

Market Research Tools Landscape

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Objectives

- Landscape of consumer research patent tools
- To understand the US market for consumer/market research tool

Introduction

American Marketing Association define Market Research, " as the function which links the consumer, customer and public to the marketer through information that is used to identify and define marketing opportunities and problems; refine and evaluate marketing actions, monitor marketing performance and improve understanding of marketing as a process.

Why Market research?

1. To understand the psychology of how consumers think, feel, reason, and select between different alternatives e.g. brands, products, and retailers.
2. To understand the psychology of how the consumer is influenced by his or her environment e.g. culture, family, signs, media.
3. How limitations in consumer knowledge or information processing abilities influence buying decisions.
4. How consumer motivation and decision strategies differ between products that differ in their level of importance or interest that they consider for consume.
5. So that marketers can adapt and improve their market strategies and marketing campaigns to reach the consumer more effectively.

Market Research Tool

In global, intensely competitive markets, companies are required to respond incessantly to market change. Businesses must continuously innovate and introduce new products in an environment where the cost of launch is high and markets are already cluttered and all for a more discerning and savvy customer.

Customer research Tool or Market Research tool can help companies to identify and select target markets and formulate the appropriate marketing mix and positioning to reach them by significantly minimize risk.

Existing Market Research Tool

Homescan Online®

Homescan Online is the first service to measure both consumers' offline purchasing behavior and their online purchasing activity. With Homescan Online, Consumer Packaged Goods (CPG) marketers can make a direct connection between online marketing activity and offline purchasing behavior.

For CPG Marketers

- **Consumer Segmentation and Targeting:** Understand your product purchasers and their online behavior. Find out who they are, and when and how often they're online. Learn which Web brands, categories and channels attract high-volume buyers. Discover which online demographics drive the most volume.
- **Media Allocation:** Create winning media plans based on actual buyer behavior. Maximize reach and frequency by targeting the most efficient Web sites for your brand. Allocate online spending effectively relative to other media types.
- **Advertising and Promotions:** Analyze the effectiveness of online ads and promotions by measuring actual offline purchasing behavior among consumers exposed to them. Calculate your online media program's ROI and develop strategies to improve it.

Source:nielsen-online.com

PersonicX®

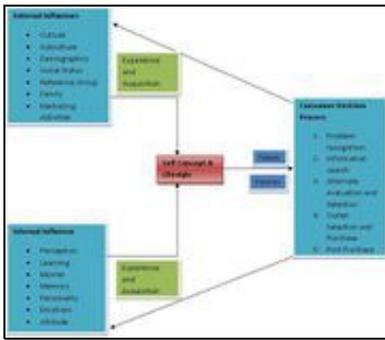
PersonicX is a household-level segmentation and visualization system that clusters U.S. households into one of 70 segments within 21 life stage groups based on specific consumer behavior and demographic characteristics.

MicroBuild®

Microbuild is a household demographic product that provides current, accurate, precise, and actionable household and population information for the U.S. It provides demographic statistics by census block, block group and higher geographies which provides researchers with a longitudinal perspective for these geographies.

Source:consumerresearchsite.com

Consumer Behavior Model



source: Hawkins et al., 1998

External and internal factors contribute to the formulation of self-concept and lifestyle, which affects the consumer decision process. During this process, experiences and acquisitions update the original external and internal influences.

This model helps marketers to understand the psychology of how consumers think, feel, reason, and select between different alternatives e.g. brands, products, and retailers. and how the consumer is influenced by his or her environment e.g. culture, family, signs, media.

Market Segmentation

Segmentation is essentially the identification of subsets of buyers within a market that share similar needs and demonstrate similar buyer behavior. Businesses need to deliver their marketing message to a relevant customer audience. If the target market is too broad, there is a strong risk that (1) the key customers are missed and (2) the cost of communicating to customers becomes too high / unprofitable. By segmenting markets, the target customer can be reached more often and at lower cost.

Market Overview

Market Research Industry In US

Key Industry Statistics are given in the following table:

Key Industry Figures	2010
Industry Revenue (\$M)	14471.5
Revenue Growth (%)	1.8
Employment (Units)	141054
Total Wages (\$M)	5451.5

Following table contains the top 10 players in Market Research Industry in year 2010

Rank		Company	US research revenue(\$ Million)	% change from 2009	Non US research revenue(\$ Millions)	No. of full time staff
2010	2009					
1	1	Nielsen	2407	4.5	2551	9566
2	2	Kantar	914.7	7.5	2268.9	4135
3	3	IMS Health	801	*NC	1410.5	1560
4	5	Symphony IRI Group	457	2.4	240	1198
5	4	Westat Inc.	455.3	-9.4	NA	1964
6	6	Arbitron	390.4	2.8	5	951
7	7	Ipsos	379.6	9	1133.2	1246
8	8	Gfk	290.9	0.6	1471.1	877
9	9	Synovate	235.8	9.9	649	762
10	11	The NPD Group	173.7	4.8	66.4	815

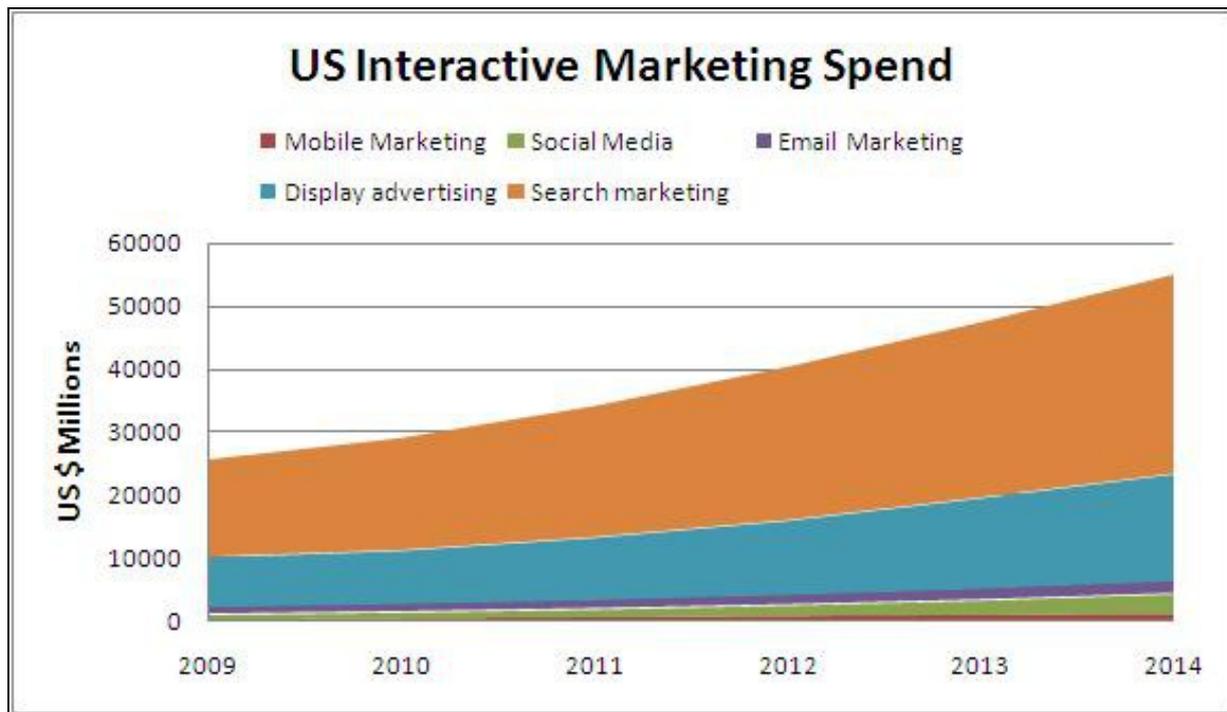
Source: Honomichl Report

Interactive Marketing

For years marketing and advertising were largely unidirectional. They controlled the message, the medium, the product and the price. Customer only 'voice' was whether or not we purchased the product or service.

In today's world, the customer is king, and it is the responsibility of the business owners to cater to the whims and fancies of their clients. Interactive marketing is able to handle this aspect better as it is personalized and two way communication. Traditional marketing strategies were based on a 'push' methodology where managers were literally pushing the products onto the customers and providing little information of customers psychological needs and changes over time. On the other hand, **interactive marketing** acts on 'pull' methodology, where the power of selection lies with the customers. Thus interactive marketing helps companies to understand their market better.

The following graph shows the US interactive marketing spend in 2009 and forecasting from 2010 to 2014:



source: Forrester Research, Inc.

Interactive marketing spend and percent of all ad spend in 2009 and forecasting till 2014, and respective CAGR are shown in the following table:

Interactive Marketing Spend (US \$ Million)	2009	2010	2011	2012	2013	2014	CAGR
Mobile Marketing	391	561	748	950	1131	1274	27%
Social Media	716	931	1217	1649	2254	3113	34%
Email Marketing	1248	1355	1504	1676	1867	2081	11%
Display advertising	7829	8395	9846	11732	14339	16900	17%
Search marketing	15393	17765	20763	24299	27786	31588	15%
Total	25577	29012	34077	40306	47378	54956	17%
Percent of all ad spend	12%	13%	15%	17%	19%	21%	

Source: Forrester Research, Inc.

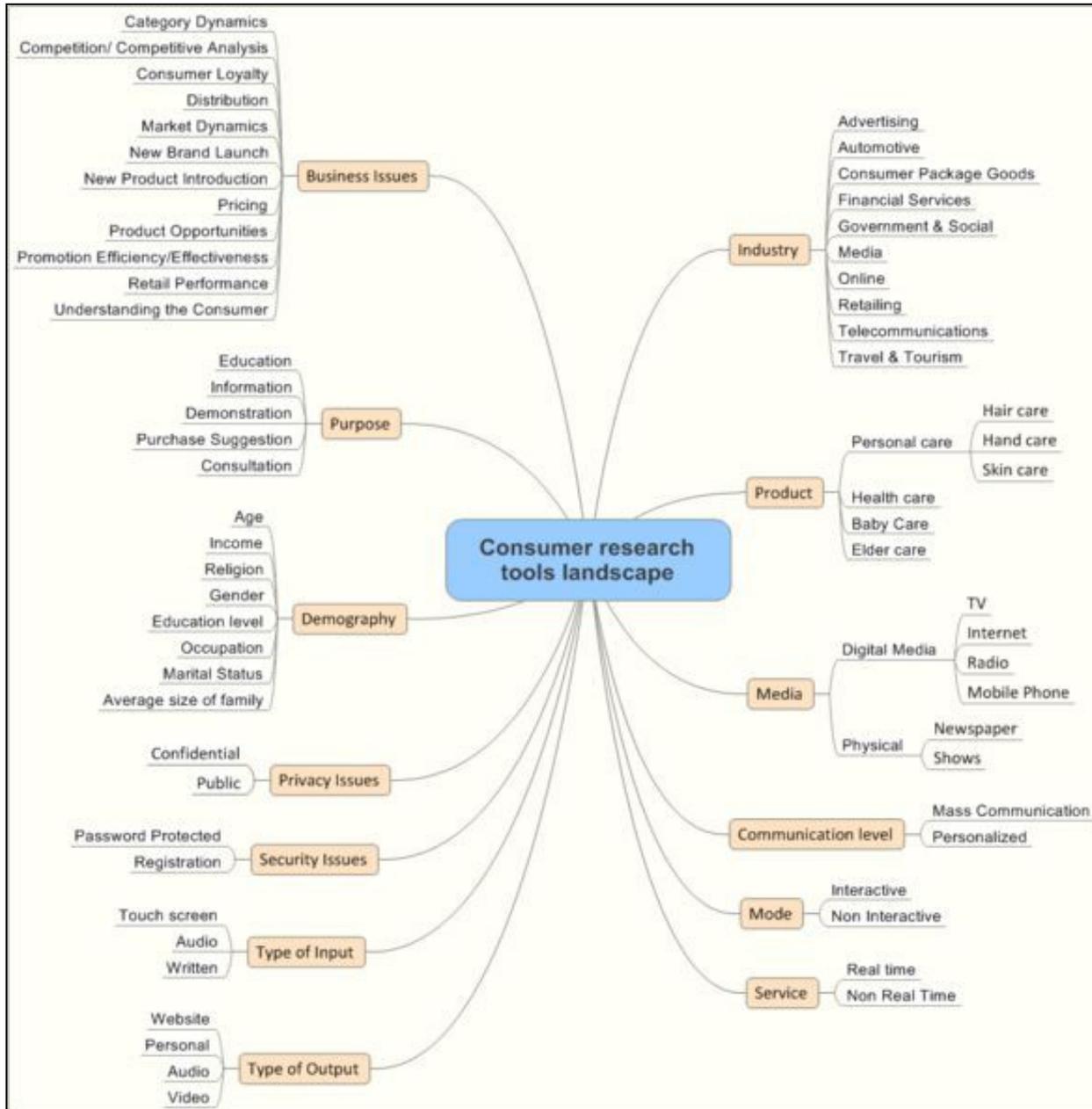
Following table shows the industry interactive marketing budget for 2009:

Industry Interactive Marketing Budget (US \$ Million) 2009	Travel and Hospitality	Financial Services	Consumer Goods	Retail and wholesale trade	Media and Entertainment	High-tech and Manufacturing	Business services
Mobile Marketing	18	11	3.75	12	3.6	2.79	1.2
Social Media	6	10	15	5.5	8.8	4.7	0.24
Email Marketing	3	3.2	1.5	2.3	1.85	1.25	0.5

