



Method to Identify Quality Ideas for New Product Development

Khairul Ridzwan Ibrahim
Ross F. Gilmour

PETRONAS Chemicals Group Berhad
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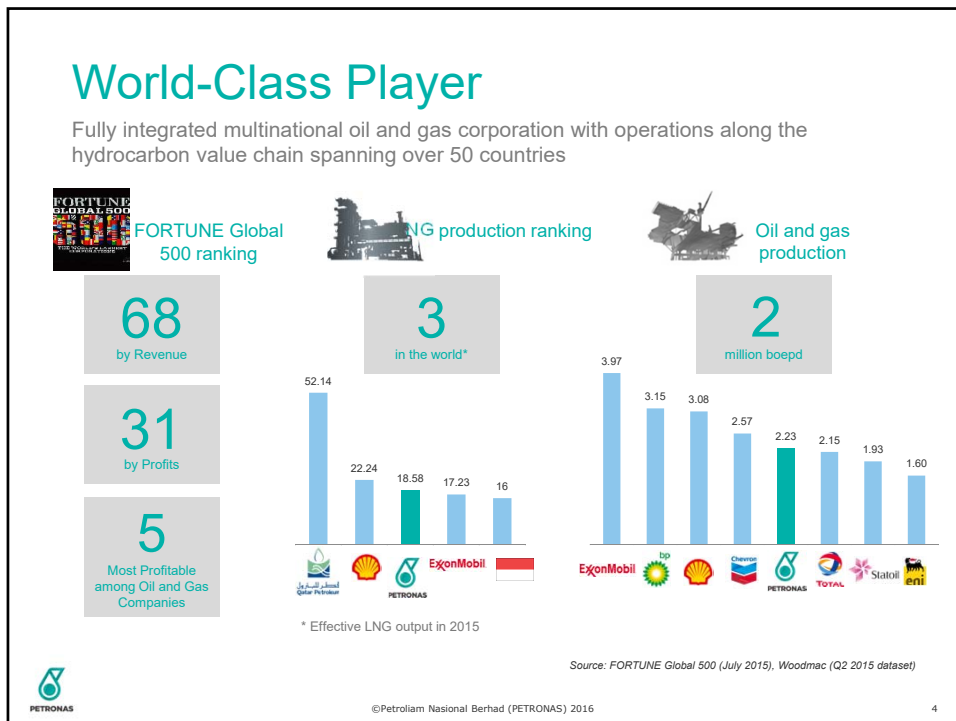
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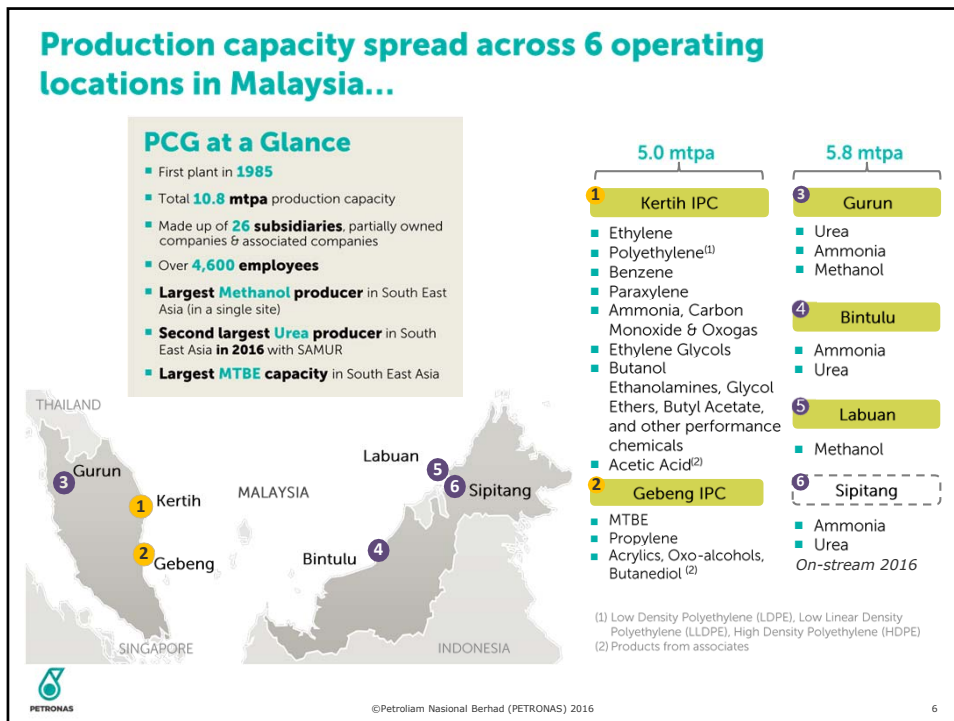
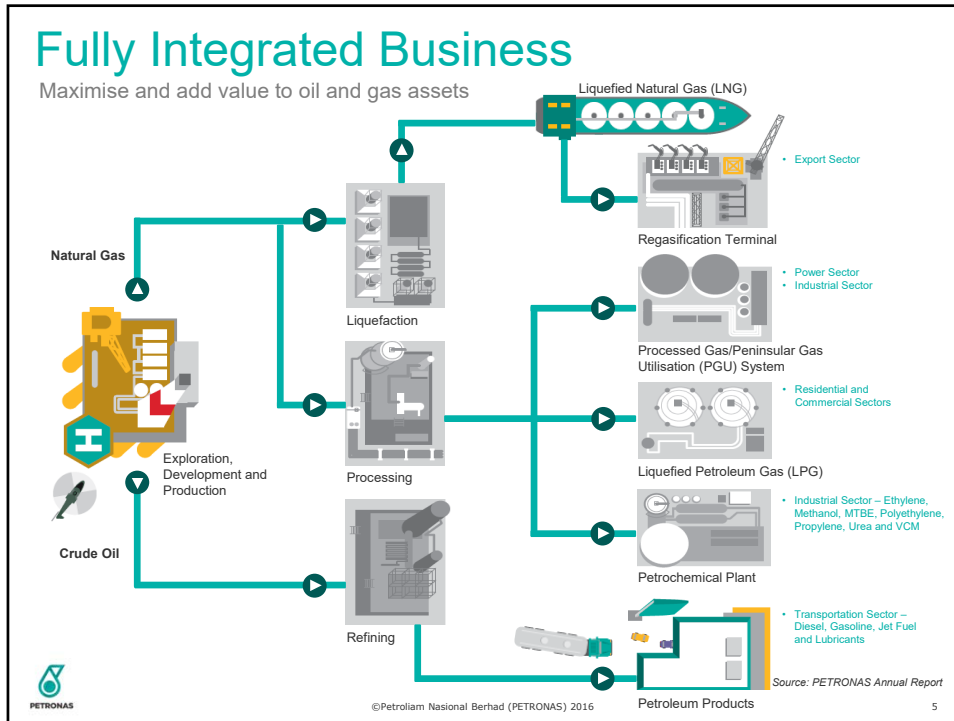
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Abstract



