Progress report
July 2016

Think Forward Initiative

# Bringing the focus

The Argumentation Factory
www.argumentenfabriek.nl

© July 2016

**Content**
Robin Fransman
Ingrid Doude van Troostwijk

**TFI facilitating team**
Dagmar van der Plas
Lucie Hustolesová
Stefan van Woelderen
Erich Suni Melgar

**Design**
Willem van den Goorbergh
Monique Willemse

**Commissioned by**
THINK FORWARD INITIATIVE

# Contents


Introduction 4

Governance & Process 6

Outcome of theme Spending, Budgeting & Borrowing 11

Outcome of theme Saving, Investing & Retirement 15

Outcome of theme Financial Literacy 19

Next Steps 24

Research Board reflection 25

Working Group Participants & Research Board 30

# Introduction

The Think Forward Initiative is an open platform started by ING, EMC, Microsoft, Dimension Data and The Institute for New Economic Thinking. Its goal is to gain a deeper understanding of how people make financial decisions and then harness those insights to empower people to make financial decisions that are better for them, and ultimately better for society.

The Think Forward Initiative brings together a range of experts and researchers to find out how and why we make financial choices. The lessons learned will be a springboard for action to help consumers.

Managing personal finances has always been tough. Emotions that people have, and the social situations that they are in, often hinder smart financial decisions. We like to see ourselves as sensible and logical decision-makers. If only that were true. Study after study shows that our decisions are driven by many other (often subconscious) factors. That's something to take into consideration, because big financial decisions can have a large and lasting impact on our lives.

Why exactly do we make bad financial decisions? Is it because it's too hard to imagine and consider our future needs over our current needs? Does the abundance of choice help us or hinder us? The Think Forward Initiative examines these questions and more. When it comes to making financial choices, it's obviously important to understand what you're choosing, but it's equally vital to know why you're choosing it. What are the deeper reasons behind our financial behaviour and choices?

This is an open-source initiative and a joint effort. We see it as an opportunity to share knowledge, and have a platform for conducting and showcasing research. To interact and co-create with academics, policymakers, consumer organisations and leaders from the financial and technology sectors. But also to have an access to the latest developments and best practices in the area of financial decision-making, fintech innovations and

financial literacy. Ultimately you could set the agenda and be part of the solution.

The first step of the TFI was taken at the Think Forward Summit on 25 February in Brussels, which gathered more than 120 academics, European and national policy-makers, consumer-organisation representatives, and leaders from the financial and technology sectors in a "meeting of the minds".

In a series of plenary and break-out sessions, the general direction for TFI was reached.

The TFI has one overarching goal: **Empower people to make better financial decisions.** To do that TFI will do the following:

- Enable and execute new research into drivers of financial behaviour;
- Develop accompanying practical solutions that help in making better financial decisions;
- Provide policy recommendations;
- Increase awareness.

In addition, as a result of the summit, the focus was narrowed to three themes:

1. **Budgeting, borrowing and spending:** How can we enable people to feel comfortable in their spending and budgeting decisions? How do people borrow? Why do they borrow? How do people make decisions?
2. **Savings, investment and retirement:** How do people set goals for themselves and what does than means for the financial wellbeing of different people?
3. **Financial literacy:** How can individuals be reached in a timely and personally relevant way to keep them financially healthy?

An additional dimension was also added; Responding to disruptive trends. This technological aspect is embedded in all the themes.

Finally, the decision was made to set up a working group for each theme, with each working group tasked to develop the theme further into plans for appropriate research and accompanying practical solutions.

The report now before you, is the first progress report of the work of the three working groups. There were three sessions in June 2016, one each for each theme, held in Amsterdam, Brussels, and Frankfurt. The participants for each session are listed at the end of this report.

# Governance & Process

### Governance of TFI

The TFI program governance consists of four elements at this time:

- The partners
- Research Board (RB)
- Three working groups
- TFI facilitating team.

The partners provide funding and, if needed and possible, facilities like access to transaction databases, and knowledge of, and access to IT infrastructure, technology counselling and associated research. Partners will also provide the application mock ups of practical solutions and help the working groups in developing the practical solutions.

The role of the RB is to evaluate and improve research proposals and make a coherent research program over time. The RB is also responsible for the overall progress and planning. The RB also decides on the allocation of the TFI research budget. That budget currently stands at euro 100.000 per year. That budget is the sum over which the research board has discretionary control. If research projects are identified that need additional funding beyond the discretionary budget, an accompanying business case must be developed and submitted as a proposal to the partners.

Separately, there is a discretionary budget of euro 80.000 per year for the development of the practical solutions. This budget is divided equally over the three working groups.

The working groups formulate and propose the research directions and the accompanying practical solutions. In addition, they will assess the forthcoming research and solution plans. Finally, a selection of the members of the working group are also likely to become members of project teams at a later

stage. More on that later. For working group participants TFI aims to provide an opportunity to share knowledge, and have a platform for conducting, publishing and showcasing research. To interact and co-create with academics, policymakers, consumer organisations and leaders from the financial and technology sectors. To have access to the latest developments and best practices in the area of financial decision-making, fintech innovations and financial literacy.

The TFI facilitating team (currently manned by staff from the partners) is responsible for the day to day management of the project.

### Process

The TFI team hired The Argumentation Factory to facilitate the working group process over the course of 2016. This process involves preparing the idea generation and decision making process, moderating the sessions and reporting the outcome. In total, three rounds of working group sessions are planned so far. The main goal for each round is in the table below.

| Working Group Session | June<br><br>Bringing the focus | September<br><br>Setting the direction | December/January<br><br>Showing the progress |
|---|---|---|---|
| Research | ○ Agree on promising research project(s), to be validated by the research board. | ○ Draft research project plans ready. Assess, improve and sharpen project plans in the working group. | ○ Final research project draft ready, showing preliminary results. |
| Practical Solution | ○ Agree on practical solution(s) to be further developed based on accompanying research. | ○ Draft solution description ready.<br>○ Assess and improve plan in the working group, including the criteria of success. | ○ Final plan and first visual mock-up ready, validating the criteria of success for the next development. |

After the September session, the research board will assess which research projects are promising, and allocate budget if they are concrete enough to be scored on the scorecard. The RB will also decide if the studies within the projects are logically prioritized and planned sequentially. Based on that, the RB will decide which studies within the projects get budget immediately and which need to be improved and therefore postponed. Some may even be rejected.

### Working Group Sessions & Deliverables

**Step 1**

Before the sessions started, a survey was sent out to all participants to gain a deeper sense of the definition of each of the three themes as seen by the participants and the accompanying research directions they saw.

**Deliverable**

The results of the survey have been combined with the results of the summit in one overview charts for each theme. They can be found under heading 'A' of the Outcomes chapter. These charts represent the overall definition and direction of each theme.

**Step 2**

In the sessions themselves, we presented the outcome of the survey, particularly with regard to the research projects that were proposed. We then divided the working group into three person teams with the question "How would you amend or improve the research directions already proposed and what, if any, additional research projects would you want to propose?" Then, in the plenary, we took inventory of all improvements on existing proposals and of new proposals. These were all discussed briefly. We prioritized the research proposals through a voting system, asking all participants what their number 1 and number 2 priority was. The accompanying question was: "Which research project would you want to see further developed into a full-fledged research plan?"

Finally, we took a brief look at possible combinations of and synergies between the various research proposals.

**Deliverable**

The results of that first part of the sessions have been combined into one chart for each theme. They can be found under heading 'B' of the Outcomes chapter. These charts represent the overall

research direction or the top two or three research proposals as assessed by the working group.

**Step 3**

In the second half of the session we focused on the practical solutions for the themes that could be envisioned. We divided the working group into three person teams with the question “Suppose these prioritized research projects have been completed, which practical solutions can be developed based on the insights this research develops?” To structure the thought process, all teams were given a business canvas to help their thinking.

Then, in the plenary, we took inventory of all proposed practical solutions. These were all discussed briefly. We prioritized the practical solutions through an auction system, asking all participants what practical solutions they though were best. The accompanying question was: “Which practical solution do you feel is the most promising?”

