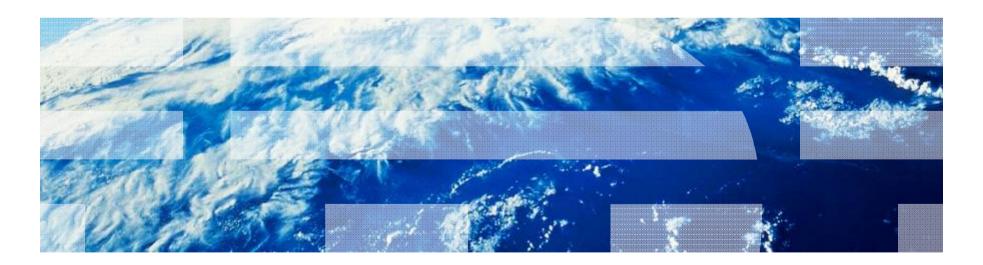


# Rolling Forecasts in Turbulent Times

# Christoph Papenfuss IBM Cognos Innovation Center





### Agenda

- Discuss the relevance of forecasting
- Review best practices for implementing a rolling forecast
- Identify how you can improve a forecasting process using IBM









"I think the world is flat."

Thomas Friedmann















#### First green 'straddling' bus in China

By Zheng Jinran (chinadaily.com.cn) Updated: 2010-08-25 16:40





The straddling bus is 6 meters wide, 10 meters long per car and 4 to 4.5 meters tall, with two levels: passengers on the upper deck, while vehicles under 2 meters can go through under it. [Photo/Beijing Times]

The first green "straddling" bus in China started its design and production process on Aug 24 and is expected to be put into operation by the end of 2011, Beijing Times reported on Aug 25.

China South Locomotive & Rolling Stock Corp Ltd (CSR) is responsible for the straddling bus program. It is to be put into pilot use in Beijing's Mentougou district.

The straddling bus is 6 meters wide, 10 meters long per car and 4 to 4.5 meters tall, with two levels: passengers on the upper deck, while vehicles under 2 meters can go through under it. It will have a speed of up to 60 km/h. It is expected to reduce traffic jams by 20-30 percent.

Song Youzhou, chairman of Shenzhen Hashi Future Parking Equipment Co Ltd, said that this bus is cheaper and greener than a standard bus. It costs 50 million yuan (\$7.4 million) to build one kilometer path for the bus, which is only 10 percent of the cost of building one kilometer subway track, and is powered by electricity and solar energy.

SPSS' AN IBM" COMPANY

The straddling bus is designed independently by Chinese engineers.





"By 1925 <u>virtually all</u> management accounting practices used today had been developed."

Kaplan & Johnson, Relevance Lost









Forecasts describe what the future will most likely look like



Plans/ Budgets detail how you think the future should look







### Forward Looking

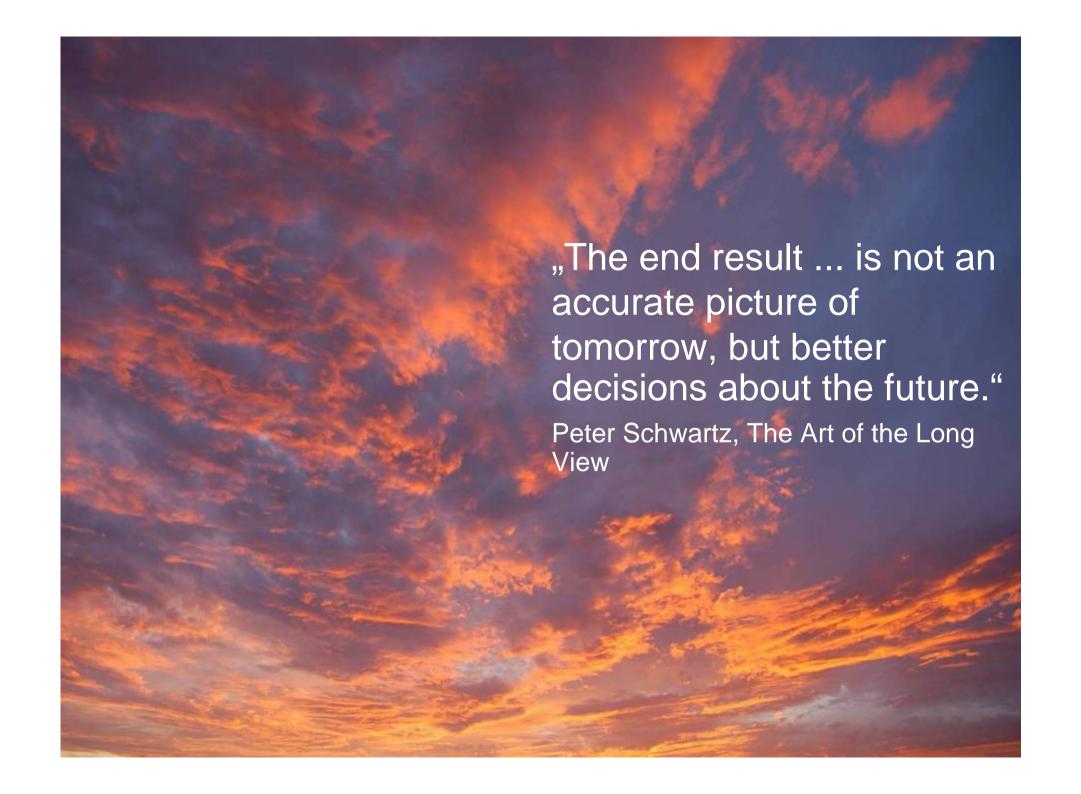


Flexible

Focused on Risks & Opportunities

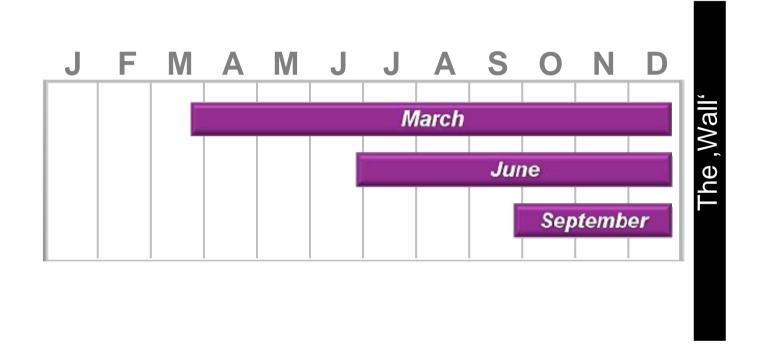








# The traditional approach...









# The traditional template?

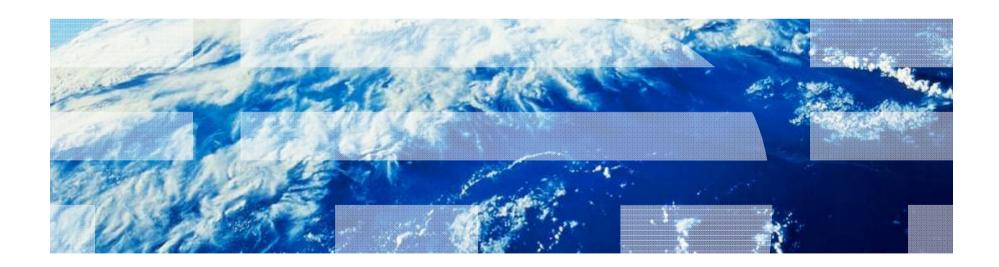
	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	YTD Actuals Variance		Total Variance	Total Var
	Actuals	Actuals	Actuals	Actuals	Actuals	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast					
Revenue	143.00	150.00	176.00	166.00	200.00	180.00	181.00	190.00	200.00	200.00	210.00	260.00	2256.00	-65.00	-7%	256.00	13%
00S	92.95	97.00	114.00	108.00	131.00	117.00	117.00	125.00	131.00	132.00	140.00	180.00	1484.95	-957.05	-64%	84.95	6%
√largin	50.05	53.00	62.00	58.00	69.00	63.00	64.00	65.00	69.00	68.00	70.00	80.00	771.05	-22.95	-7%	71.05	10%
/largin %	35.00%	35.33%	35.23%	34.94%	34.50%	35.00%	35.36%	34.21%	34.50%	34.00%	33.33%	30.77%	34.35%	0%		-0.65%	
Salaries	19.00	19.00	19.00	19.00	19.00	19.00	19.00	22.00	22.00	22.00	22.00	22.00	243.00	-1.00	-1%	-3.00	-1%
3onus	1.43	1.50	1.76	1.66	2.00	1.80	1.81	1.90	2.00	2.00	2.10	2.60	22.56	-2.35	-39%	2.56	13%