Success rates of ideas launched to the market in New Product Development (NPD) is low. It is estimated that only 3 successful lunches from 1000 ideas. This means that standard practices in launching products in organizations are highly inefficient. To improve the efficiency, we developed practical tools and processes to better manage the fuzzy-front-end of innovation in NPD. The process developed involves tools such as challenge framing, online idea management, modified Delphi ideation and review sessions and a semi-quantitative Opportunity/Feasibility matrix for prioritization. In a case study discuss in this paper, 43 ideas were gathered and later prioritized to 6 ideas by highly engaged participants. This was enabled by the practical and straight forward approaches applied. Being able to better manage the fuzzy-front-end, high quality ideas were able to be identified. The systematized approach delivered a significant improvement in its efficiency leading to more successful product launches.







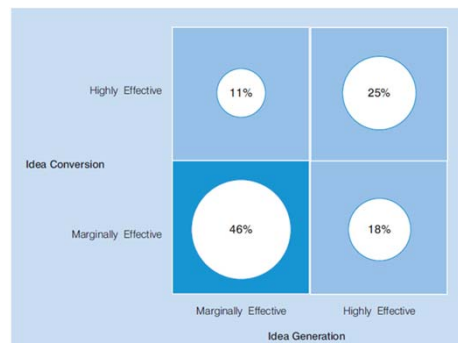
We will cover...

