

Perspectives on **Confusing Markets:**
 “All you need is TRUST” 

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Outline

- **Part 1: Consumer Context**
 - Many Markets
 - Many Options
 - Market Dynamics
 - Personal Dynamics
 - Micro-microscopic static solutions vs. dynamic general solutions
- **Part 2: Consumers**
 - Rational Behaviour vs. Overload, Salience and Biases

- **Part 3: Current approaches**
 - Static Micro-microscopic and local maxima

- **Part 4: On-the-horizon approaches**
 - Dynamic Micro-microscopic and local maxima

- **Part 5: Hopefully not too distant and not too unimaginable future**
 - **Finding dynamic global maxima**
 - Data (personal and global)
 - ML & AI
 - TRUST

Part 1: Consumer Context

- Many Markets
- Many Options
- Market Dynamics and Personal Dynamics
- Micro-microscopic static solutions vs. dynamic general solutions

Many Markets

- Health Insurance
 - Auto Insurance + Roadside + Green Slip
 - Home owners-renters Insurance
 - Content Insurance
 - Life Insurance
 - Travel Insurance

 - Electricity
 - Gas
 - Solar, Hot-water Heater, ...
- Super-annuation
 - Credit Cards
 - Savings, Debit
 - Investments
 - Mortgage

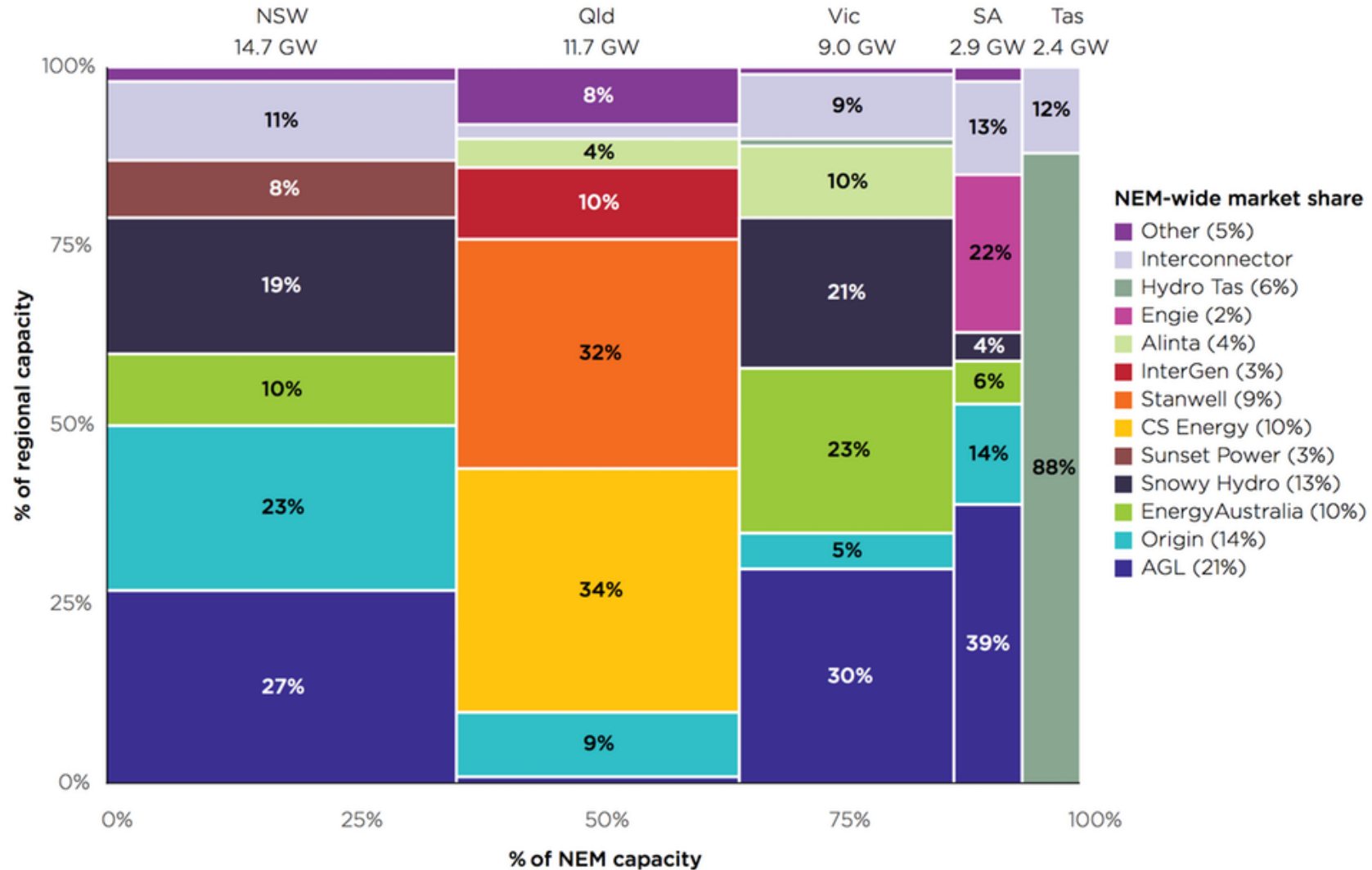
 - Internet Service
 - Mobile Phone

 - Schooling (K-12, Uni, training)

