

The Complexity Challenge

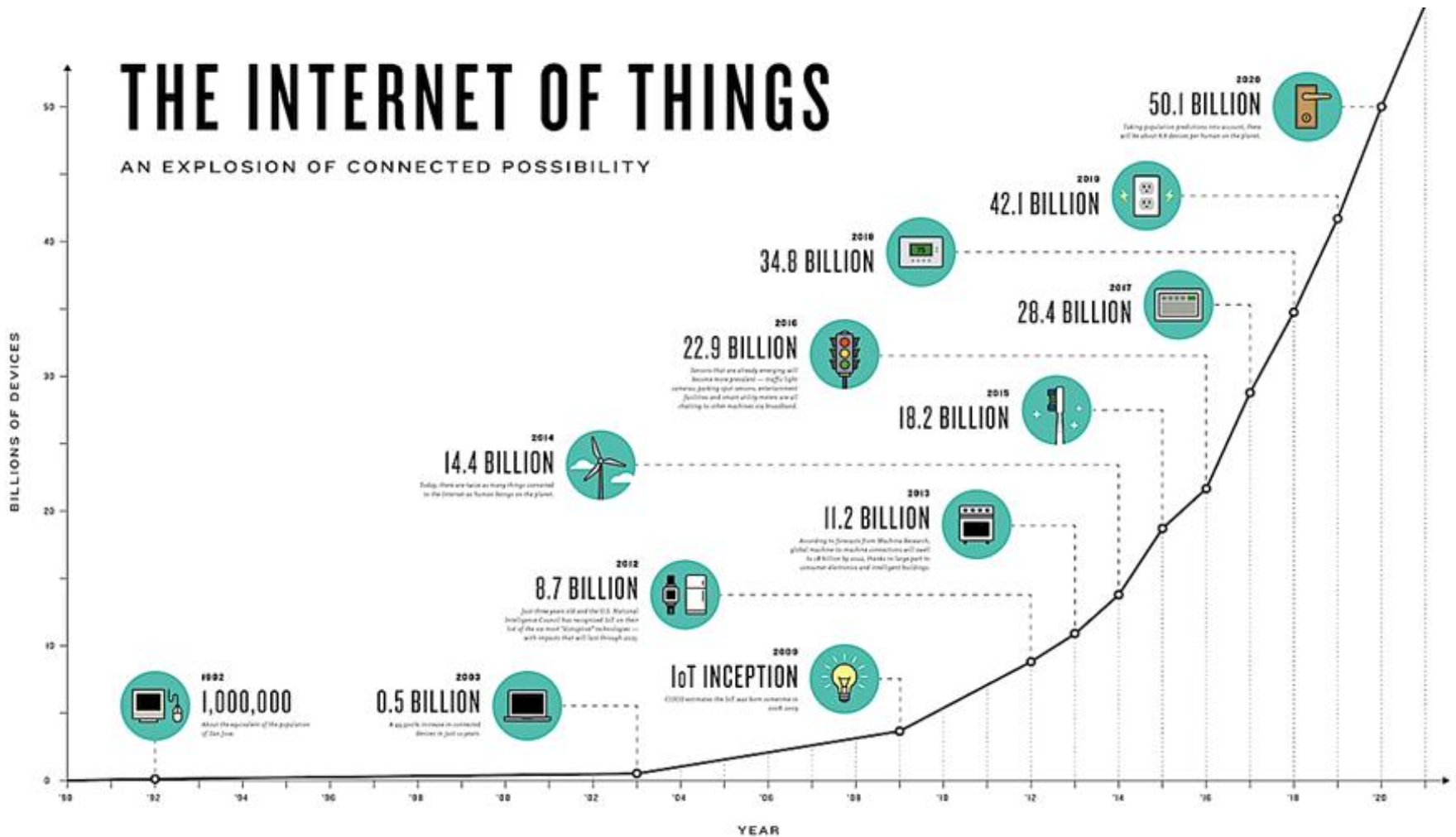
IRM Industry Workshop

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At last (?), a changing World!