3enefits	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.22	0.22	0.22	0.22	0.22	2.43	1.35	59%	-0.07	-3%
nsurance	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	1.80	0.00	0%	-0.10	-5%
Rent	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	34.80	0.00	0%	-1.20	-3%
	• • • • • • • • • • • • • • • • • • • •		•••••	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	•••••		•••••		•••••	••••••		•••••		
Jtilities	3.00	2.00	2.50	1.58	1.00	1.00		1.40	1.59	2.00	2.50	3.00	22.77	0.92	8%	-1.23	-5%
Office Supplies	0.11	0.20	0.16	0.20	0.07	0.37	0.14	0.42	0.49	0.34	0.38	0.43	3.30	0.07	9%	1.00	43%
ravel - Air	7.15	7.50	8.80	9.00	15.00	9.00		9.50	10.00	10.00	10.50	13.00	118.50	-17.45	-58%	13.50	13%
ravel - Hotels	1.43	1.50	1.76	1.66	2.00	1.80		1.90	2.00	2.00	2.10	2.60	22.56	-3.35	-67%	-7.44	-25%
ravel - Car	0.72	0.75	0.88	0.83	1.00	0.90	0.91	0.95	1.00	1.00	1.05	1.30	11.28	-2.68	-178%	6.28	126%
ravel - Train	1.30	1.00	1.50	1.00	1.20	1.00		3.00	2.00	2.00	2.00	3.00	20.00	-1.50	-33%	9.00	82%
Gifts & Misc	0.50	0.00	0.00	0.50	0.00	0.00		0.00	5.00	0.00	0.00	0.00	6.00	0.00	0%	-1.00	-14%
Naintenance & Repair	0.35	0.14	0.06	0.43	0.30	0.36		0.42	0.03	0.41	0.09	0.13	3.04	0.02	1%	0.04	1%
/larketing	2.00	0.00	8.00	9.00	4.00	7.00	8.00	4.00	5.00	2.00	9.00	1.00	59.00	-3.00	-15%	5.00	9%
let Income	9.83	16.17	14.35	9.90	20.18	17.53	17.53	16.24	14.62	20.98	15.01	27.66	200.01	15.43	28%	0.01	0%