Finally, we asked the participants whether they wanted to be involved in developing the research proposals and accompanying practical solutions further into full-fledged research plans and practical solution descriptions.

**Deliverable**

The results of the second part of the sessions have been combined into one chart for each theme. They can be found under heading ‘C’ of the Outcomes chapter. These charts represent the most promising practical solutions that accompany the research proposals as assessed by the working group. The participants who volunteered for further development of the research plans and accompanying practical solutions have not been placed in the charts, but provided as an overview at the end of this report and will be used as a basis to form the project teams.

# Results


**Outcome of theme Spending, Budgeting & Borrowing** 11

**A** Outcome of the survey 11

**B** Prioritized research directions 12

**C** Prioritized practical solutions 14

**Outcome of theme Saving, Investing & Retirement** 15

**A** Outcome of the survey 15

**B** Prioritized research directions 16

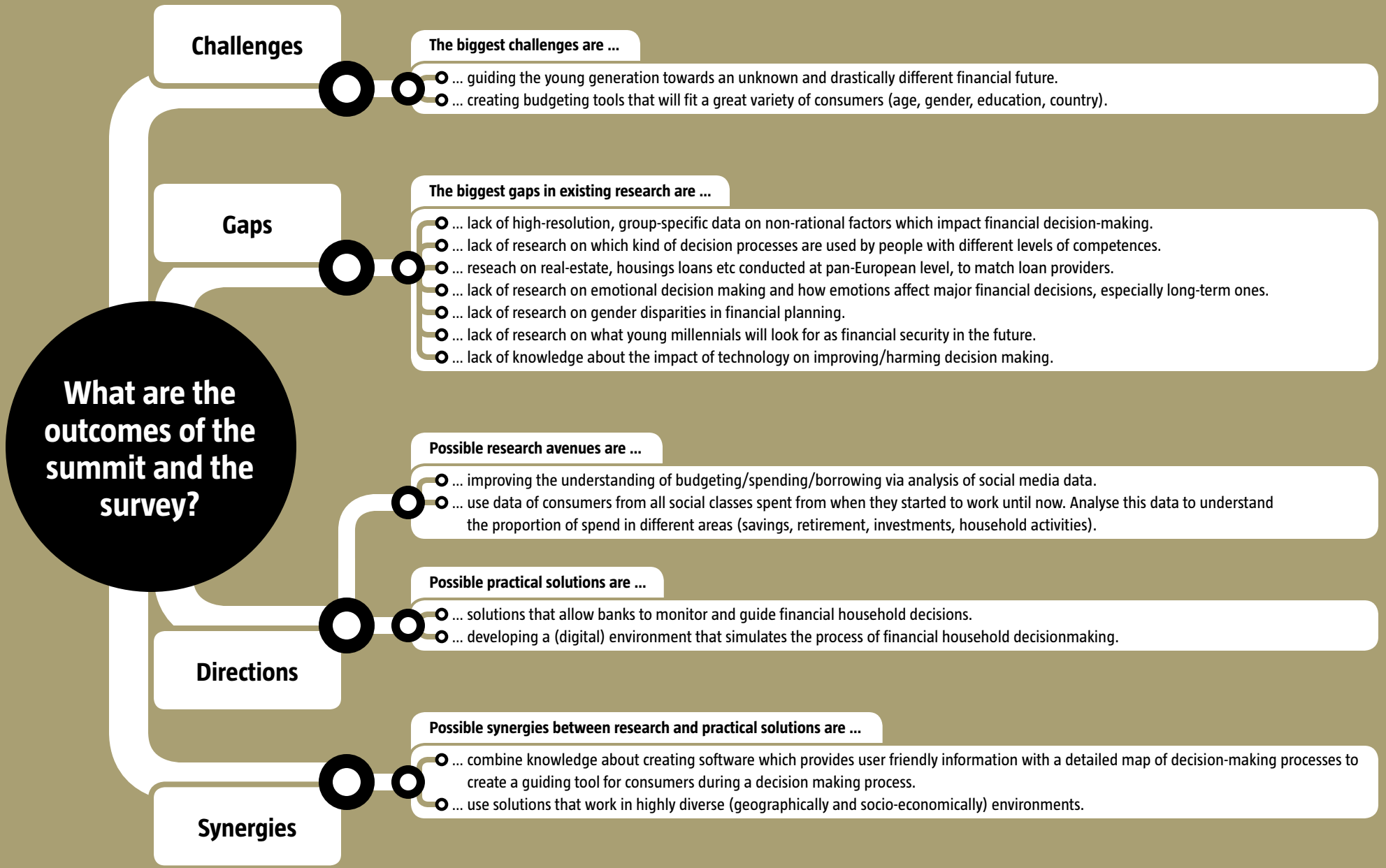
**C** Prioritized practical solutions 18

**Outcome of theme Financial Literacy** 19

**A** Outcome of the survey 19

**B** Prioritized research directions 20

**C** Prioritized practical solutions 23




This chart represents the summary of the results of a survey held among participants of the Think Forward Initiative working group on Spending, Budgeting & Borrowing. It is used as a preparation for the working group sessions.

# Spending, Budgeting & Borrowing: most promising research avenues

## Which research avenues and methodologies do we want to develop?

### Analysis of social media

**Which challenge does this research avenue adress?**

- Creating budgeting tools that will fit a great variety of consumers (age, gender, education, country).
- Determine what the relative importance of the decision drivers is for different kinds of consumers.

**Which problems do we want to solve and what needs do we want to meet?**

- Consumers base their decisions partly on non-rational motivations.
  - Some of these motivations are emotional;
  - Some of these motivations may be linked to social pressures;
  - Some of these motivations may be linked to personality types;
  - These motivations may not always lead to smart decisions.

**What is the research thesis?**

- By obtaining a better understanding of personal borrowing and spending behaviour via social media analysis ...
  - ... we can develop solutions/tools for the different personality types and emotional states to guide them to better descisionmaking ...
  - ... and by including their social network, this can be further improved.
- We can automate parts of this process through use of social media.

**Which knowledge or insight is required to achieve that?**

- Algorithms which can analyse the emotions which individuals are exhibiting in their social media discussions.
- Algorithms which can analyse social media to know what the motivation and goals of people are.

**Which methodologies and/or research strategies can we apply to acquire those insights?**

- Study and analyse data and categorise different personality types on how they make decisions.
- By analysing social media conversations and machine learning predictive analytics.
- Combine social media with transaction history (recorded in payment systems/registrations).
- Contact technology providers to see where the state of the art of technology is in this field.

### Intra household dynamics

See next page

This chart represents the outcomes of the priorities as set by the working group on Spending, Budgeting & Borrowing. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.

**Analysis of social media**
See previous page

# Which research avenues and methodologies do we want to develop?

## Intra household dynamics

**Which challenge does this research avenue adress?**

- Lack of high-resolution, group-specific data on non-rational factors which impact financial decision-making.

**Which problems do we want to solve and what needs do we want to meet?**

- We do not know enough which influences determine the quality of decision making.
  - This is especially true of how household dynamics influence decision making ...
  - ... while especially the big decisions are often made through household consensus.

**What is the research thesis?**

- Once we understand the role of household dynamics better ...
  - ... and once we know what effective guidance is on the household level ...
  - ... we can guide households toward smarter decision making.

