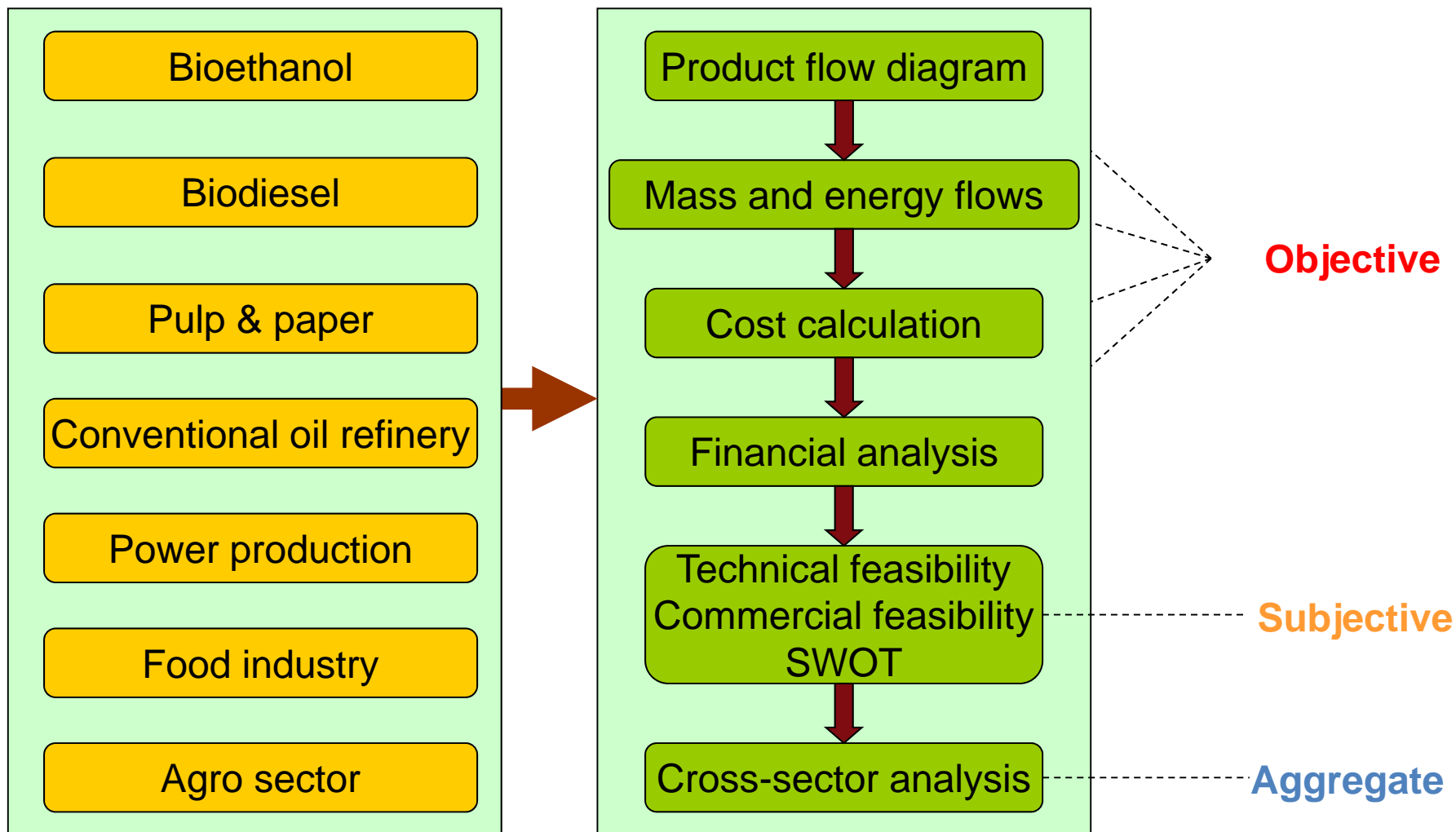




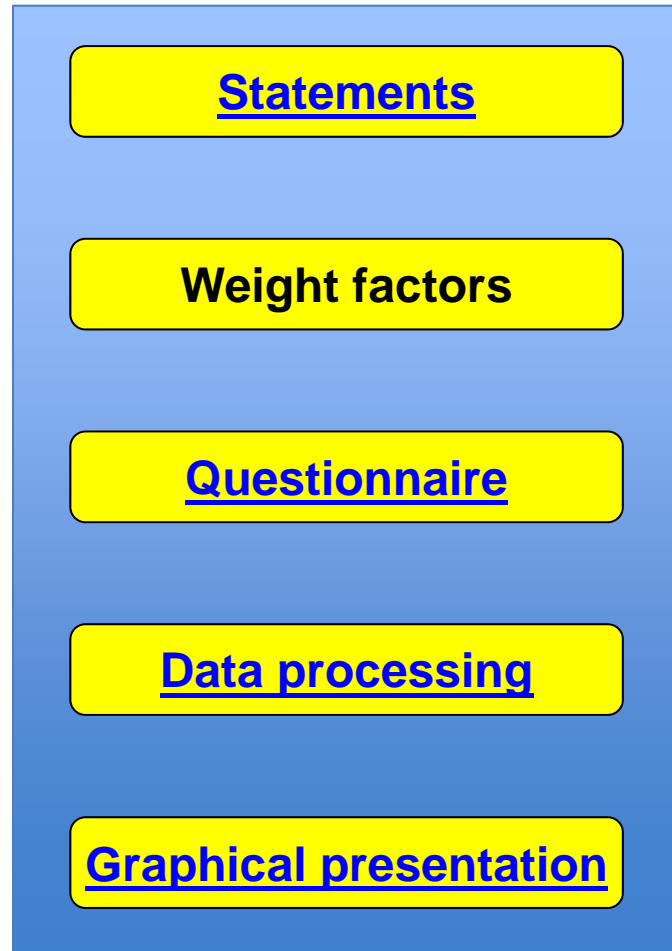
Introduction to PortfolioScan

Philippe Willems (VFT, Belgium)
Final BiOREF-INTEG Seminar
9 June 2010, Düsseldorf, Germany