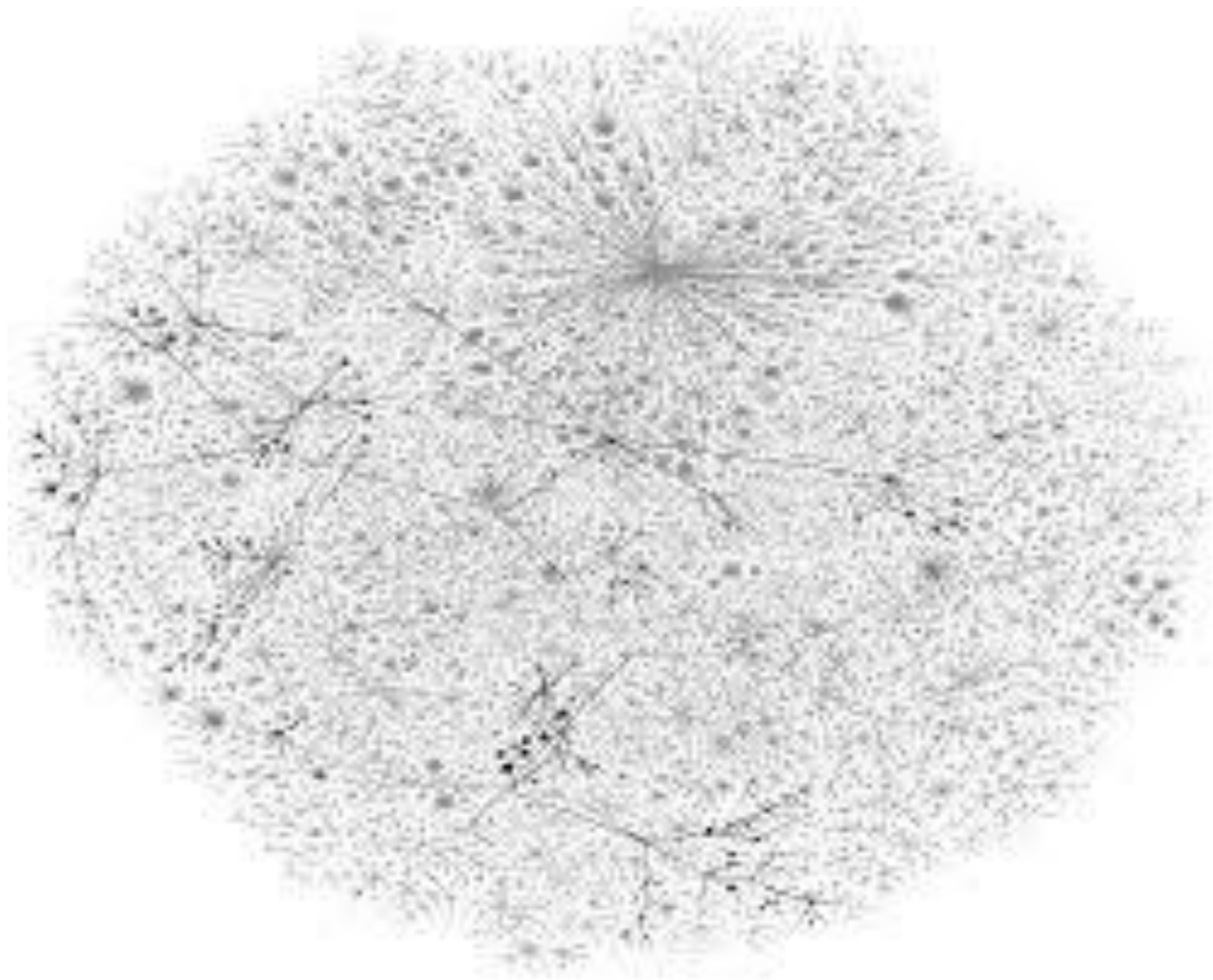
Data volumes increasing exponentially



Complexity is increasing



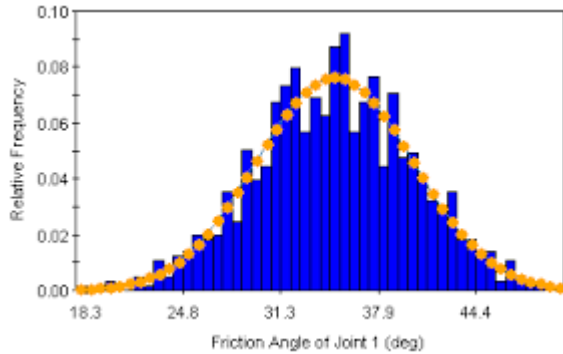
So where does the risk lie in this complex network?