**Which knowledge, insight is required to achieve that?**

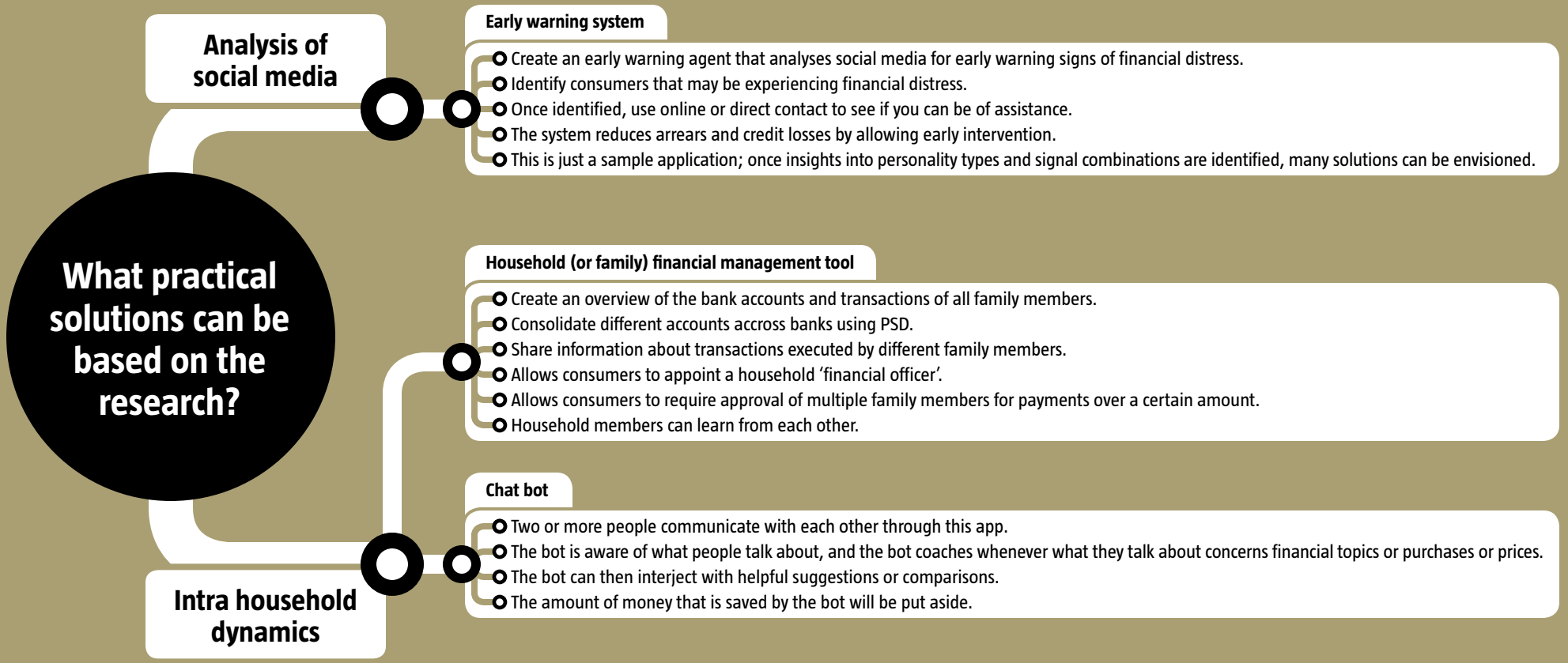
- We don't yet know what constitutes an effective household in this context (family, multi-family, close friends etc).
- There are many different dynamics behind household decision making, such as age, gender and income.
- The role in the family may affect decision making, children or parents may make decisions differently.

**Which methodologies and/or research strategies can we apply to acquire those insights?**

- Experiment in an open source, gamified environment.
- Create a lab to do tests with evidence based interventions and test effectiveness.
- Experiment in an open source, gamified environment.
- Simulate an environment where people make decisions and change the environment to see differences.
- Analyse transaction data combined with household composition and survey data.
- Differentiate between different types of decisions, ranging from life time event decisions to small daily decisions.

This chart represents the outcomes of the priorities as set by the working group on Spending, Budgeting & Borrowing. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.

# Spending, Budgeting & Borrowing: practical solutions




This chart represents the outcomes of the priorities as set by the working group on Spending, Budgeting & Borrowing. It determines which practical solutions can be envisioned once the research is available.

# What are the outcomes of the summit and the survey?

## Challenges

**The biggest challenges are ...**

- ... reaching adults, parents, and children and especially millenials.
- ... consumers can't picture themselves in the long future or are too optimistic about their future.
- ... consumers lack general knowledge on investing, savings and pensions.

## Gaps

**The biggest gaps in existing research are ...**

- ... lack of knowledge about (intra)household decision making and financial wellbeing.
- ... lack of knowledge about life events, such as unemployment and changing relationships.
- ... lack of knowledge about how effective interventions are, in particular FinTech.
- ... lack of knowledge about the impact of demographic variables on saving/investment outcomes.
- ... lack of real-time insights in decision making.
- ... lack of knowledge on what constitutes a good decision for different kinds of consumers and how they can best be enabled to make smarter financial decisions.
- ... lack of data, such as experimental data and longitudinal data.
- ... lack of knowledge about the pros and cons for consumers if they consider changing their level of savings in a low interest-rate environment.
- ... lack of knowledge about the quality of expertise of financial professions.

## Directions

**Possible research avenues are ...**

- ... create a behavioural economics lab.
- ... conduct research on how consumers perceive financial experts.
- ... conduct research on the behaviour of financial institutions.
- ... perform experiments on the impact of trainings on consequent decision making.
- ... influence of language on financial data in decision making in savings and investments.

**Possible practical solutions are ...**

- ... develop a supporting app, giving advice to consumers about financial decisions.
- ... develop money management apps to encourage consumers to save money and build a buffer.
- ... develop a tool that gives insight in future returns on investment and the impact of costs.
- ... develop training for millenials and first-time buyers about mortgages.
- ... develop training about retirement plans.
- ... organise financial clinics.

## Synergies

**Possible synergies between research and practical solutions are ...**

- ... behavioral data and reasons and explanations given by consumers for their behavior.
- ... using data about nudging, to see if the effect of nudges on changing financial behaviour will last.

This chart represents the outcomes of the summit and a summary of the results of a survey held among participants of the Think Forward Initiative working group on Savings, Investments & Retirements. It is used as a preparation for the working group sessions.

# Savings, Investments & Retirement: most promising research avenues

## The future self

**Which research avenues and methodologies do we want to develop?**

**Which challenge does this research avenue adress?**

- Consumers can't picture themselves in the long future or are too optimistic about their (financial) future.

**Which problems do we want to solve and what needs do we want to meet?**

- Many consumers find it difficult to assess future life events like career choice, marriage, illness and divorce.
- Without knowing future goals it is impossible for consumers to make smart financial decisions.
- Without knowing the future goals of consumers it is impossible to advise on smart financial decisions.

**What is the research thesis?**

- Many consumers find it difficult to imagine what their financial future will be.
- By understanding how, why and when, which type of consumer make decisions about their desired future self ...
- ... we will be able to better help them make smarter financial decisions.

