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Management Consultants

Product Strategy and Modularisation

uniter

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Product Strategy & Modularisation

MARKET DESCRIPTION

ANALYSING TRENDS

MODULAR ROADMAP

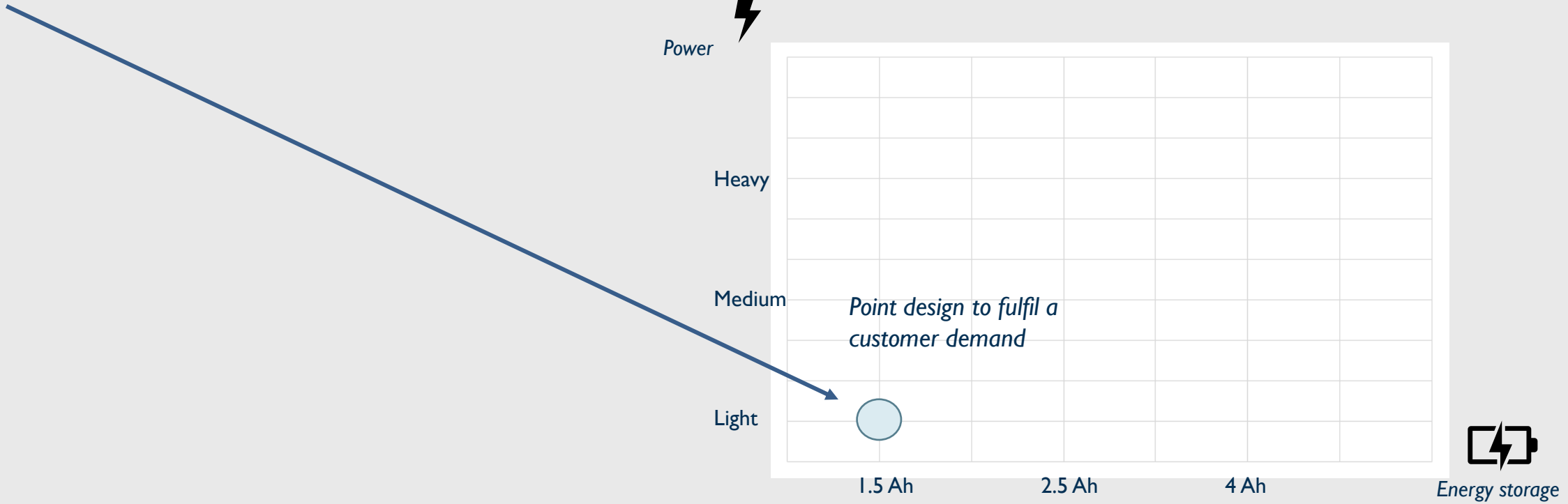
CONFIGURABLE SOLUTIONS

VALUE BASED SELLING

Typical approach: Point design

Customer A

