



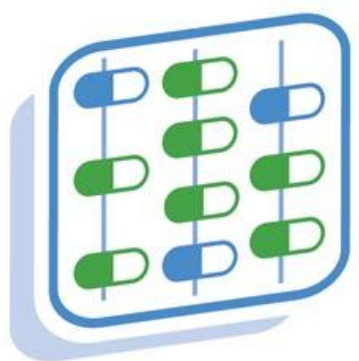
Conference Presentation
2014 PMSA - Forecasting Excellence



*Best Practices for Forecasting Pharmaceutical Products –
Identifying & Eliminating Pharmaceutical Forecasting*

**Foster
Rosenblatt**

***Best Practices for Forecasting
Pharmaceutical Products –
Identifying & Eliminating
Pharmaceutical Forecasting
“Chaos”***



PMSA

PHARMACEUTICAL MANAGEMENT
SCIENCE ASSOCIATION

**Results of the Best Practice
Forecasting Survey**

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**Foster
Rosenblatt**

Between January & March of 2014, we conducted a survey of pharmaceutical professionals to assess the “state of forecasting”

Business Objectives

- Better understand how forecasting is viewed in terms of the overall Pharma strategic planning process

Research Goal

- Survey 100+ industry professionals concerning best-practices for business analytics as it relates to forecasting

Key Finding

- The results suggest forecasting in life sciences can often be often disjointed, inconsistent and ineffective, leading to suboptimal generation of business-critical knowledge

Preliminary analysis suggests there is “**chaos**” in terms of the **effectiveness** of many forecasting functions as well as **where responsibility should reside**

- The results suggest there are *large gaps* between the current and ideal state with respect to:
 - Process, effectiveness and value generation
 - Forecasting responsibility
- There are strong differences between Brand Marketers, Forecasters and Others
 - The *largest discrepancy between* perceived importance and current company effectiveness on almost all forecasting tasks *exists for Marketers*

Definitions of job functions used in the research

- **Brand Marketers:**
 - Marketers who are currently on an in-line or late-stage brand team
- **Forecasters:**
 - Individuals who specifically responded that forecasting was their primary job function
- **Analytics:**
 - Individuals who responded that they had market research, business intelligence or an integrated analytics role
- **All Others:**
 - Represents more than 10 additional job functions reported by respondents
- The sample was split relatively evenly between these four groups

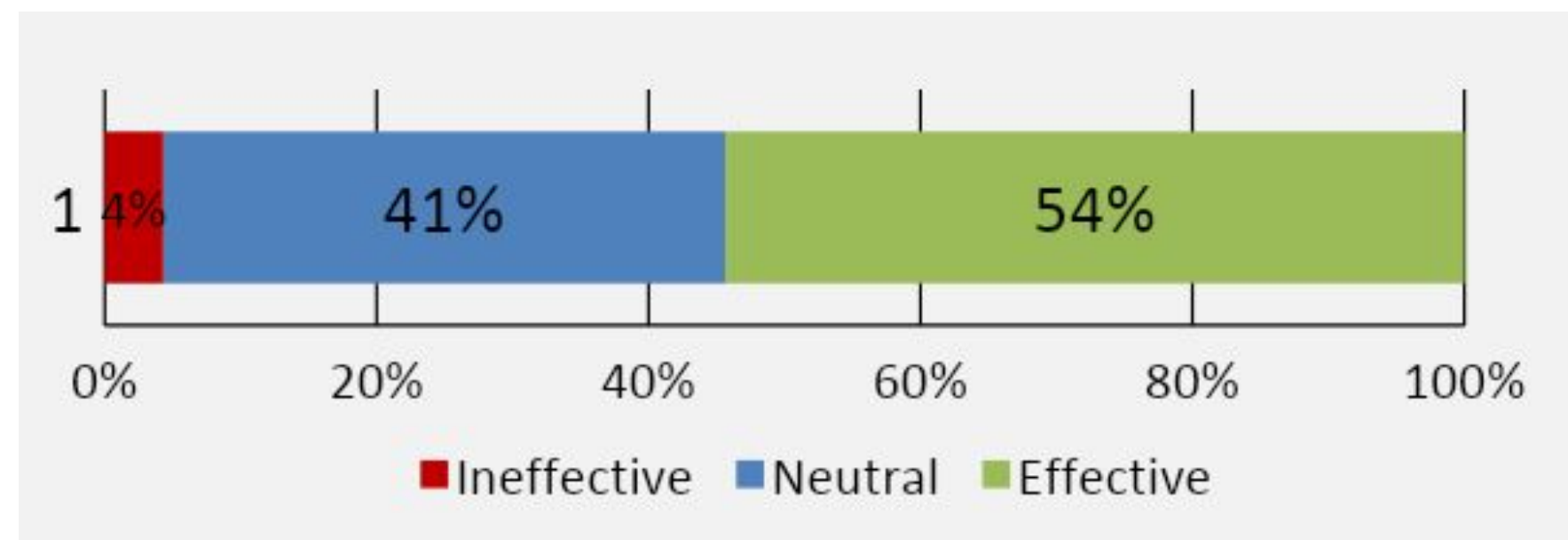
Top Line Results

- Overall Assessment of Forecasting
- Summary of Importance & Company Effectiveness Ratings
- Summary of the RACI
- Summary of Issues Relating to Data Types

Just over ½ the sample (54%) believed forecasting in their company is **highly effective** and **provides timely and valuable** information for making business decisions

- **Marketers** were **least likely** to agree with this statement
- More technical job functions (**Forecasting & Analytics**) were **more likely** to agree

How effective is forecasting in your company?



1,2 = Low Effectiveness
3,4,5 = Neutral
6,7 = High Effectiveness

83% of respondents agreed forecasting should be an *integral part of the strategic planning process* – only **46% believed** this was done *effectively*...

This gap is significant and greatest for **Forecasters** (6.6 vs. 4.9)

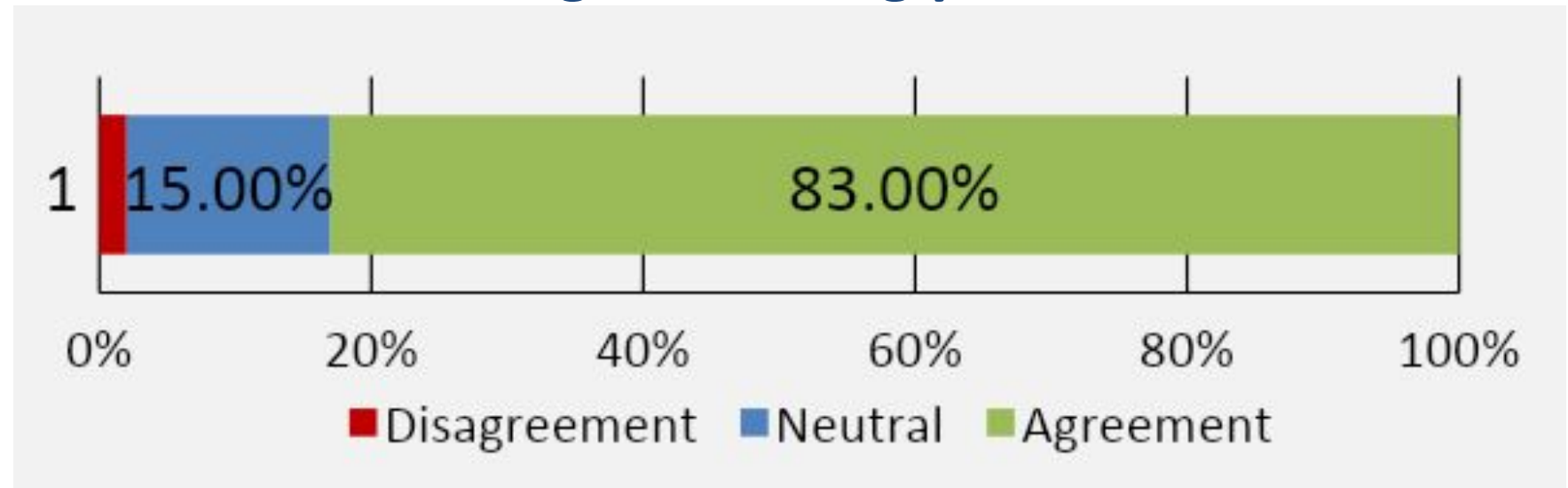
Group Means

- Brand Marketers – 6.2
- Forecasters – 6.6**
- Analytics – 6.3**
- Other – 6.1**

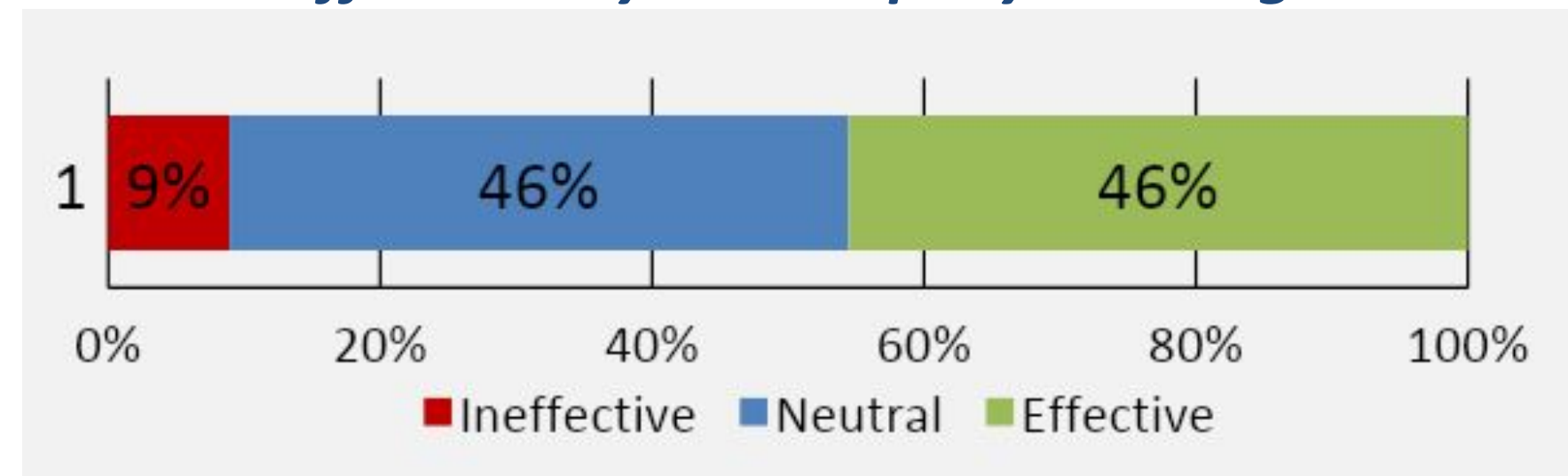
Group Means

- Brand Marketers – 4.9
- Forecasters – 4.9**
- Analytics – 5.2**
- Other – 5.0**

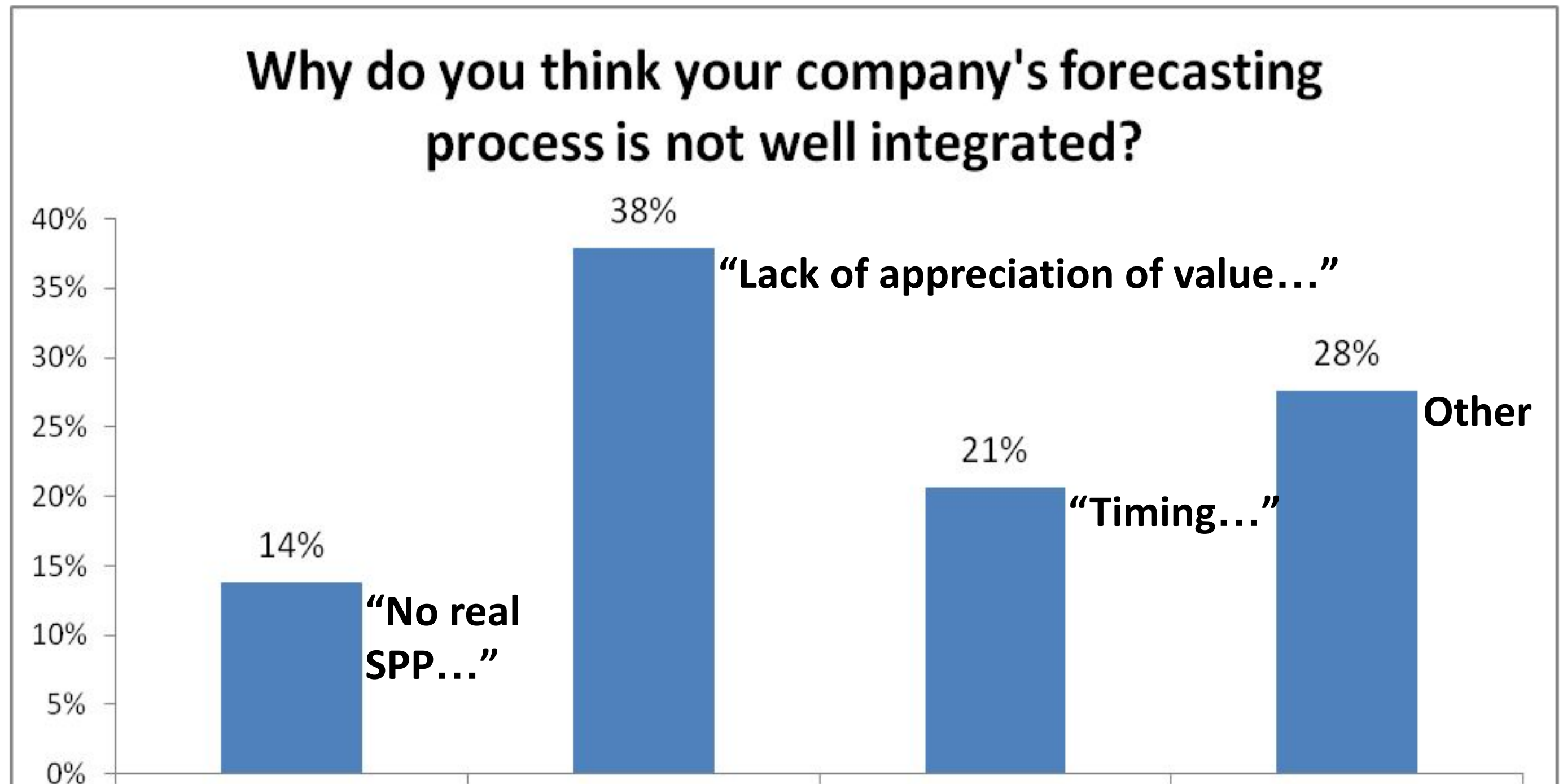
Should forecasting be an integral part of the Strategic Planning process?



How effective is your company at doing this?



The *majority of respondents* claimed that *“lack of appreciation of forecast integration” (38%)* or *“syncing the timing of forecasting activities and the SPP” (21%)* were the main reasons why forecasting was currently not an integral part of the strategic planning process



There were *many comments* offered as to why *forecasting* is *not well integrated* into the strategic planning process

“We supply forecasts & senior **management changes them** (usually upward) thereby creating **disconnects between reality & the planning process.**”

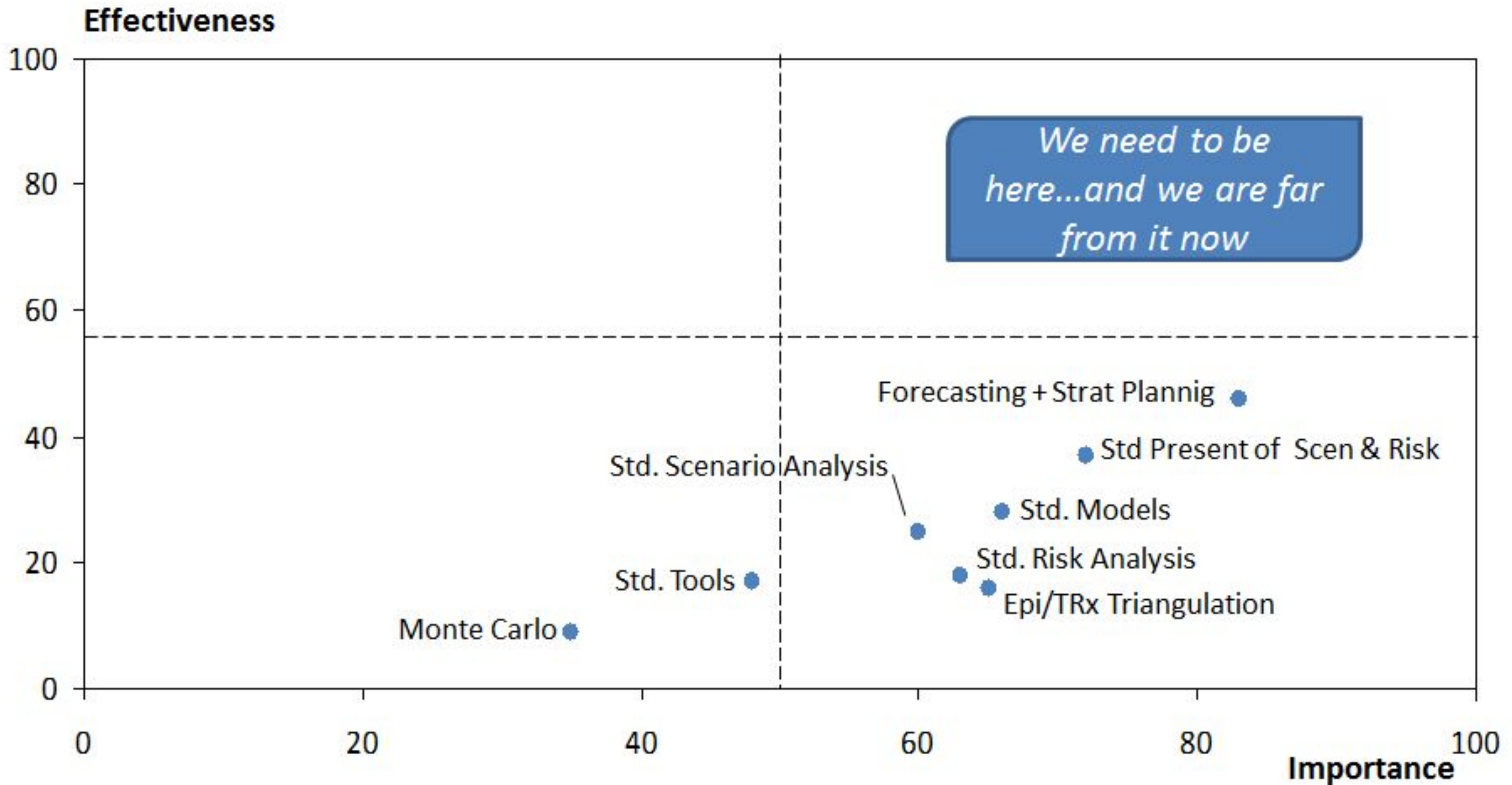
“Forecasts are not realistic - management expects the forecast to generate a predetermined number **not directly part of the strat plan process.**”

“Global Finance owns the planning cycle, while Global Marketing creates the forecasts, and the two **groups do not collaborate well;** also, senior leaders do not recognize this as an issue.”

The *gap* between **Importance & Effectiveness** persists across all key forecasting elements

“Top Box” results of Level of <u>Agreement</u> & Level of <u>Effectiveness</u>	% Agreeing	% Effective
Forecasting should be an integral part of my company’s corporate strategic planning process	83%	46%
There should be standard ways of presenting forecasts / scenarios / risk assessments	72%	37%
There should be standard forecasting models , methods and tools used for the majority of our company forecasts	66%	28%
Triangulation of epidemiological and demand (TRx/unit) forecast methods is essential for effective forecasting	65%	16%
There should exist standard methods for conducting and presenting the outputs of risk analysis	63%	18%
There should exist standard rules for creating and analyzing scenarios in the forecast development process	60%	25%
Our company should provide/develop standardized Excel tools to aid in the development of most required forecasts	48%	17%
A process to develop Monte Carlo simulations should be part of our firm’s forecasting process	35%	9%

The *gap* between *Importance & Effectiveness* persists across all key forecasting elements



Results for the RACI*

The survey question ...

Please complete this “RACI” table to identify **WHO IS** and ideally **WHO SHOULD BE** “*responsible*”, “*accountable*”, “*consulted*”, or “*informed*” for the various types of forecasts at your company.

For clarity, by “RESPONSIBLE” we mean those who do the work to achieve the task.

There is *disagreement* on who *has responsibility as well as who should have responsibility* for developing the final forecast

- For Early Stage products, **43%** of respondents believed *forecasting currently* holds Responsibility, and **48%** believed it *should reside* with *forecasters*
 - There are differences between job functions: **40% of Marketers** believed they *should have responsibility*, while almost **70% of Forecasters** believed this is their domain
- For In-Line products, **42%** of all respondents believed *forecasting currently* holds Responsibility, and **45%** believed it *should reside* with *forecasters*
 - There are differences between job functions: **41% of Marketers** believed they *should have responsibility*, while **65% of Forecasters** believed this is their domain

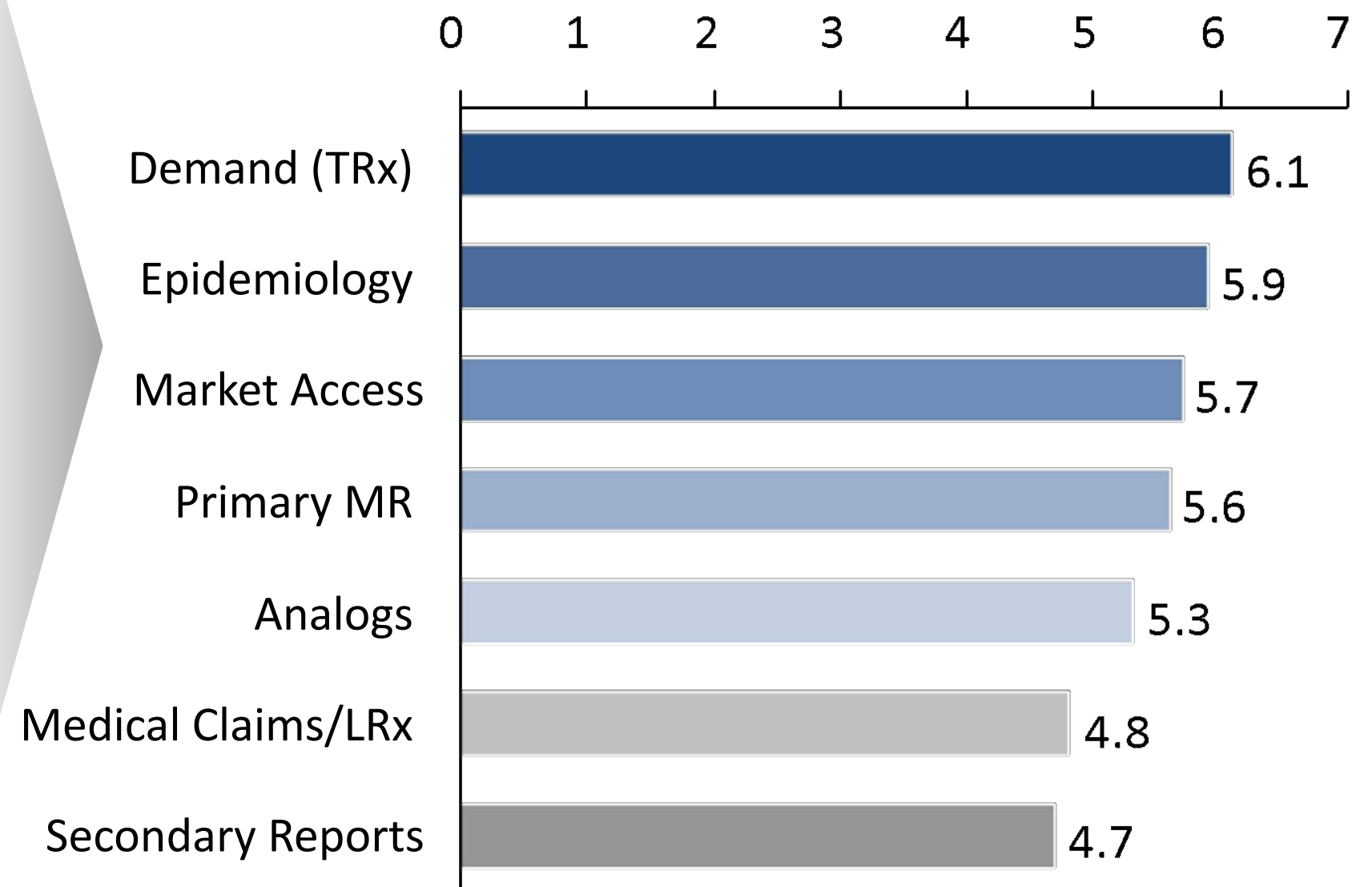
There is *disagreement* on who *has responsibility as well as who should have responsibility* for developing the final forecast

- For Late Stage products, **43%** of all respondents believed *forecasting currently holds Responsibility*, and **48%** believed *it should reside with forecasters*
 - There are differences between job functions: **37% of Marketers** believed they should have responsibility, while **76% of Forecasters** believed this is their domain
- For BD/Acquisition products, **43%** of all respondents believed *forecasting currently holds Responsibility*, and **52%** believed *it should reside with forecasters*
 - There are differences between job functions: **29% of Marketers** believed they should have responsibility; **Forecasters** were very much split on this, believing that Medical/Clin/Reg (25%), Market Access/Pricing (25%), **Forecasting (25%)** should be responsible

Overall, ***Demand/unit*** data is considered ***most important*** for forecasting, followed closely by ***Epidemiological data***

- ***Secondary reports*** were considered ***least important***
 - They are often outdated or not specific enough
- Claims/longitudinal data were also less important
 - Due to cost, lack of availability, and ability to interpret
- In further subset analysis, ***epidemiological data*** was considered ***most important*** by analytics

How important are the following data assets for forecasting?



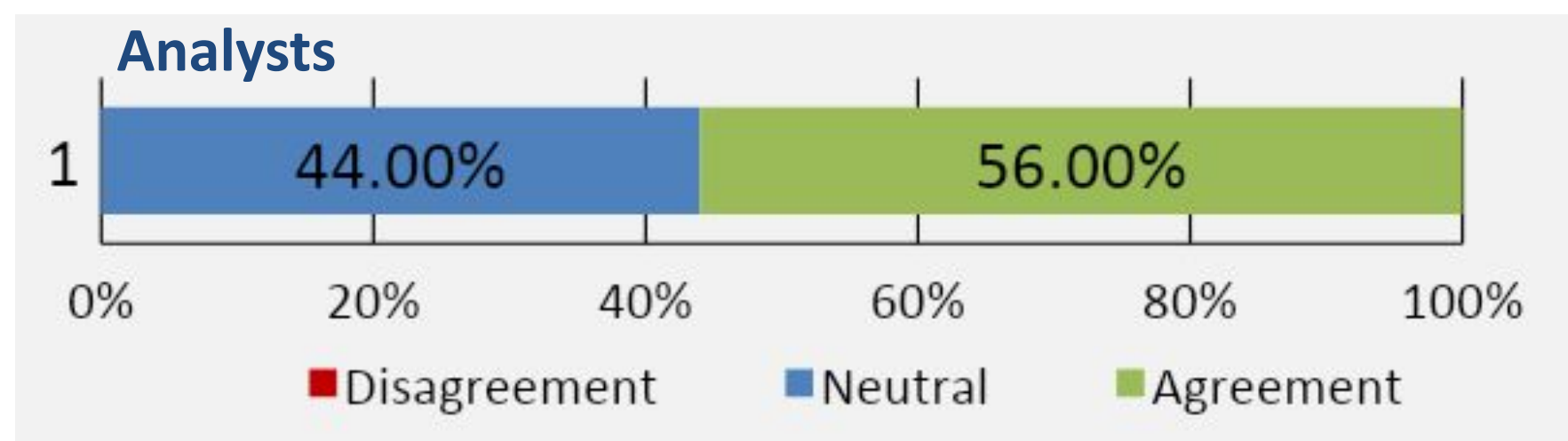
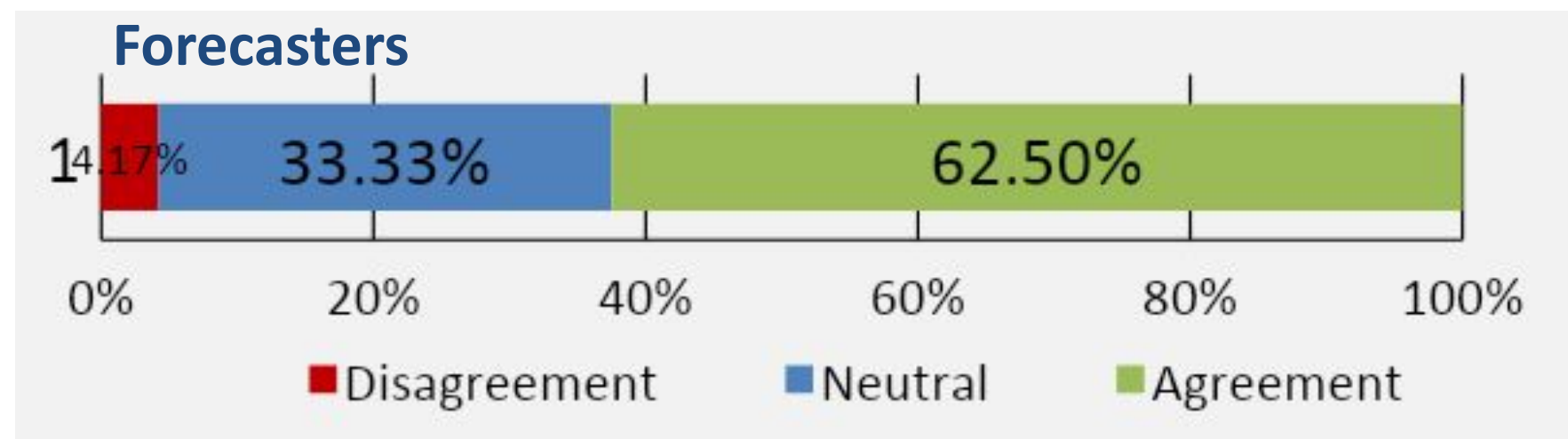
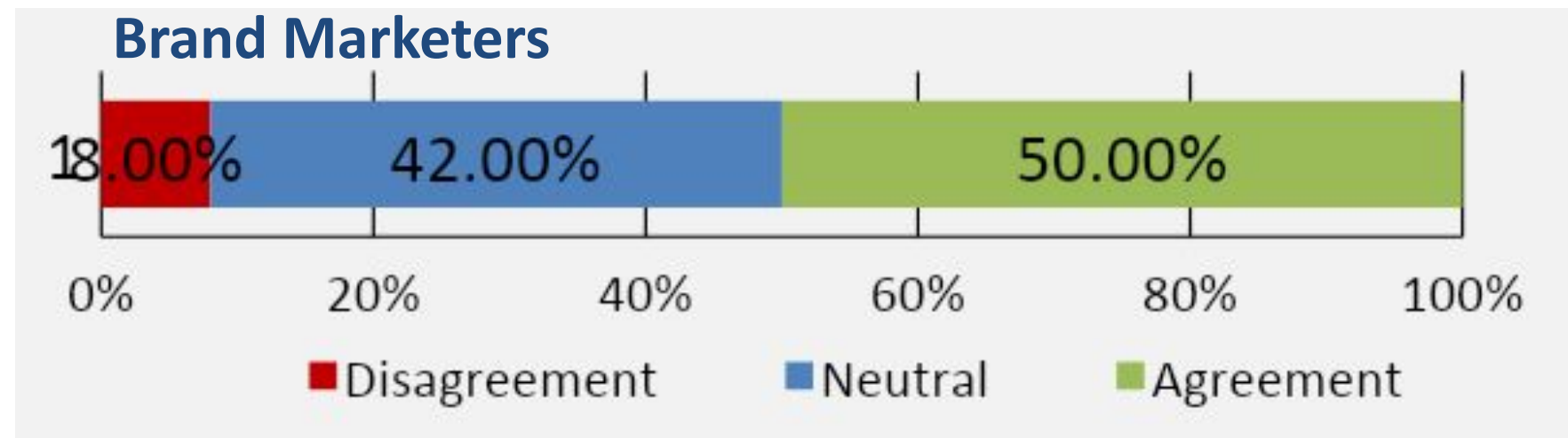
*1 = Low Importance, 7 = High Importance

Selected Detailed Findings

- Overall Assessment of Forecasting
- Summary of Importance & Company Effectiveness Ratings

54% of respondents believed their company's *forecasting* was *highly effective*

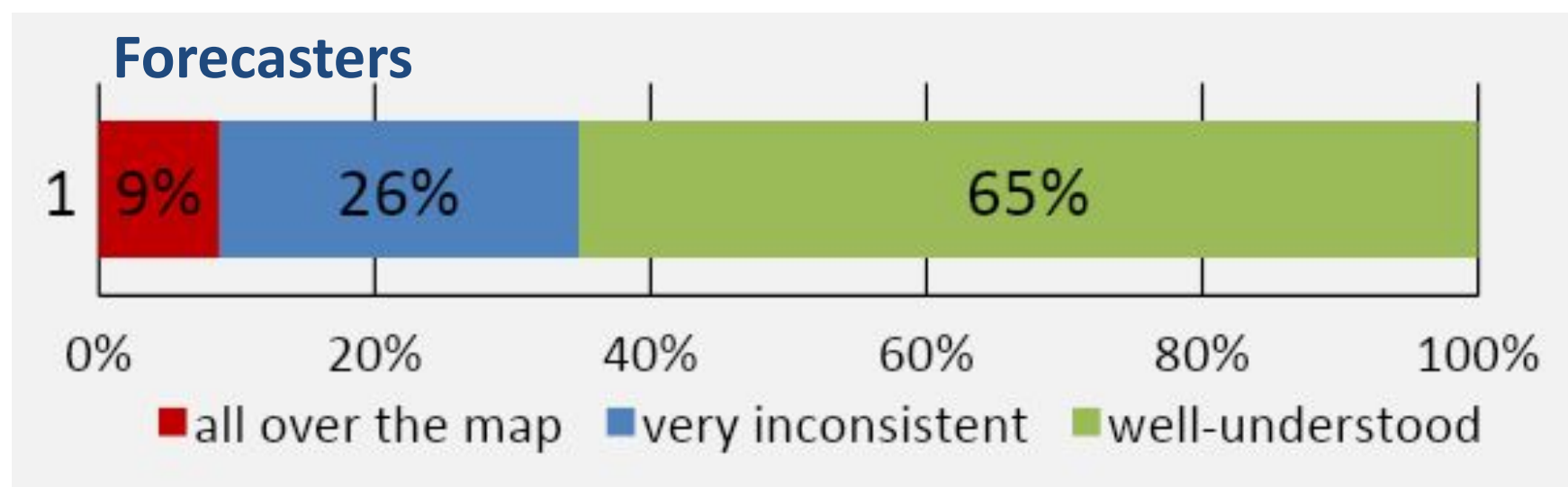
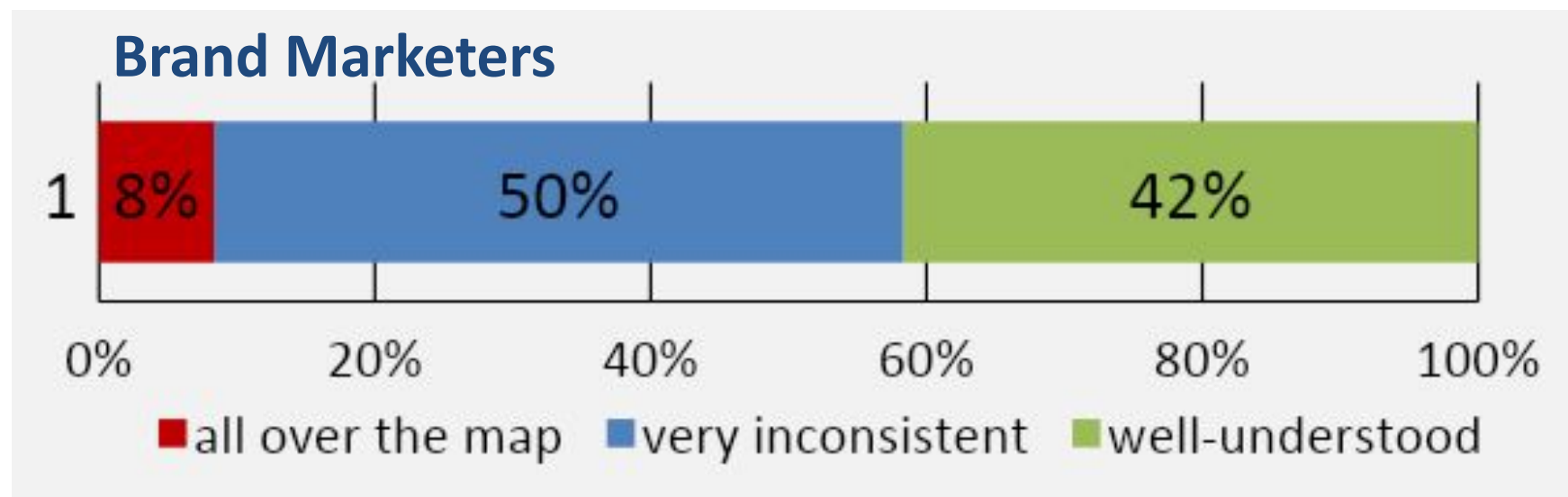
- Only **50% of Marketers** agreed that their company's forecasting was highly effective
- **Forecasters** were, not surprisingly, **the most positive**, but still only 63% in agreement



58% of Marketers believed that forecasting in-line brands is **very inconsistent** or “**all over the map**”, compared to only **35% for Forecasters**

“We have a well-defined and clearly assigned forecasting process, but management expectations continue to [unpredictably] evolve”

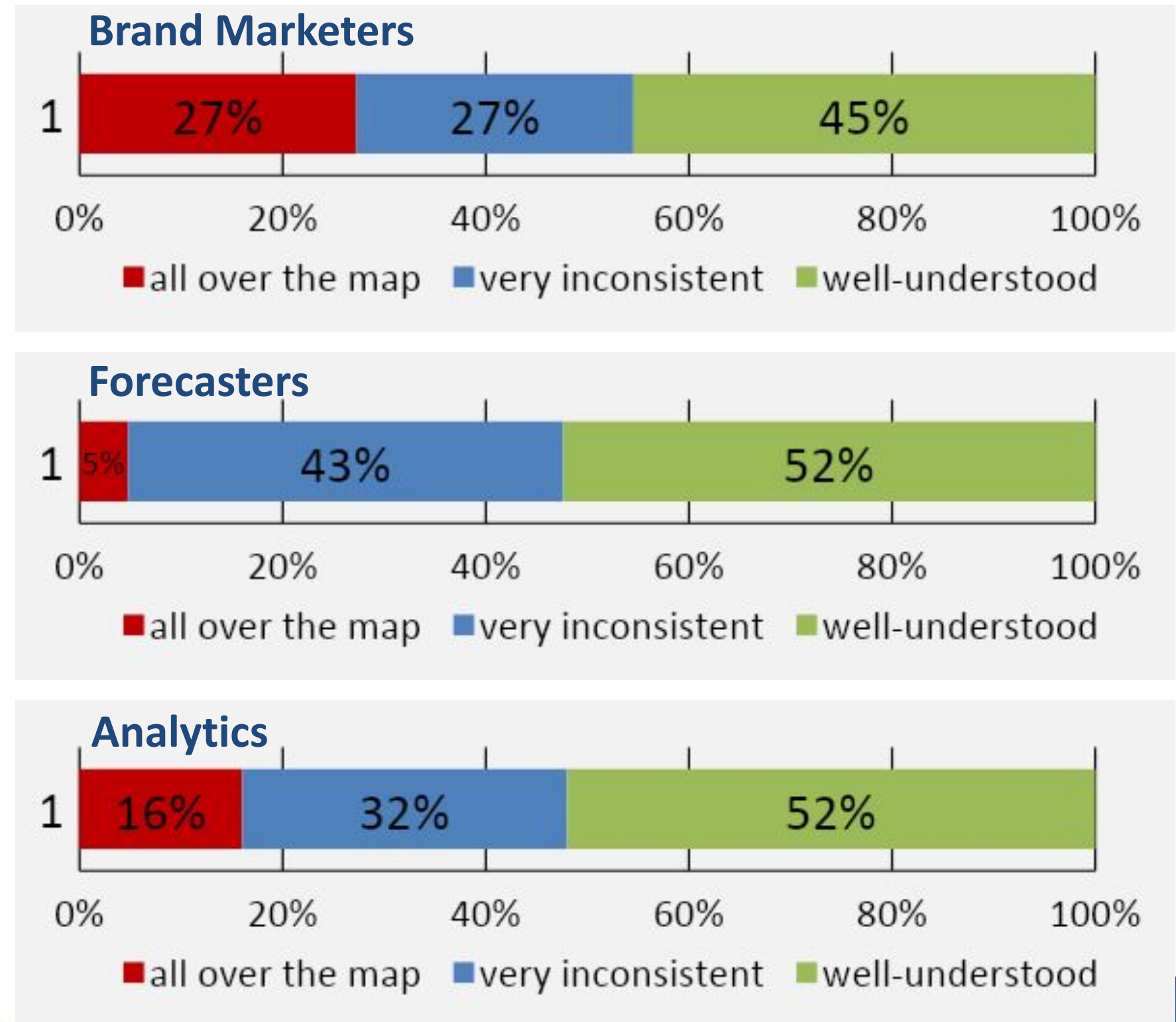
“Forecasting established products is well understood and management knows what to expect. Forecasting launch products is all over the map.”



Overall, the **majority** believed that forecasting **pipeline products** is very **inconsistent** – **Marketers (27%)** were much more likely to state that this process was “**all over the map**”, compared to Forecasters (5%) or Analytics (16%)

“Inevitable differences occur in valuation when ownership transitions from Global to Regional... early dialogue and alignment are required but are limited by resource constraints.”

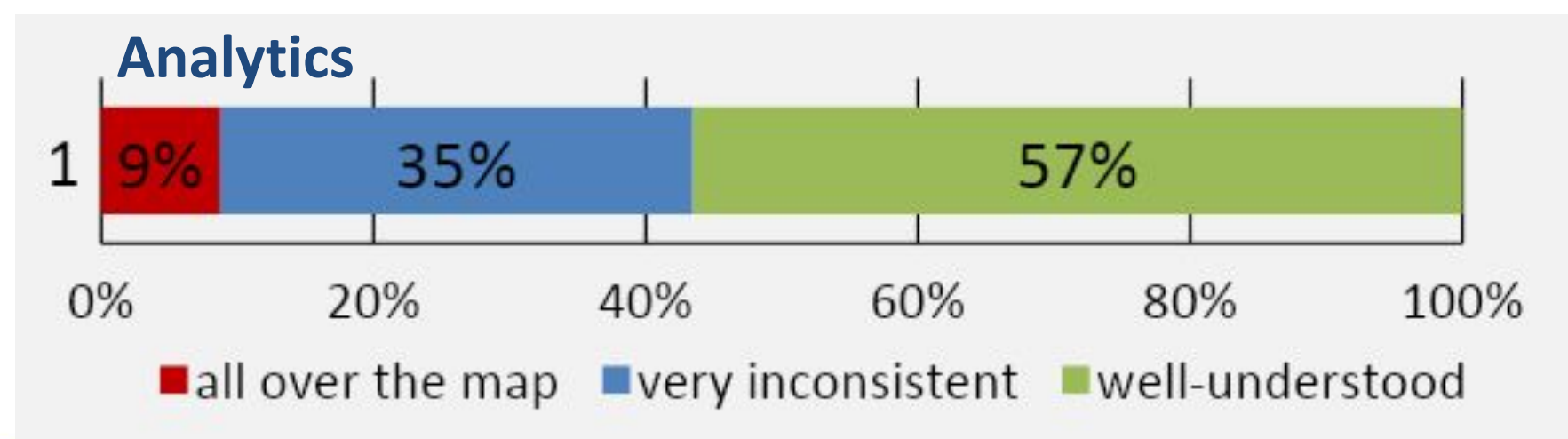
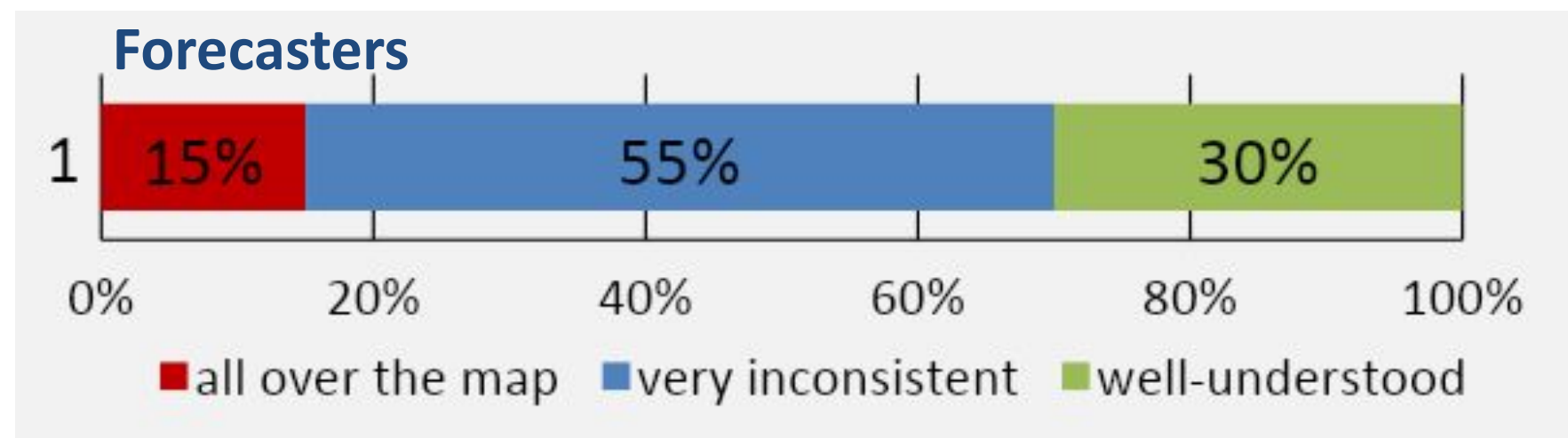
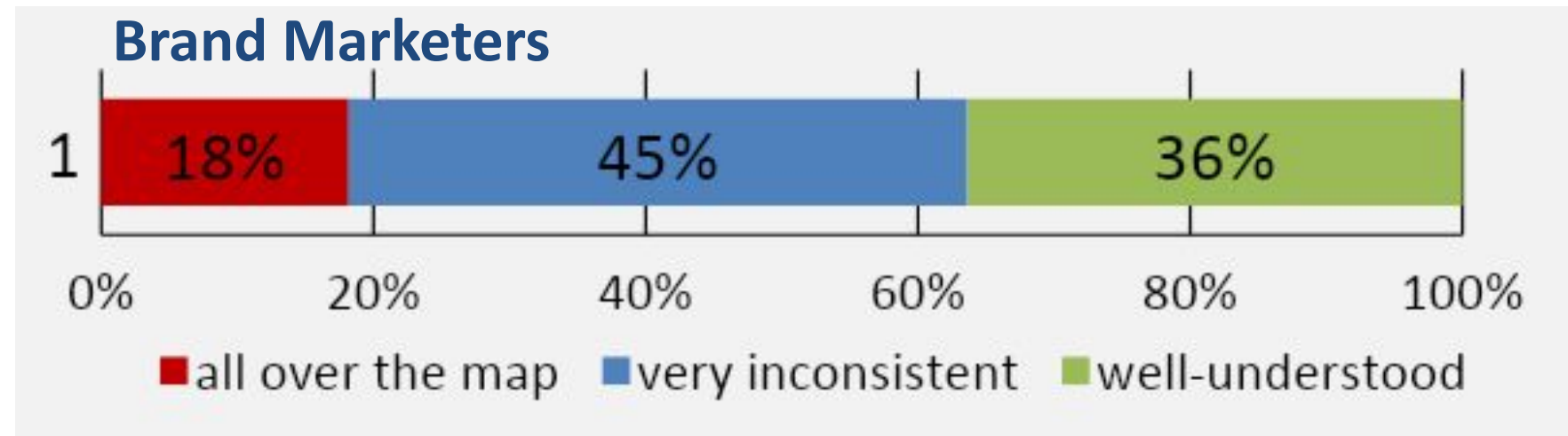
“Internally produced products carry more internal political baggage which makes forecasting more difficult.”



Overall, a **minority** (42%) believed there is a **well understood process** for **BD forecasting** – **Forecasters (30%)** and Marketers (36%) were less likely to state that this process was well understood

“Fast turn-around times... too many cooks in the kitchen, no clear vision ... top-down driven process, we don't take the time for 10-50-90 assessment of value, only base case”

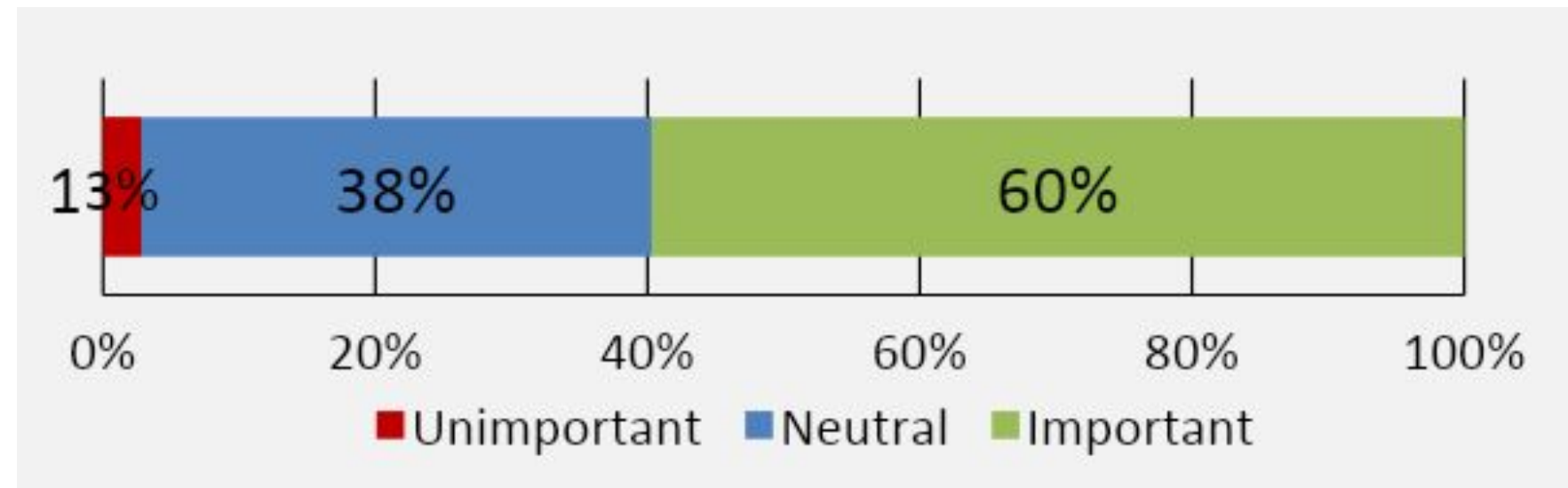
“Acquisition or licensing is the worst... everyone wants to pump up the number to get the deal done.”



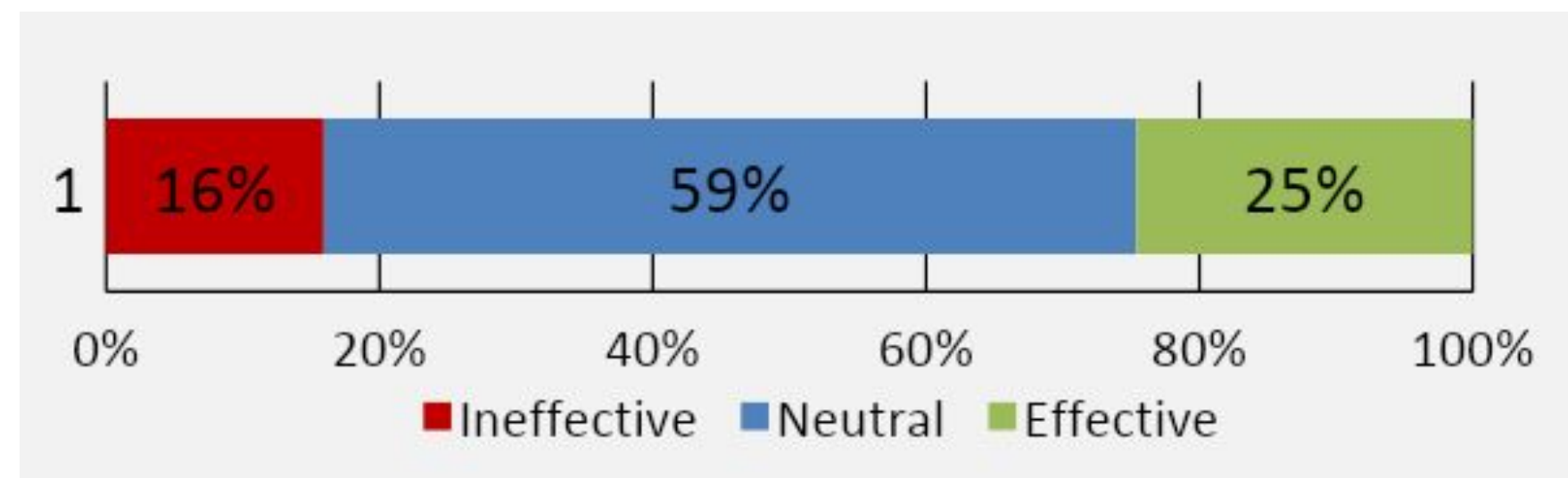
60% of respondents stated there should exist **standard rules** around **generating scenarios** for forecasting - only **25%** believed that this was done **effectively** in their company

- **Marketers** presented the greatest discrepancy in terms of importance (5.8) and effectiveness (3.7)

How important is the use of standard rules for generating forecast scenarios?



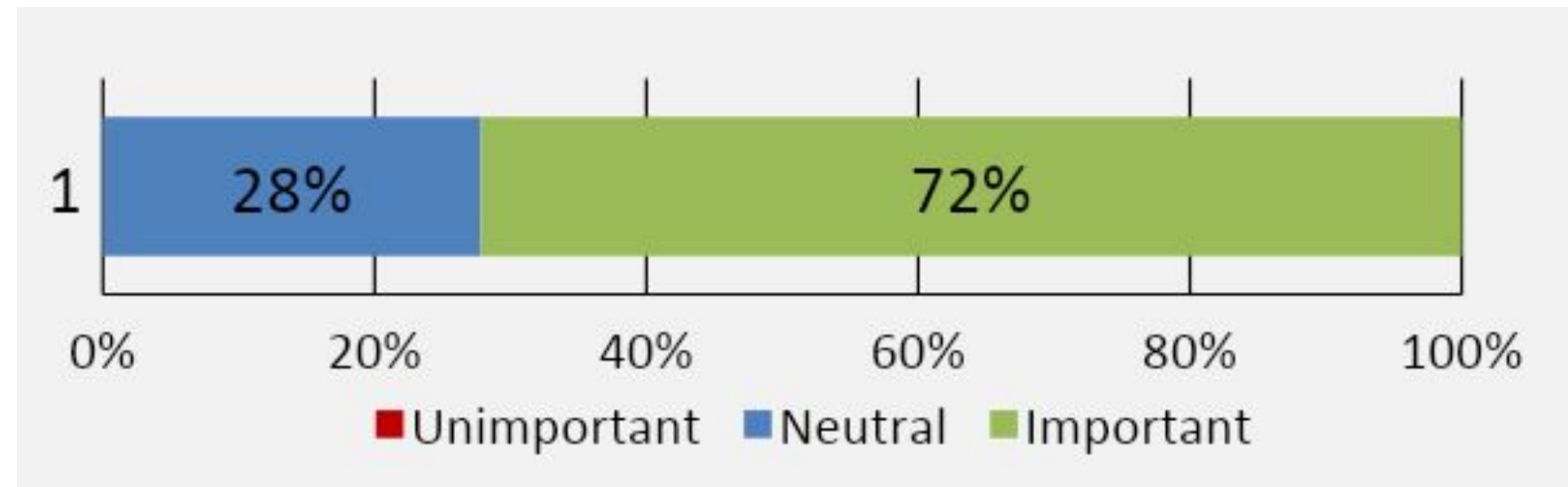
How effective is your company at doing this?



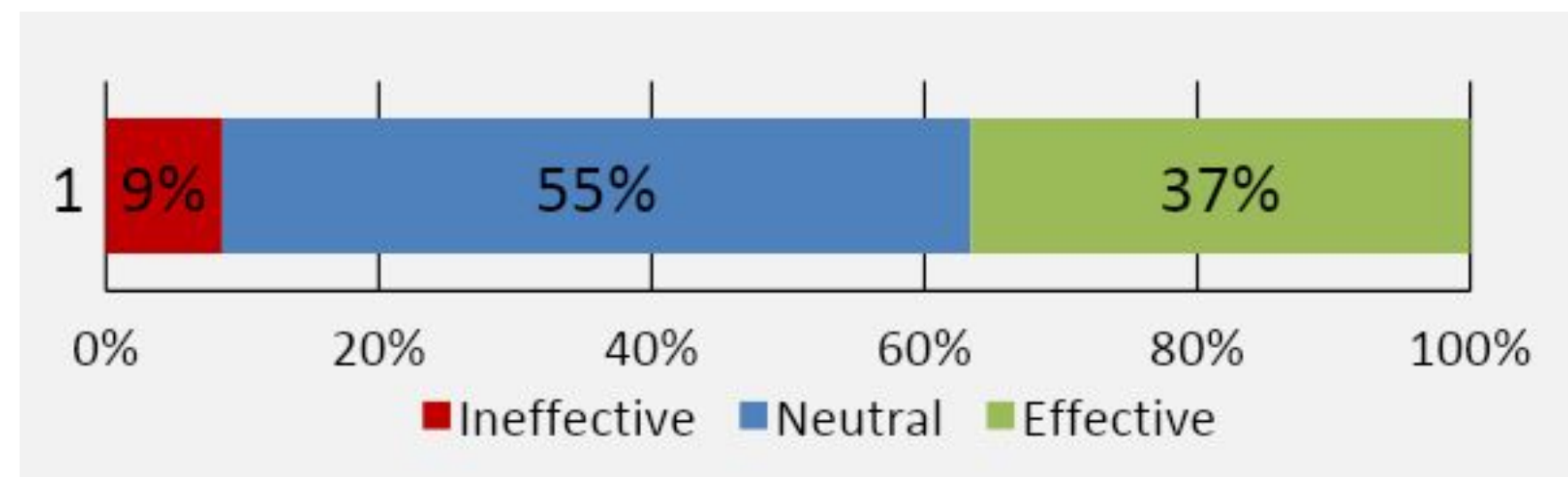
72% of respondents stated that **standard methods** to “**present**” **scenarios** should be available for forecasting – **37%** believed that this was done **effectively** in their company

- This gap is significant and greatest for **Marketers** (6.2 vs. 4.1)
- The least significant gap is for **Analytics** (5.8 vs. 5.3)

How important are standard methods to present scenarios / risk analysis?



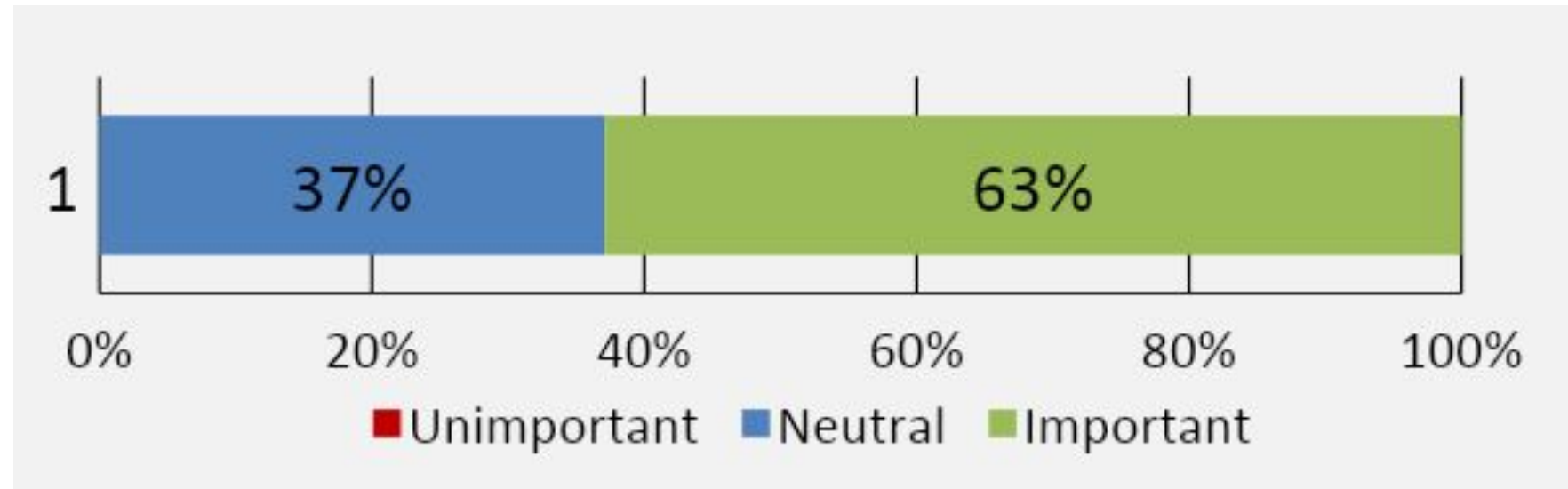
How effective is your company at doing this?



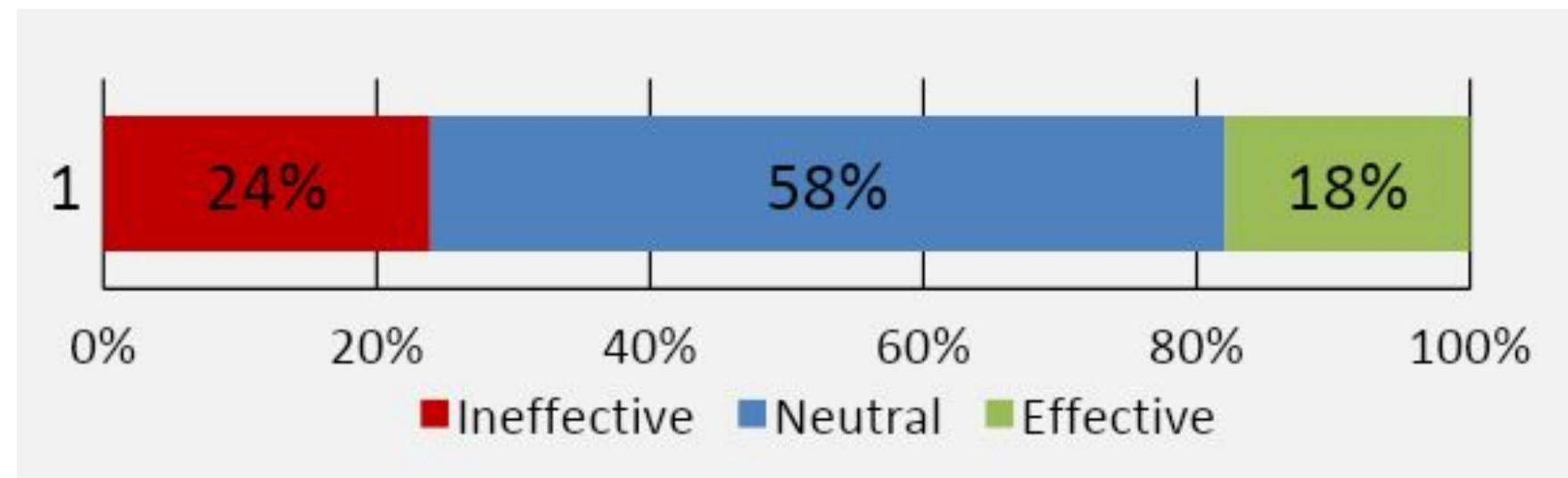
63% of respondents stated that *standard methods* to “*conduct*” *risk analysis* should be available for forecasting - only **18%** believed that this was done *effectively* in their company

- **Marketers** presented the greatest discrepancy in terms of importance (5.7) and effectiveness (3.0)
- **Marketers** perceived the lowest effectiveness (3.0); the next lowest was forecasters (3.6)

How important is the use of standard methods for conducting risk analyses?



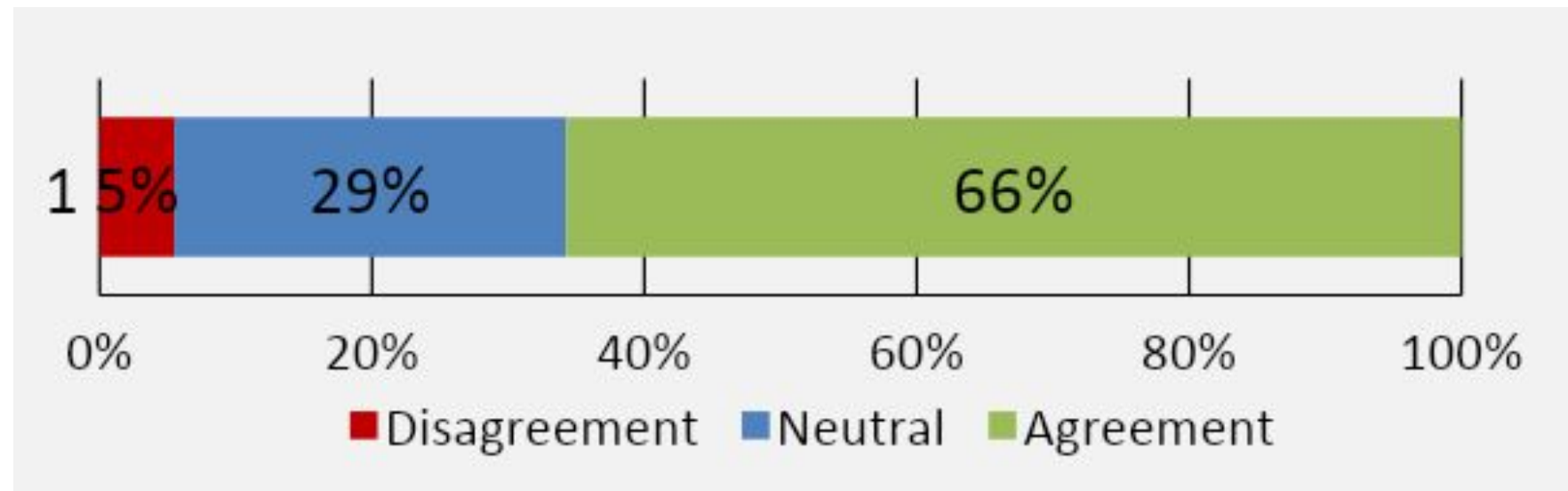
How effective is your company at doing this?



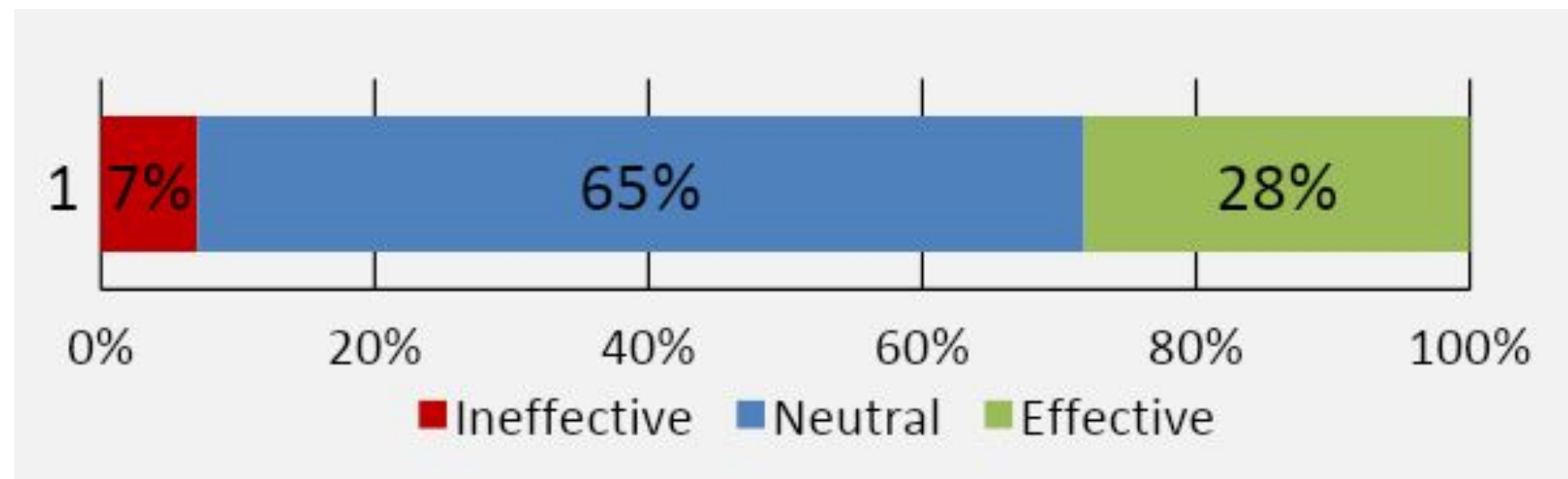
Two-thirds of respondents stated standard *models* and methods *should be utilized* - only **28% believed** that this was done *effectively* in their company

- **Marketers** presented the greatest discrepancy in terms of agreement (6.2) and effectiveness (4.3)
- The main reason given is that each forecast is **“too unique”**

Should standard forecast models, methods, and tools be used for company forecasts?



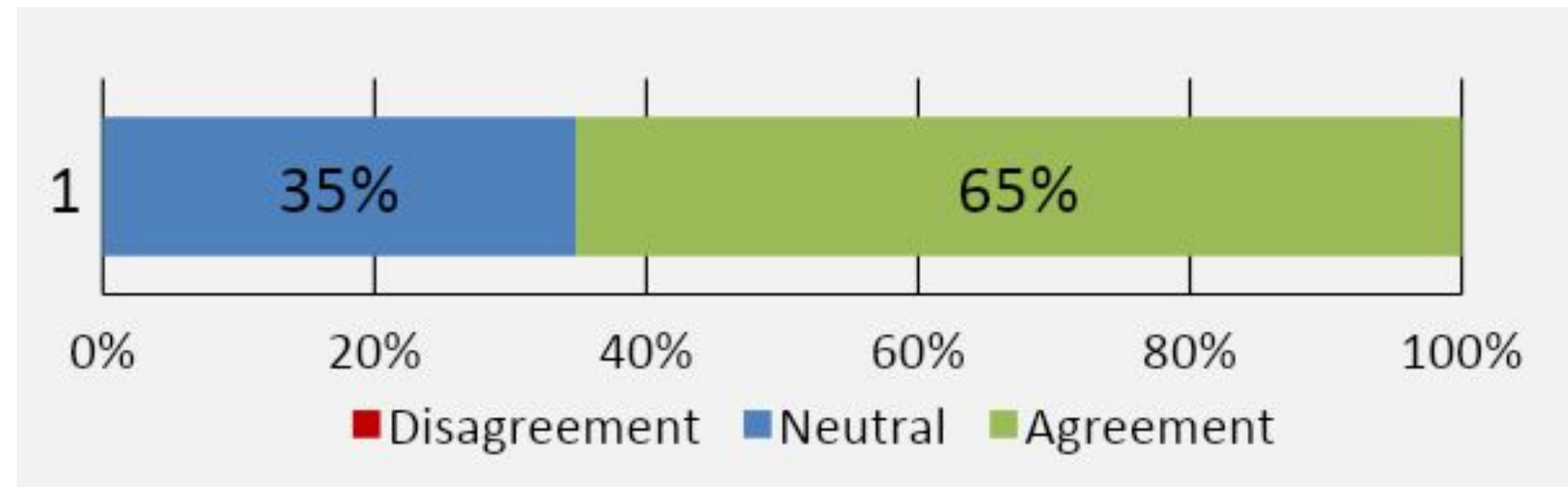
How effective is your company at doing this?



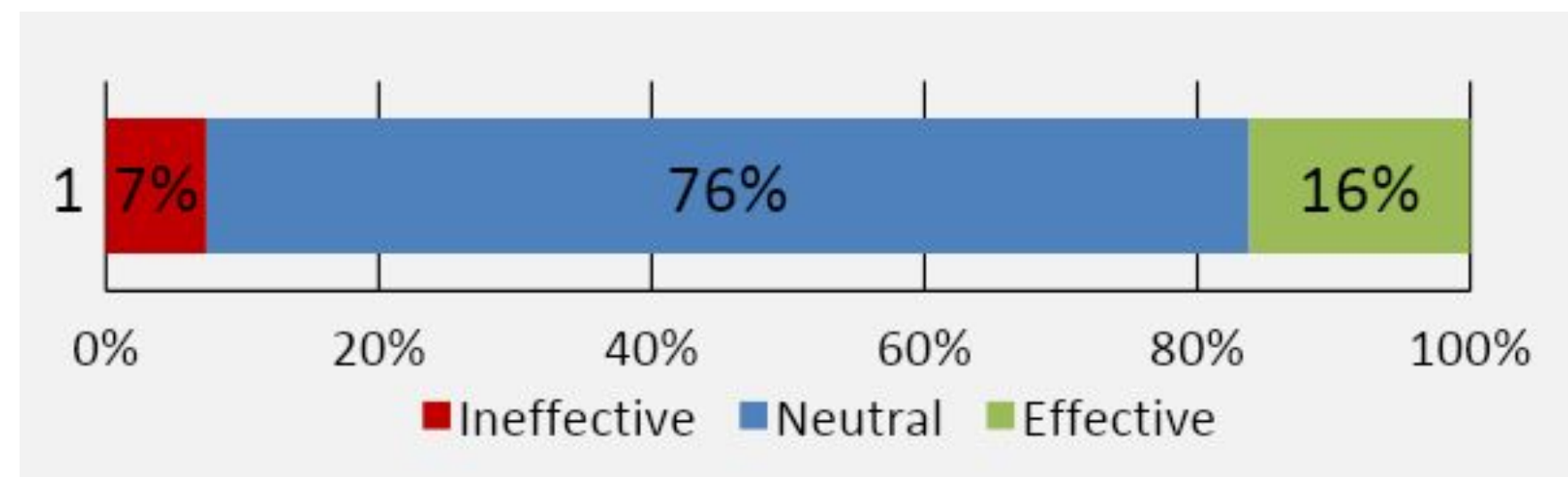
65% of respondents stated that *triangulating epi and demand* data is essential – only **16% believed** that this was done *effectively* in their company

- **Marketers** presented the greatest discrepancy in terms of agreement (5.9) and effectiveness (3.9)

Is triangulating epidemiology and demand data essential?



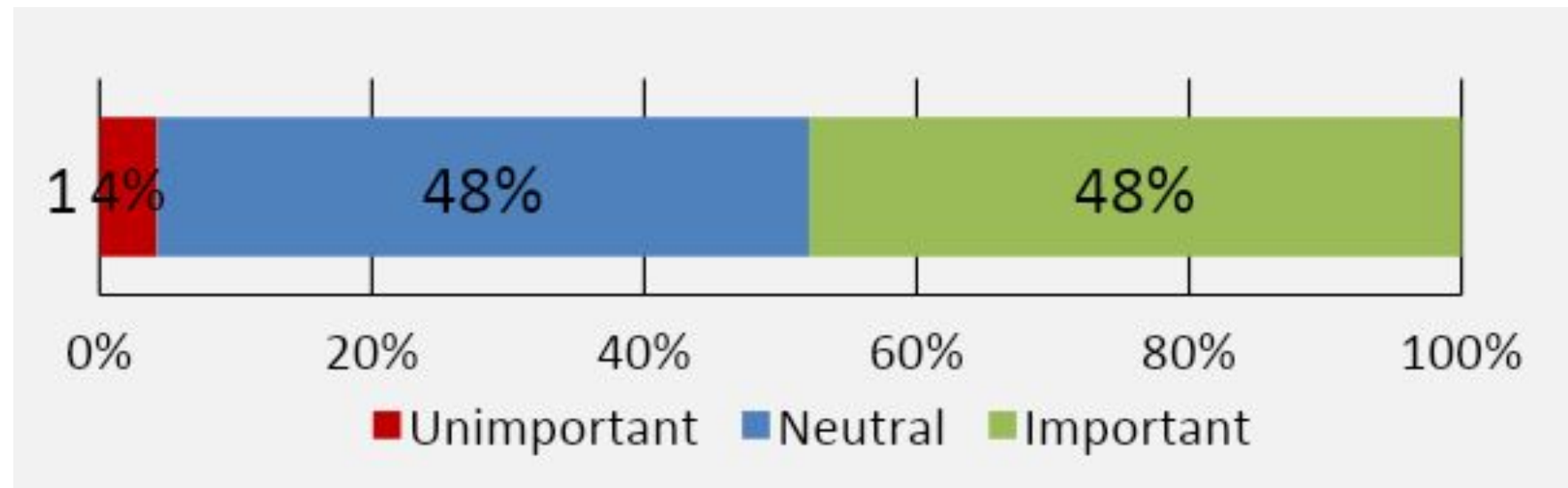
How effective is your company at doing this?



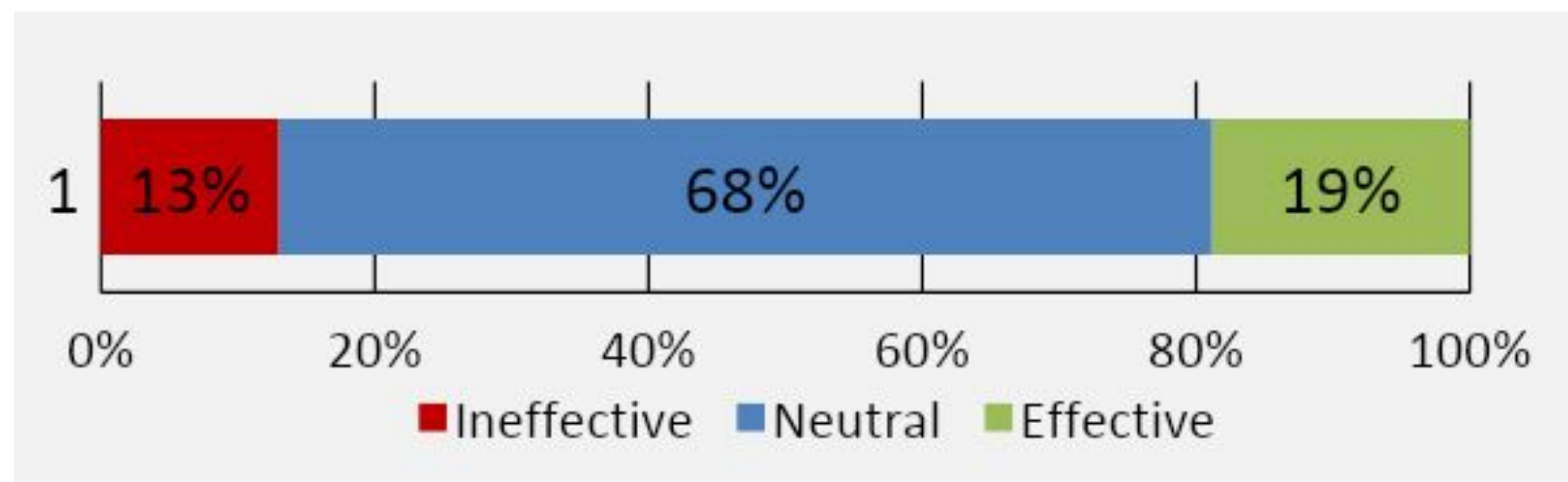
48% of respondents stated that a *library of Excel tools* should be available for forecasting - only **19%** believed this was done *effectively* in their company

- **Marketers** presented the greatest discrepancy in terms of importance (6.0) and effectiveness (3.4)
- **Marketers** perceived the lowest effectiveness (3.4); the next lowest was forecasters (4.2)

How important is the availability of a library of Excel tools for forecasting?



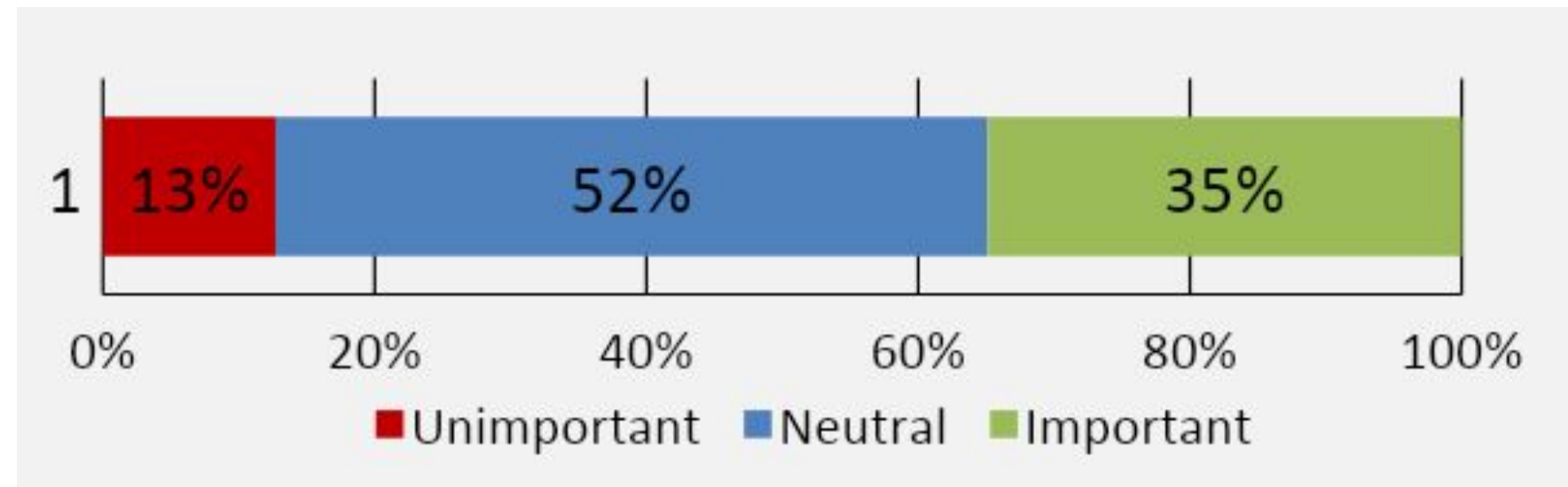
How effective is your company at doing this?



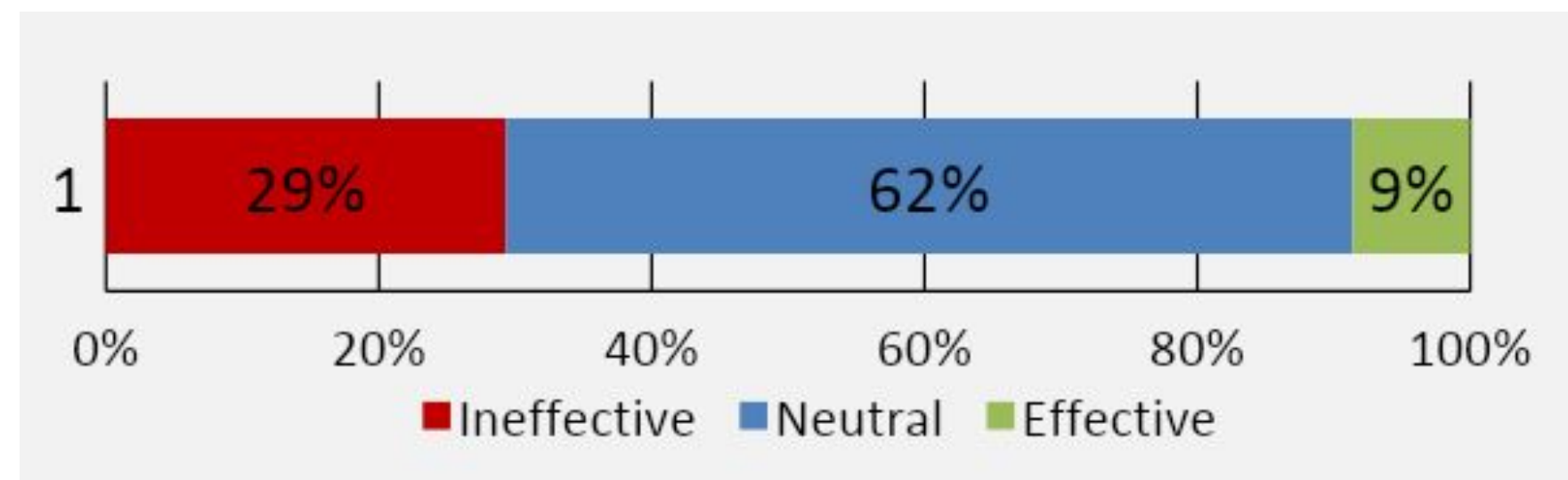
35% of respondents stated **Monte Carlo simulation** tools should be available for forecasting - only **9%** believed that this was done **effectively** in their company

- **Forecasters** presented the greatest discrepancy in terms of importance (5.1) and effectiveness (2.7)
- The lowest rating of effectiveness was given by **Marketers** (1.8)

How important is the availability of Monte Carlo simulation tools for forecasting?



How effective is your company at doing this?



Final Conclusions & Recommendations

- The survey highlights many areas where there are significant differences between the expectations and experiences with respect to various forecasting functions:
 - Forecasting as an integral part of corporate strategic planning process
 - Triangulation of epidemiological and demand (TRx/unit) forecast methods
 - Standard methods for conducting and presenting the outputs of risk analysis
 - Developing standard Monte Carlo simulations
 - Developing standardized Excel tools
- The greatest differences between expectations and experience exists for Marketers, across most forecasting issues
- Marketers believe they should have a higher degree of responsibility in the forecasting process... ***or do they really?***

Final Conclusions & Recommendations

- To bridge many of the gaps that exist between expectations and experiences requires the development of a more systematic, formalized forecasting function that clearly identifies roles, responsibilities and process
- All professionals need to cooperatively expose their needs and deficiencies – in a “risk-free” environment
- A forecasting process that involves the majority of stakeholders will serve to identify what individual needs are, and how the majority of these unmet needs can be addressed
- Education, information sharing and the dedication of resources to resolve the issues highlighted in this presentation will go a long way to improving the state of pharmaceutical forecasting

Interesting quote from one survey participant...

“Until forecasting, risk analysis, NPV valuation activities, decision analysis, and portfolio analysis reside in one group, forecasting as a function will only be seen as semi-important, and we won't overcome the organizational challenges that keep us in the state of dysfunction and disarray that we find ourselves. Furthermore, these functions must be centralized into a COE in order for maximum effectiveness to occur on many levels... only then can we really transform our strategic forecasting capabilities and become world-class.”

What's Next?

- Assess your own organization across these elements to determine the extent to which your organization exhibits “world class” effectiveness and supports “Best Practice” process
- Identify the forecasting elements of greatest need, that can be improved, and ***implement a plan to change them***
- ***“Make it Happen...”***