**Which knowledge or insight is required to achieve that?**

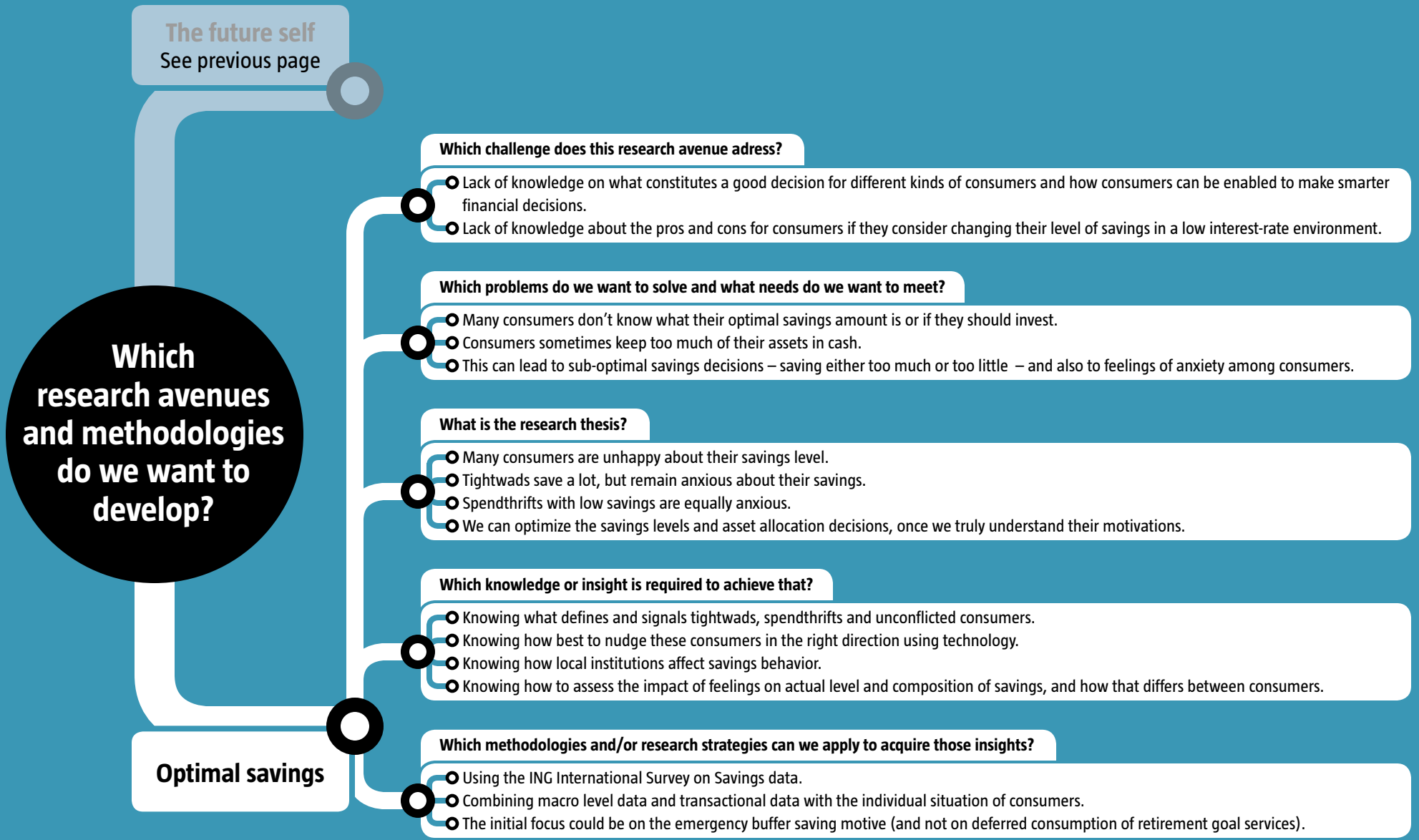
- A real understanding of how consumers plan, envision and decide on their future self.

**Which methodologies and/or research strategies can we apply to acquire those insights?**

- Develop and test a multi-dimensional model of the human self, which includes different goals, time horizons, personality types and unexpected life events.
- Use the accompanying practical solutions as a data gathering tool.

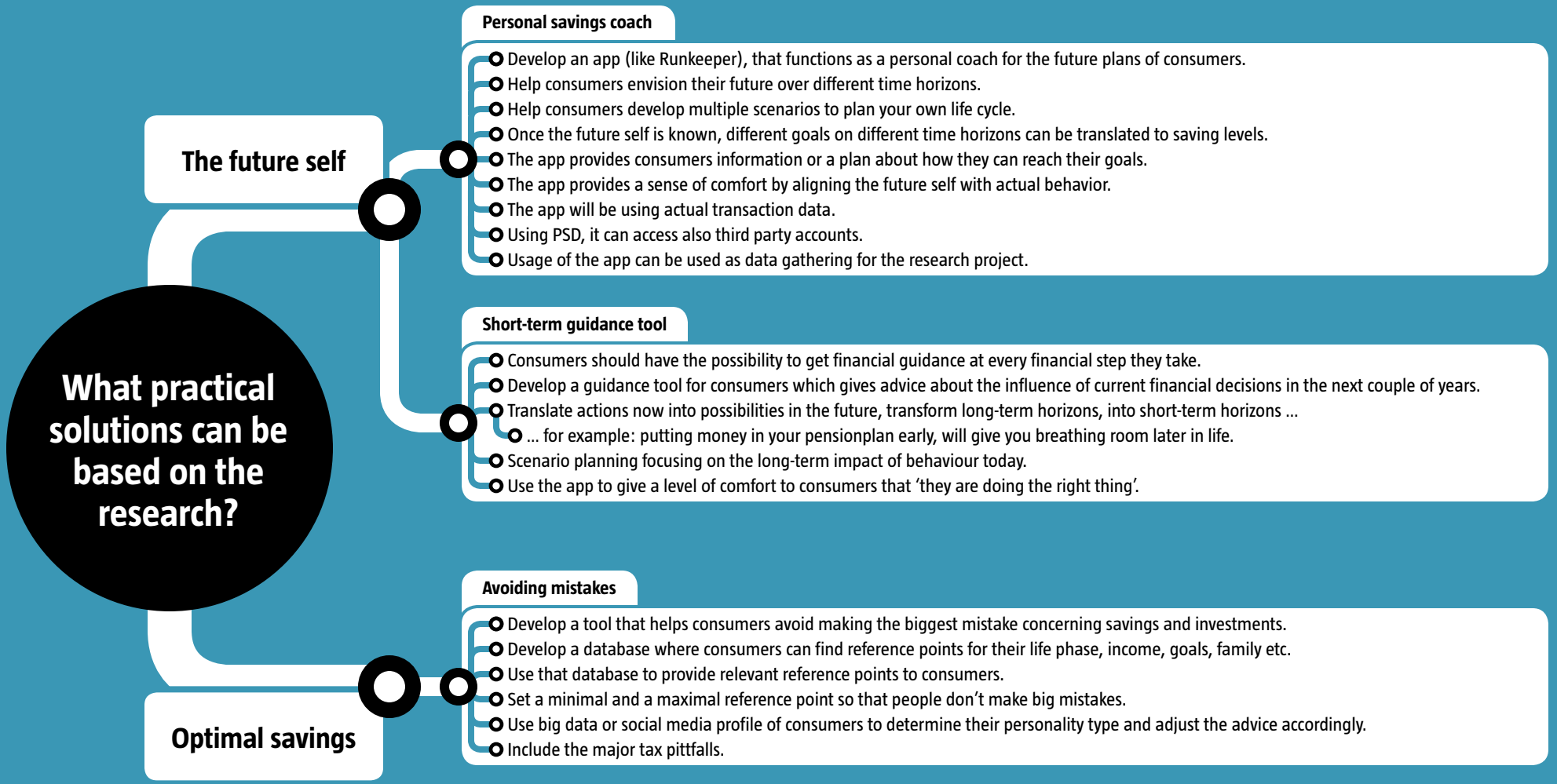
**Optimal savings**
See next page

This chart represents the outcomes of the priorities as set by the working group on Savings, Investments & Retirements. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.




This chart represents the outcomes of the priorities as set by the working group on Savings, Investments & Retirements. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.

# Savings, Investments & Retirement: practical solutions




This chart represents the outcomes of the priorities as set by the working group on Savings, Investments & Retirements. It determines which practical solutions can be envisioned once the research is available.

# Financial Literacy: outcomes of the summit and the survey

## What are the outcomes of the summit and the survey?

### Challenges

**The biggest challenges are ...**

- ... consumers do not understand basic economics and financial terms.
- ... to know if financial education is 'neutral'; who is responsible for the content of financial education?
- ... in many countries it is difficult to find organisations or public institutions willing to pay for increased financial capability within the community.
- ... reaching very young children and vulnerable people effectively and in time.
- ... knowing which tailor-made tools should be used for which consumers.
- ... structuring findings about efficacy of practical implementation.

### Gaps

**The biggest gaps in existing research are ...**

- ... it is not known what the effects of fincancial education are and if financial literacy is even possible.
- ... lack of knowledge about cultural differences in financial decision making, especially regarding short and long-term planning.
- ... lack of knowledge about how behavior is shaped by external factors such as advertising, marketing and social pressure.

### Directions

**Possible research avenues are ...**

- ... conducting research on what interventions have the greatest impact for sustainable change.
- ... conducting research on the financial education of over-indebted individuals/households focusing on triggers for getting into financial trouble in detail.
- ... running mid-/long-term impact measurement with certain target groups (high risk groups are focused).
- ... developing a concept for the evaluation of financial competences that is relevant for the way consumers deal with their financial situation and financial services (throughout different life stages).
- ... take the approach that ING used for the Next Rembrandt, see how we can identify the major areas of interest, use analysis to drill down further and see if we can build on that.
- ... researching financial literacy among youngsters below the age of 16, and understand their short-term and long-term financial priorities.