- Why we needed Idea Management?
- How we identified areas to launch Innovation Challenge?
- How we conducted Idea Sprint?
- How we designed our Challenge Statement?
- How we identified priority ideas?
- How we "roadmap" the ideas?





The 2012 Booz innovation survey found that 46% of companies evaluate themselves as marginally effective at ideation and conversion, while just 25% regard themselves as highly effective at both

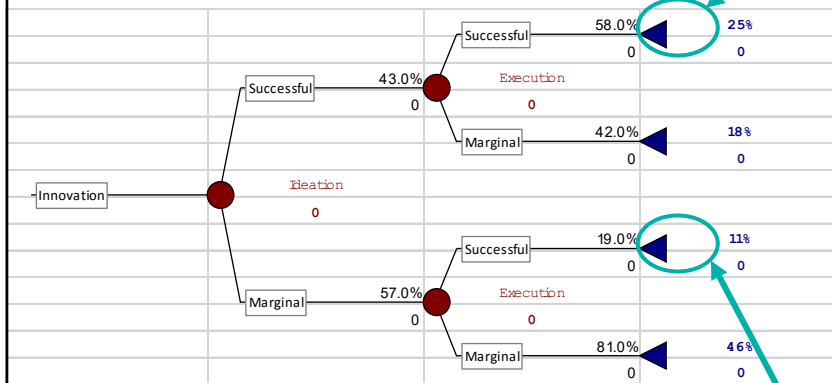


Is this really what these data are telling us?



The really important result is that successful ideation greatly enhances the likelihood of successful execution

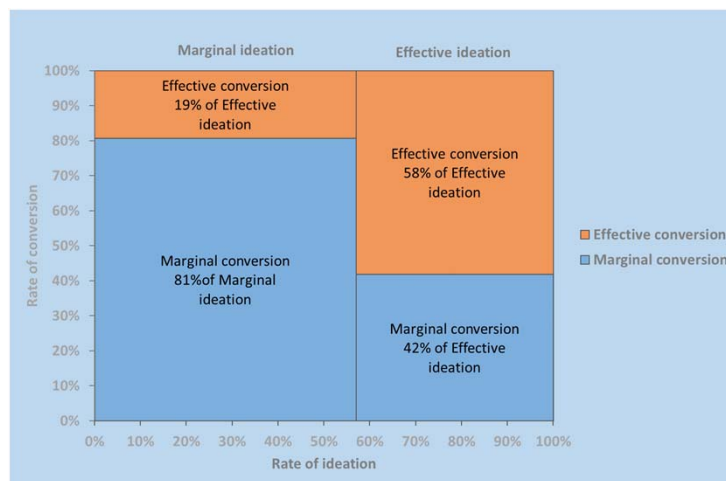
58% is the probability of successful execution, conditional on previously having successful ideation – having great ideas greatly enhances the likelihood of successful execution



By contrast, if you have poor ideas, then the likelihood of successful execution is poor (only 19%)



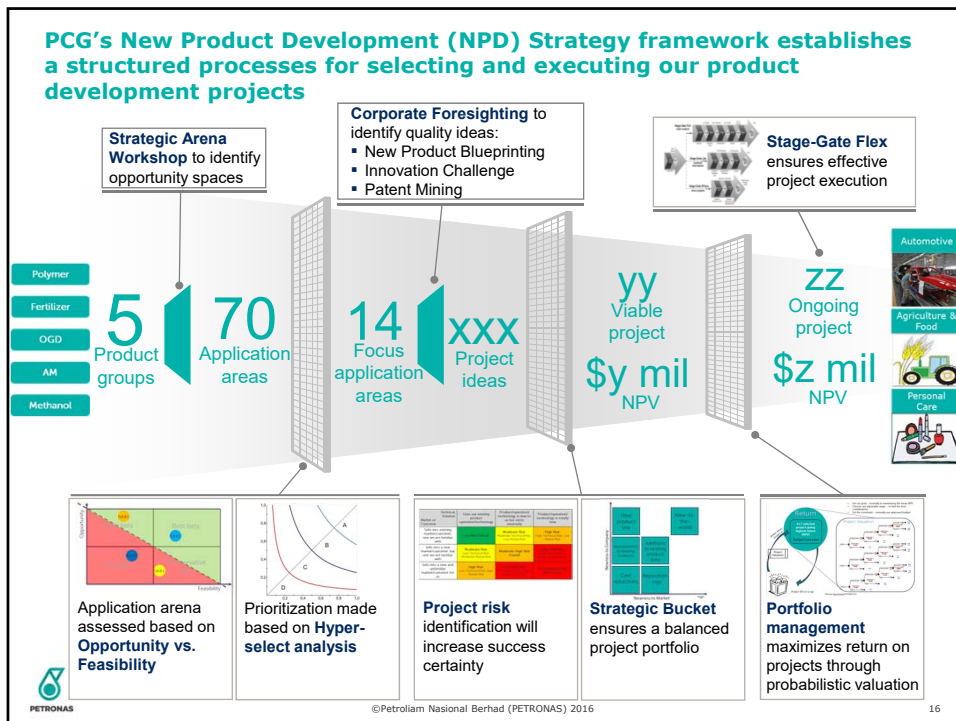
Emphasis on successful ideation, is associated with much enhanced rates of conversion