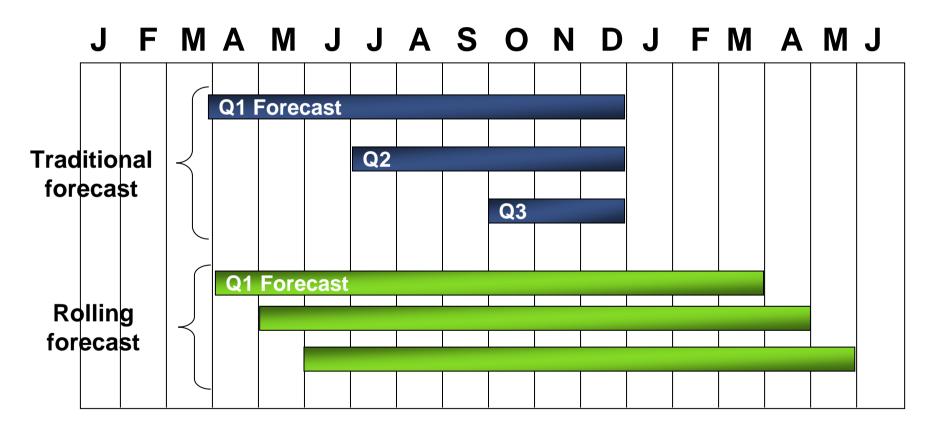


# Rolling Forecasts. A modern approach.





### What is a Rolling forecast

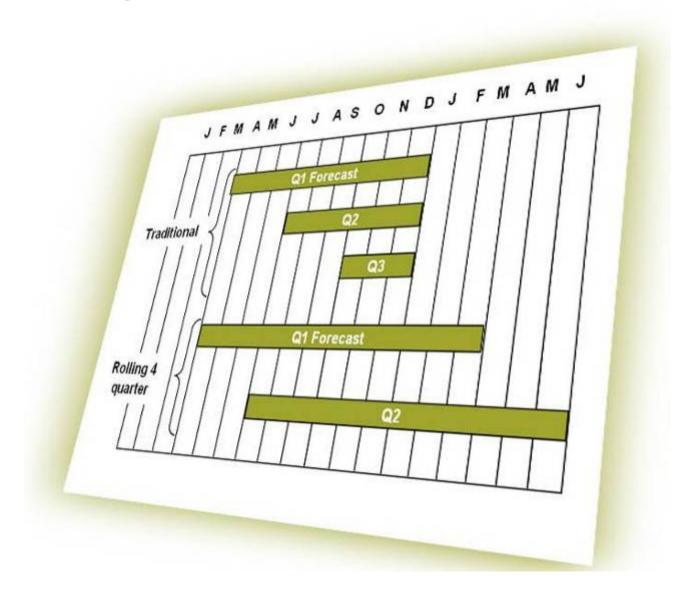








# Why are rolling forecasts attractive?









### There are several success factors

Modeling **Participation** Time Horizon **Process** Risk & Culture Measurement **Uncertainty** 







# Rolling Forecast = 12 month quarterly?

No. It depends on **YOU** business!