**Possible practical solutions are ...**

- ... facilitate financial advisors to go out into community centres, giving 'financial clinics'.
- ... combining youth work principles with financial capability interventions to engage the most excluded and drive behaviour change.
- ... facilitate financial guidance by an independent body without any ties to financial institutions.
- ... developing future selfie apps (visualisation) and further explore pre-commitment solutions.
- ... building a toolkit for different ages and different life goals/targets that can be re-used by participating organizations in different countries
- ... implementing a financial education intervention in schools that focuses on the interests and needs of school students in their actual situation as well as their needs when entering the labor market.
- ... developing a gaming context to train consumers in financial literacy.

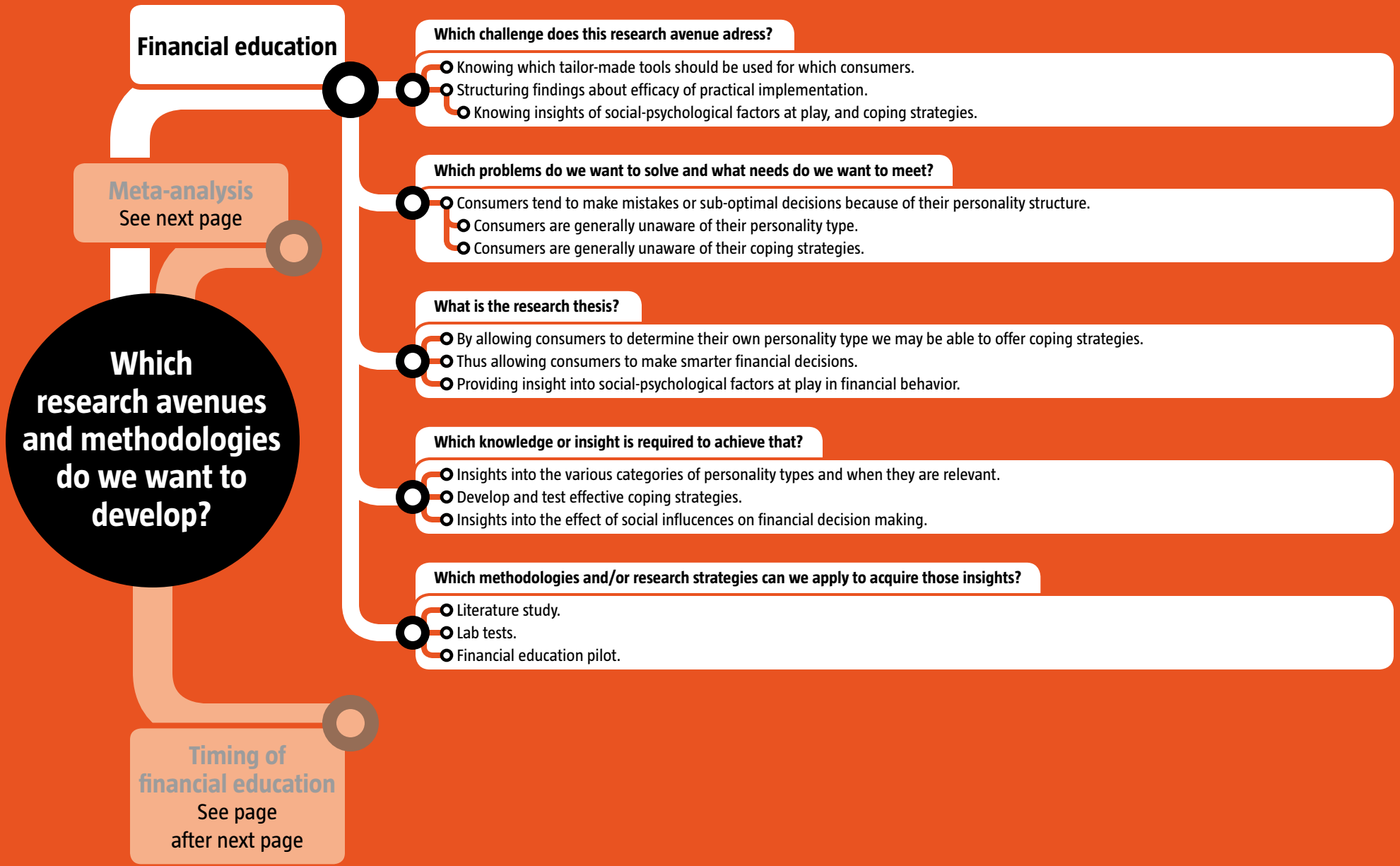
### Synergies

**Possible synergies between research and practical solutions are ...**

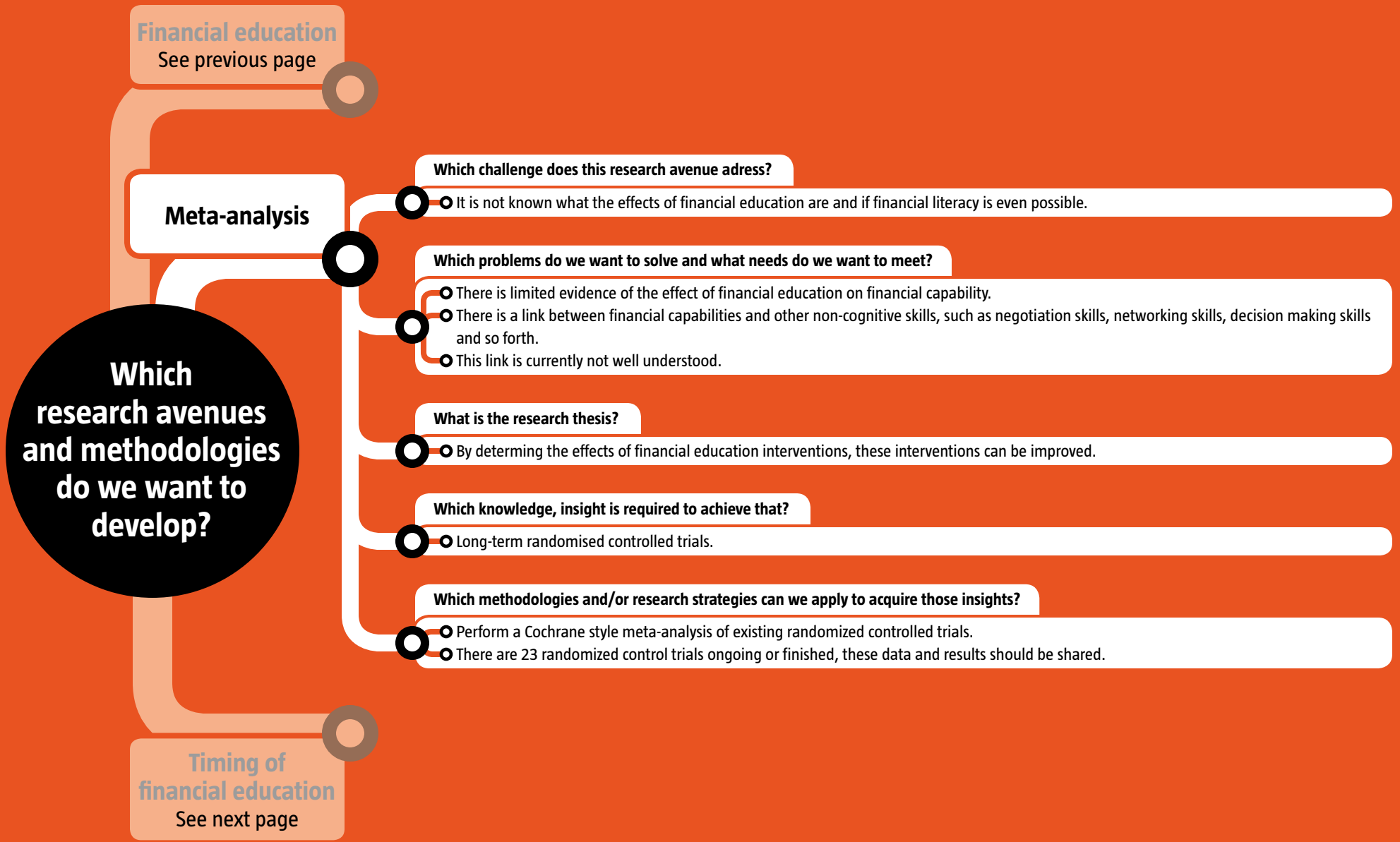
- ... working together with a pilot implementation partner such as a community group our school to deliver a co-designed financial capability course.