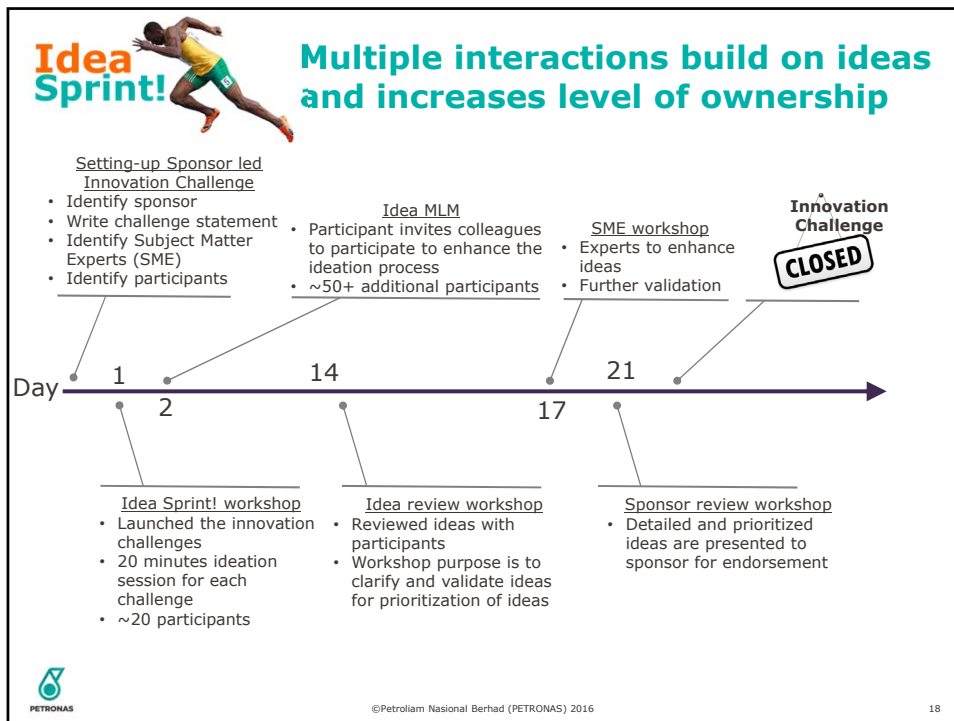




Why we want to do Idea Management?

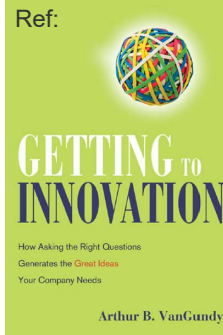
- Lack of transparency in project selection
- Small pool of people involved in NPD





Write an engaging question

1. Begin with the phrase, "How might we.....?"
2. Singularity of objective?
3. Absence of evaluation criteria?
4. Absence of solutions?
5. Appropriate level of abstraction?
6. Appropriate use of positioning elements?
7. Clear and unambiguous?



Example:

Idea Challenge	How might we develop new product from <u>(base product)</u> in <u>(focus application area)</u> application?
Context	1. (Base product) is limited to solvent application only. 2. This limitation has impacted the business netback.
End state	Solutions should be likely improved product netback.
What's next?	1. The team will review the ideas within 2 weeks time. Outcome of the review process will be shared. 2. Your participation will give you the opportunity to significantly take part in the implementation of the idea.

