

# MIS 3534 Fall 2016 – Strategic Management of Information Technology

## *Week 6 – Cost of IT (I)*

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## Today, we will discuss ...

- Why does IVK have to invest in IT maintenance?
- How do competitive strategies affect IT investment decisions?

## IT System Maintenance (1/3)

- Why does an IT system need maintenance? It does not become rusty!
  - Or does it?
- On Page 58, it reads “we’ve run closer to 5 to 6 percent of sales on IT spending. Which, by the way, Davies thought wasn’t enough to keep IT assets from *degrading* over time..”
  - Why does Mr. Davies mean by *degrading*?



# Hurricane Sandy and DC Metro

| OCTOBER 2012 |     |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|-----|
| SUN          | MON | TUE | WED | THU | FRI | SAT |
|              | 1   | 2   | 3   | 4   | 5   | 6   |
|              | 8   | 9   | 10  | 11  | 12  | 13  |
|              | 5   | 16  | 17  | 18  | 19  | 20  |
|              | 22  | 23  | 24  | 25  | 26  | 27  |
| 28           | 29  | 30  | 31  |     |     |     |



- After Hurricane Sandy, DC Metro ran a Sunday schedule on Tue. 30 but charged riders the *weekday and rush-hour* fares.

<http://blogs.cio.com/risk-management/17518/superstorm-hurricane-sandy-aftermath-video>

<http://www.freeismylife.com/2012/09/freeismylife-october-2012-calendar-dont.html>

[http://en.wikipedia.org/wiki/Washington\\_Metro](http://en.wikipedia.org/wiki/Washington_Metro)

## IT System Maintenance (2/3)

- IT maintenance is needed because
  - business requirements are always, constantly changing.
  - IT system needs to accommodate, for example, new products, new business processes, new suppliers and customers, and so forth.
  - IT system degrades not by itself, but by surrounding, supporting technologies such as hardware, network, or operating systems that are becoming advanced.

## IT System Maintenance (3/3)

- If it needs to spend money in maintaining IT systems, how much does a company need to spend on it?
  - What happens with too little spending in maintenance?
  - What happens with too much? Then, a business cannot initiate something “new” and gets behind of competition.
  - It should depend on what?