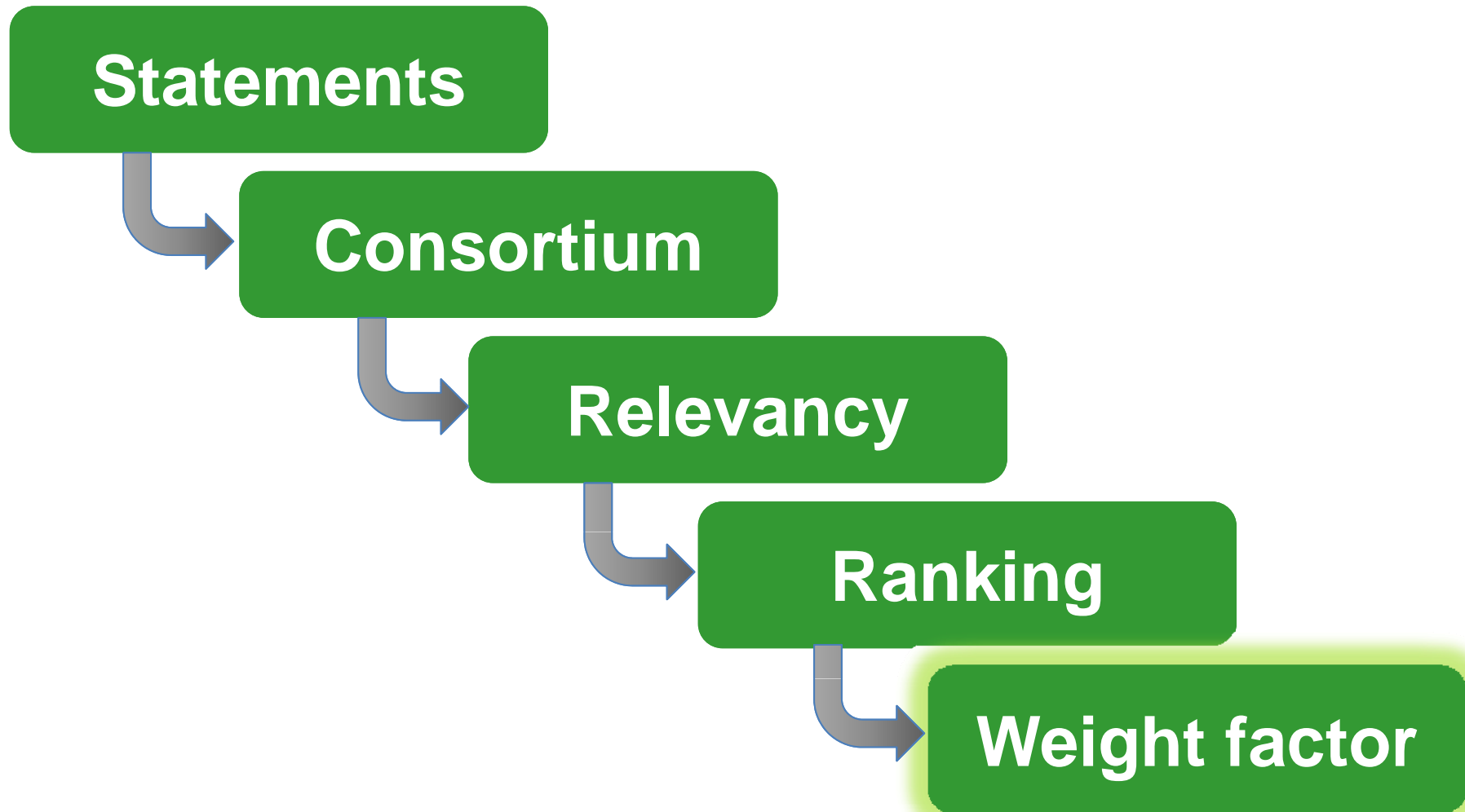
Bioref-Integ process flow



Subjective analysis: methodology



Weight factor calculation



Statements and weight factors: TF

Technical feasibility statements	Weight factor
Process development	
The integrated concept does not require significant downstream processing	7
All steps of the integrated concept are well identified	7
Required technologies are already developed for the targeted products	6
Required technologies are proven on industrial scale for the targeted products	6
Process does not require toxic or hazardous auxiliaries	4
The integrated concept does not generate additional waste that has to be treated	4
Application development	
Most of the selected applications are already existing	6
Products can be used in most of the selected applications	3
Products are referenced in most of the selected applications	4
Secondary products are referenced in the applications	3



Statements and weight factors: CF

Commercial feasibility statements	Weight factor
Project characteristics	
The integrated concept is leading to 1 new product	1
The product(s) can be used in several applications/markets	1
Market characteristics	
The integrated project addresses existing product/market combinations	4
The addressed markets are innovative (= open for new products/concepts)	2
The targeted markets are large enough to absorb the foreseen volumes	4
Competitive advantage	
Introduction of the new product(s) will lead to an economical benefit for the user	5
The new product(s) have functional benefits	5
There are specific benefits related to the integrated concept compared to the conventional processes	4
Social & environmental impact	
The new product(s) is an alternative to fossil-based products	3
The integrated concept is not in competition with food supply	2
The integrated concept does not require large quantities of fresh water	2
The integrated concept is leading to additional renewable energy production	3
The integrated concept is 'LCA positive'	4
The integrated concept improves the European competitive position in a global market	3
Regulatory impact	
There are no regulatory barriers affecting the market introduction of the product(s)	3
There is a supporting EU directive promoting the integrated concept	4



Questionnaire respondents

Bioethanol
Biodiesel
Pulp & paper
Conventional oil refinery
Power production
Food industry
Agro sector