This chart represents the summary of the results of a survey held among participants of the Think Forward Initiative working group on Financial Literacy. It is used as a preparation for the working group sessions.

# Financial Literacy: most promising research avenues

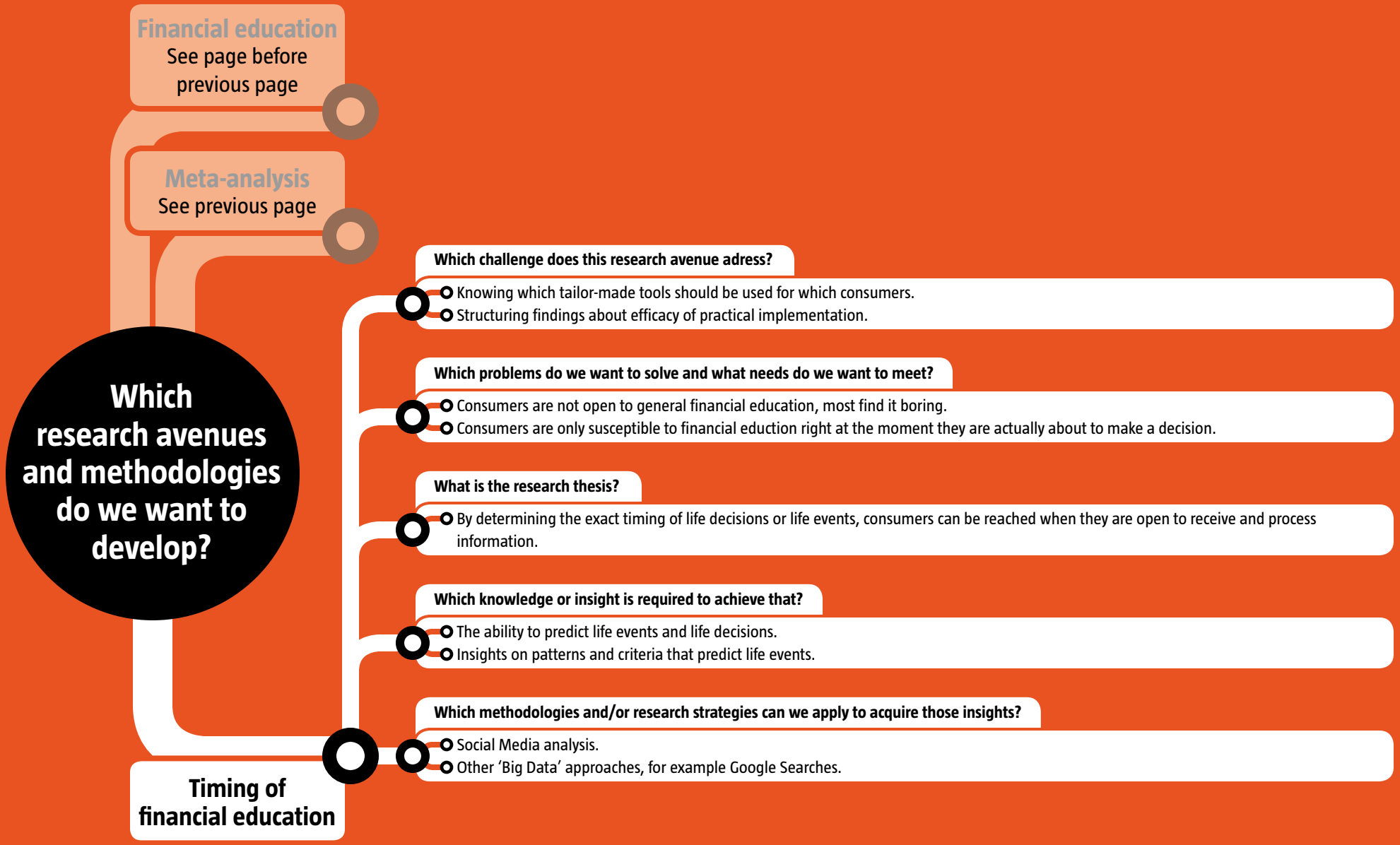



This chart represents the outcomes of the priorities as set by the working group on Financial Literacy. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.

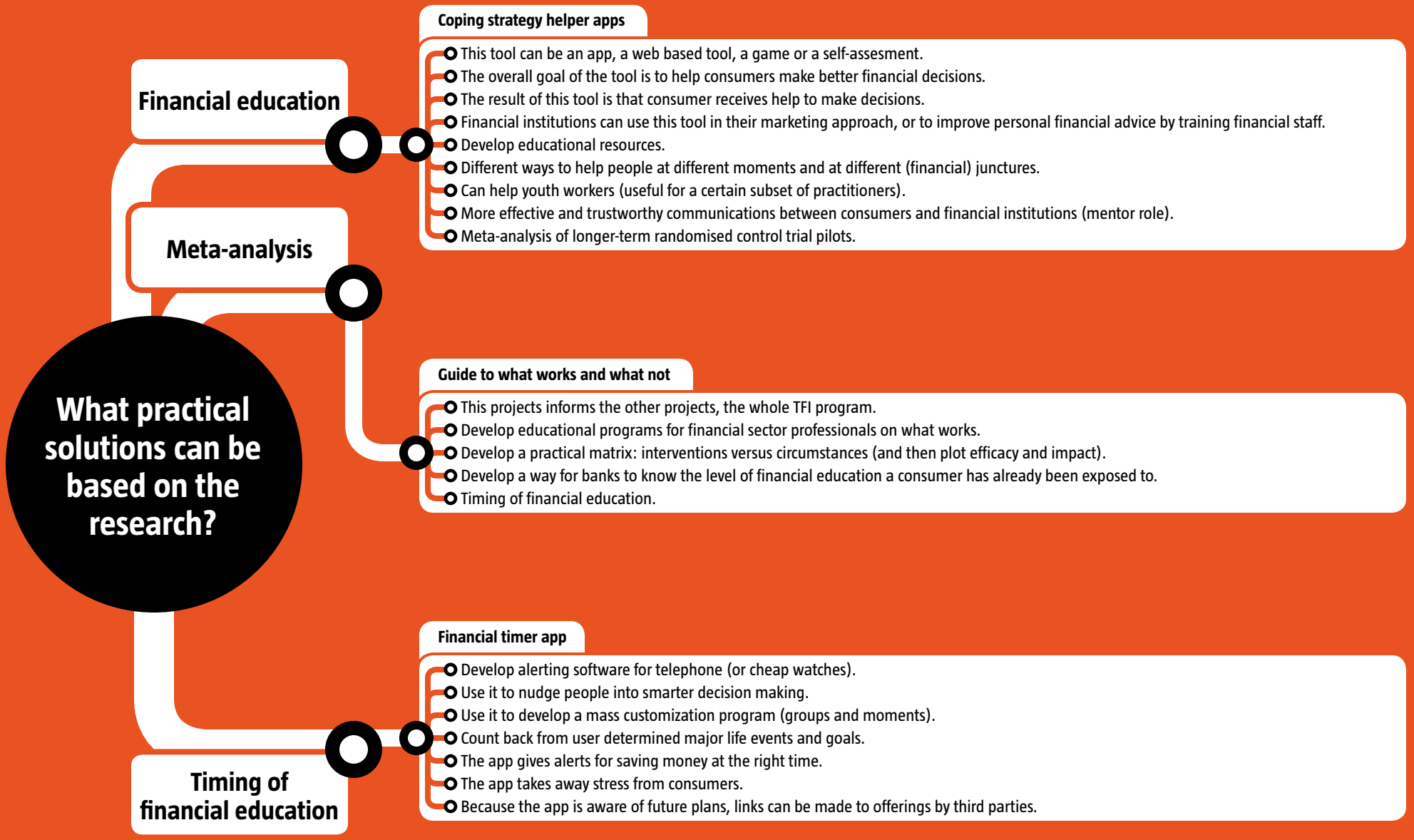



This chart represents the outcomes of the priorities as set by the working group on Financial Literacy. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.