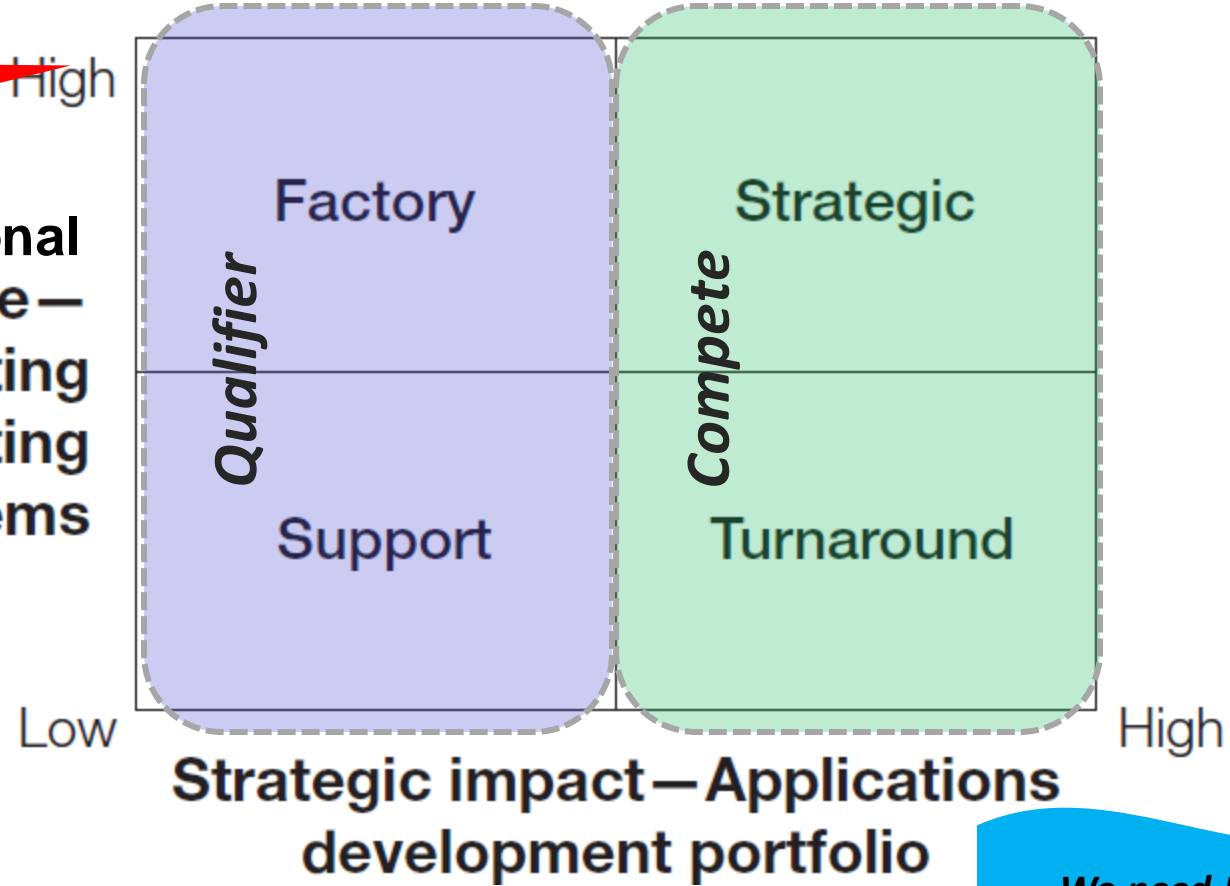


<http://www.evansautocare.com/services/>

# IT Strategic Impact Grid (1/2)