### Match the time horizon to the rhythm of your business

#### **Short cycles**

### Long cycles

Oil exploration

# Industry

- Consumer electronics
- Retailing
- Investment banking

- Plant construction
- Infrastructure investment

Pharma development

Infrastructure investment

Research & development

- Advertising
- Cash flow
- Overtime

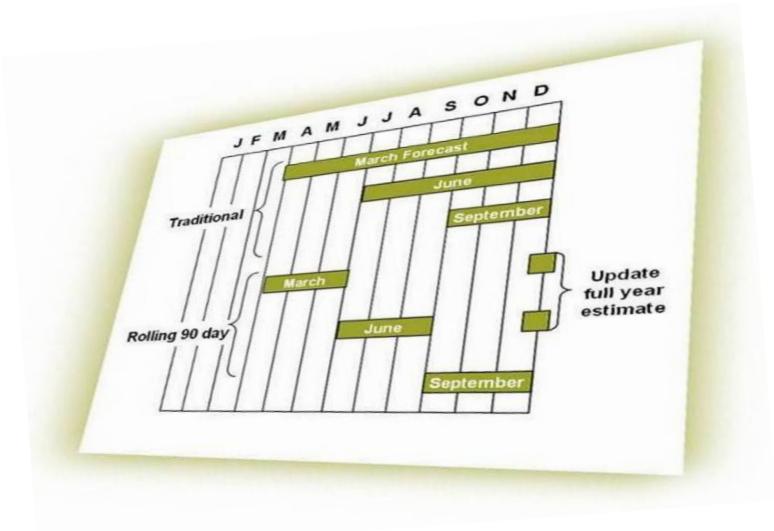








# An example of the time horizon decision











### There are several success factors

Time Horizon

**Participation** 

Modeling

Risk & Uncertainty

Process Measurement

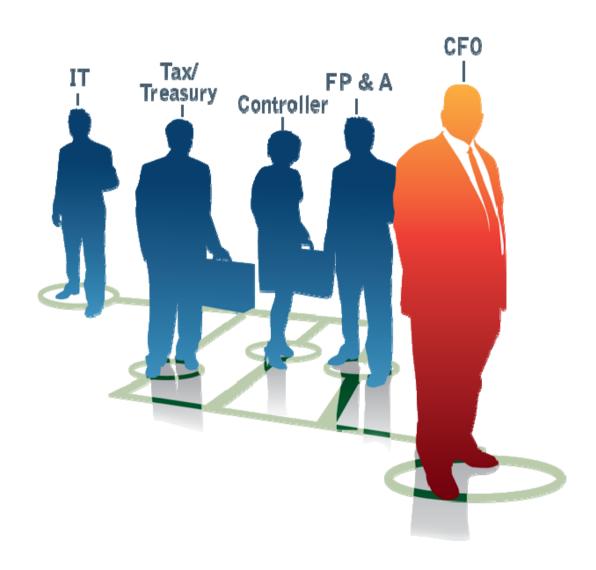
Culture







### Who creates the forecast?



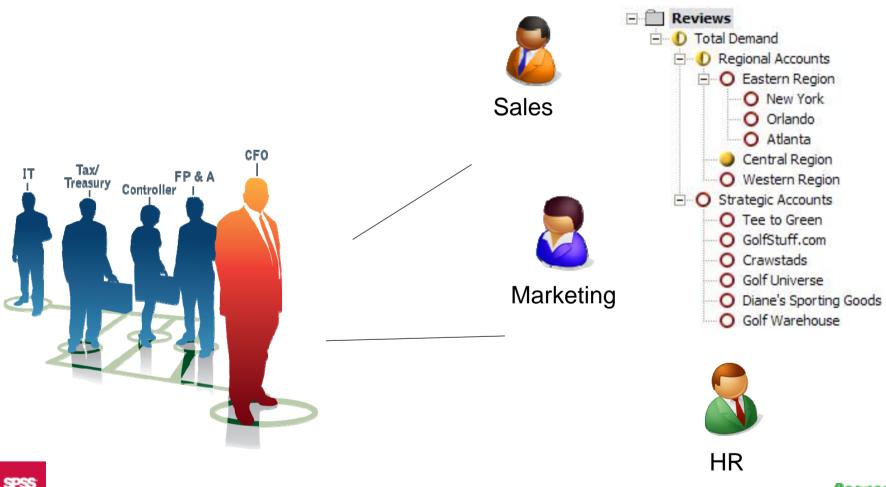








### High participation creates value.









### There are several success factors

Time Horizon

**Participation** 

Modeling

Risk & Uncertainty

Process Measurement

Culture







### Remember this model?

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	YTD Actuals Variance		Total Variance	Total Var
	Actuals	Actuals	Actuals	Actuals	Actuals	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast					
Revenue	143.00	150.00	176.00	166.00	200.00	180.00	181.00	190.00	200.00	200.00	210.00	260.00	2256.00	-65.00	-7%	256.00	13%
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√largin	50.05	53.00	62.00	58.00	69.00	63.00	64.00	65.00	69.00	68.00	70.00	80.00	771.05	-22.95	-7%	71.05	10%
∕largin %	35.00%	35.33%	35.23%	34.94%	34.50%	35.00%	35.36%	34.21%	34.50%	34.00%	33.33%	30.77%	34.35%	0%		-0.65%	
Salaries	19.00	19.00	19.00	19.00	19.00	19.00	19.00	22.00	22.00	22.00	22.00	22.00	243.00	-1.00	-1%	-3.00	-1%
3onus	1.43	1.50	1.76	1.66	2.00	1.80	1.81	1.90	2.00	2.00	2.10	2.60	22.56	-2.35	-39%	2.56	13%
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nsurance	0.15	0.15	0.15	0.15	0.15	0.15		0.15	0.15	0.15	0.15	0.15	1.80	0.00	0%	-0.10	-5%
Rent	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	34.80	0.00	0%	-1.20	-3%
Jtilities	3.00	2.00	2.50	1.58	1.00	1.00	1.20	1.40	1.59	2.00	2.50	3.00	22.77	0.92	8%	-1.23	-5%
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ravel - Air	7.15	7.50	8.80	9.00	15.00	9.00		9.50	10.00	10.00	10.50	13.00	118.50	-17.45	-58%	13.50	13%
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Naintenance & Repair	0.35	0.14	0.06	0.43	0.30	0.36	0.31	0.42	0.03	0.41	0.09	0.13	3.04	0.02	1%	0.04	1%
/larketing	2.00	0.00	8.00	9.00	4.00	7.00	8.00	4.00	5.00	2.00	9.00	1.00	59.00	-3.00	-15%	5.00	9%
let Income	9.83	16.17	14.35	9.90	20.18	17.53	17.53	16.24	14.62	20.98	15.01	27.66	200.01	15.43	28%	0.01	0%