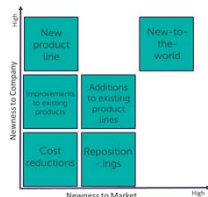


The expectations for the ideas were set up-front to provide a more focused ideation

Innovation Challenges

1. Innovation challenge #1
2. Innovation challenge #2
3. Innovation challenge #3
4. Innovation challenge #4
5. Innovation challenge #5

New Product Ideas



Quality Qualifiers

- Gross Net Back
- Sales Volume
- Time to Market
- Customer Readiness

Supporting Info

- Technology Maturity
- CAPEX investment
- Project Period**



Idea portfolio (risk/reward) matrix scaling statements

Opportunity Scaling Statements

No	Element	1	2	3	4	5
1	Net Back (gross)	\$0-\$10	\$11-\$30	\$31-\$50	\$51-\$100	More than \$100
2	Sales Volume (per month)	Less than 100MT	101MT-500MT	501MT-1000MT	More than 1000MT	
3	Customer Readiness	No customers identified	1-3 potential customers identified	More than 3 customers identified		

Feasibility Scaling Statements

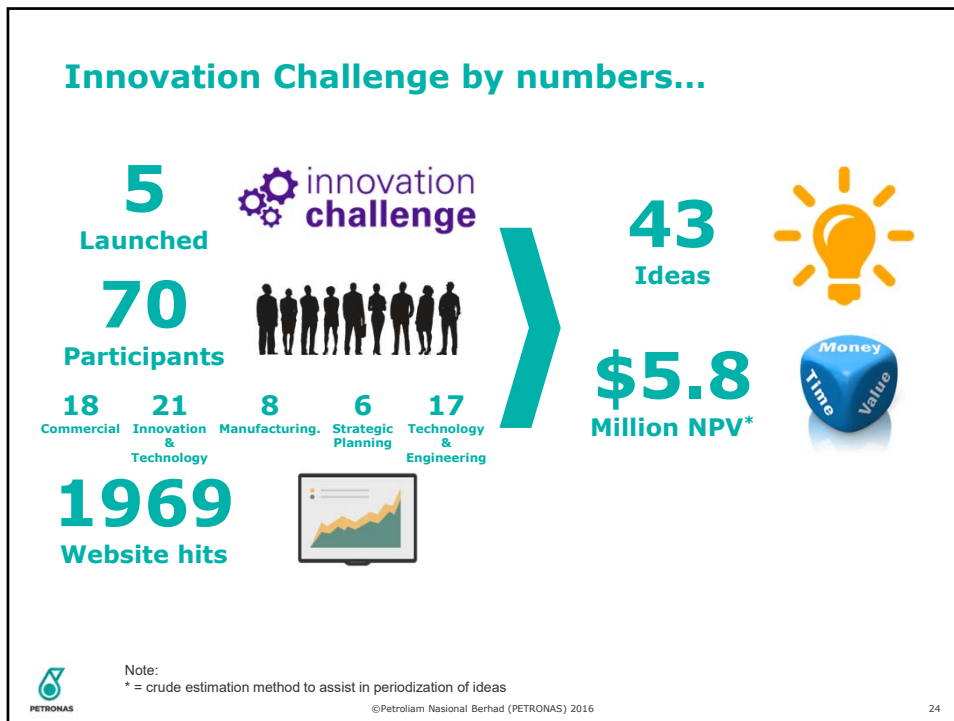
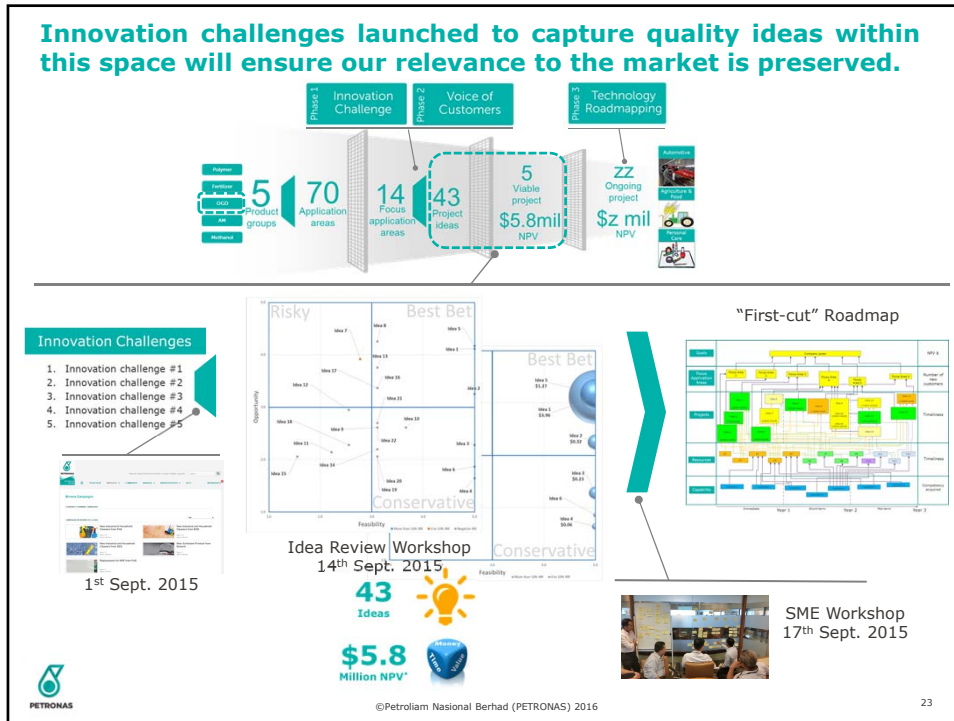
No	Element	1	2	3	4	5
1	Time to market	More than 3 years	Between 1 to 3 years	Less than 1 year		
2	Technology Maturity	Proven discovery	Successful demonstration at lab scale	Successful demonstration at pilot plant	Successful demonstration at demo plant	Successful full commercial production
3	Internal Rate of Return	Less than 5%	5.1%-7.0%	7.1%-9%	9.1%-11.0%	More than 11.1%