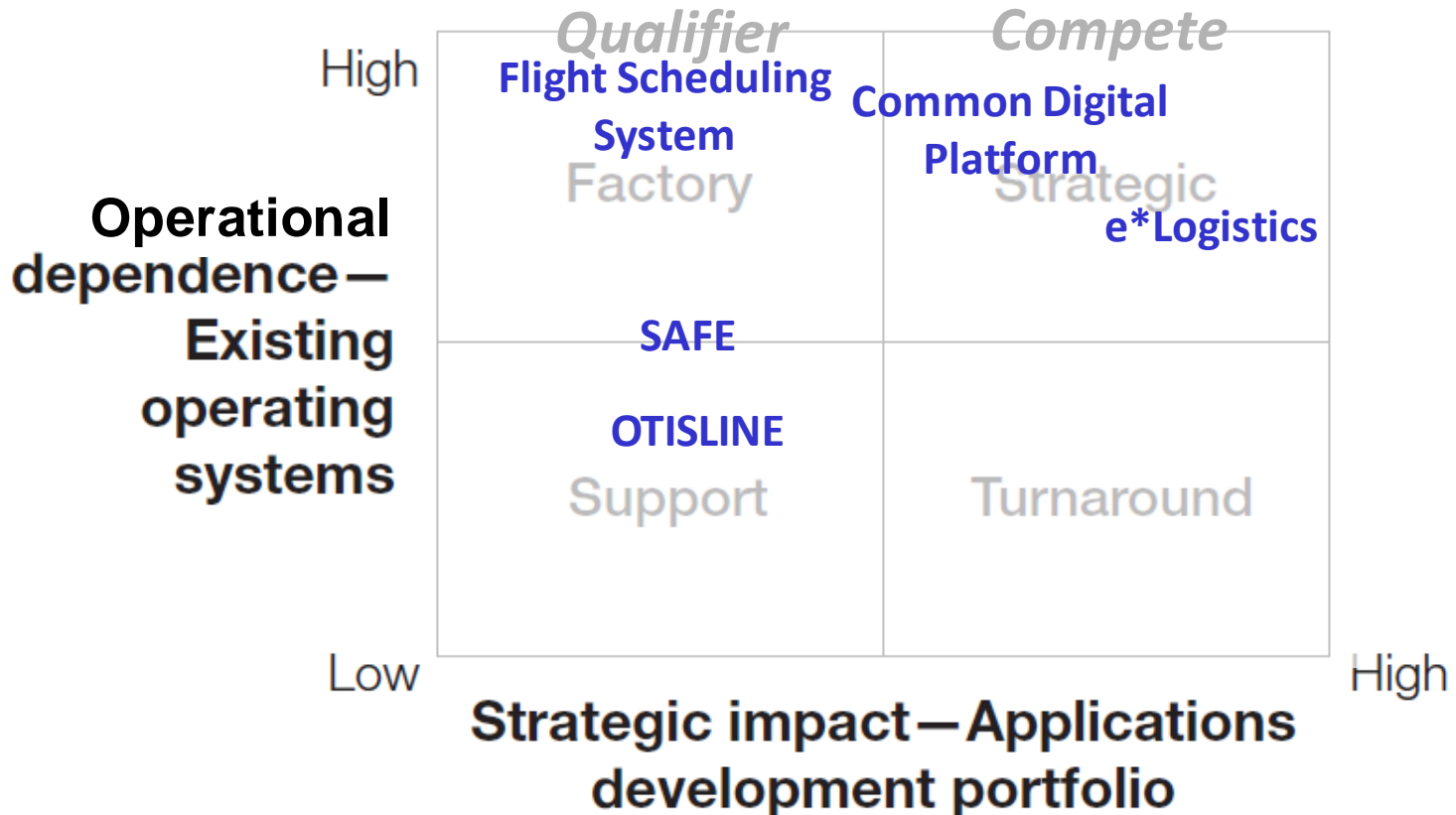
*If IT fails, business fails.*

**Operational dependence – Existing operating systems**