- Weight level Light
- Energy storage 1.5 Ah



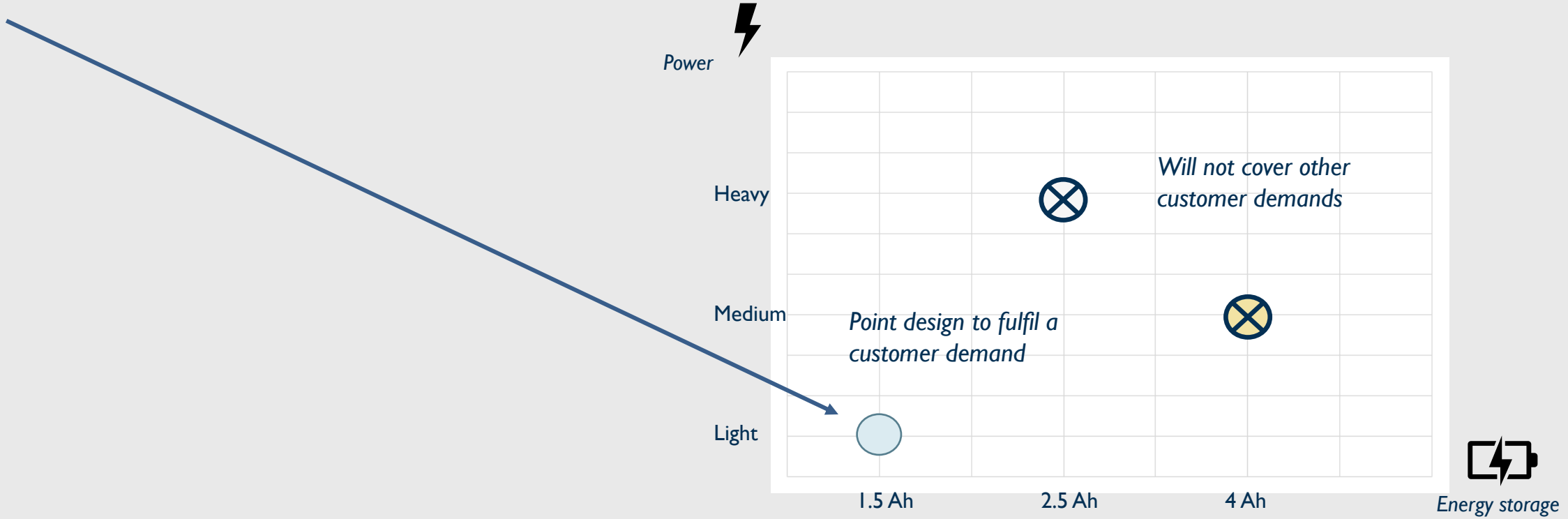
Typical approach: Point design

Single customer focus

Customer A
- Weight level Light
- Energy storage 1.5 Ah

Customer B
- Weight level High
- Energy storage 2.5 Ah

Customer C
- Weight level Medium
- Energy storage 4 Ah



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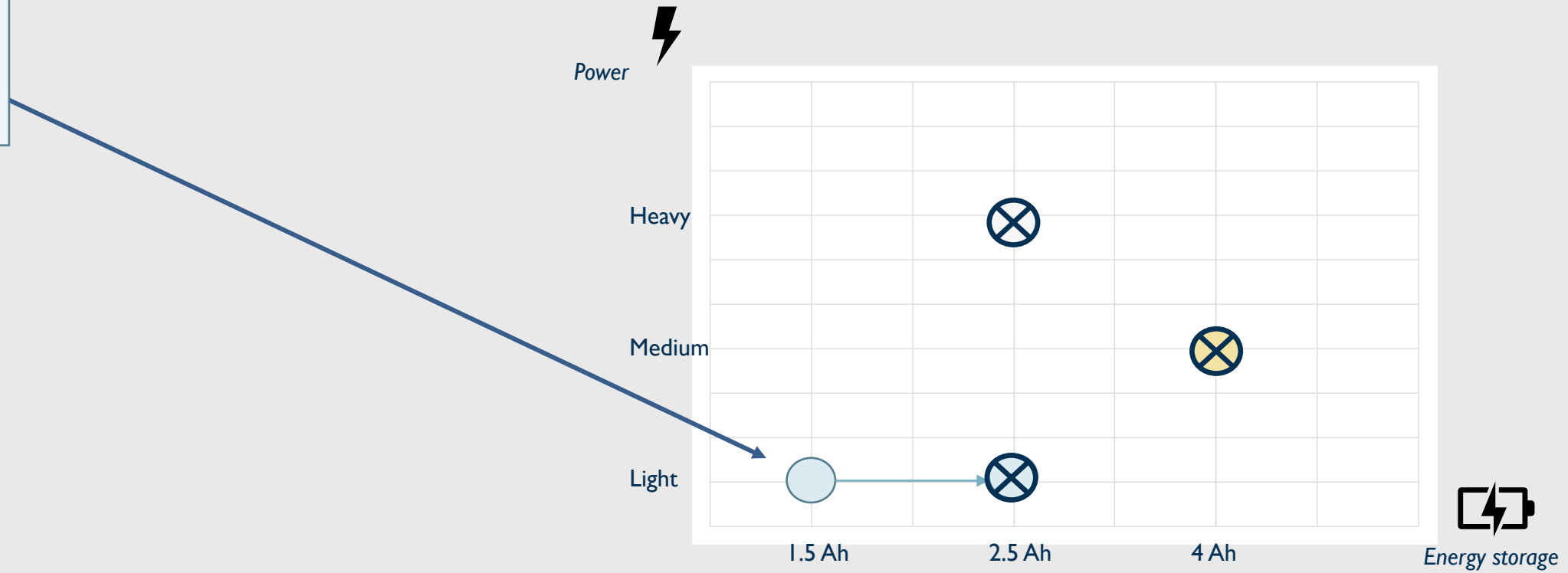