6

5

4

3

5

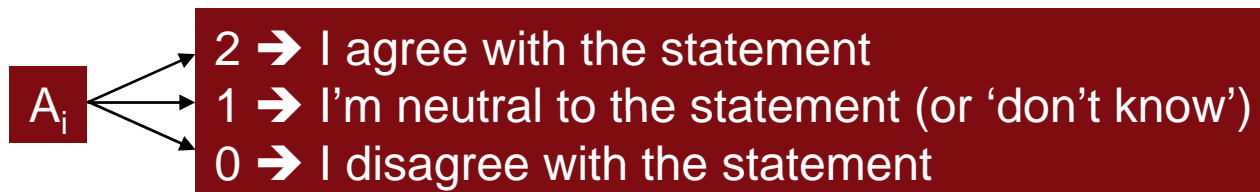
3

4



Data processing

$$\sum WF_i = 50$$



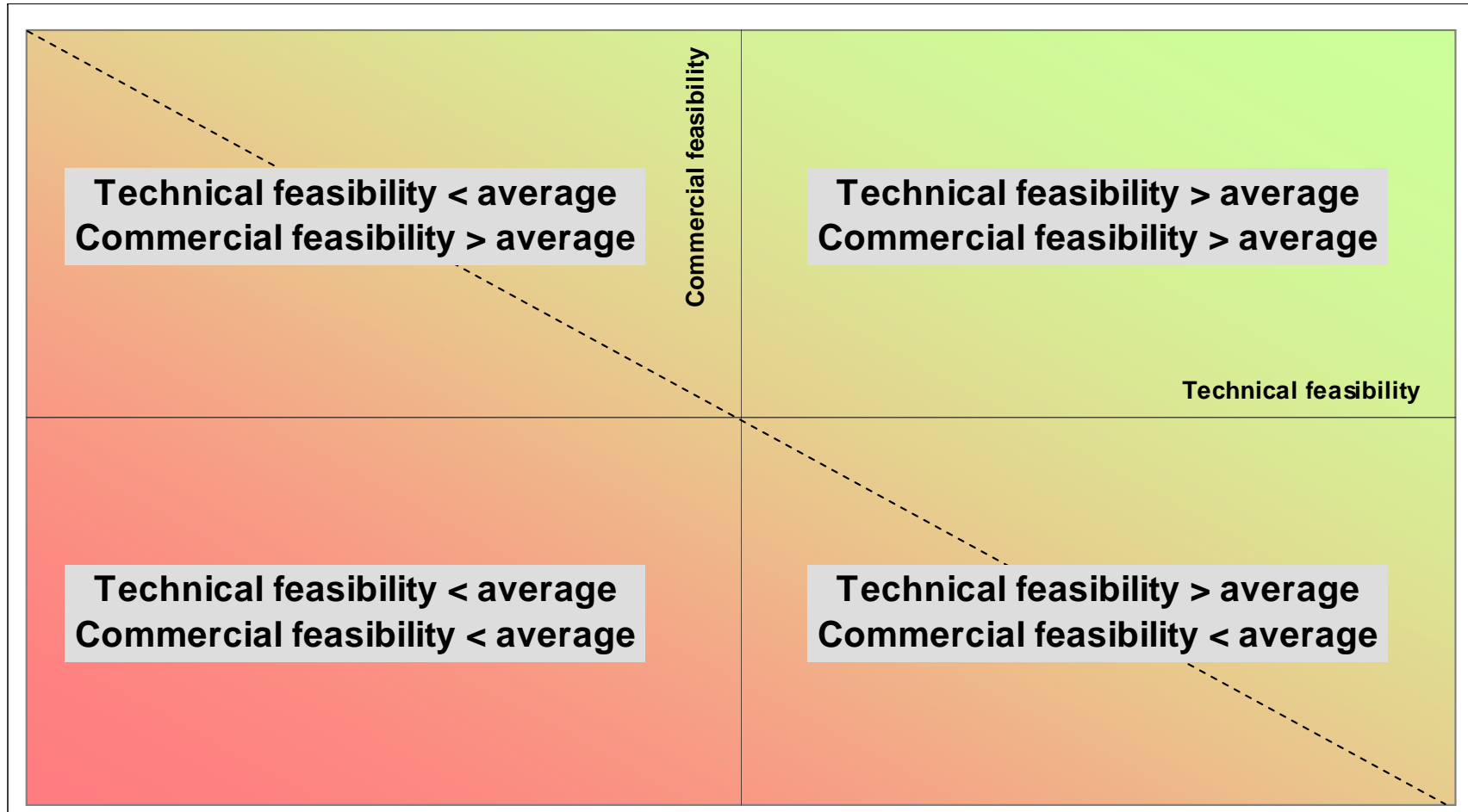
$$TF \text{ or } CF = \sum(WF_i \times A_i) \Rightarrow \text{Maximum score is 100}$$

$$TF_{\text{total}} \text{ or } CF_{\text{total}} = \sum_i(\sum_j(WF_{ij} \times A_{ij}) / \# \text{ respondents})$$