*We need IT for our strategy & future.*

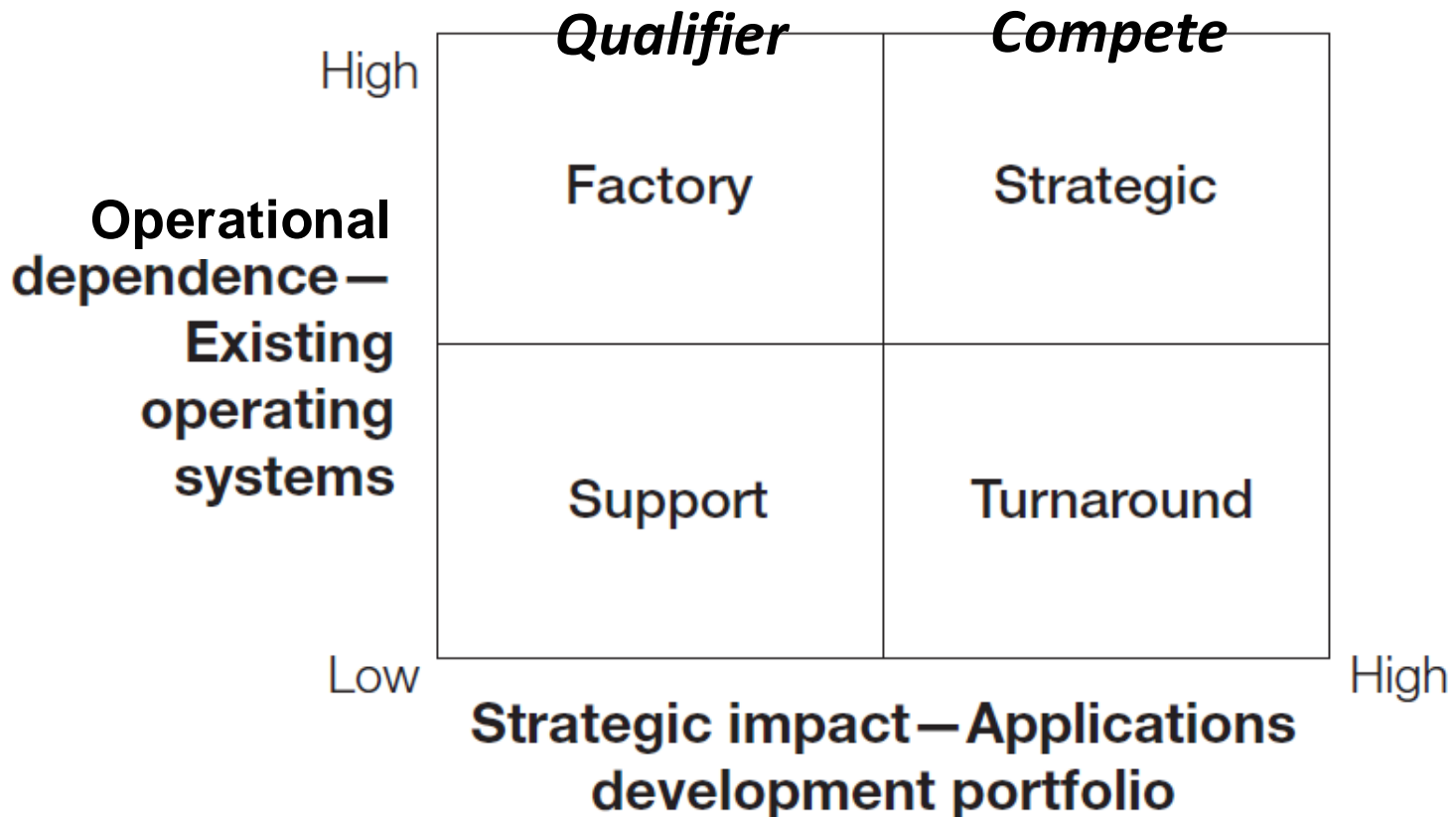
## IT Strategic Impact Grid (2/2)