Typical approach: Point design

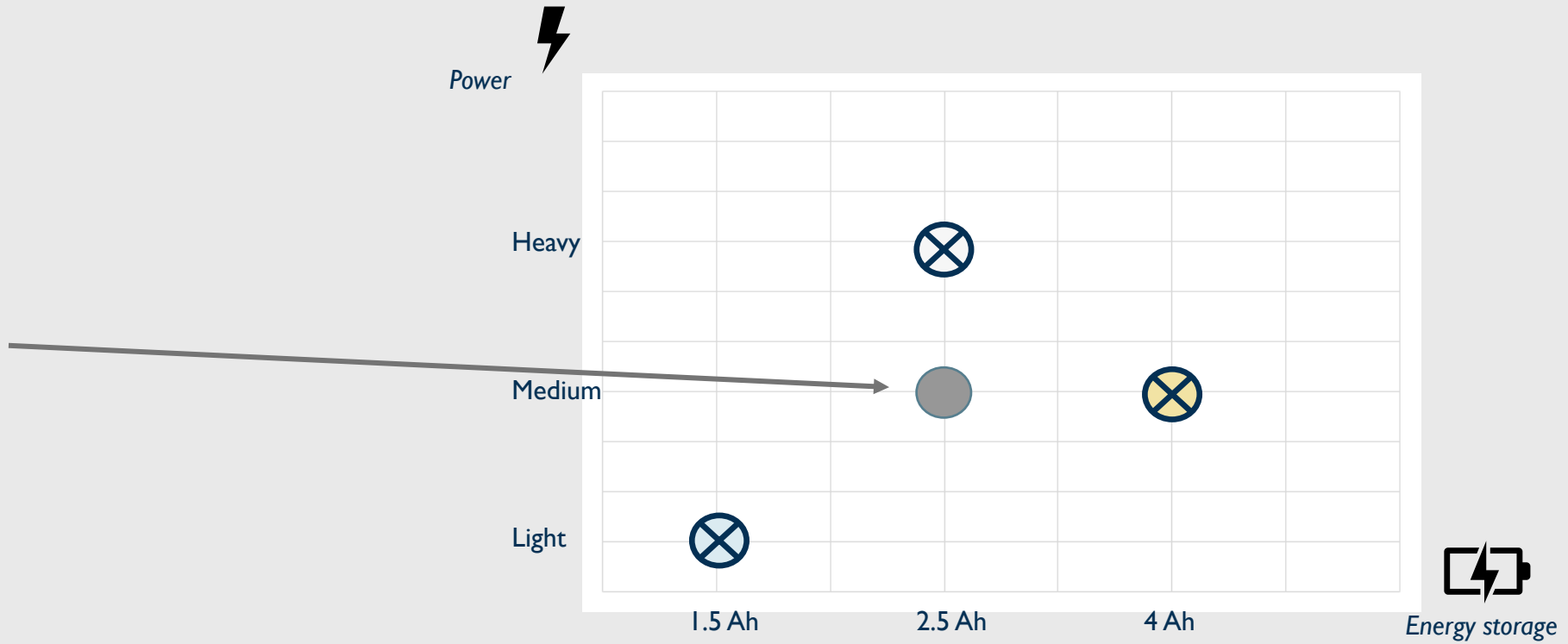
One solution fits all

Customer A
- Weight level Light
- Energy storage 1.5 Ah

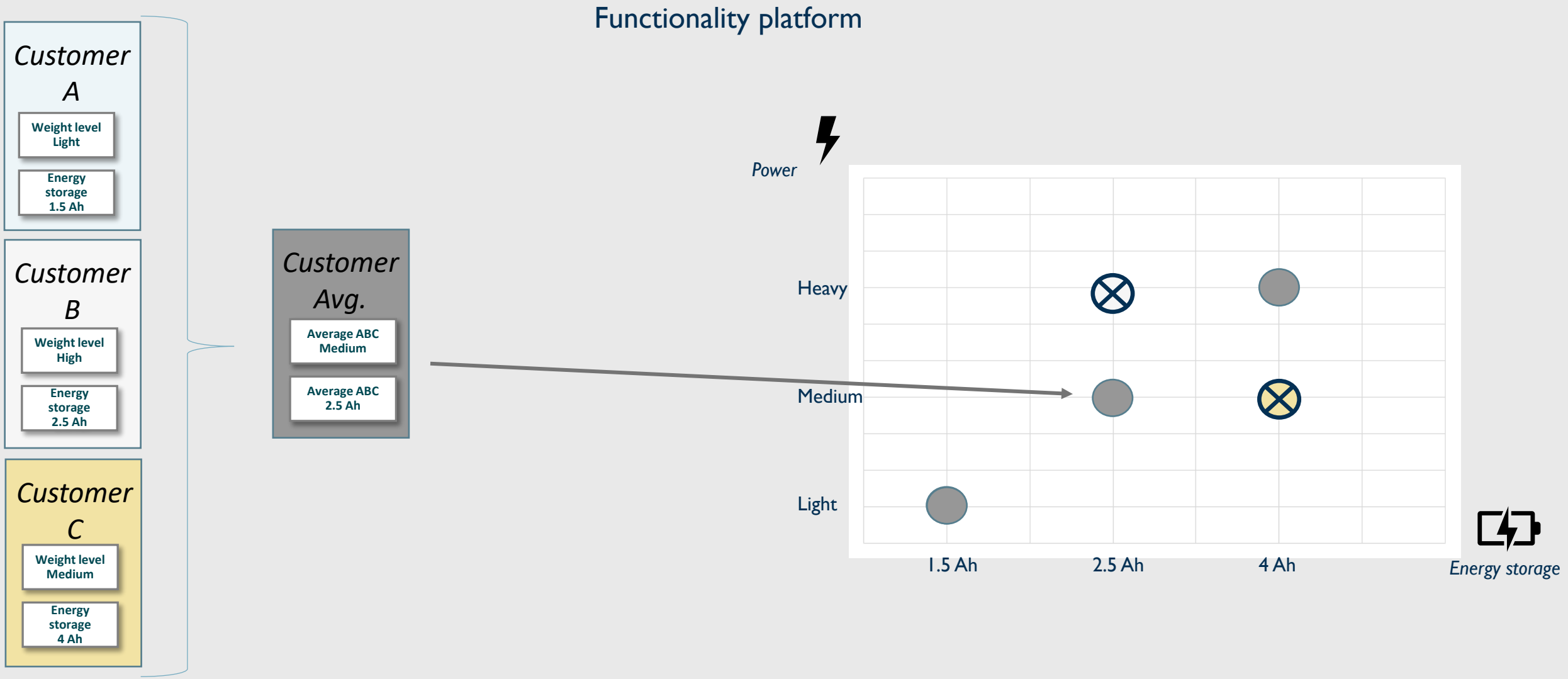
Customer B
- Weight level High
- Energy storage 2.5 Ah

Customer C
- Weight level Medium
- Energy storage 4 Ah

