

Search Relevance Organizational Maturity Model

MICES 2019 Berlin | Eric Pugh | @dep4b

Search Relevance
Organizational Maturity

Model

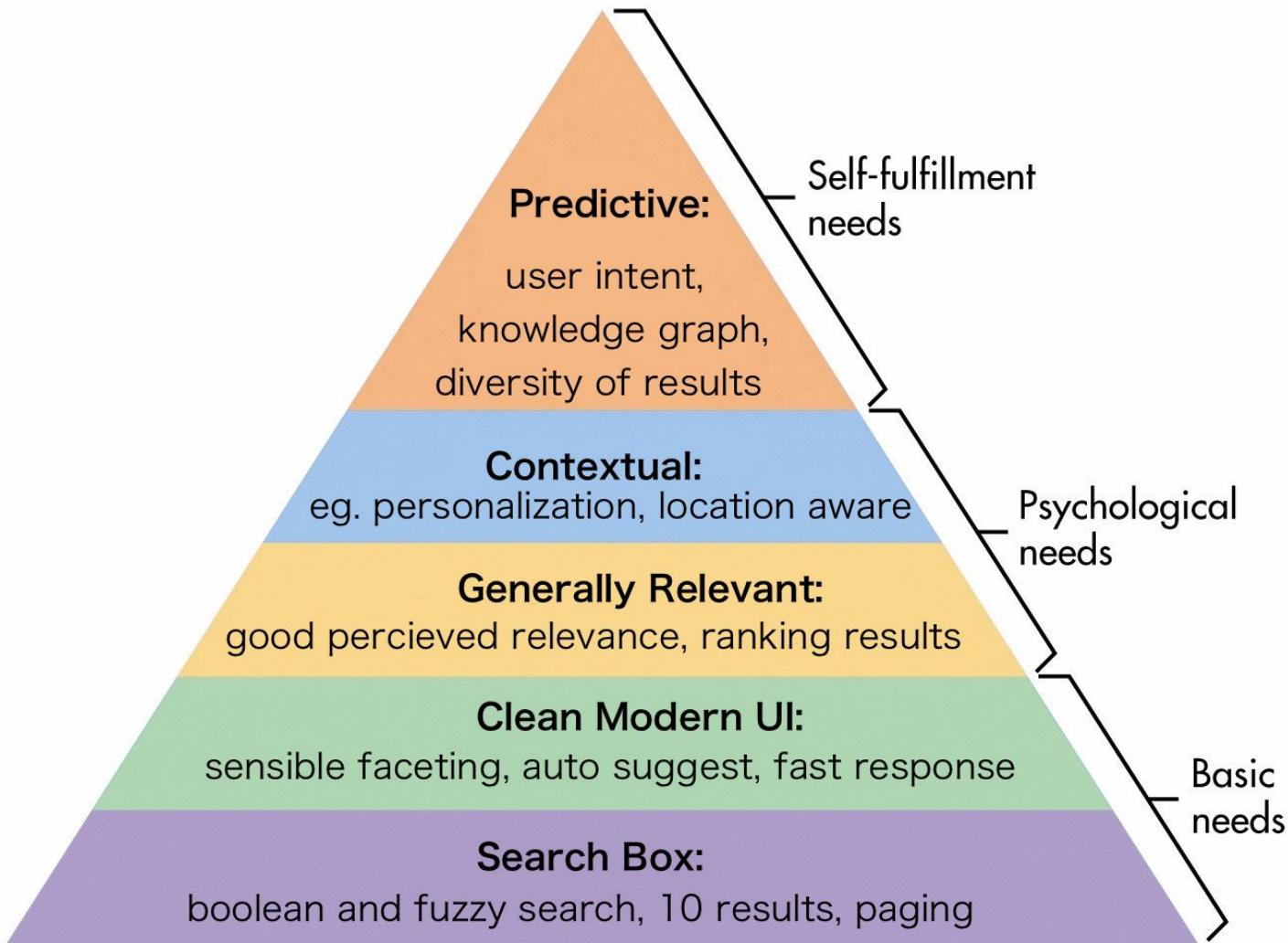
“The Missing Ingredient”