7 qualified ideas from the 5 Innovation Challenges

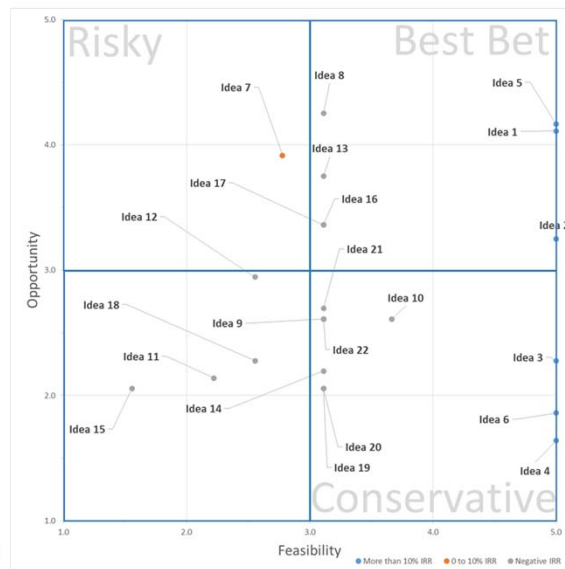
No	Innovation Challenge	Submitted Ideas	Qualified Ideas
1	Innovation challenge #1	8	1
2	Innovation challenge #2	10	2
3	Innovation challenge #3	6	0
4	Innovation challenge #4	10	4
5	Innovation challenge #5	9	0







Idea portfolio matrix was constructed to analyse and identify opportunities based 22 verified ideas (out of the 43 submitted).