Customer Avg.
- Average ABC Medium
- Average ABC 2.5 Ah



Typical approach: Point design



Performance demand approach: System of systems

Customer A
- Weight level Light
- Energy storage 1.5 Ah

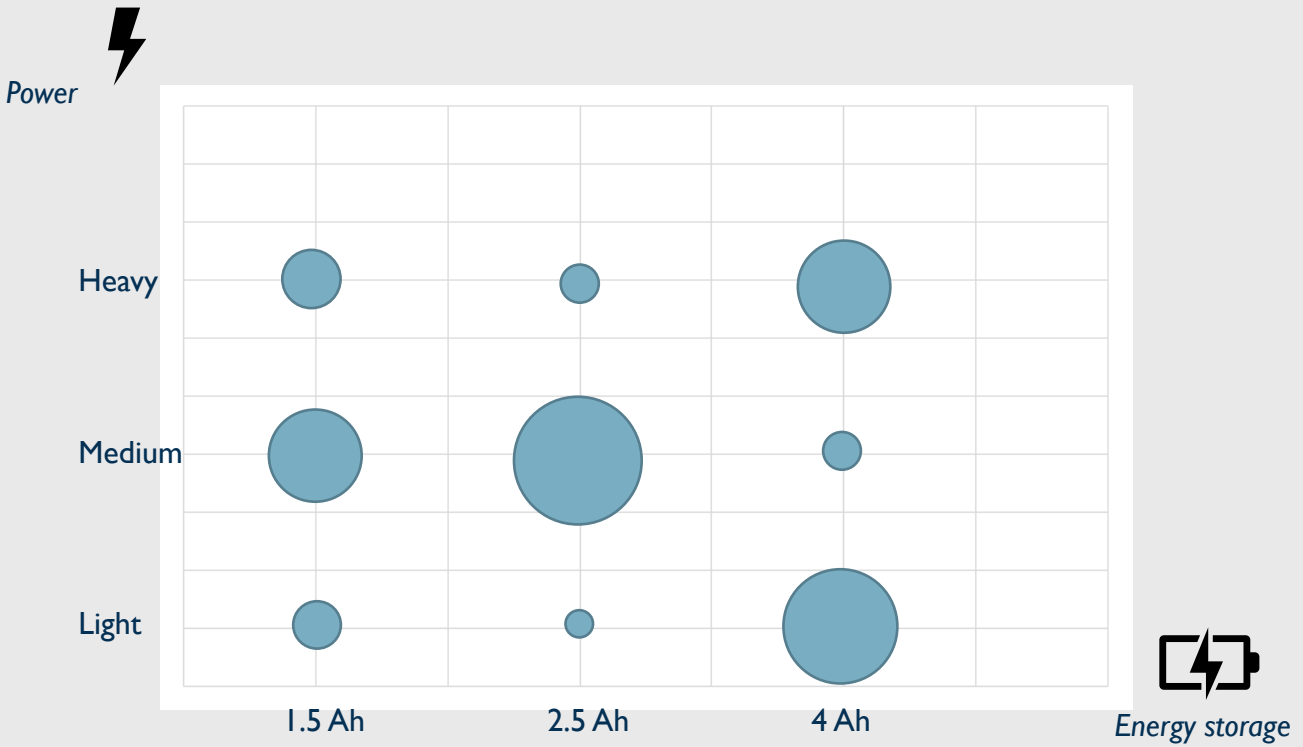
Customer B
- Weight level High
- Energy storage 2.5 Ah