# Financial Literacy: most promising research avenues




This chart represents the outcomes of the priorities as set by the working group on Financial Literacy. It determines which research avenues the working group wants to (see) develop(ed) into a full fledged research proposal.




This chart represents the outcomes of the priorities as set by the working group on Financial Literacy. It determines which practical solutions can be envisioned once the research is available.

# Next Steps

The next steps to be taken, until the next round of working group sessions are as follows:

| Who | What | When, completed by | Deliverable |
|---|---|---|---|
| Research Board | Reflect and assess the outcome of the sessions | Completed and in this report | Guidance to working groups on how to proceed |
| TFI Facilitating team | Contact working group participants to form project teams and project owners | Early July | Project teams per research project |
| Project teams, project owners, partners | Develop and write research plans and accompanying practical solutions descriptions | Over the course of July and August, done by early September | Research plans, Solution Descriptions |

## Research Board reflection

The Research Board (RB) reviewed the outcome of the working group sessions and wishes to share the following general observations and decisions with the working groups.

- The RB was positively impressed by the June session outcomes and the suggested research directions. The RB would like to see them to be further developed before the September sessions. The research proposals are to be considered more as research programs containing a number of specific, inter-related studies. The TFI facilitating team have mentioned previously that we would like to focus on a limited number of research projects and accompanying practical solutions. Additionally, if there is a good underlying business case we might be able to gather more funding for the projects. Therefore the project teams are asked to try and define studies within the proposed projects; and therefore effectively asked to chop up the projects smartly. The studies should be prioritised and should allow to be planned in and realised sequentially. This work should be done before the early September working groups. Some parts of the projects could then be realised starting in September, some may or must be postponed.
- The RB considers that the dependent variables for all research plans must be one or more of the following: improved financial behaviour, well-being, and/or happiness of consumers.
- When the choices that people make are considered and the question is asked how to enable and empower better decision making, the research projects should clearly distinguish between big decisions (related to life time events) and small decisions (daily purchases).
- When the choices that people make are considered and the question is asked how to enable better decisions, the

research projects should clearly take into consideration if the individuals concerned actually have goals and which sort of goals (personal, professional, financial).

- All projects need a lot more work to be finalized in July and August and to be made concrete so that a budget and many of the other aspects of the Research Board scorecard can be filled in. After the September round finalization, final assessment will be made by the Research Board and budget allocated.

In addition, the Research Board would like to share some specific feedback, questions and thoughts per project, also, the Research Board ranked the projects from most promising to least promising. The list below is ranked, with the most promising research projects first.

### Intra-household dynamics

The RB would like to see granularity across different household types (household composition, male-, female-dominated, egalitarian, one or more income earners). Role and task divisions: initiator, influencer, decision-maker, executor, evaluator, etc. Impact of resident and non-resident parents/children/other relatives. It will be crucial to differentiate between different types of decisions, ranging from big (related to life time events) to small decisions (daily purchases). Role of personality factors such as conscientiousness, openness, neuroticism, etc. How do these aspects (hh types, task divisions, personality) affect (the) actual (smartness of) decision making? This project is considered to be jointly with the next one as the top priority since it is almost virgin / unchartered territory, and materially important. It is also amenable to a variety of methods, including lab tests, gamification, analysis of historic transaction data together with household composition and attitudinal surveys.

### Financial education (FE)

The RB would like to see some focus on practical skills such as price comparisons, mental budgeting, keeping track of expenses in day-to-day money management. Behavioural hurdles include: information overload, procrastination, partitioning tasks into sequences of steps (partitioning), just-in-time advise (apps). This project is considered to be jointly with intra-household

dynamics as the top priority as it contains important behavioural elements that have not yet been properly researched. In addition to the specific proposal for piloting a 'financial education course' of strategies to overcome behavioural hurdles, lab tests could also be considered (these could be a prior step to develop such courses) and randomized trials of app-based interventions. Reference to 'Social-psychological factors' suggests that we should look beyond psychological/personality hurdles to investigate interventions to reflect social influences that may (positively or negatively) affect money management decisions (this will build a link with the previous project).

### Future self

The RB considers future versus present time orientation the basic concept. Scenarios could be used to assess future life events such as career choice, marriage, number of children, divorce, purchase of a house, unemployment, illness, retirement. Are people planning and financially prepared for these life events and the financial consequences? Quantification efforts can be made, including that of the risks. In the project one can distinguish between deliberate choices of the individual and external shocks; for both scenarios can be made. It is about making the future salient to people's present choices, and making the implications of decisions visible. Lab experiments (and other methodologies) can be part of this project (and other projects). One would need to take a holistic view on a person's situation and make a data set with relevant information. The goal would be to understand if, how, why and when different kinds of consumers make long term plans about their future self, and to confront them with the errors (typically over-optimism) that they are making by illustrating the prospective (financial) impact of different decisions. Sources of data could include mining if and where possible customer data (e.g. evaluating data on income of people losing jobs), insurance, actuarial and credit risk data. This project is considered to be potentially very useful.

### Social media

The role of the social environment on financial decisions and behaviours. Social media as an information source, a reference source about what relevant others are doing, and as a justification (second opinion) of financial decisions and behaviour. Behaviour on social media as an indicator of

preferences, emotions, and personality. We do not know enough how consumers make borrowing decisions and what the relative importance of the decision drivers are for different kinds of consumers (age, gender, education, country). Social media analysis can provide us with insights. Therefore, this project is considered to be potentially very useful.

### Meta-analysis

Longitudinal data on financial transactions and behaviour, including day-to-day money management, role of adviser, FE and marketing communication. Already included in the general points, and pertinent to this project is the need to clearly distinguish between big decisions (related to life time events) and small decisions (daily purchases), as well as to take into consideration if the individuals concerned actually have goals when assessing (effects on) behaviour / smartness of dm.

### Timing of Financial Education

Roles and functions of finance apps on major and minor financial decisions, purchases, saving and borrowing. Seems to be over-researched and needs a particular research angle. Currently it is therefore considered one of the less promising research projects in itself but it may be combined with 5 which is considered to be one of the most promising projects. At the same time, studies would need to differentiate between big/ infrequent decisions (e.g. life event driven with an advice need) – which were emphasized in the mindmap - and small/frequent decisions (e.g. budgeting, consumer loans which are increasingly amenable to mobile apps). Timing also puts more spotlight on to the role of emotions and context (think of 'retail therapy', peer pressures, pushy salesmen etc). As well as psychologists, sociologists and marketing experts may be helpful here.

### Optimal savings

The present proposal seems to be in the tradition life-cycle income/savings theory of Modigliani. Making it more concrete would make it significantly stronger: feelings and perception toward saving, over- and undersaving. The angle is perhaps to build on the existing tightwad/spendthrift and prudence/ patience work to analyze the impact of feelings on behaviour (actual level and composition of savings), understand the drivers of those feelings (e.g. income, income volatility,

household circumstances and experiences, personality and values). Quantifying what is the ‘optimal’ or ‘needed’ level and composition of savings for different households is probably a separate study in itself (since it would require both assessing the appropriateness of goals and analyzing outcomes in relation to goals). One option could be to differentiate between emergency buffer savings and other forms of savings (eg. deferred consumption or retirement goals), focusing initially on the former.

### General Criteria for Research Plan

The Research Board has defined the criteria that will be used to assess the research plans. These will be shared with the working groups through other channels.

