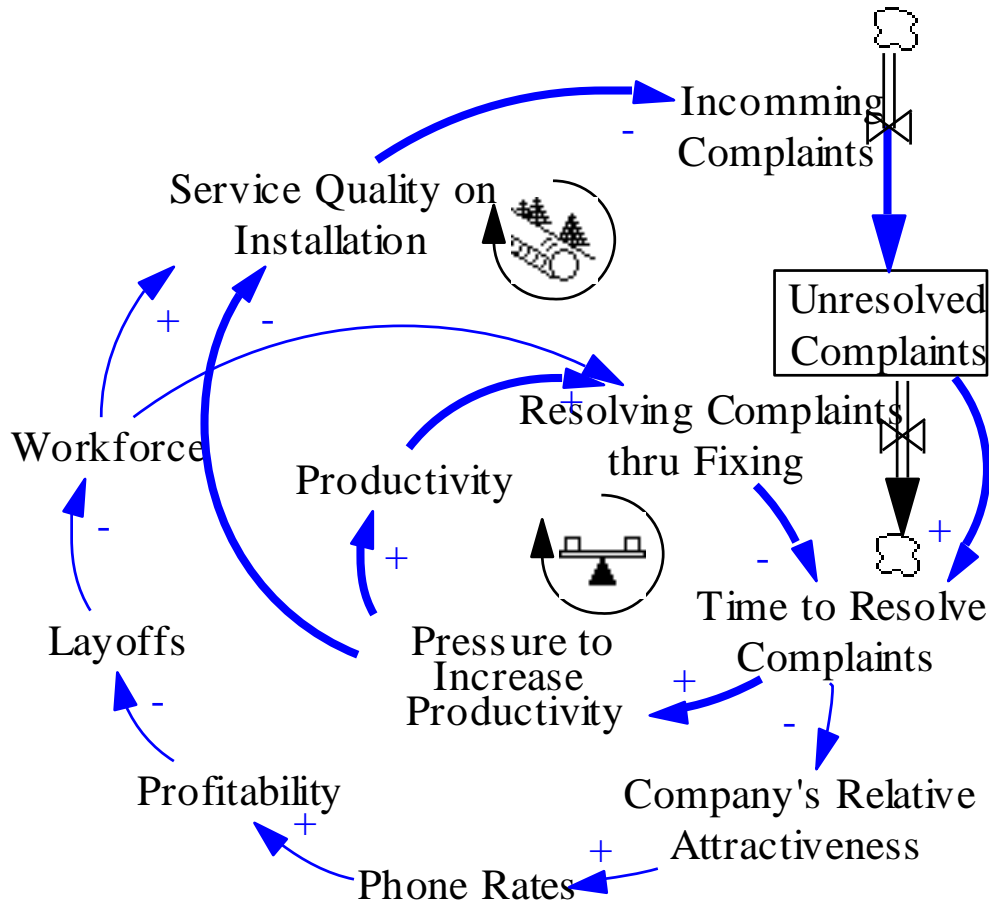
If service stays low, reduce telephone rates even more.

The Rate-Setters' Error



Given the problem, rate setting relying on the traditional way can cause continuing deterioration.

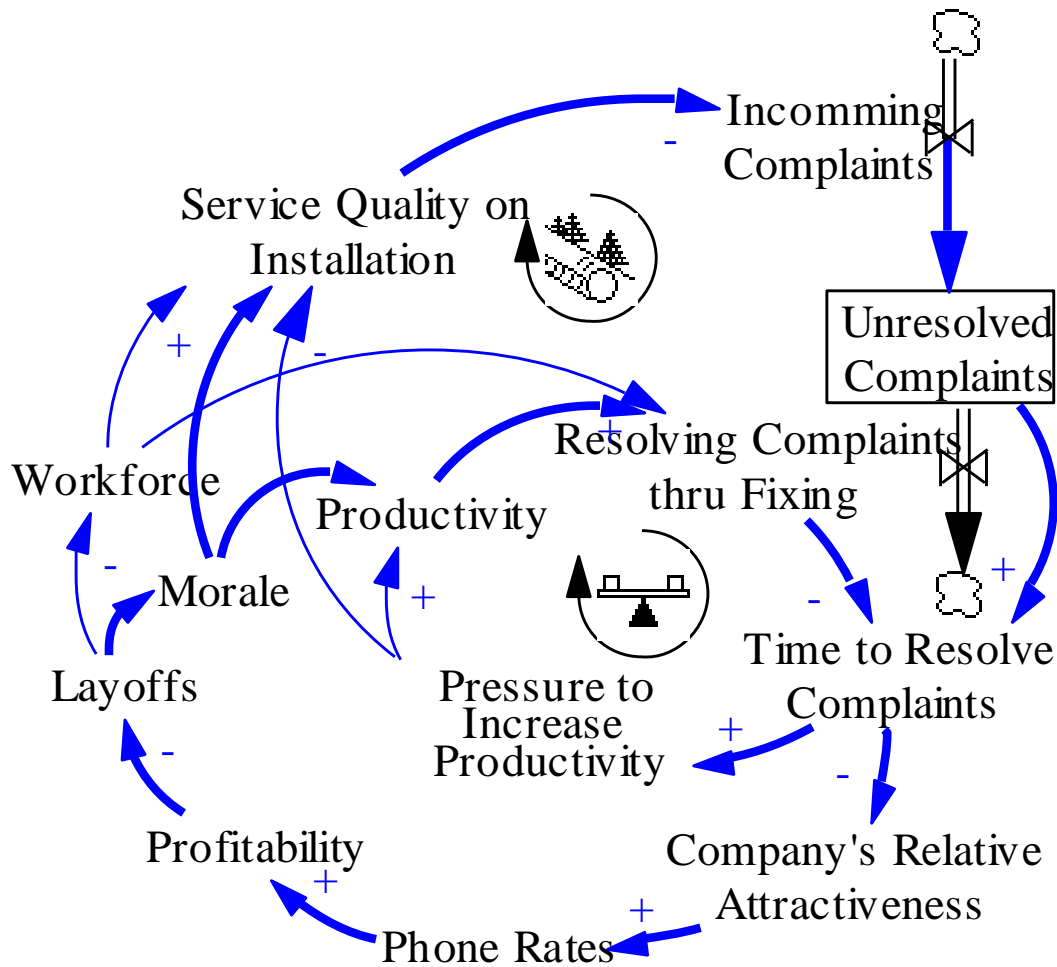
Focus on Quality and Productivity...



Respond to rate threat by improving quality.

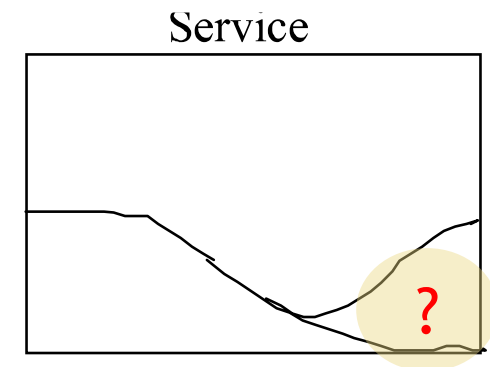
Resist pressure on productivity.

Compounding via Morale

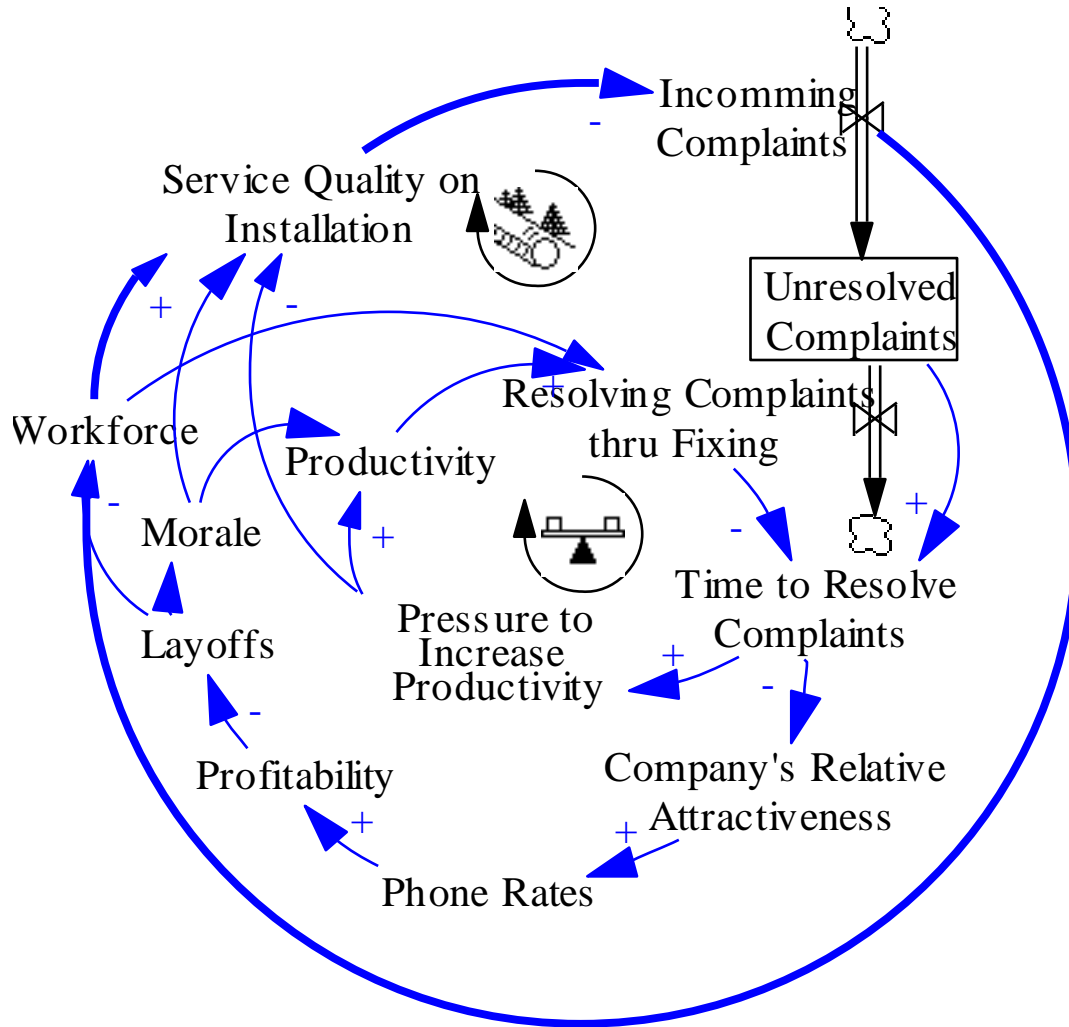


Incentives on good service and productivity

No layoffs

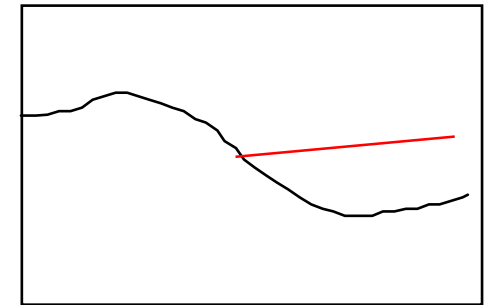


Even Hire More ...

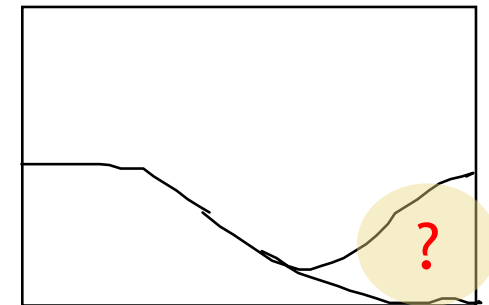


Profits will suffer in the short terms...

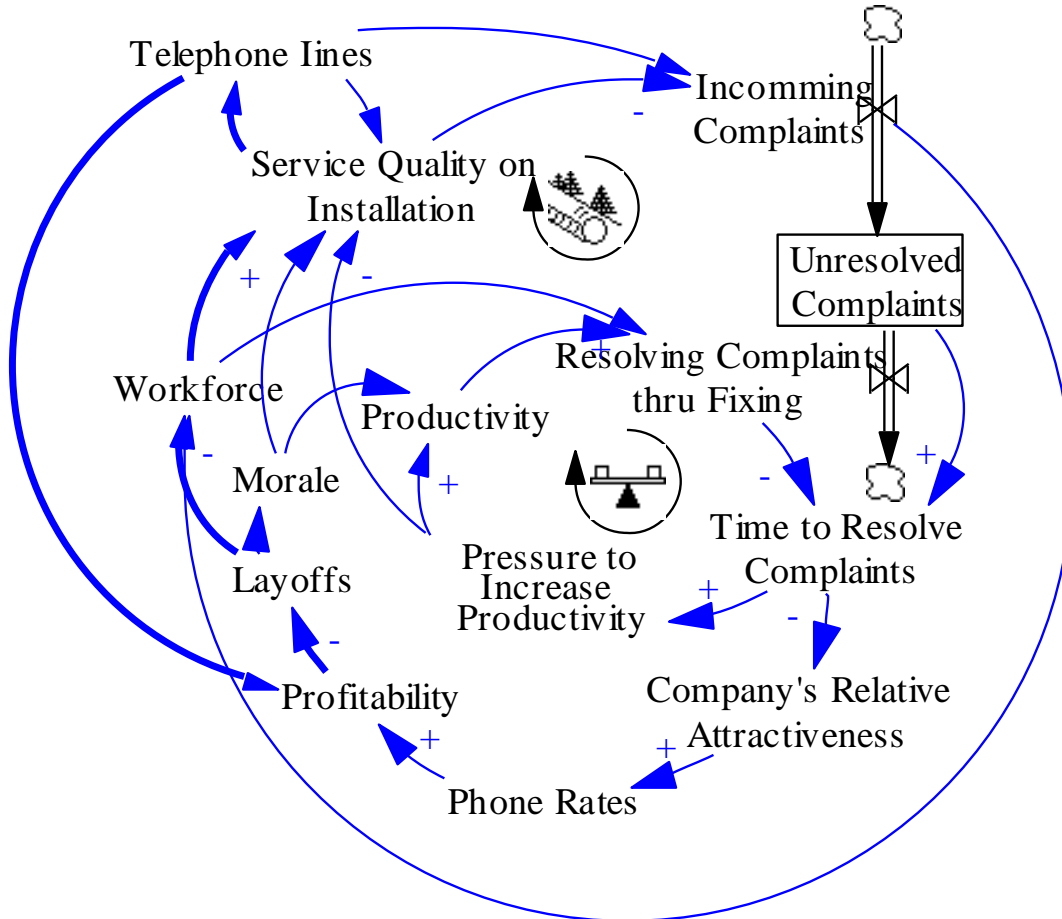
Workforce



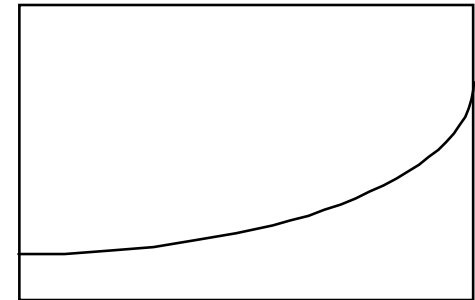
Service



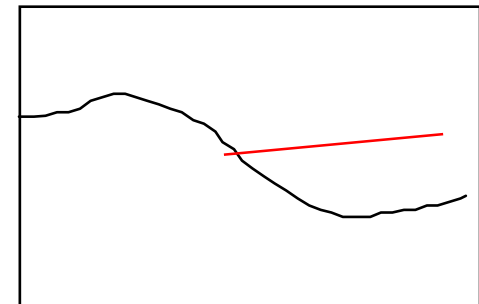
The company Hopes...