Customer C
- Weight level Medium
- Energy storage 4 Ah

All Performance Demands
- Weight level Light
- Energy storage 1.5 Ah
- Weight level Heavy
- Energy storage 2.5 Ah
- Weight level Medium
- Energy storage 4 Ah

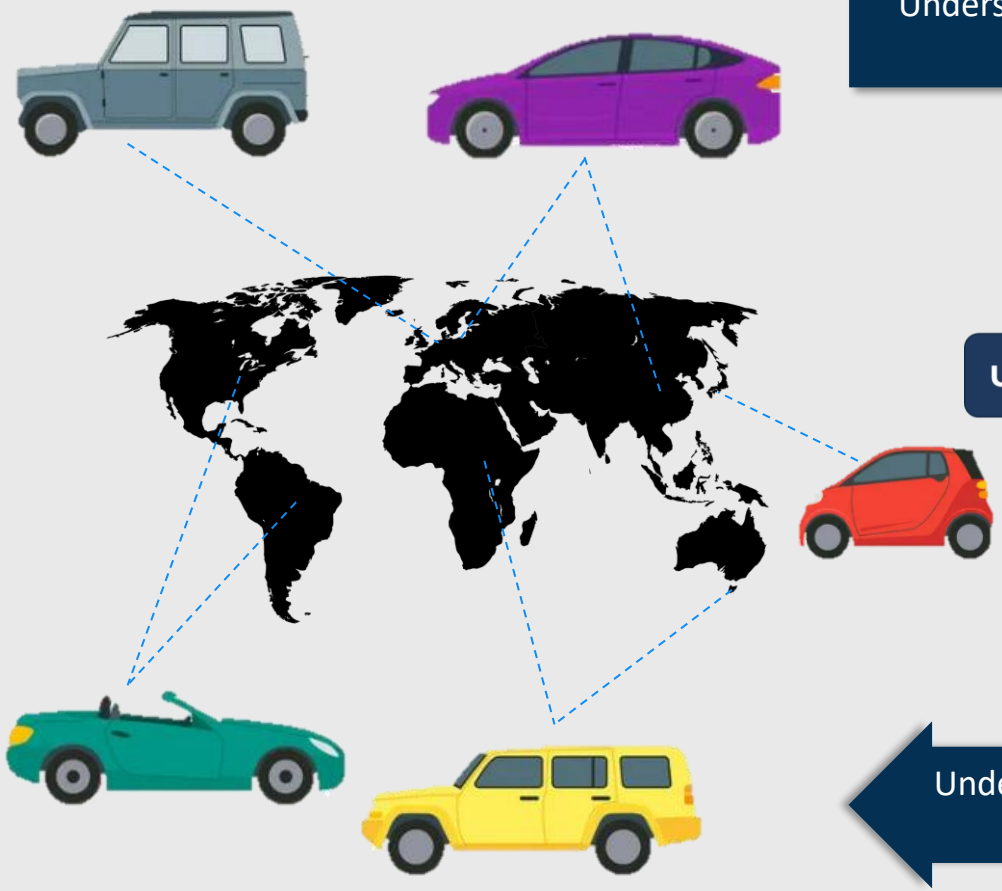
Performance Series

Series 1	Series 2
Light	1.5 Ah
Medium	2.5 Ah
Heavy	4 Ah

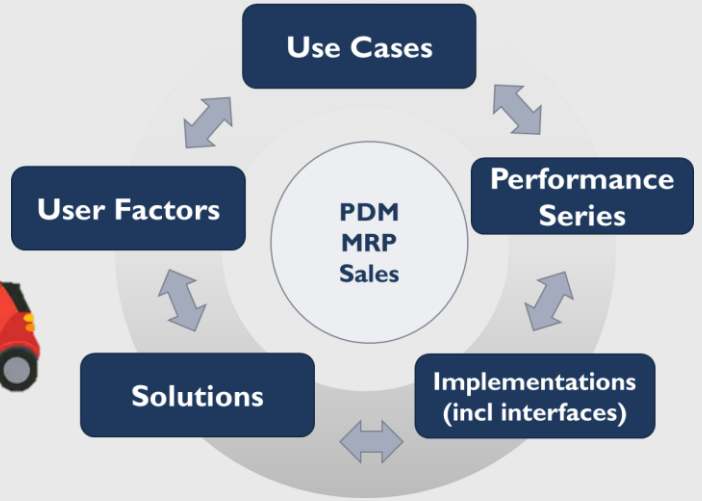


One Common Modularisation Methodology

Through User Factors and Performance Series

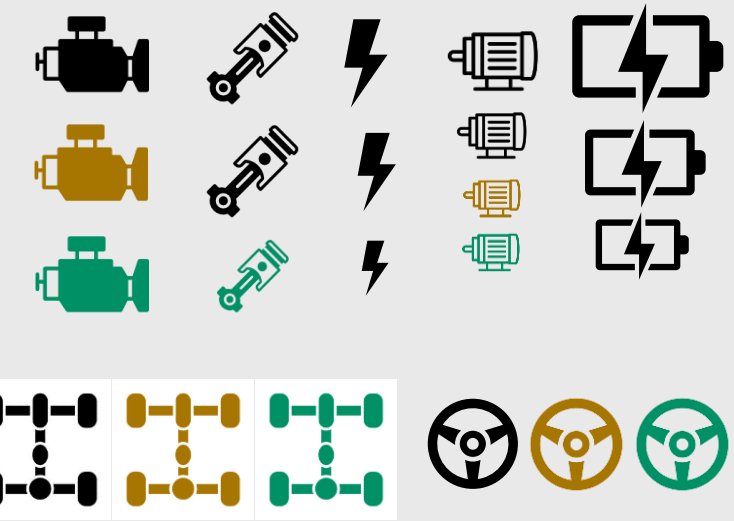


Understanding all customers' needs and what to develop



Understand the customer need to offer the right solutions

Modular Roadmap



			
LITHIUM	LITHIUM+	LITHIUM+	LITHIUM+
1.3AH	1.5AH	2.5AH	4.0AH

What is the right number of batteries?

- As few as possible?
- Every battery the customers asks for?
- As cost efficient as possible?

Just enough to fulfill all different customer needs!

Expressed as *User Factors*:

- Working material
- Type of work
- Frequency of use