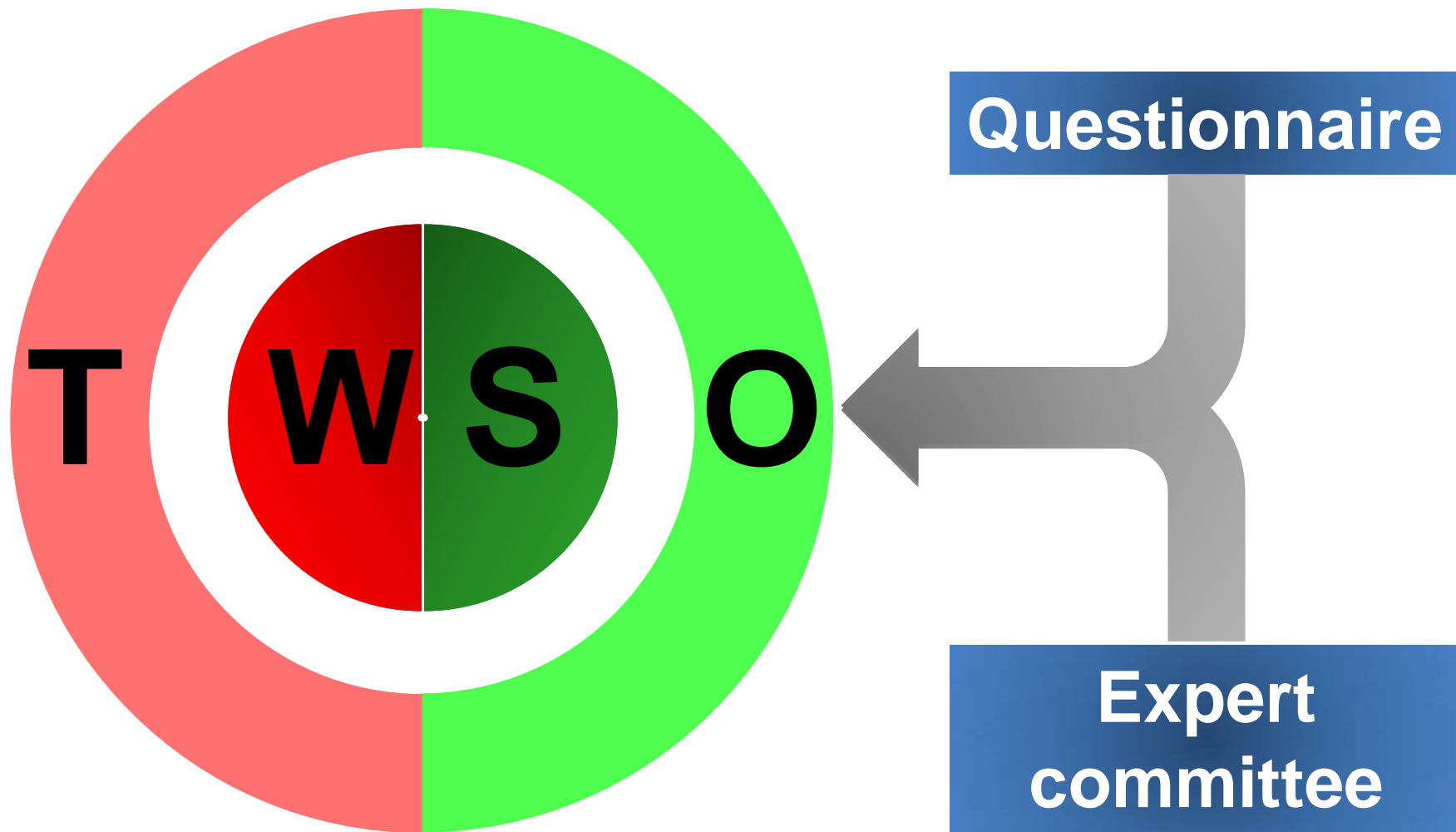
where i = a particular statement and corresponding weight factor
 j = a particular respondent



Graphical presentation



SWOT analysis



QUESTIONS?