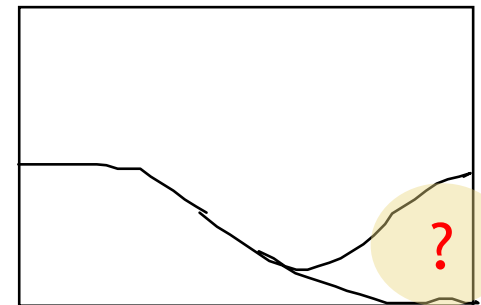
Phone Lines



Workforce

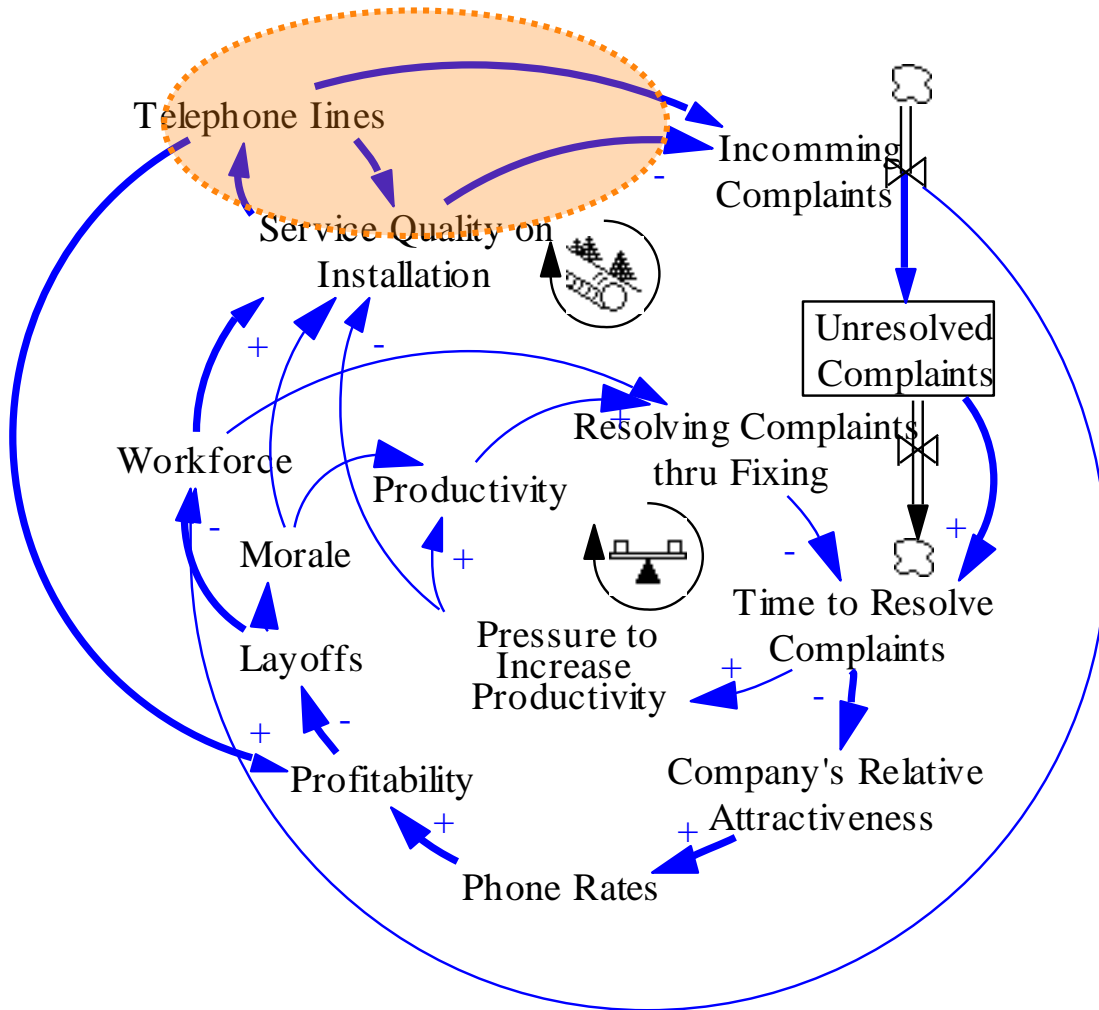


Service

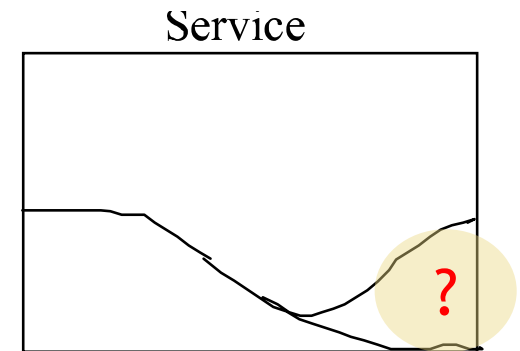


Hiring more people can increase service quality and in turn telephone lines, which increases their profits. ...However...

Lurking Danger



Increased telephone lines can deteriorate their service quality and profitability as well.



Policies

Start hiring (profits will suffer in the short term).

Introduce incentives on good service and productivity increases.

Do not put newly hired people in line expansion, which is counter to the 'company's hope'. However, our conclusion suggests that the company's hope is dangerous.

Utilize them for resolving customers' complaints:
Increasing service with slow growth.

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