 - Home, Car(s), ..., HBO, Netflix
 - Charitable donations, volunteering

Many Options: Eg, Electricity Landscape (2018)

(A) Many Providers (From ACCC Regulatory Report)



Many Options: Eg, Electricity Landscape (2018)

- (B) **Many plans:** Eg,
 - AGL offered at least 11 plans in Sydney:
The “Savers” plan, “Savers Online”, “Everyday”, “Freedom”, “Standing Offer”, “Essentials”, “Essentials Plus”, and so on.
 - And each plan has **many options:**
Each plan had four to eight tariff type options: “Flexible Price”, “Time of Use Interval”, “5 Day Time of Use”, “Single Rate”, “Two rate: single rate with controlled load”, “Single Rate Demand Opt-in”, and so on.
- Overall, there were over 350 unique provider-plan-options to choose from if you lived in some areas of Sydney in 2018
- A rational (single market and temporal) Optimizing Consumer choice:
 - Depends on usage patterns
 - Should also consider responsiveness to each option

Consequences of Many Firms & Many Options

- In The Conversation, I argued that more firms and more options should (*based on traditional economic theory*) be great for consumers (i.e., according to preaching to the rational economist's choir). If correct, the ACCC should be happy (i.e., they should let sleeping dogs lie).
- Yet, in 2018:
 - Real prices for electricity had increased by 35% over the past decade
 - AGL profits were nearly \$1.6B, an increase of over 100% in the past year alone

Dynamics:

A constantly changing optimization problem

- Markets
 - New entrants
 - New Options
 - Deals Expiring
 - Packages and Bundling
 - New solutions
 - And so on
- Personal
 - Aging
 - Marriage and Divorce
 - Births and Deaths
 - New Job, Promotions, Loss of work
 - New home, car, etc.
 - Health shocks
 - And so on

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All optimal solutions can involve, and take into consideration, adjusting behaviour and choices across multiple markets

Part 2: Consumers

- Rational Behaviour
 - Within a market: Options and Behaviour

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 - Within a market: Options and Behaviour
 - Across all markets
 - Over Time
- Overload (288 hours)
 - Q: Imagine having two hours free this weekend to improve your financial wellbeing. Which market(s) should you focus on?
 - Health Insurance, Mortgage, Debt management, Electricity Contract, Solar,
 - A: Obviously, where can you save the most?

Part 2: Consumers

- Rational Behaviour
 - Within a market: Options and Behaviour
 - Across all markets
 - Over Time
- Overload (288 Hours) & Salience
 - Imagine having two hours free this weekend to improve your financial wellbeing. Which market(s) should you focus on?
 - What do we actually do? For many, what is made salient:
 - The markets where someone just called you with a better deal?
 - The ones in the news
 - Word of mouth
 - Etc.

Part 2: Consumers

- Rational Behaviour
 - Within a market: Options and Behaviour
 - Across all markets
 - Over Time
- Overload (288 Hours) & Salience/Attention
 - These take conscious (System 2, Deliberative) effort
 - Our brains are not hard wired for this context

Part 2: Consumers

- Rational Behaviour
 - Within a market: Options and Behaviour
 - Across all markets
 - Over Time
- Overload (288 Hours) & Salience/Attention
- Many Biases (i.e., shortcuts)
 - Perhaps two most important ones:
 - **Present Bias** – time to gather info, make decisions, time to enact the decision
 - **Status Quo Bias** – includes loss aversion, omission-commission bias, reference effects, ...

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 - In a similar spirit, BI units can try the same tactics to help consumers

Part 3: Current approaches

- Static Micro-microscopic and local maxima
 - Communications – Addresses Salience
 - UK BIT OFGEM 2017 RCT
 - Information Comparison services – Addresses Overload
 - E.g., Australian Government’s EME; Financial Institution Product Comparisons
 - Changing Default Settings – Addresses Status Quo Bias
 - E.g. Default 401 (Super) plans
 - Commitment Devices – Addresses Present Bias
 - E.g., Save for Tomorrow
 - Offering New Products – Addresses Atypical Preferences
 - E.g., PLS products

Part 4: On-the-horizon approaches

- **In Search of a Dynamic Micro-microscopic solution**
- **Solution needs to overcome:**
 - **Information Overload**
 - **Biases (Present Bias, Status Quo, Loss Aversion, Omission-Commission, ...)**
 - **Dynamics: Personal and Market**

Part 4: On-the-horizon approaches

- **In Search of a Dynamic Micro-microscopic solution**
- **In there infancy; third party services**
 - **Transformer (was offered by Choice); Robosave**
 - **I-select; Travago**

Part 4: On-the-horizon approaches

- **In Search of a Dynamic Micro-microscopic solution: Characteristics of an optimal third party service: My Perspective**
 1. **Continuously** search the *entire market* for the **best plan**;
- Covering the entire market will be important. Many existing comparison sites only include a subset of market offers (generally from retailers who pay commissions to the comparison site).

