Wordpeck: *A new paradigm for finding keyword associations*

Pawan Nayar

Agenda

Words: the
building
blocks

The Wordpeck
framework

*Wordpeck
reports*

Next steps

Wordpeck:
from words to
insight

The process

*Collaboration
possibilities
with Efficient
Frontier*
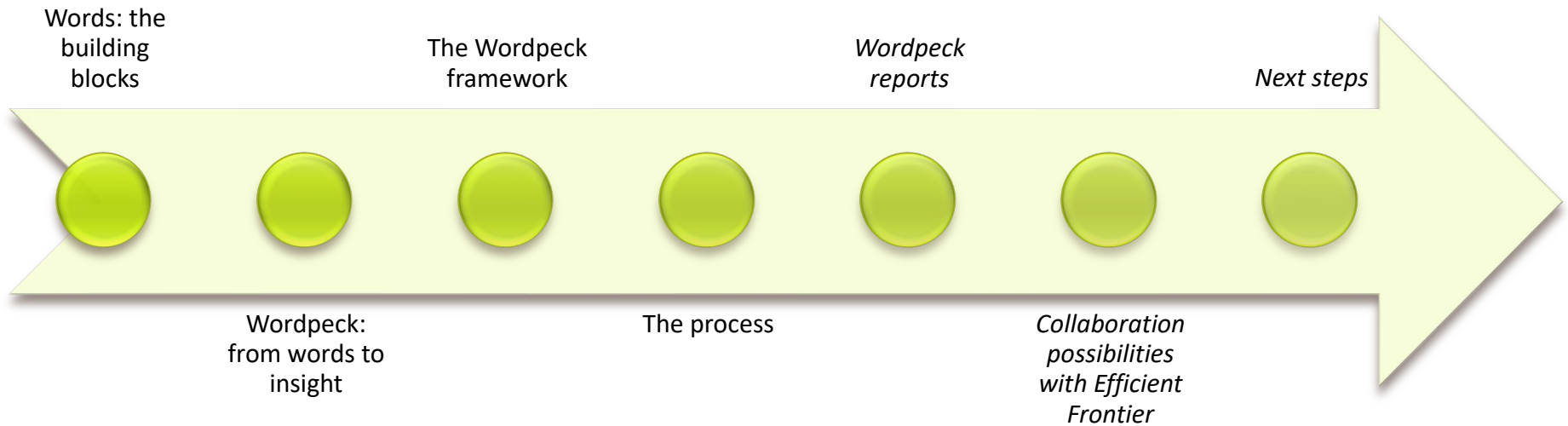
The world of words … their meanings … finding best bets for advertising, captioning and positioning

- Finding general to specific context for any common word or brand

Word basket for "Home Loan"

#	Words that frequently refer to "Home Loan"		#	Words people think of when they connect "Home Loan"	
1	Bank	100% | 20	1	Emi	100% | 20
2	Hike	100% | 20	2	Convenience	100% | 20
3	Rate Hike	100% | 20	3	Gift	100% | 20
4	Entitlement	100% | 20	4	Ready-to-occupy	100% | 20
5	Floating Rate	50% | 10	5	Under-construction	100% | 20
6	Apartments	50% | 10	6	Plot	100% | 20
7	Loans	50% | 10	7	Transfer	50% | 10
8	Real Estate	50% | 10	8	Renovate	50% | 10
9	Mortgage	50% | 10	9	Build	50% | 10
10	Payment	50% | 10	10	Top-up	25% | 5
11	Secured	25% | 5	11	Loan	25% | 5
12	Insurance	25% | 5	12	Eligibility	25% | 5
13	Documentation	25% | 5	13	Floating Rate	12.5% | 2

WordPeck: Current database

Current statistics

- **1,815,420** words are seeds (have both incoming and outgoing connections)
  - For example, "home loan" is a seed

- **6,958,690** unique words or terms are connected to 15420 seeds
  - (loan, city, flat ... >> home loan)

- The above unique connections were established by **14,066,637** relationships of seeds and connections (for example "home loan >> bank")

How do we increase data?
The data is from a limited exposure to 2000 users. As we expand user base through more enhanced UI and Facebooks apps, we can quickly make this data go up by 100x times in 2 quarters.
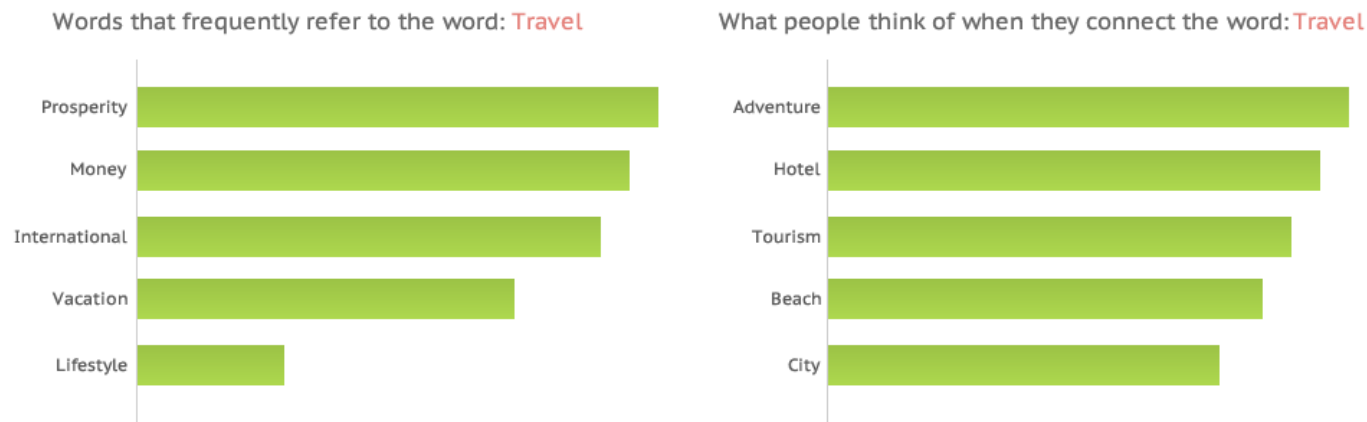
We are training a crawler to find seed to connection and connection to see word associations for any phrase/ term. Test shows we can get 20,000 relationships / set of phrase from a trained crawler and 65% relations are appropriate. We are improving algorithm further

- **Words form thoughts**
  - Words are basic units of human cognition
  - Human thoughts are represented by words

- **Thoughts influence behavior**
  - Understanding words and their relationships is the key to understanding and influencing behavior

- **Efficient, non-obvious but relevant keyword are good ad bets**
  - Wordpeck is a step is toward unraveling this understanding
  - Wordpeck output helps find most efficient, obvious, or non-obvious word recall
  - Use these words to broaden keyword phrases you want to bid

- **Advertizing algorithms: Future: Ad on Fly**
  - Use Wordpeck data to create new phrases, captions, ad lines, metadata, synonym etc.
  - For Facebook users, customized ads can be created that use frequently-used words or word-associations by user/social circle

- WordPeck is a social platform/game
  - Right now, users log on to www.WordPeck.com (protected and accessible only after general authentication) and *play* WordPeck
  - They are given a seed word and are requested to enter as many direct, indirect, or abstract words as they think are connected to the seed word
  - Users can enter as many words as possible in a pre-determined timeframe

- Administration panel and processing engine
  - Record connections and builds a 360-degree view of words
  - Understands word density - The connections are aggregated and we find dominant connections out of the aggregated and filtered data
  - Understands preferred words/associations by a user

Words that frequently refer to the word: Travel

Prosperity	
Money	
International	
Vacation	
Lifestyle	

What people think of when they connect the word: Travel

Adventure	
Hotel	
Tourism	
Beach	
City	

WordPeck: 360-degree word association – Understanding sentiments

Words that frequently refer to the word: Heart
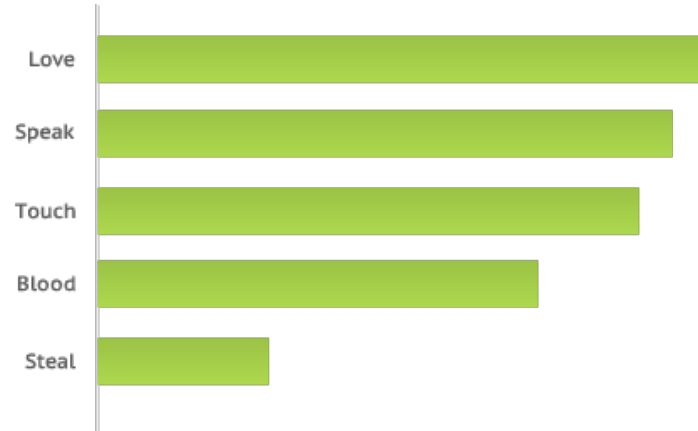
- Love
- Speak
- Touch
- Blood
- Steal