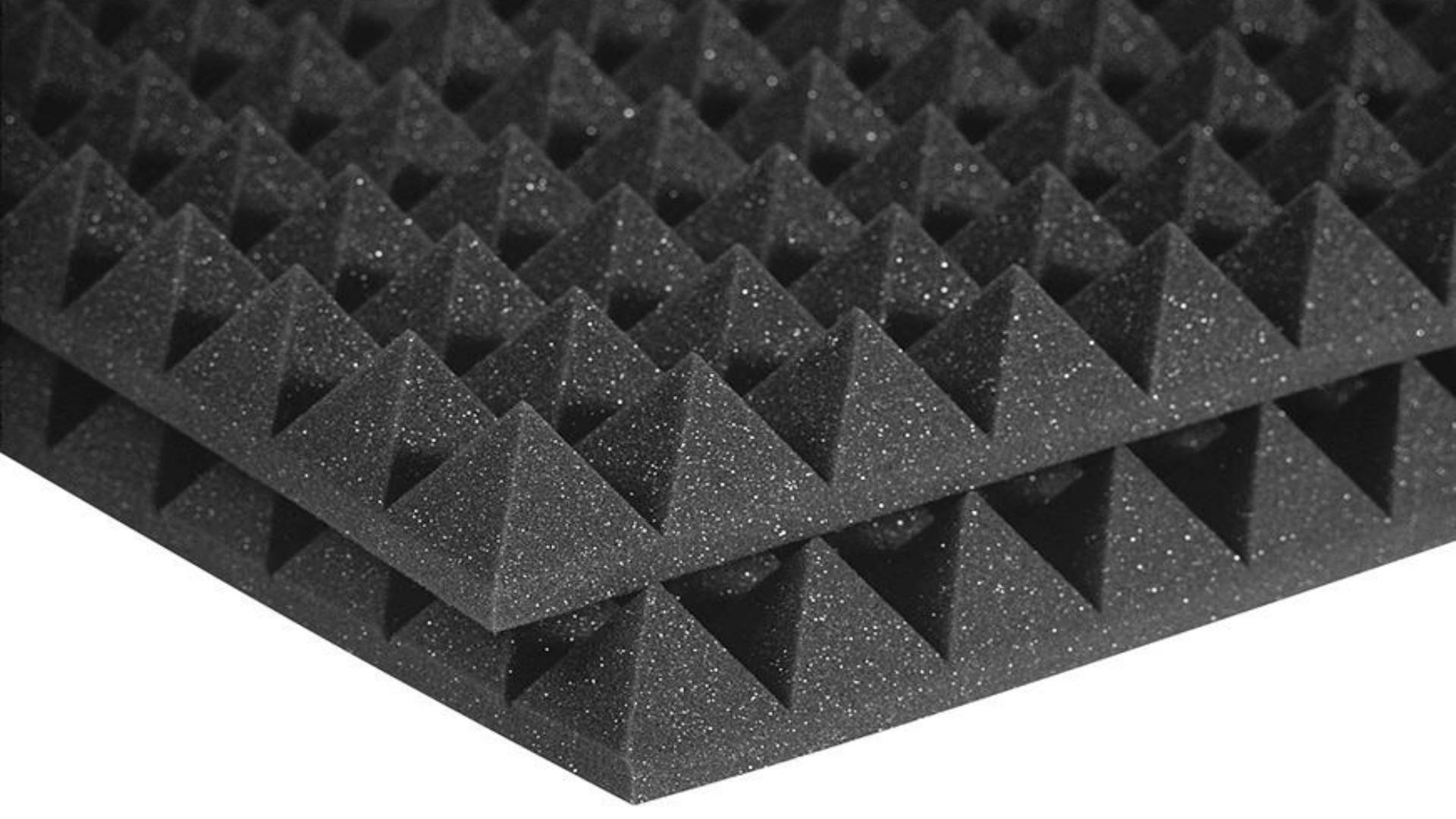
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People are the Magic Ingredient!