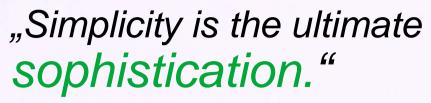


### Can we answer critical questions with this information?





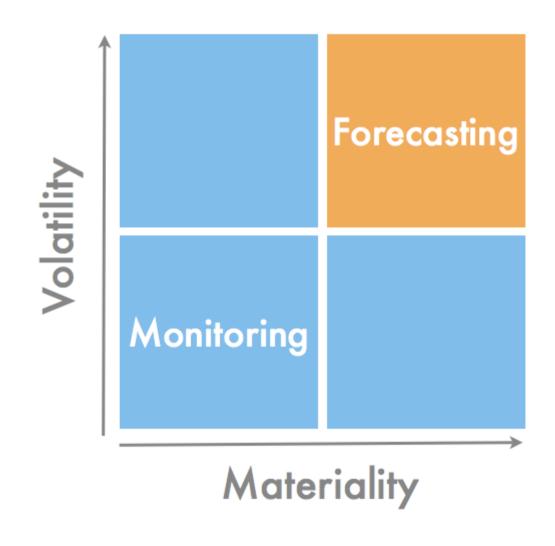








### A simple test for selecting the right items









	Jan	Feb	Mar	Apr	May	Jun	Q3	Q4	2010	Q1	Q2	Q3	Q4	2011
Revenue														
COGS														
Margin														
Salaries														
Travel Expense														
Rent														
Other Expenses														
Net Income														



	Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez	2010	Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez	2011
Revenue																										
COGS																										
Margin																										
Salaries																										
Travel Expense																										
Rent																										
Other Expenses																										
Net Income																										





### The language of our forecasts need to change



Opportunities
Pipeline
Number of employees

**Customer Satisfaction** 



634172 - Revenue (New Accts)

665891 - Office Supplies (Paper)

665892 - Office Supplies (Pens)

677199 - Gifts, Misc.











Revenue?







### There are several success factors

Time Horizon

**Participation** 

Modeling

Risk & Uncertainty

Process Measurement

Culture









### **Considering Uncertainty**









# But developing scenarios can be very tedious

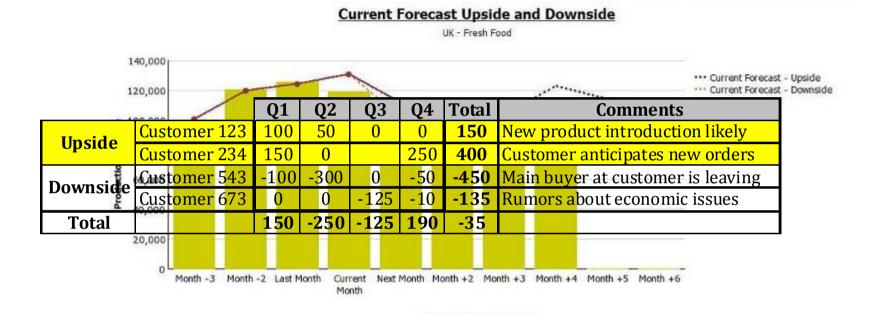


- Multiple scenarios
- Floating assumptions
- Data volumes





### Consider a simpler approach



Upside Exceptions

Base Case (most likely)

Downside Exceptions









#### There are several success factors

Time Horizon

**Participation** 

Modeling

Risk & Uncertainty

Process Measurement

Culture







"In a performance-oriented society, what you measure affects what you do."