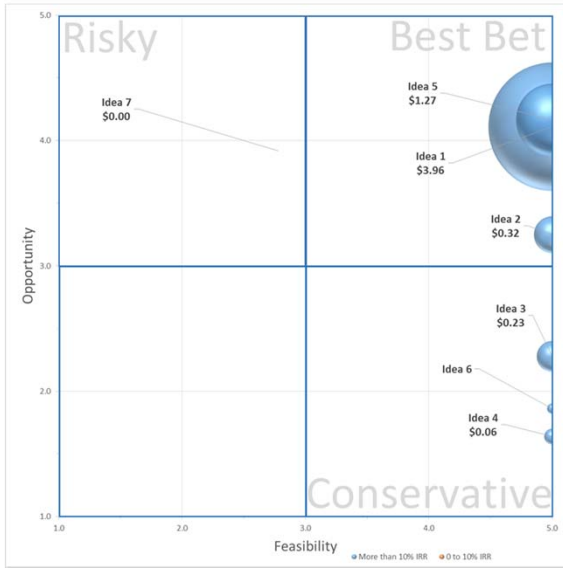


Highlights:

- Best Bet Ideas – 7 ideas (32%)
- Conservative Ideas – 10 ideas (45%)
- Risky Ideas – 1 idea (5%)
- Low priority – 4 ideas (18%)



NPV and IRR values for the ideas were also estimated utilizing probabilistic analysis to identify potential values



Highlights:

- 6 ideas have positive NPV
- 7 ideas have positive IRR
- 1 idea between 0% to 10% IRR
- 6 ideas more than 10% IRR

Note

- NPV in USD Million
- \$0.00 represents negative NPV



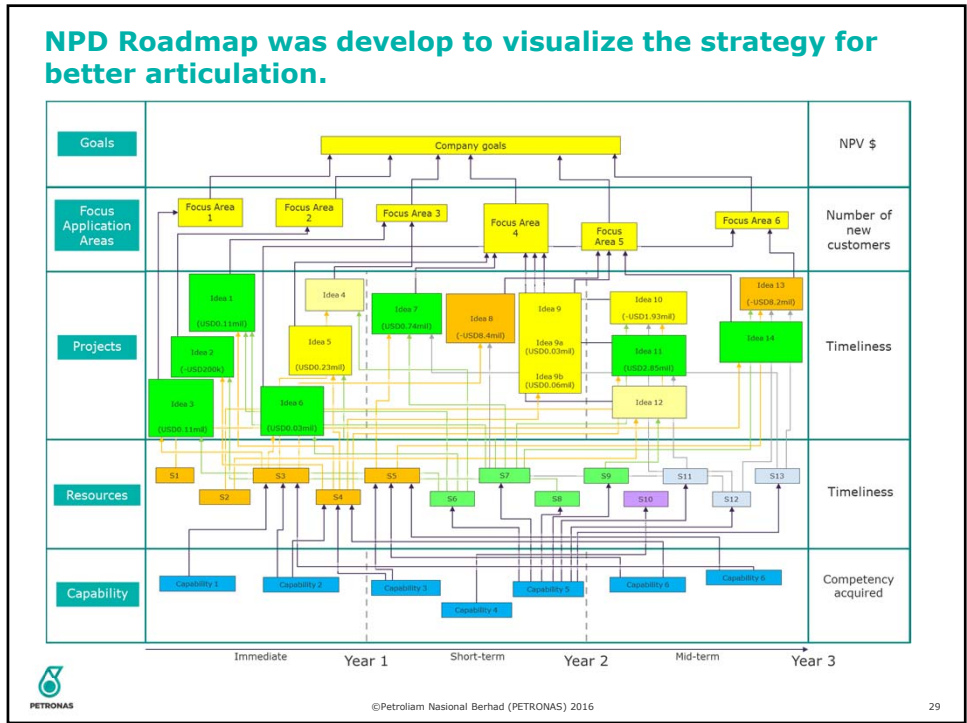
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How do we “roadmap” ideas?

NPD Roadmap was develop to visualize the strategy for better articulation.



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Challenges, summary & way forward...

Challenges

- Standardizing scaling statement for all product group is impossible as the nature of the businesses are different
- Although the online tool is user friendly, first time user still requires guidance and time to familiarize
- Finding high value quality ideas as ideas identified were more of low-hanging-fruits
- 5 idea sprints is too much in one day, 3 is optimum
- The challenge framing can be further elaborated to ensure participants are clearer with the context. This is hoped to result in improvement to the quality of ideas received

Success factors

- Getting the right sponsor for the challenge
- Clear challenge statement
- Getting the right participants



Summary and way forward

- Idea management is effective in getting quality ideas, so long the design is correct
- We will be launching more Innovation Challenges to load our idea bank with short term and mid-term NPD ideas



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Thank you