Sebastian leading the conversation at yesterday's *E-commerce Search for Product Managers* class







	Business	Understand User Needs	Search Tech	Experiment Driven	UX	Content Enrichment	Data Inventory
Advanced	Business stakeholders use real-time KPIs	Producing quality data from analytics	Develops custom plugins	Ops supports A/B testing & offline tests	Innovative Discovery (chatbots, etc)	NLP & Data science team	Varied, complex, large-scale data
Practitioner	Occasional reporting	Some user testing / basic analytics	Complex relevance config; uses plugins	Available, but complex experiments	UI supports findability	Taxonomies / Ontologies	Moderate data complexity
Baseline	Business impact not measured	No query logs or user testing	Stock or moderately tweak config	Test search manually, deployed rarely	10 search links on page	Minor enrichment (synonyms)	Very simple data model

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Maturity Model Lays
out where you are,
now do we have the
team to get there?

MONITOR QUERY HEALTH
DOCUMENT KNOWLEDGE
INFRA HEALTH MONITOR
DATA - MAVEN - GROK DATA Quality
ID BUSINESS / IT DEPENDENCY on SEARCH
TWEAK PERFORMANCE OF SEARCH
SAFE GUARD AGAINST REGRESSION
DEFINE SLA.
DEFINE BEST PRACTICES
CRUNCH LOG DATA
DEFINITION OF DONE 4 PLATFORM STABLE
MONITOR PLATFORM HEALTH
THEMES / TRENDS / PATTERNS IN USER
CANONICAL DATA w/ SEARCH
USER INTENT

OPERATING THE CLUSTER
SCOPE SEARCH FOR PRODUCT
CONVERSION METRICS
CAMPAIGN OPPORTUNITIES
UNDERSTAND USER BEHAVIOR
PRIORITY SEARCH TASKS
ENSURE BACKUPS EXIST + RESTOREABLE
FIND POSSIBILITIES IN TECH
QUERY DEVELOPMENT
ANXIETY FREE SEARCH DEVELOPMENT
SEARCH RESULTS ANALYSIS 4 RELEVANCE
EXPERIMENT DEFINER
ARTICULATE LONG TERM VISION
SOCIOLOGICAL ABSTRACT REPRESENTATIONS
MEASURE SEARCH QUALITY

Step 2: Cluster the Tasks

- 1 OPERATING The Cluster
- 2 SCOPE SEARCH FOR PRODUCT
- 3 CONVERSION METRICS
- 3 CAMPAIGN OPPORTUNITIES
- 4 UNDERSTAND USER BEHAVIOR
- 5 PRIORITISE SEARCH TASKS
- 1 ENSURE BACKUPS EXIST + RESUME
- 2 FIND POSSIBILITIES IN TECH
- 6 QUERY DEVELOPMENT
- 1,6,4 ANXIETY FREE SEARCH DEVELOPMENT
- 3,7,4,6 SEARCH RESULTS ANALYSIS 4 RELEVANT
- 1,2,8,6,3 EXPERIMENT DEFINER
- 2 ARTICULATE LONG TERM VISION
- 9,6 SOCIO ^{INFLUENCE} ABSTRACT REPRESENTATION
- 3,7,4,6 MEASURE SEARCH QUALITY

1,6,8 MONITOR QUERY HEALTH
* DOCUMENT KNOWLEDGE
1 INFRA HEALTH MONITOR
10 DATA MAVEN - GROK DATA Quality
2 ID BUSINESS / \$ DEPENDENCY on SEARCH
1,6 TWEAK PERFORMANCE OF SEARCH
PLATFORM
6 SAFE GUARD AGAINST REGRESSION
2 DEFINE SLA.
9,6 DEFINE BEST PRACTICES
8,7 CRUNCH LOG DATA
5,2 DEFINITION OF DONE 4 PLATFORM STABLE
1 MONITOR PLATFORM HEALTH
8,4 THEMES / TRENDS / PATTERNS IN USER
10 CANONICAL DATA w/ SEARCH
4,8 USER INTENT

1 OPERATING the Cluster
2 SCOPE SEARCH FOR PRODUCT
3 CONVERSION METRICS
3 CAMPAIGN OPPORTUNITIES
4 UNDERSTAND USER BEHAVIOR
5 PRIORITISE SEARCH TASKS
1 ENSURE BACKUPS EXIST + RESTOREABLE
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3,7,8,6 SEARCH RESULTS ANALYSIS 4 RELEVANCE
12,3,6 EXPERIMENT DEFINER
2 ARTICULATE LONG TERM VISION
9,6 SOCIOLOGICAL ABSTRACT REPRESENTATIONS
3,7,8 MEASURE SEARCH QUALITY

① INFRA

OPERATING THE CLUSTER

- ENSURE BACKUPS EXIST & RESTORE
- ANXIETY FREE DEVELOPMENT
- MONITOR QUERY HEALTH
- DOC KNOWLEDGE
- INFRA HEALTH MONITOR
- TWEAK PERF SEARCH PLATFORM
- MONITOR PLATFORM HEALTH

② MARKETING

- CONVERSION METRICS
- CAMPAGNS OPPORTUNITIES
- SEARCH RESULTS RELEVANCE
- EXPERIMENT DEFINER
- MEASURE SEARCH QUALITY

⑤ PRIORITISE SEARCH TASKS

⑨ ENGINEERING

- ENCAPSULATED/ABSTRACT REPRESENTATIONS
- DEFINE BEST PRACTICES
- DESIGNER DESIGN GOOD USER UI

ADD KEYWORD TO ALL

② PRODUCT

- SCOPE SEARCH FOR PRODUCT
- FIND POSSIBILITIES IN TECH
- EXPERIMENT DEFINER
- ARTICULATE LONG TERM VISION
- ID BUSINESS/TECH DEPENDENCIES
- SEARCH DEFINE SLA + DESIGN GOOD UI
- DEFINITION OF DONE PLATFORM
- DATA ENRICHMENT + PRIORITISE SEARCH TASKS

④ MARKETING

- USER RESEARCH (QUANTITATIVE)
- UNDERSTAND USER BEHAVIOR
- ANXIETY FREE DEVELOPMENT
- SEARCH RESULTS RELEVANCE
- MEASURE SEARCH QUALITY
- THEMES/TRENDS/PATTERNS
- USR BEHAVIOR
- USER INTENT
- DATA ENRICHMENT
- DESIGN Good USER UI

⑩ DATA SCIENCE

- DATA MAVEN
- GROK DATA QUALITY IN
- CANONICAL DATA IN SEARCH BULDERS
- DATA ENRICHMENT
- CLEAN UP CLUSTER

⑥ ENGINEERING

- QUERY DEVELOPMENT
- ANXIETY FREE DEVELOPMENT
- SEARCH RESULTS RELEVANCE
- EXPERIMENT DEFINER
- ENCAPSULATED/ABSTRACT REPRESENTATIONS
- MEASURE SEARCH QUALITY
- MONITOR QUERY HEALTH
- TWEAK PERFORMANCE SEARCH PLATFORM
- SAFE GUARD REGRESSIONS
- DEFINE BEST PRACTICES
- EXPECTATIONS VS REALITY
- SEARCH RESULTS RELEVANCE
- MEASURE SEARCH QUALITY
- CRUNCH LOG DATA
- EXPERIMENT DEFINER
- CRUNCH LOG DATA
- THEMES/TRENDS/PATTERNS
- USR BEHAVIOR
- USER INTENT
- EXPECTATION VS REALITY

Trying to Learn to Rank before they can Walk!

A	B	C
Infra	YES, WE HAVE A TEAM	Michael
Marketing	MAYBE?	
Engineering	YES	
Product	YES	
Designer	YES	
Data Science (Quantitative)	VOID	
User Research (Qualitative)	VOID	
Data Maven	VOID	

“App and Ops Focused” Team Starting to Think about Relevance

A	B	C	D	E	F	G
Search Product Manager	Alice	VOID				
Search Architect	Bob	Carol				
Solr Ops	OPS					
Site Reliability	Dan	OPS				
Relevance Engineer	VOID					
Software Engineer	Carol					
Performance Testing	Off Shore Team					
UX Design	Jon	Alice				
Support	OPS	Red Team:	Bob	Carol	Bob	

“Search is a Team Sport”

Thanks!

Lets talk:

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