Joseph Stiglitz, September 25th, 2009







## Some measures you should consider

## Forecast Accuracy



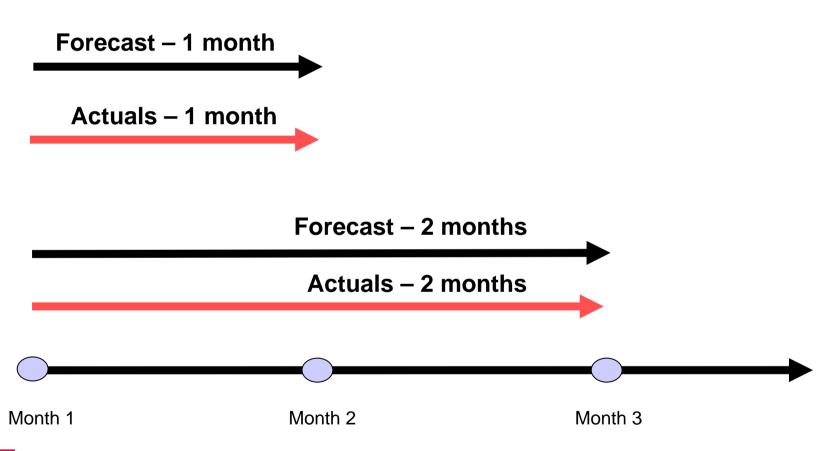
Cycle Time

Confidence Levels





## Forecast Accuracy – Select the appropriate term





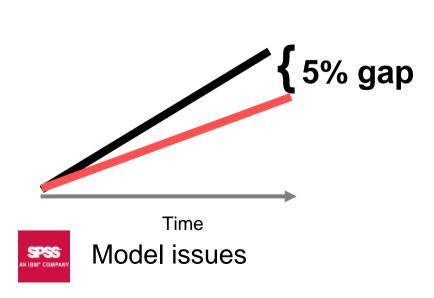


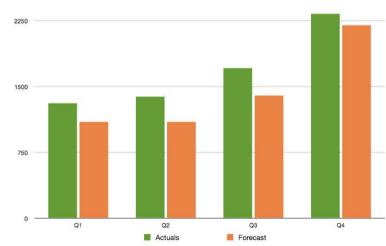


## Forecast Accuracy - useful in different ways



Attention



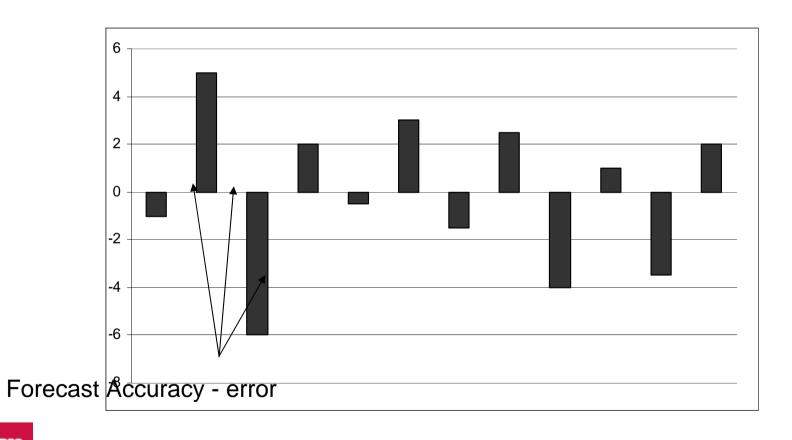


Discover potential bias





## Consider using a Run Chart

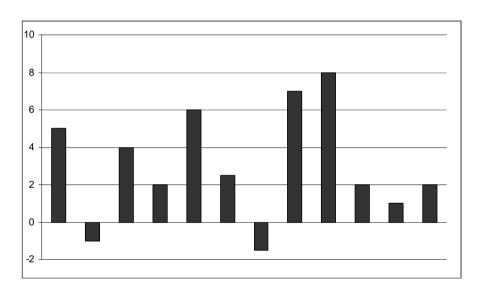


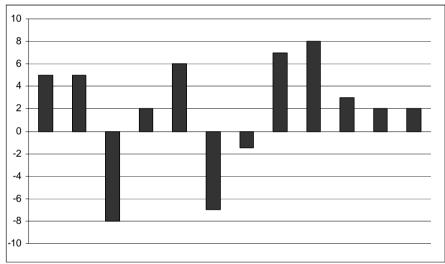






## Monitor accuracy often – a case of bias?



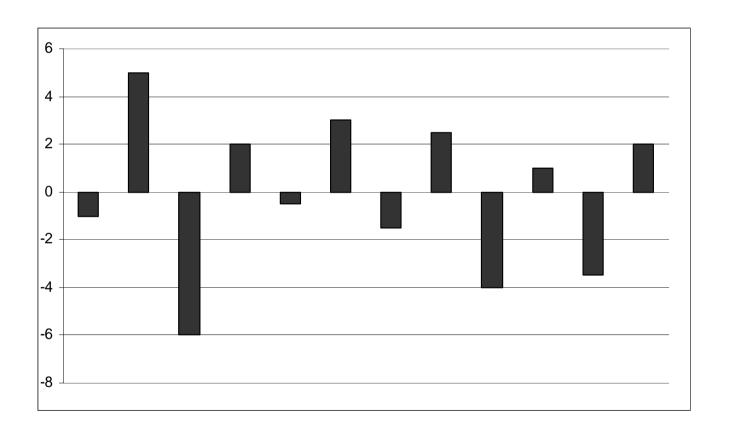








## Accuracy – no obvious bias









#### There are several success factors

Time Horizon

**Participation** 

Modeling

Risk & Uncertainty

Process Measurement

Culture







Nice forecast. But I don't like the revenue numbers. They are too low.

But this is the most realistic estimate I can provide!





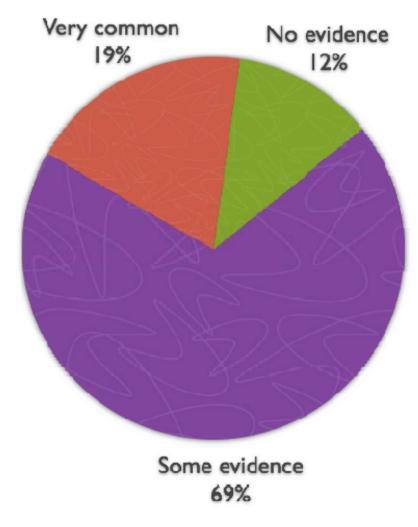
Please go back to your office and come back with **new** numbers.







## Is there evidence of sandbagging?

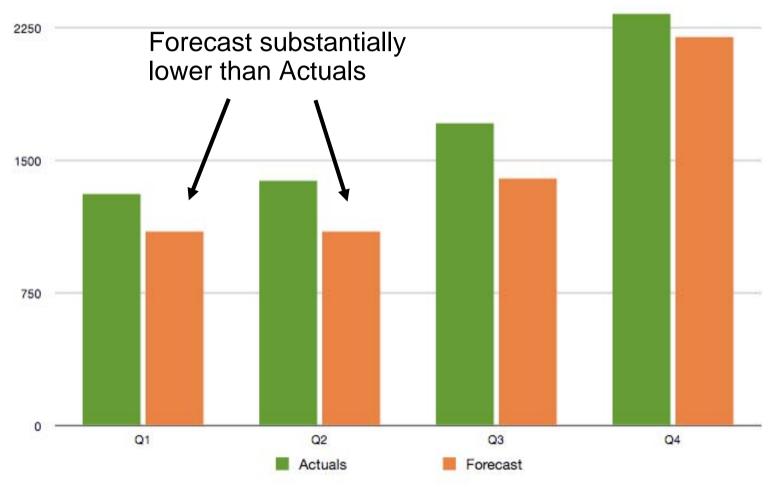








## A typical case of sandbagging: Revenue forecast









## Management sets the tone

"Why didn't we anticipate that in the budget? Who screwed up?"

"Okay, clearly things have changed.

- What are the drivers of the change?
- What is the impact on our business?
- What actions should we be taking?"







## A different approach is often required



Purpose of the Forecast



New Compensation Approaches



Assessment of your processes







#### There are several success factors

Modeling **Participation** Time Horizon **Process** Risk & Culture Measurement **Uncertainty** 







But Rolling Forecasts are not a silver bullet

- No one-size-fits-all approach
- Forecast culture required
- Changes to models required
- Technology upgrades









# Clinton: ,Never waste a good crisis'

Friday, 6 March 2009

US Secretary of State Hillary Clinton today told an audience "never waste a good crisis", as she highlighted the opportunity of rebuilding economies in a greener, less energy intensive model.

Highlighting Europe's unease the day after Russia warned that gas exports to the EU via Ukraine might be halted, she also condemned the use of energy as a political lever.

#### Related articles

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Parliament global economic turmoil provided a fresh opening: "Never waste a good crisis ...

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Clinton told young Europeans at the European Parliament global economic turmoil provided a fresh opening: "Never waste a good crisis ... Don't waste it when it can have a very positive impact on climate change and energy

security."

Clinton told young Europeans at the European







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