# Working Group Participants & Research Board

## Savings, investment and retirement

| Participants | Organisation |
|---|---|
| Bakas, Adjiedj | Trend Office Bakas |
| Bellovi, Roberto | NTT Everis, Head of Digital (UK) |
| Blom, Marieke | ING, Chief Economist at ING Netherlands |
| Bos, Hans | Microsoft, National Technology Officer |
| de Vos, Hannie | AFM, Strategy and Policy Advisor |
| Groom, Jez | Cowry Consulting, Chief Choice Architect |
| Groothedde, Eric | NVB, Advisor Consumer Affairs (Retail Banking) |
| Hamers, Ralph | ING, CEO ING Group |
| Kaastra, Japke | ING, Manager Financial Planning |
| Koedijk, Kees | Tilburg University, Professor |
| Lierman, Frank | Belgium Financial Forum, Chief Editing Officer |
| Maat, Verdy | NN Investment Partners, Manager Consumer Intelligence |
| Mihm, Oliver | Investors Marketing Management Consultants |
| Muyldermans, Christiane | KBC, Counsel Regulatory Affairs |
| Paemen, Joep | Flow Design Works, Managing Partner |
| Paradowski, Piotr | Luxembourg Income Study |
| Porino, Giulia | Finance Watch, Coordination Officer |
| Prast, Henriette | Tilburg University, Professor |
| Rozemuller, Martijn | Think ETF's, Co-founder and Managing Director |

| | |
|---|---|
| Schmalzried, Martin | Financial Services Users Group (FSUG) and EBA member |
| Schuerz, Martin | Oesterreichische Nationalbank |
| Sierminska, Eva | Luxembourg Institute of Socio-Economic Research |
| Simonse, Olaf | OECD, Member of Advisory Board of INFE |
| Schmidt, Klaus Oskar | Investors Marketing Management Consultants |
| Staehr, Karsten | Tallin University of Technology, Professor |
| Swinkels, Rob | NTT Dimension Data, Enterprise Architect |
| Thirion, Jean-Philippe | TriFinance, Director |
| Timmerman, Hans | EMC, CTO EMC Netherlands |
| Trojanovic, Zoran | NN Investment Partners, Head of Commercial Intelligence |
| van Woelderen, Stefan | ING, Principal Economist |
| Watkins, Nick | Money Advice Service, Consumer and Market Insight |
| Weihrauch, Andrea | Consumer behaviour researcher KU Leuven |
| Zielonka, Piotr | University of Warsaw, Professor |

Budgeting, spending and borrowing

| Participants | Organisation |
|---|---|
| Ayers, Adam | ING, Cofounder of the ING Innovation Studio |
| Bouyon, Sylvain | Centre for European Policy Studies, Research Fellow |
| Brzeski, Carsten | ING, Chief Economist ING-DiBa |
| Cliffe, Mark | ING, Chief Economist ING Group |
| Colbaugh, Richard | Periander, Partner |
| De Rock, Bram | Université Libre de Bruxelle, Professor |
| de Vos, Hannie | AFM, Strategy and Policy Advisor |
| Doornweerd, Yorick | Gartner, Global Client Director |
| Garcia, Sergio Hermida | NTT Everis, Digital Banking Manager |
| Gerritse, Rebecca | Humanitas, Programme Manager |
| Graffeo, Michele | University of Trento, Researcher Behavioural Economics |
| Lopez, Juanjo | NTT Everis, Head of Big Data EMEA |
| Mohan, Devie | FinTech Market Strategist and Industry Researcher |
| Meerburg, Roy | Humanitas, Project Manager |
| Ormerod, Paul | Volterra Partners, Academic |
| Rijnja, Guido | Ministry of General Affairs, Advisor |
| Roberts, Jonty | NTT Dimension Data, Group Sales Insurance |
| Romensen, Gert-Jan | University of Groningen |
| Soetevent, Adriaan | University of Groningen, Professor |
| van Dijk, Wilco | Leiden University and National Institute for Family Finance Information |
| van Grinsven, Bo | ING, Behavioural Economist |
| van Raaij, Fred | Tilburg University, Professor |
| Wall, Neville | EMC, Client Director |
| Wilmink, Gerjoke | Nibud, General Manager |

Financial literacy

| Participants | Organisation |
|---|---|
| Bailey, Simon | Aflatoun, Head of Programmes and Research |
| Barwick, Paul | NTT, RMA, Client Services Director |
| Bohorquez, Louis | Delft University, Financial behaviour solutions |
| Bonini, Nicolao | University of Trento, Professor |
| Bradbrook, Ruth | Developing Youth Practice, Co-founder and Director |
| Bright, Ian | ING, Managing Director, Group Research |
| Caron, Hans | ING, Head of Market Research |
| Derickx, Roelof | NTT, Dimension Data, Global Account Director |
| Diers, Judith | UNICEF, Adolescent Development and Participation Section |
| Haj-Ahmad. Jumana | UNICEF, Deputy - Adolescent Development and Participation Section |
| Jorna, Remco | Microsoft, Global Account Technology Strategist |
| Lampert, Martijn | Motivaction, Research Director |
| Papadongonas, Panos | Motivaction, Reseacher |
| Ledent, Philippe | ING, Senior Economist |
| Maes, Johan | NTT Everis |
| Martinho, Vera | JA Europe, Project Officer |
| Muyldermans, Christiane | KBC, Counsel Regulatory Affairs |
| Nieboer, Jeroen | Research Fellow |
| O'Brien, Aidan | EMC, Senior Director |
| Penner, Jared | Child and Youth Finance International (CYFI), Director of Thought Leadership and Consultancy |
| Reitsma, Arthur | Dutch Banking Association |
| Riitsalu, Leonore | University of Tartu, Lecturer of Financial Literacy and Behavioural Finance |
| Schellhove, Anne | German Institute for Financial Services, Scientific Associate |
| Schmalzried, Martin | Coface, Policy Office |
| Sent, Esther-Mirjam | Radboud University, Professor |

| | |
|---|---|
| Spencer, Nathalie | RSA, Senior Researcher, Social Brain team |
| Ubhi, Satinder | NTT, RMA Consulting |
| van Campenhout, Geert | KU Leuven, Professor |
| van Garderen, Marten | ING, Senior Economist |
| Van Gorp, Caroline | ING, KID'ING |
| Verhoef, Peter | RUG, Research |
| Alessie, R.J.M. | RUG, Professor |
| Wolk, Alexandra | Three Coins, Strategic Partnerships |
| Woodley, Monica | Editorial Director, Thought Leadership, EMEA at The Economist |

Research Board

| **Members** | **Organisation** |
|---|---|
| Cliffe, Mark | ING, Chief Economist ING Group |
| Haliassos, Michael | CEPR Network on Household Finance, Director |
| Ormerod, Paul | Volterra Partners, Academic |
| Tristani, Oreste | ECB, Senior Advisor |
| van Raaij, Fred | Tilburg University, Professor |

## Provisional team member list

| Saving, Investement & Retirement | |
|---|---|
| The Future Self | Eva<br>Hannie<br>Andrea<br>Roberto<br>Piotr P<br>Joep<br>Hans<br>Adjiedj<br>Stefan |
| Optimal Savings | Hannie<br>Martin<br>Nick<br>Eric<br>Martijn<br>Marieke |

| Spending, Budgeting & Borrowing | |
|---|---|
| Analysis of Social Media | Devie<br>Paul<br>Richard<br>Fred<br>Bo |
| Intra-Household Dynamics | Michele<br>Sergio<br>Adam<br>Stefan<br>Mark<br>Hannie<br>Paul<br>Jonty<br>Bram<br>Fred |

| Financial Literacy | |
|---|---|
| Financial Education | Nathalie<br>Ruth<br>Simon<br>Leonore<br>Vera<br>Monica<br>Anne<br>Martin<br>Panos<br>Alexandra<br>Geert |
| Timing of financial Education | Anne<br>Remco<br>Marten<br>Arthur<br>Jared<br>Roelof<br>Hans<br>Jumana<br>Panos<br>Johan |
| Meta-analysis | Ian<br>Esther-Mirjam<br>Philippe<br>Nathalie<br>Simon<br>Geert<br>Anne |

A
The Argumentation Factory