- Typical working time
- Time available to charge
- Strength of User
- Appearance sensitivity
- Price sensitivity
- ...

The right Performance

CHEMISTRY	LITHIUM	LITHIUM+	LITHIUM+	LITHIUM+
CAPACITY	1.3AH	1.5AH	2.5AH	4.0AH
FADE FREE POWER	+	+	+	+
IMPROVES TOOL PERFORMANCE		10%	10%	10%
FUEL GAUGE		+	+	+
OVERLOAD & THERMAL PROTECTION ELECTRONICS	+	+	+	+
INTELLICELL INDIVIDUAL CELL MONITORING	+	+	+	+
	102	125	192	387
	86	119	197	312
	48	87	131	341

Properties

The ”best” Property

Use Case

Performance

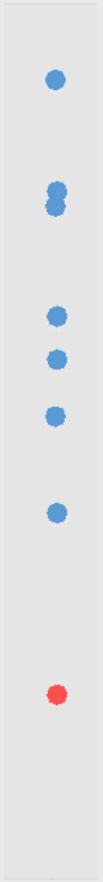
Sequential example – Energy Storage Demand

User Factors | Use Cases | Performance Demand Formula | Energy storage demand | Performance Steps | Implementations

User Factors	
Type of work • Drilling • Sawing • Screwing	
Typical working time • 30 seconds • 10 minutes • 30 minutes	
Working material • Stone • Solid wood • Concrete • …	

Use Cases
Professional Carpenter
Factory Assembly Europe
Fatcory Assemby Brazil
Home Appliance
School Appliance