Part 4: On-the-horizon approaches

- **In Search of a Dynamic Micro-microscopic solution: Characteristics of an optimal third party service: My Perspective**
 1. Continuously search the *entire market* for the best plan;
 2. Have access to **individual consumer usage data**;
- To offer the best deal to each consumer – based on their actual usage – a service needs regular easy access to consumer data that does not burden the consumer to find the plan that matches usage.

(Note CDR is a potentially big step in this direction.)

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 1. Continuously search the *entire market* for the best plan;
 2. Have access to individual consumer usage data;
 3. Have the **power to switch** a consumer to a better deal (with authority from the consumer);
- It is also important that consumers can grant authority to a third party to automatically switch providers and change plans on their behalf. This is critical, as consumers often find taking action just too much hassle, even when they're guaranteed fairly substantive savings [Deller et al. (2017)].

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 1. Continuously search the *entire market* for the best plan;
 2. Have access to individual consumer usage data;
 3. Have the power to switch a consumer to a better deal (with authority from the consumer);
 4. Act in **the best interests of consumers** (and therefore not accept payments or commissions from retailers);
- Most comparison sites accept commissions and it is not always clear to consumers that a comparator has an affiliation with a retailer.
- **Trust will be a vital feature for the service** – consumers need to trust the service with their personal data, and trust that an automatic switch will genuinely be in their best interest.

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 4. Act in the best interests of consumers (and therefore not accept payments or commissions from retailers);
 5. Be structured so consumers **pay for the service when they save**, not before;
- The benefits of service often come with a significant lag, and the consumer typically won't see the counterfactual (that is, they aren't reminded of how much they would have paid if they didn't use the service). Aligning payment for the service with monthly or quarterly bills, and explicitly drawing attention to the counterfactual will make savings salient, and avoid present bias.

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4. Act in the best interests of consumers (and therefore not accept payments or commissions from retailers);
5. Be structured so consumers pay for the service when they save, not before;
6. **Bargain collectively for consumers**
 - An ideal service would operate on a large scale. This would allow the service to collectively bargain and counter-balance retailers' market power, with similar advantages that unions provide when aggregately bargaining for many workers.
 - Collective bargaining on behalf of consumers also enhances competition and encourages new entrants.

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Q: Does this shift the challenge from evaluating retailers to evaluating 3rd parties?

A: Role for Government: Certification & Ratings will be critical (at least initially)

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IS THIS FEASIBLE?

Q1: Does the Data Exist?

Q2: Are there algorithms (ML, AI) to find the best solution and automate actions?

Q3: Will consumers trust anyone to do this (i.e., to give up autonomy)?

Part 5: Finding dynamic global maxima

- **Recall:**
 - Many markets
 - The markets are **NOT** independent
 - The markets are dynamic
 - The consumers are dynamic
- **Thus, optimal solutions need to take into consideration all market relationships and all dynamics**
- **Data (personal and global)**
- **ML & AI**
- **TRUST**

Summary: The Big Picture

Shifting the Market from System 2 to System 1

From Life 3.0

- System 2: Deliberative and slow
 - Multiply numbers, choose where to go to dinner, which electricity plan, which mortgage, how much debt to pay, etc.
- System 1: Unconscious and fast
 - Identify Images, balance, grabbing, breathing, ...
- We in-take roughly 10^7 bits of information every second
 - Mostly handled by System 1
 - Perhaps 10 to 50 bits of this information handled by System 2
 - We consciously or unconsciously trust our System 1 even though we mostly have no clue how it works

Summary: The Big Picture

Shifting the Market from System 2 to System 1

From Life 3.0

- System 2: Deliberative and slow
- System 1: Unconscious and fast
- We in-take roughly 10^7 bits of information every second

- Consumers make decisions in markets analogously to System 2; i.e., take in limited bits of information, use short cuts to make decisions, and thus are (highly) inefficient

Summary: The Big Picture

Shifting the Market from System 2 to System 1

From Life 3.0

- System 2: Deliberative and slow
- System 1: Unconscious and fast
- We in-take roughly 10^7 bits of information every second
- Consumers in Markets operate analogously to System 2:
- **The bottom line:**
To move towards a System 1 marketplace requires us to trust the market in a manner analogously to trusting our own System 1

Discussion Points:

How to overcome Confusing Markets?

1. Are the current micro approaches a futile battle if firms always stay one step ahead, given the dynamic contexts?
2. What key factors will drive trust to share data?
3. What key factors will drive trust to give up autonomy in choice?
4. Should we solely rely on a private market solution?
5. What role does government have?