What people think of when they connect the word: Heart

- Love
- Soul
- Mind
- Care
- Beating

Love is heart	Heart is a source of love
Speak your heart	Without heart no soul
Touching is heart-rending	Kind heart needs a sound mind
Blood goes to heart	Beware of beating hearts
Body organs contain heart	Heart kindles all passion
Steal a heart	No heart, no care
Open your heart	Heart defines blood relations
Follow your heart	Heart is a child
Right place is to follow heart	Heart is a seat of power
Body parts starts with heart	Heart is a bed of feelings

Adobe

Home page – New look coming next week

Add Word Associations

Report Connections: 360 degree view of a word

Demo
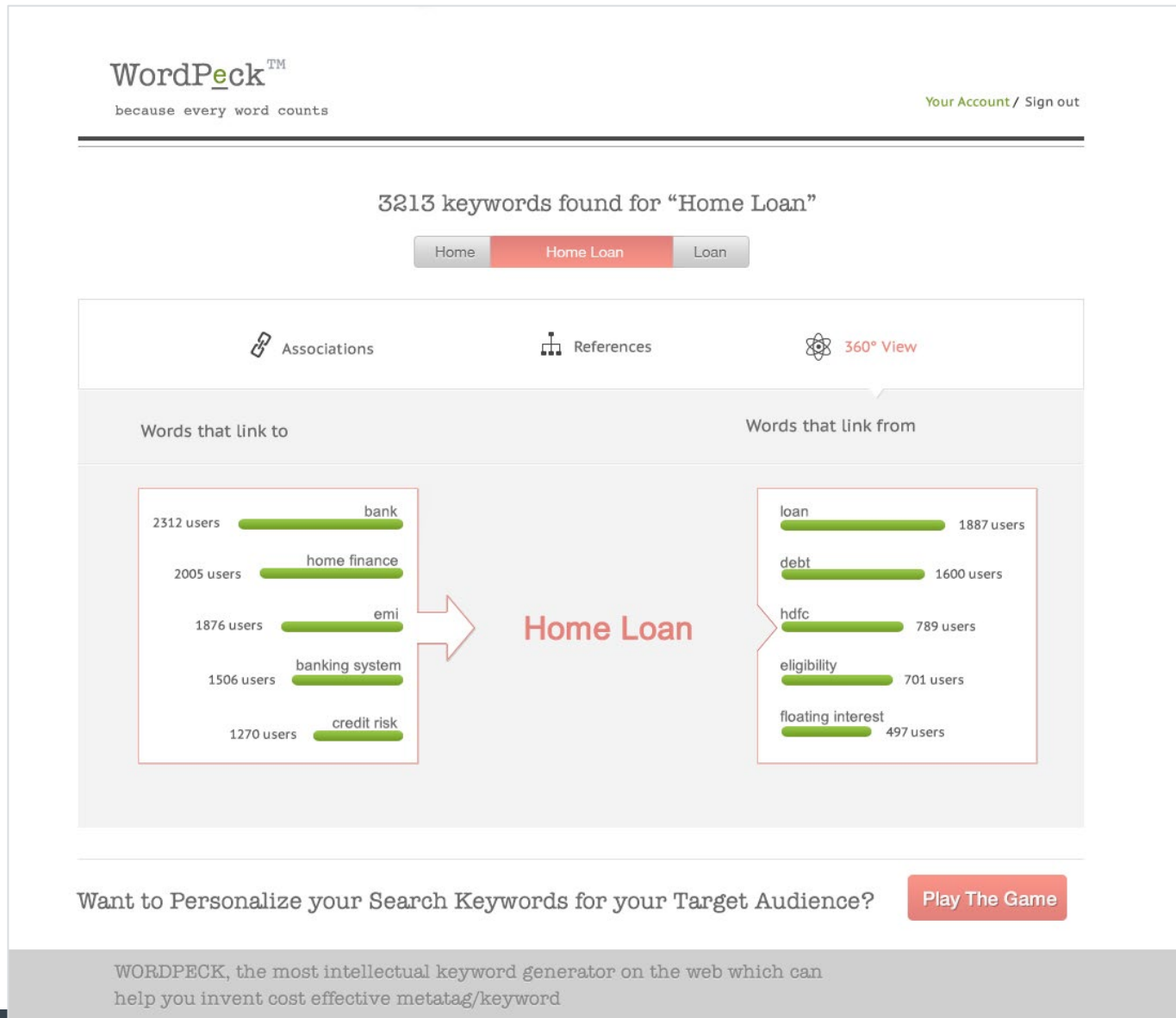
Questions...

Summary

- Wordpeck finds non obvious relationships of words. This can help generate more relevant but non-obvious keywords for ad-bidding

- The process of searching preferred adwords for Google bidding is simplified

- User preferences and thought process is stored for future computation

- Generic demographic data can fetch new insights for targeted marketing

WordPeck: Word Density

- Find density of words calling a word or referred to by a word

- Better algo than conventional Tag cloud

- Finds words calling "selected" words, and word "selected" word refers to. See example for home loan

home loan as a word:

Most dominant seeds: Loan (7), Bank (6), Banking System (4).
Total connections: 118
Unique connections: 74
Connections identified by: 33
Last wordpecked by: aauyshpant12453212 [Login to view stats]
Last wordpecked on: 2012-06-21 16:43:38
Max connections established by: asit.pant (14) [Login to view stats]

home loan as a seed. Owner is Shalini [Login to play this seed]

Most dominant words: Loan (15), Debt (8), Eligibility (7).
Total no. of times wordpecked: 291
Used as a connector by: 163 words.
Connected by: 19 users.
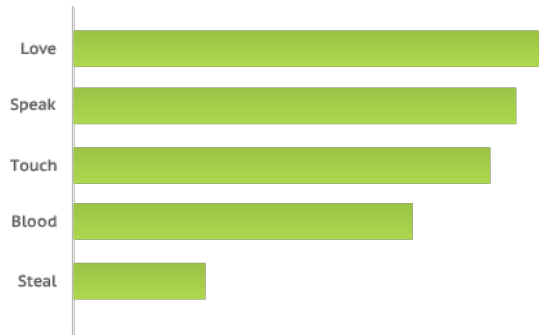Last connected by: sunandinibasu [Login to view stats]
Last connected on: 2012-06-21 13:42:59
Max connected by: asithpant (66) [Login to view stats]
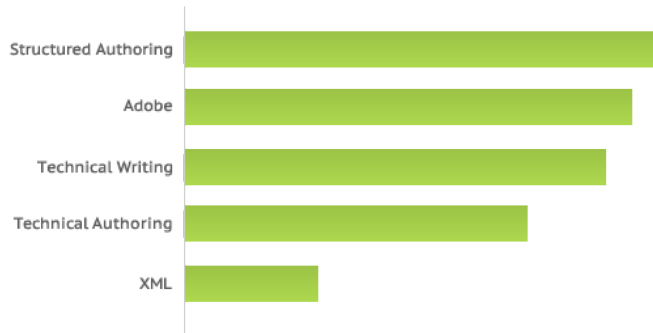
WordPeck: 360-degree word association – More examples

Words that frequently refer to the word: Heart

- Love
- Speak
- Touch
- Blood
- Steal

What people think of when they connect the word: Heart

- Love
- Soul
- Mind
- Care
- Beating

Words that frequently refer to the word: Framemaker

- Structured Authoring
- Adobe
- Technical Writing
- Technical Authoring
- XML

What people think of when they connect the word: Framemaker

- Adobe
- Data
- Authoring
- Structured
- XML

Words that frequently refer to the word: Cars

- Hyundai
- Win
- Prosperity
- Petroleum
- Accident

What people think of when they connect the word: Cars

- Swift
- Zen
- New
- Esteem
- Service