Without help, the PM will need super powers



Traditional Risk Approach

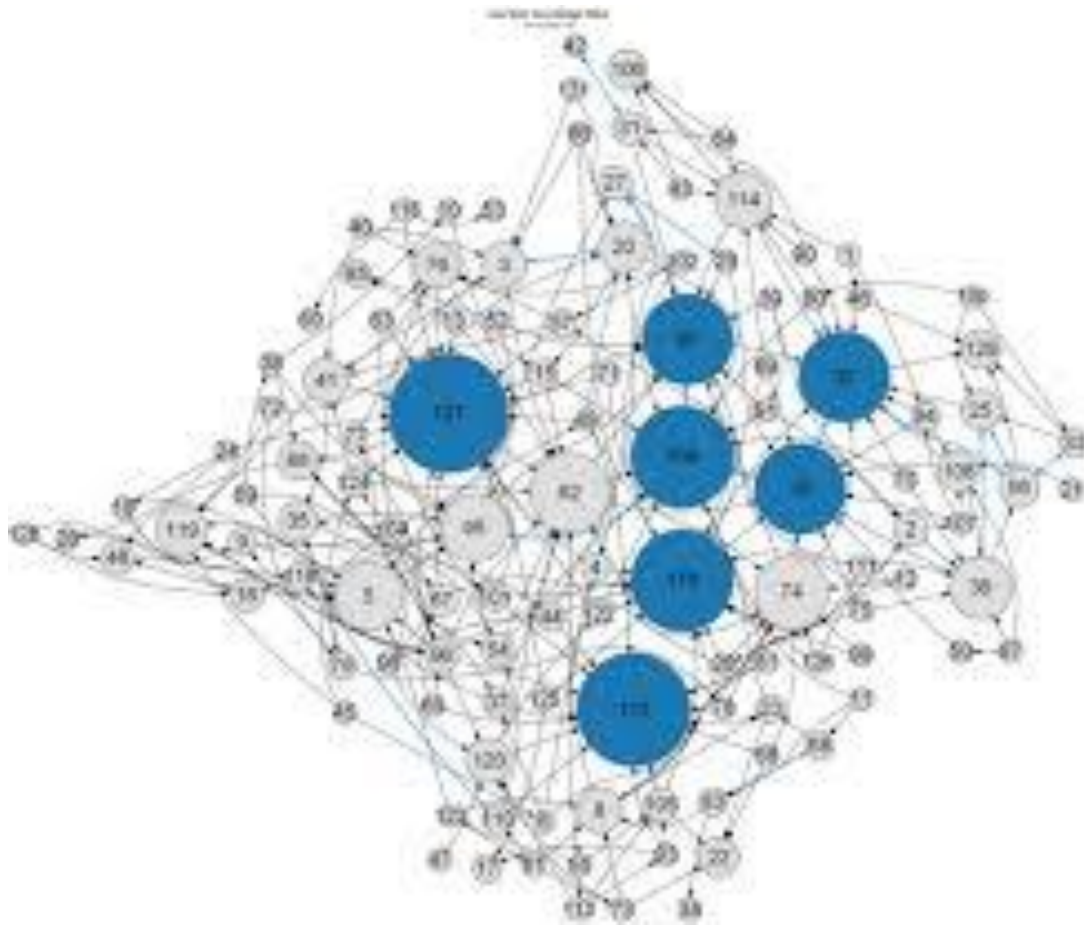


- Statistical analysis based on estimated probability and impact
- Often ignored when it's a 'difficult message'
- Based on 'identified' risks

- Risk log identifies known risks
- Good for tracking mitigations and residual risk
- Production can bring team together
- Role of Risk Manager can be mis-understood

Lp.	The main of risks	Owner of risk	Reason/cause	Effect	Risk assessment			Risk response strategy	Cost of strategy
					Probability	Impact	Level of risk		
Designing risk									
1	Lack of acceptance by investor of design proposals	Investor	Delays in approval	Increase in costs due to the suspension of work of the design team	5-40%	50thous.-500thous	Low	Market observation, alternative designing solutions	0
2	Delays and difficulties in obtaining options and permits	Investor	Delay of designing work, unknown scope of design	Disturbed designing process	5-40%	500thous.-2millions	Medium	Earlier diagnosis of the situation in local authorities offices, organization of meetings preceding designing process	50thous.
3	Conflict among designing team members	Designer office	Insufficient flow of information among team members	Disturbed designing process	0-5%	50thous.-500thous	Low	Response of a team leader to all form of conflicts - mediation in a team	15thous.
4	Too optimistic assessment of employee workload	Designer office	Approval of unrealistic deadlines for individual work	Delay of designing work	5-40%	50thous.-500thous	Low	Proposing for employees to work overtime or ordering of part of work to another designing team	120thous.
5	Incorrect information from investor/lack of clear guidelines	Investor	Design may be issued with duplicate error or detected error can generate timing constraints	Verification of errors will increase costs and increase time due to the development of the next revision of design	40-70%	2-5 millions	High	Application to investor for extension of time to complete a design due to additional circumstances	20thous.
6	Staff do not have sufficient knowledge about the subject of design	Designer office	Errors in design	Verification of errors will increase time due to the repeated checks of designing work	5-40%	2-5 millions	Medium	Designing team leader strengthens control over work, providing for employees consultation with an expert	65thous.
Time risk									
7	Acceptance of unrealistic deadlines in contract	Designer office	Faulty contractual provisions	Deterioration of design quality or failure to meet the deadline	40-70%	2-5 millions	High	Employment of new employees or ordering part of work to another party during a contract	105thous.
Budget risk									
8	Underestimation of design budget	Investor	Budget may not be sufficient to carry out designing tasks	Deterioration of design quality	40-70%	2-5 millions	High	Limiting scope of design to necessary minimum	40thous.

But what about the hidden 'complex' risks?



We now need to look beyond the 'known'

- Assimilate the vast quantities of data
- Understand complex interdependencies
- Use analysis to focus the message
- Use history to help model tomorrow
- Create models to understand potential impacts

Today, it is possible:

