

UK store forecasting and location planning:

The state of the art

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THE UNIVERSITY OF OXFORD
**RETAIL LOCATION
ANALYSIS 2010**



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Aims and Context



- To discuss the main findings of our 18 month research project funded by the Nuffield Foundation:
 - An online questionnaire survey of location planning activities at retailers
 - We will also refer to the data obtained from interviews with over 30 location planning managers and consultants
- To discuss what the implications of these findings are for the location planning profession



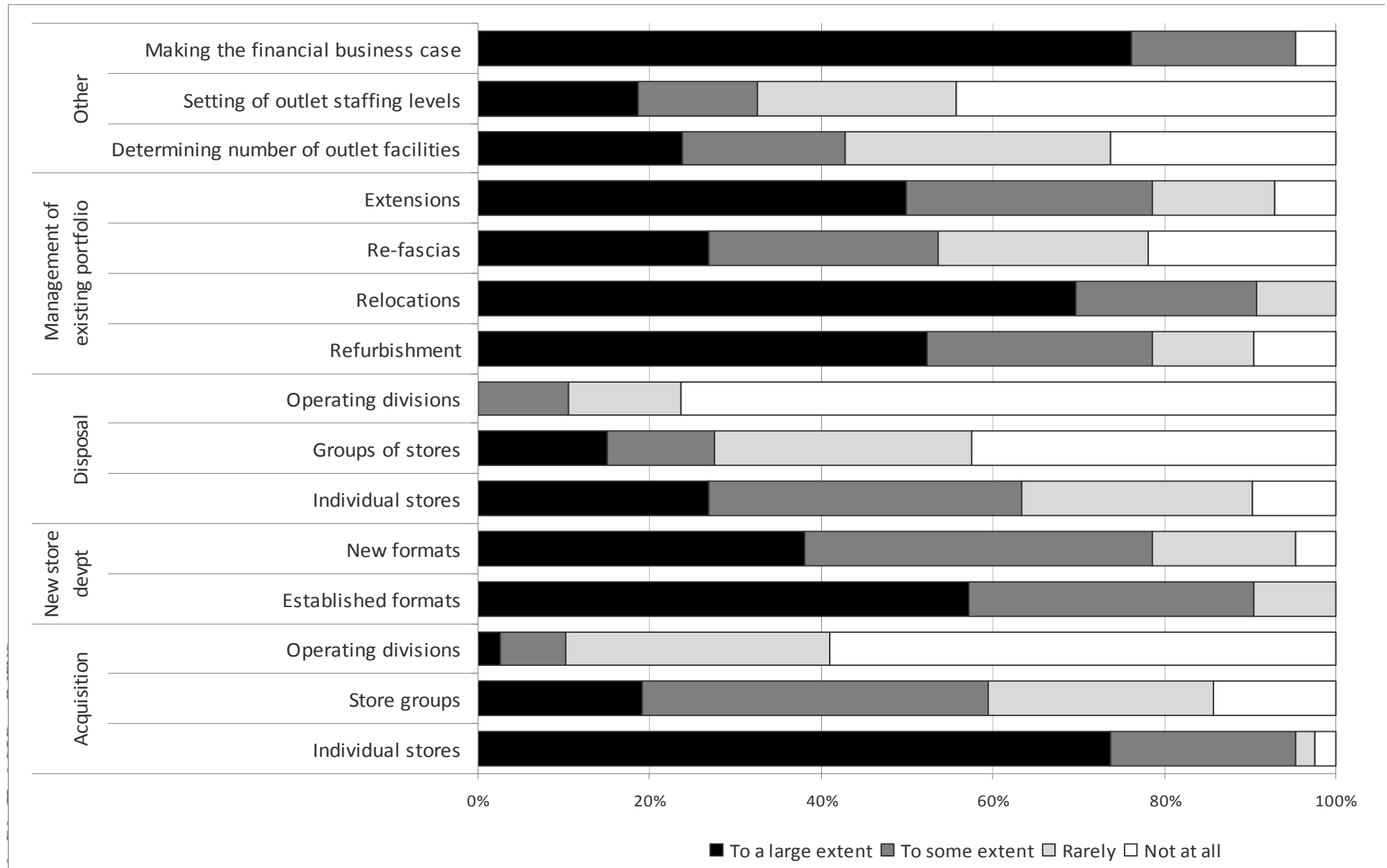
The survey



- An exploration of the extent and contemporary usage of store forecasting and site assessment techniques across UK retailing.
- Survey of named location planning/property managers from 102 individual retailers produced 43% usable responses.
- Comparison with a similar survey from 1998 (Hernández & Bennison, 2000).



Extent of location decision-making activity, 2010



Extent of location decision-making activity, 1998, 2010

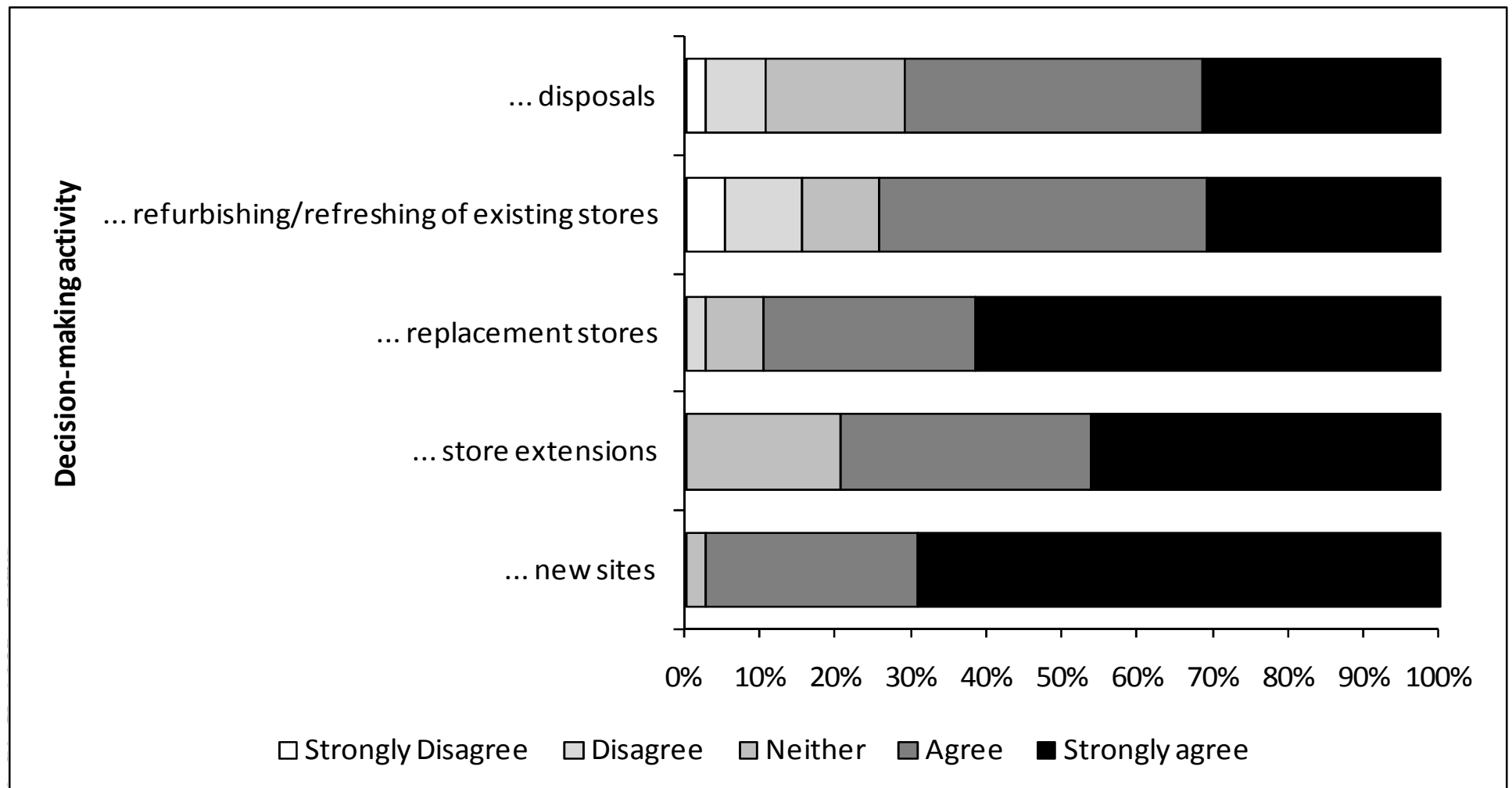
Activity	% undertaking 1998	% undertaking 2010(*)
<i>Acquisition of</i>		
Groups of stores	38	60
Operating divisions	13	10
<i>New store development of</i>		
Established formats	78	90
New formats	62	79
<i>Disposal of</i>		
Individual stores	76	63
Groups of stores	18	28
Operating divisions	7	11
<i>Management of existing portfolio through</i>		
Refurbishments	82	79
Relocations	67	91
Re-fascias	53	54
Extensions	44	79

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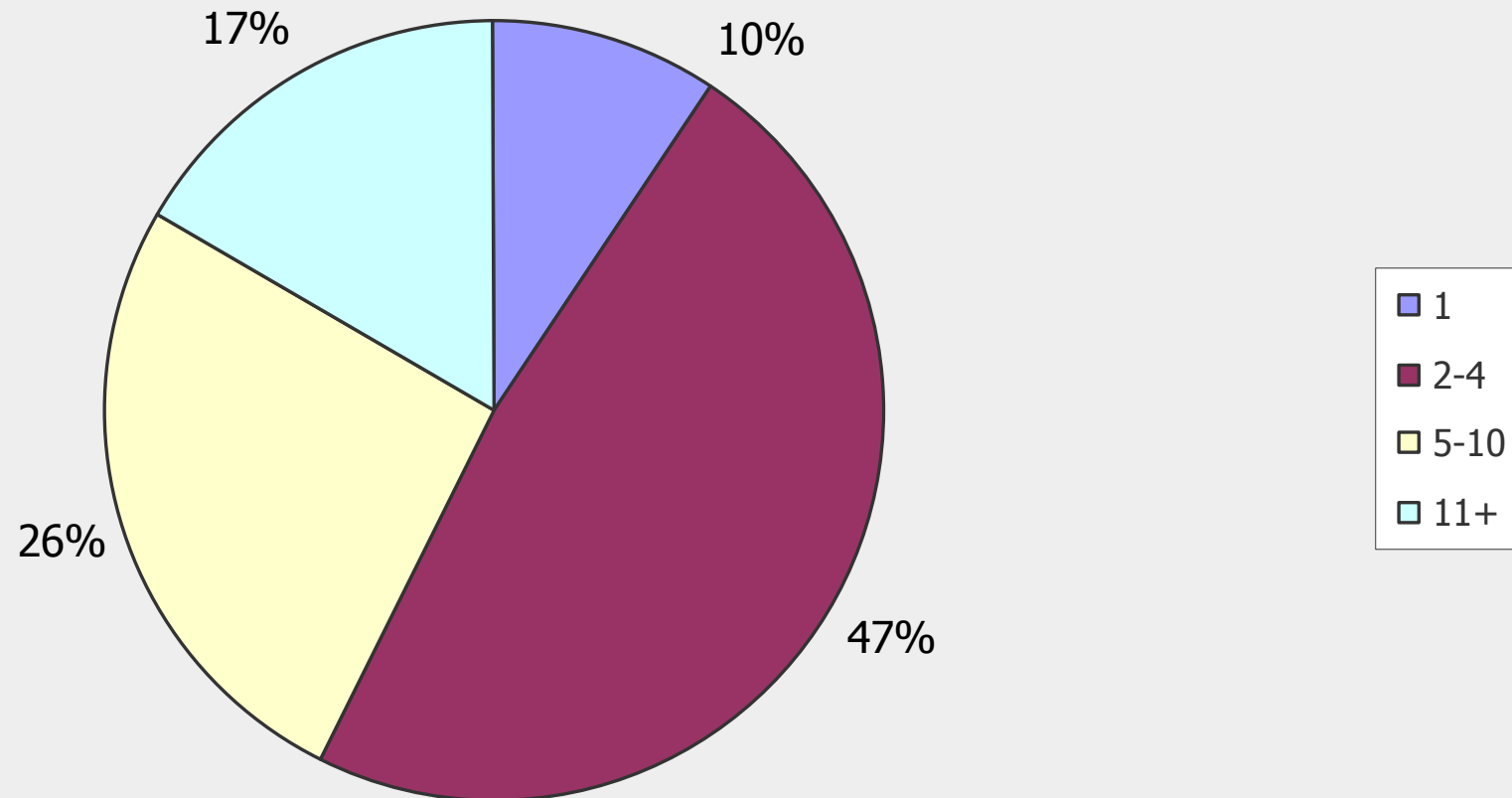


But to what extent do established processes exist for location analysis tasks?

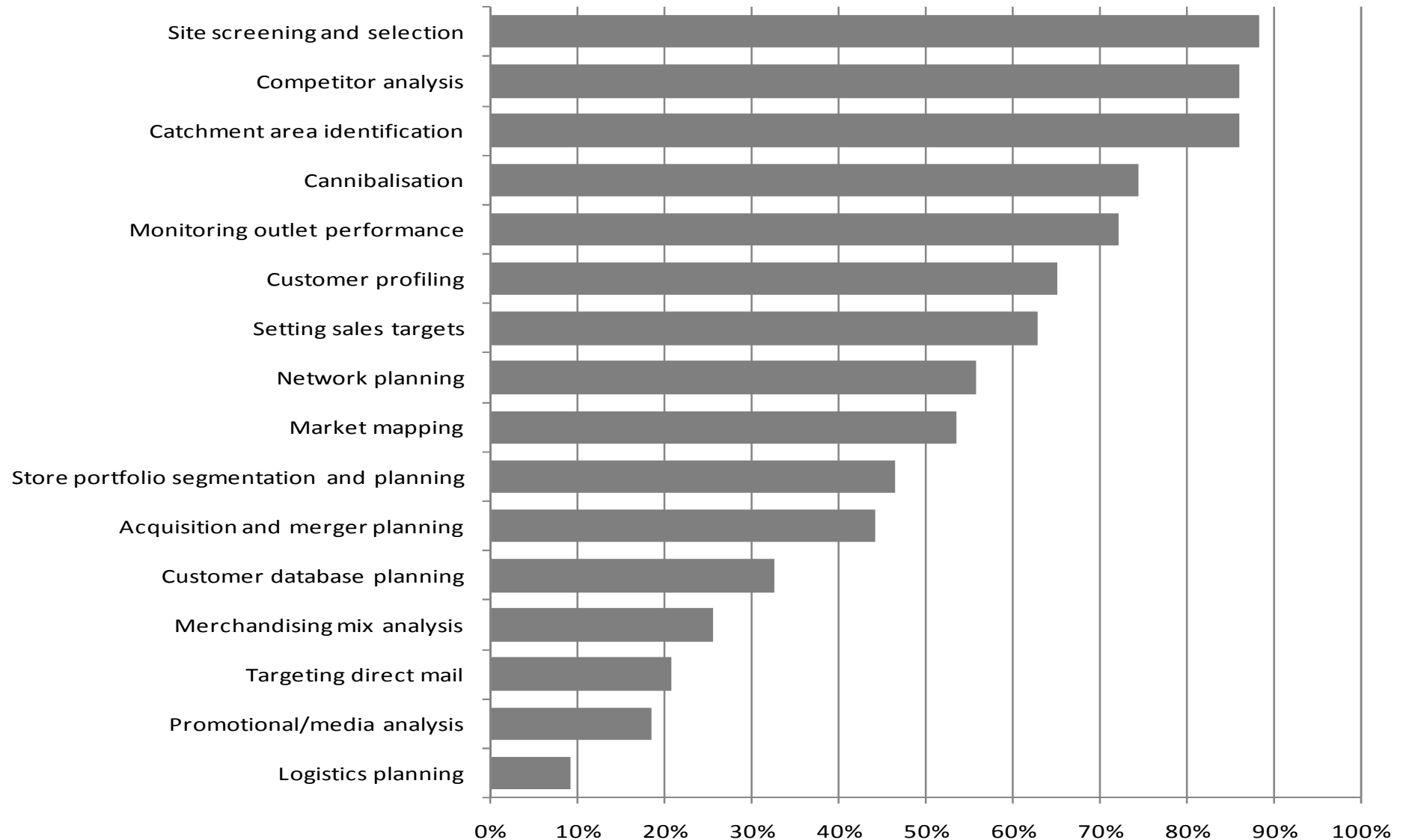


Small size of location planning teams

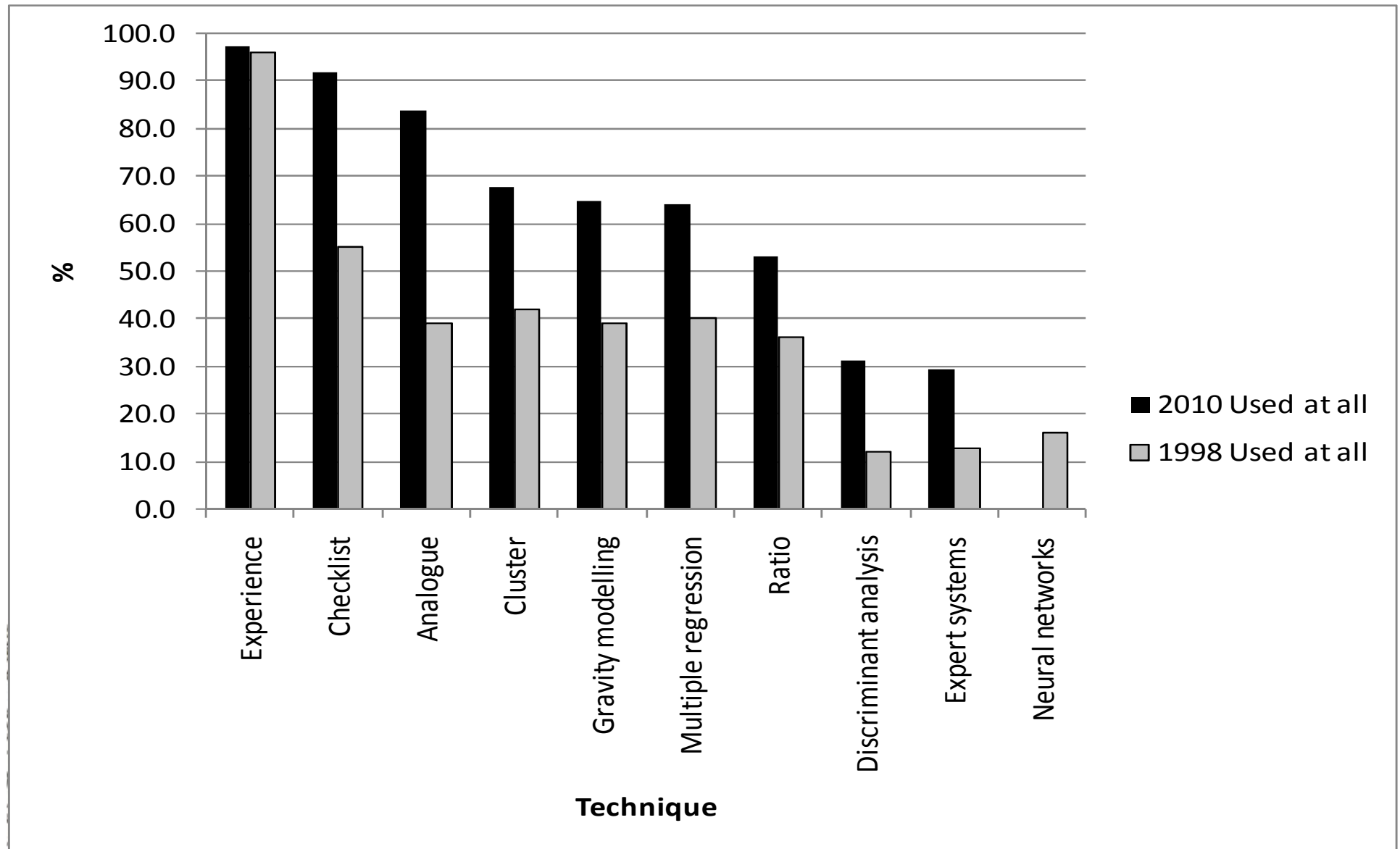
Including yourself, how many location planning decision-makers are there in your organisation? Please include all those people who make key location decisions or contribute to the decision-making process in a significant way.



Location applications conducted by firms



Location techniques by usage (% respondents) 1998, 2010



The limits to modelling...?

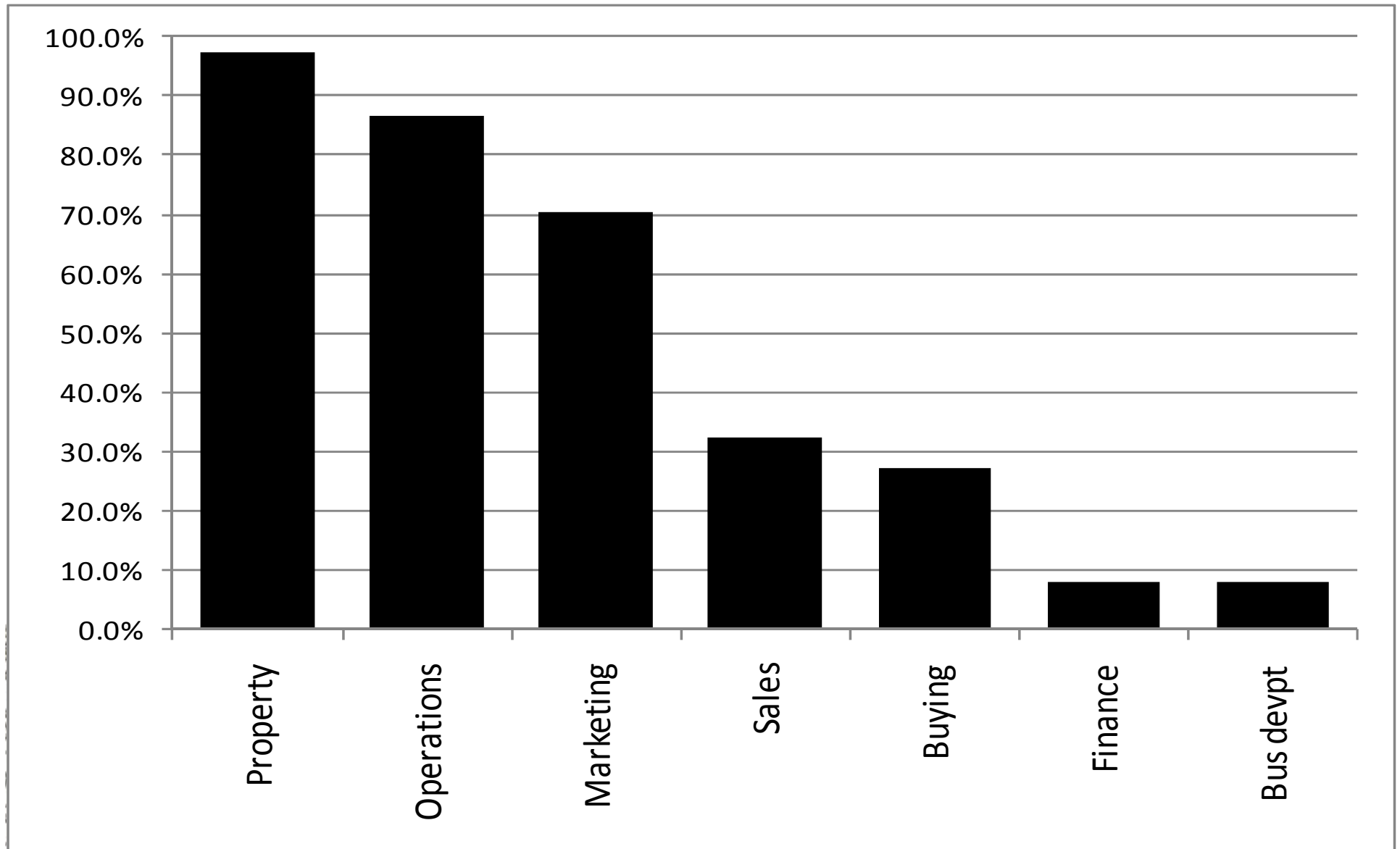
- Neural networks rejected for inability to explain output to senior management

- *"I can't remember technically how many models were actually in it, but ...you don't know what combination of models it's choosing to use for a particular scenario, and even if you did know that, it would then still be very difficult to unpick why it had kicked out a particular sales number. So ...we were never that uncomfortable with the forecast accuracy...we just couldn't explain the number, and that, as I say, was becoming more and more of a problem to me."*

- Non food retailer



Which departments share your data and findings?



The practice of forecasting....

Statement	Strongly agree/ agree	Neither	Strongly disagree/ Disagree
We have adequate tools to produce accurate forecasts	63	21	16
Models employed “in the office” are accurate and truthful	68	21	11
Model accuracy is let down by inaccurate source data	49	16	35
Quantitative models are adjusted by analysts if they feel it is necessary	76	19	5
Site forecasting is too much focused on pressing buttons on models	21	11	68
Multiple techniques are employed for any single forecast	79	8	13
We often do not have the time to undertake in-depth analysis	42	18	39
The site visit is important to forecast accuracy	97	0	3
Experience is the most important factor when making decisions in the retail industry	55	34	11
Site research and forecasting is more an “art” than a “science”	37	34	29

So what does this mean?

- Site research is more than pressing buttons:
 - No single technique is the panacea – multiple methods
 - Data within models not always trusted
 - Forecasting is seen as a mixture of art and science
 - Models are adjusted by analysts
 - Experience is important
 - The role of the site visit is critical
- This places an emphasis on:
 - Excellent analyst training – when to adjust...and how?
 - Discussion and dissemination within analyst teams concerning new knowledge and findings



Benefits of the site visit

Techniques to employ 'on site'	Calibration of spatial interaction models	Collect data difficult to express in spatial interaction models	Other benefits of the site visit
Checklists	Road speeds	Visibility of site	Aid in selection of suitable analogue stores
Experience/gut feel/ experimental	Competitor sizes	Benefit/drawbacks of adjacent retailing	
	Competitor car park (no of spaces)	Role of 'trade barriers' (eg rivers, motorways) in customer decision-making	
	Pedestrian flows Traffic flows Population affluence versus database	'Quality' of the competition The 'feel' of the site Ease of access of store	
	Exact location of competitors	Type and structure of residential catchment	

Source: Wood & Tasker, 2008



Benefits of the site visit



- To validate data in the office
 - *“We can’t trust the GIS. It’s theoretical and that’s it. You know, in practice, on a certain road, the traffic may move at a different speed. So I will physically go out and do a drive time myself.”*
 - Sports retailer
 - *“the micro-location is so much more important than for a superstore [in terms of] really understanding how that...tiny bit of that catchment is really working, and the flows that are happening, is that much more important, but it’s harder to get just from parachuting in and out for a day.”*
 - Food retailer



Benefits of the site visit



- To determine elements lost in purchased data
 - *“I don’t think I’ve sent any sites to the Board here with my name on a report when I haven’t seen the site. Also, just, you know, access, visibility, what’s the state of the competition as well, because it varies so much...there’s only two main... chains but then there’s a lot of smaller chains and there’s a lot of independents...[which] can vary from being just a little corner shop that’s not going to have any impact to...a full-on supermarket that’s actually doing a really good job. Because our independent and smaller chain data is patchy, you wouldn’t know unless you’d been to visit that store...”*
 - Food retailer



Softer elements of forecasting at risk for time efficiency?

- A lack of understanding the site research job by other departments?
 - *“The Property team: we have this issue and ongoing battle with them. They’re not convinced of the need for us to go out on site. They think that should be their job and that we sit in the office and do the numbers, and give them maps and things like that.”*
 - Food retailer.



Blending the techniques to a decision



- Assessing the evidence – the art of site research?
 - *“the analogy I use now is, rather than an all-singing, all-dancing model, I much prefer to use a series of heuristics, series of rules of thumb, and it’s almost like a fistful of darts. ... you throw it at the dartboard, then you get a shape, and you sort of know from that shape the solution is probably somewhere inside there, so there’s a lot more smart interrogation by the analysts to say, okay, well, for this particular type of store, I don’t believe that little model quite as much as I believe that one... so it’s that mixture, which I think will always continue, of art and science in the process.”*

- Non food retailer



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Art versus science

- Separate out the modelled and the observed
 - *“Our view tends to be that you should keep those two things [modelled data and analyst judgements] parallel and separate, that there should be a process which is mechanistic, deliberately mechanistic, which should be going on in isolation of the other more gut-feel, more experience-based approach to looking at a location, and that the two should come together at the end of the process and one should be used to challenge the other.”*
 - Director, Location Planning Consultancy



Mixed degrees of knowledge retention & spreading of “best practice”

Statement	Agree strongly agree	Neither	Disagree/ strongly disagree
Our department is good at ensuring that the knowledge of employees who leave is not lost to the organization	75	6	19
Analyst experience is the fundamental resource within our department	69	11	20
We could spread best practice more effectively	67	14	19
Analysts have regular meetings to discuss new findings and learnings	58	31	11
Analysts are encouraged to attend location planning related events	57	29	14
Senior analysts act as mentors to new starters in the department	56	17	28
I benefit from externally sourced knowledge concerning location planning	46	31	23
The procedure for store location decision-making is codified in a training manual	46	11	43

Post-opening reviews and leveraging knowledge

- The challenge of retaining tacit knowledge
 - *“it’s mostly in our heads, which is not great, but it’s kind of a function of there not being many of us. I mean, there are bits and pieces... The bits...we do keep a record of all our output, and ...we have got training manuals and kind of “how to” guides on the technical bits of how you run a forecast and how the model works ...*
 - *The bit we’re bad at kind of systematically capturing... is some of the more conversational stuff that comes out of meetings”*
 - Non food retailer



Post-opening reviews and leveraging knowledge

- The goal of a virtuous circle of learning
 - *“a better approach is a constant learning cycle, where, every time you open a new store, you surely must be able to learn something new. There must be some element that informs, you know, you, the business, the model, and even if it’s only informing on a positive affirmation point”*
 - *Food retail consultant*



Post-opening reviews and leveraging knowledge

- The reality of a virtuous circle of learning?
 - *“We’re very affected by anyone up in [the] corporate culture. So...it doesn’t always happen, but it...in terms of formalised processes, it should be...my experience is, if it’s working well, you have documentation, post-investment documentation, where these factors are highlighted. However, in terms of how that information is then used, it’s probably not used formally. It’s probably used informally by those who’ve experienced the post-investment process, so in actual fact, although that data exists, it might be lost in the sea change, interestingly.”*
 - *Non food retailer*



The challenge of gaining legitimacy

- Lack of independence of location planning
 - *“I don’t know if it’s a typical Property mindset, but they’ve already got their own answer anyway. They know what they want, and if they’re trying to push a site forward, they’re going to push the site forward”* Non food retailer
- Excluded from the process
 - *“[Our head of team is] trying to get them to agree to let him be present at the [decision-making] meeting, because currently he’s not, and we don’t get a copy of the minutes, so we don’t know whether it’s been approved, whether they agreed our sales number, or whether they approved it on their own number. We don’t know whether our reports get edited”* Food retailer



The challenge of gaining legitimacy



- Needs to shed disconnected image

- *“Location Planning is...can be seen as a sort of back-room, boffin type thing that doesn’t really understand the real world of retail and isn’t out there on the coalface, so it can have pejorative associations because ...it appears to be a long way from the customer and the product, whilst, in actual fact, in reality, Location Planning should be the closest thing to the customer and understanding product performance”.*

- Location planning consultant



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The challenge of gaining legitimacy



- Avoiding isolation led to positive developments
 - *"I think...historically, they kept themselves in a little bit of a silo, and I've pushed them out of that silo, so they're speaking to the Area Managers from day one, and the Regional Managers will come over and talk to us about a site. So I think...probably, for me, the question is how long it took for that to happen"*
 - General Merchandiser



The challenge of gaining legitimacy

- Need to sell the concept of location planning
 - *“they need to fundamentally understand how you arrived at an answer. So yeah, I think some are happy with that, but I think those who... take an approach where... you build up a network and you make it a bit more of a touchy-feely function, a bit more tactile, as part of that kind of PR exercise, you go out there and ...you don’t necessarily show people the model itself, you don’t necessarily show them an algorithm, but ...enough for people to know that there is some science involved, but you can present your analysis in layman’s terms quite easily actually”*

- Non food retailer



Conclusions – topics for discussion



- How is the art and science of location planning played out?
- How are decisions made within your analyst team?
- How could you better share and retain “location planning memory”?
- How should you build legitimacy with senior management for location planning?