- Where can we put OTISLINE, e\*Logistics, Common Digital Platform, a flight-scheduling system, and San Francisco SAFE?

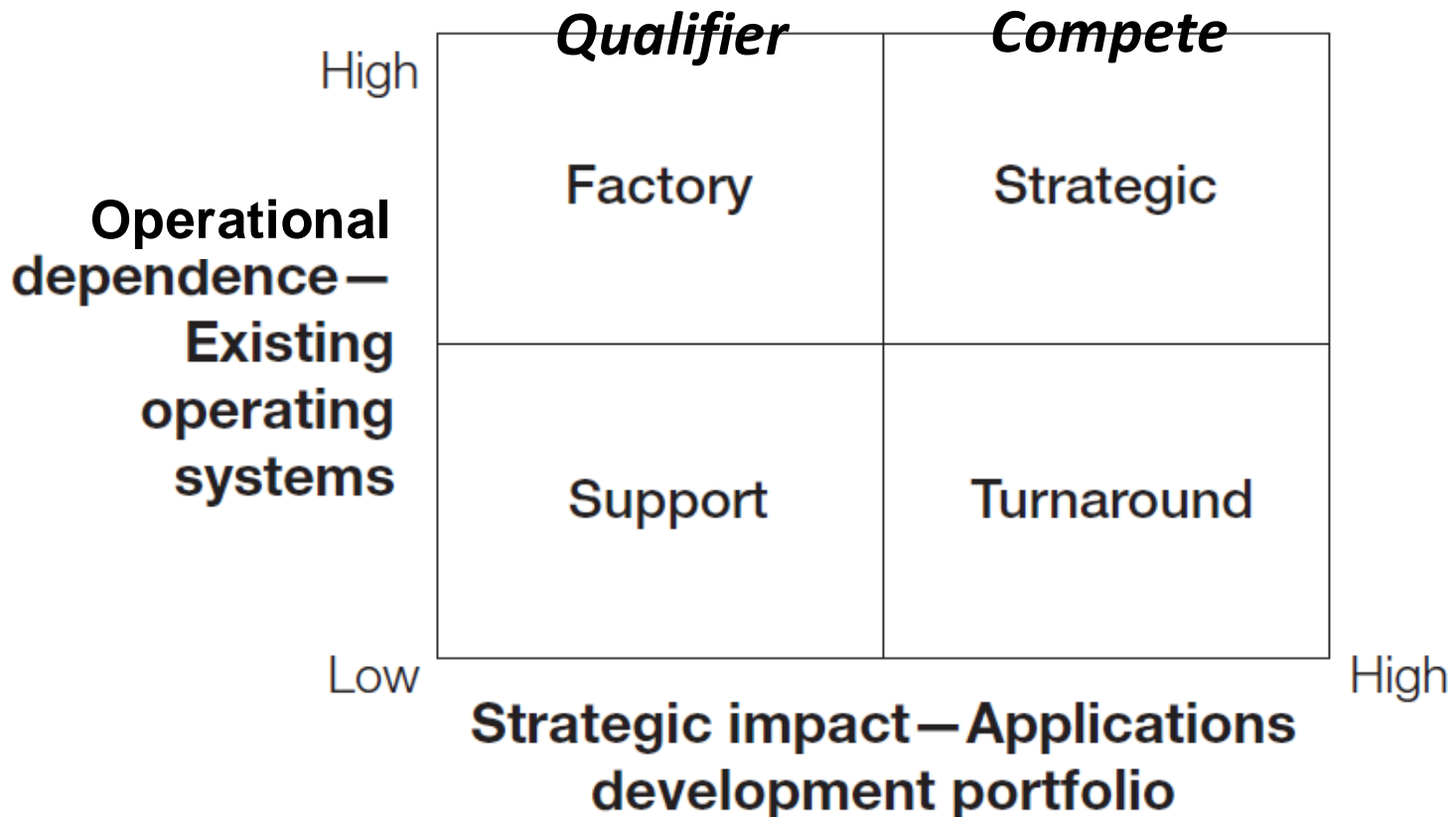


## Strategic Grid and IT Cost (1/3)



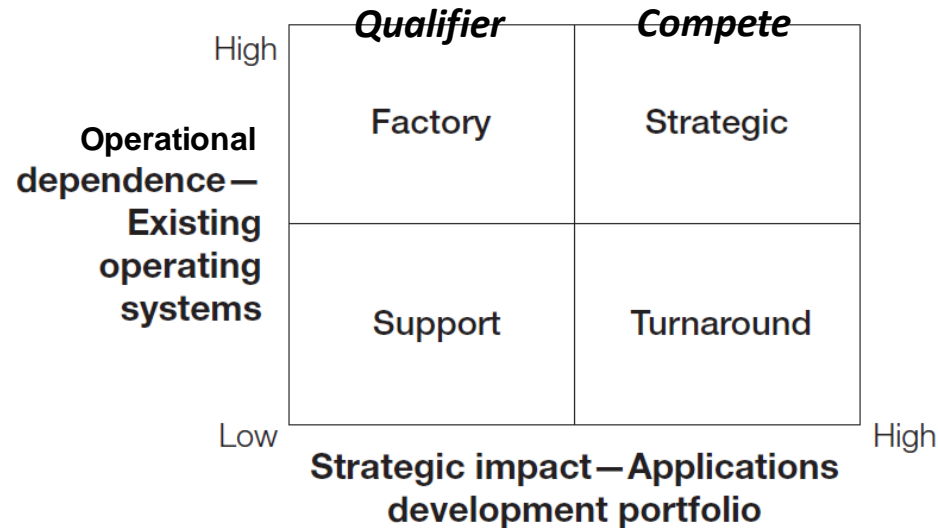
- What should the *right* amount of IT spending in each grid?

## Strategic Grid and IT Cost (2/3)



- If you've got \$10 million for your IT budget, how would you divide into each grid? depends on what?

## Where to Spend More?



- if you are #1 in a stable, mature industry?
- if you are a follower and want to be #1?
- if you are in a dynamic, growing industry?
- if you are in a tightly-regulated industry?
- if you are in an industry where IT is “mission-critical”?

## Strategic Grid and IT Cost (3/3)

- The division of a limited IT budget amongst the four IT grids depends on competitive strategies and business environments.
  - If you are #1 in a stable, mature industry, spend more in Qualifier (Factory/Support).
  - If you are a follower who wants to be #1 or in a growing, dynamic industry, spend more in Compete (Strategic/Turnaround).
  - If you are in a tightly-regulated industry, spend more in Qualifier (Factory/Support).
  - If you are in an industry where IT is very dependent or “mission-critical”, spend more in Factory and Strategic.