Energy Storage demand
=
$Function(Task, Material…)$

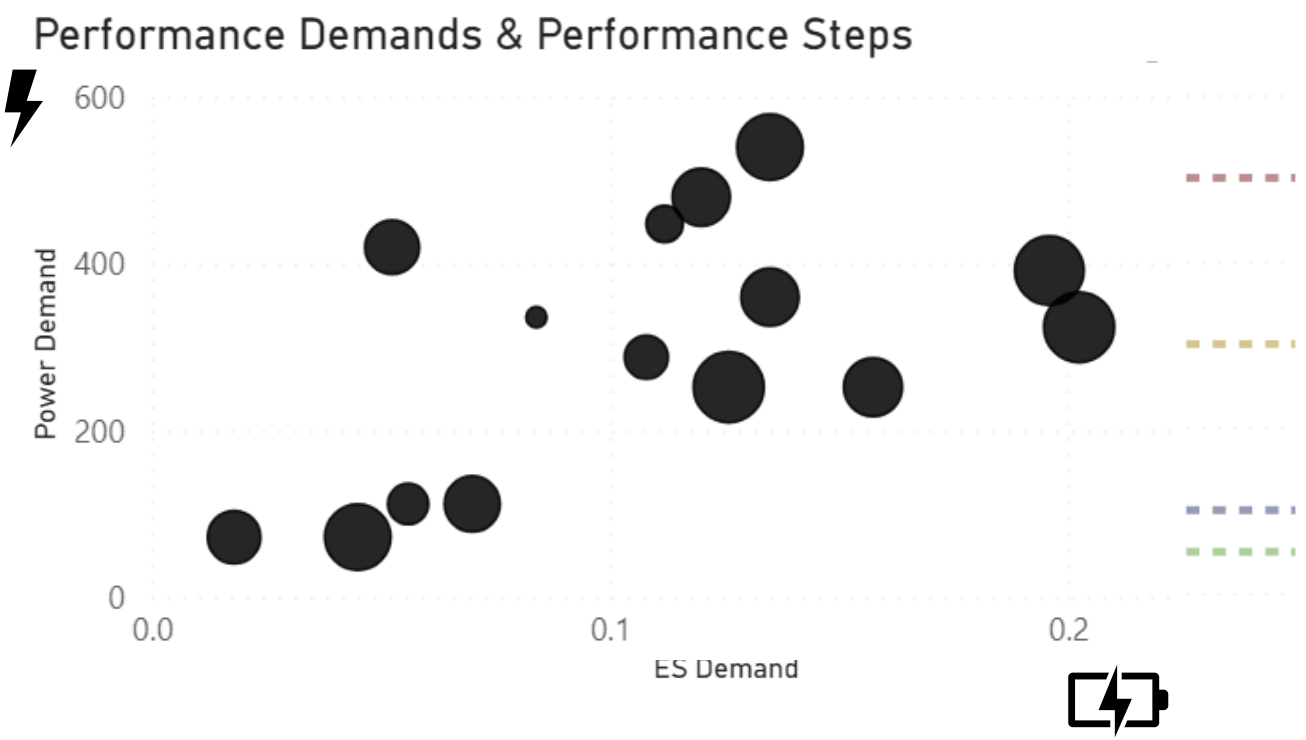


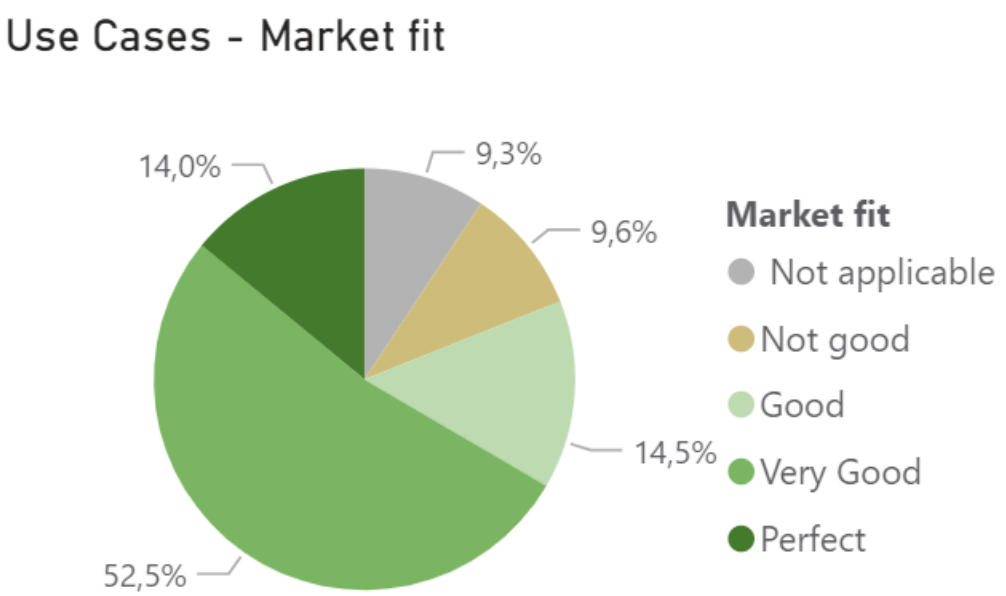
C
B
A

Modularisation

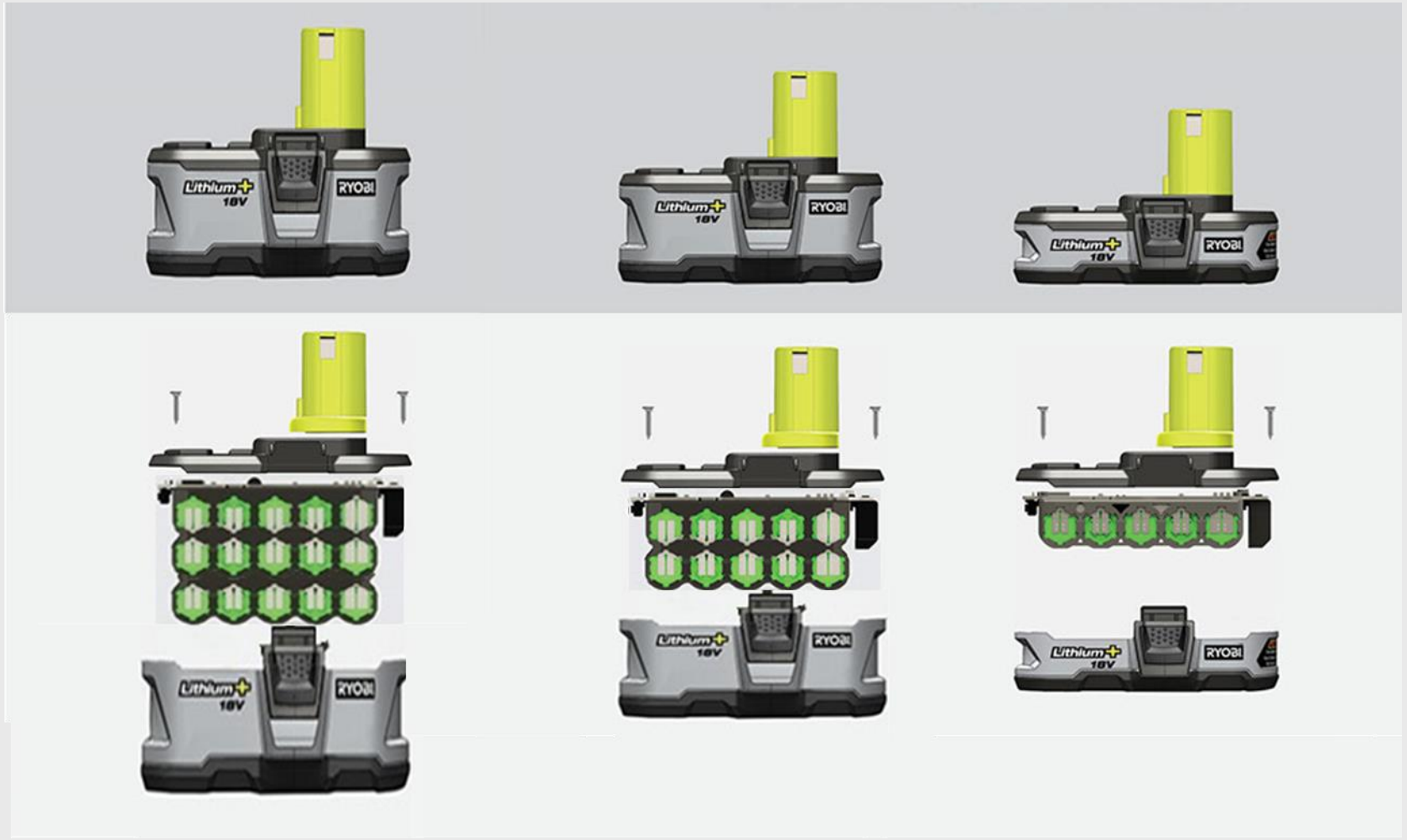
How good does a system fit the market

Market fit analysis





Modular Implementation



Uniter process

- Identify the market conditions and needs - User Factors
- Describe the market variation by Use Cases based on User Factors
- Analyze Performance Demands across Use Cases
- Create relevant Performance Series covering the demands
- Design a modular architecture for the whole system
- Evaluate concepts, architectures, solutions etc. against the Use Cases – Market Fit Analysis
- Design and implement hardware, software and services.
- Find the most optimal solution through combinatorics

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