Display advertising	0.68	0.2	1.4	0.4	0.25	0.55	0.3
Search marketing	1.43	0.75	0.5	0.25	1.23	0.3	0.03
Total Interactive Marketing Budget	29.11	25.15	22.15	20.45	15.73	9.59	2.27
Percent of total Marketing Budget	29%	3%	2%	14%	2%	10%	19%

- Consumer product goods (CPG) companies are expected to grow their interactive marketing spend by a 22% compound annual growth rate (CAGR) ? more than any other industry. Source:forrester.com

Taxonomy



- The taxonomy is populated further as the analysis progresses

Search Strategy

Patent search is conducted using the following parameters:

- Database used: Micropatent

- Country coverage: US applications and grants
- Timeline: Jan 01, 2001 till date (Aug 10, 2011)

S. No.	Scope	Search String	IPC Class	Hits
1	Claims, Title or Abstract	(Media ADJ2 exposure) OR ((data NEAR2 acquir*3) NEAR5 (user OR consumer OR customer OR shopper) OR (content Near5 (usage ADJ2 (data OR information))) OR (metering ADJ (system OR information)) OR (interactive ADJ service) OR (metering NEAR (usage ADJ data)) OR ((biometric* OR consumer OR customer OR shopper) NEAR1 (recognition OR identif* OR verification)) OR (personal ADJ characteristic*) OR (local ADJ application ADJ program) OR (application ADJ program ADJ usage) OR (meter* ADJ web ADJ content)	G06F0001* OR G06F001130	160
2	Claims, Title or Abstract	((audience OR consumer OR costumer OR people) NEAR2 (measurement OR monitoring OR count OR number OR sampling OR composition)) OR (media ADJ exposure ADJ measurement ADJ system*) OR (pedestrian NEAR1 surveyor) OR (vehicular NEAR1 surveyor) OR (media ADJ content ADJ2 (monitor*3 OR detect*3)) OR (identif* NEAR3 (content OR audio OR program*1 OR media)) OR (blank NEAR2 frame NEAR2 identifier)	G06K0009*	879
3	Claims, Title or Abstract	((Market OR consumer OR customer OR buyer OR shopper) NEAR (research ADJ system)) OR ((collect*3 ADJ2 retail ADJ store) NEAR2 data) OR (monitor*3 ADJ2 retail ADJ1 sale*1) OR ((product OR offer) NEAR1 (identification OR identify)) OR (buying ADJ1 behavior?r) OR ((point-of-sale) ADJ terminal) OR ((product-specific) ADJ price) OR (product ADJ2 penetration) OR (product ADJ2 (performance OR distribution)) OR (promotion NEAR1 effectiveness) OR (price ADJ1 sensitivity) OR ((consumer OR customer OR buyer OR shopper) NEAR1 (interception OR interview)) OR (tracking NEAR1 advertisements) OR psychographics OR (metering NEAR1 (shopping OR purchasing) NEAR (activit*3 OR behavio?r OR habit)) OR ((sensor ADJ1 based) ADJ count*) OR (advertisement ADJ1 exposure ADJ1 stud*3) OR (interactive ADJ1 program ADJ guide) OR (usage ADJ meter) OR (advertisement ADJ identifier) OR (pushbutton NEAR4 selection) OR (market NEAR1 parameter*) OR (Content ADJ display ADJ monitoring) OR (demographic ADJ1 profiles) OR ((Interactive ADJ service) NEAR2 metering) OR (Content ADJ display ADJ monitor*) OR (select* NEAR2 (market ADJ categor*3)) OR (market NEAR4 broadcast NEAR4 detection) OR ((detect* OR access OR information) NEAR5 (client NEAR7 cookies)) OR (personalized ADJ content ADJ delivery) OR (habituation ADJ profile*) OR (internet NEAR2 metering) OR (neuro-behavioral ADJ data) OR (detecting ADJ5 (advertising ADJ banner)) OR (marketing ADJ3 effectiveness)	G06Q003000	1007
4	Claims, Title or Abstract	(Viewing NEAR (behavior?r OR habits)) OR (Audience NEAR (measurement OR composition OR metering)) OR (household NEAR metering) OR (identifying NEAR2 program) OR (broadcast NEAR2 (program ADJ identification)) OR (consumption NEAR2 content) OR (broadcast ADJ content ADJ identifier) OR (effectiveness OR (cost ADJ efficiency) NEAR2 advertisement) OR (targeted NEAR1 advertisement) OR (consumer ADJ profile) OR (advertisement ADJ profile) OR (intended ADJ targeted ADJ market) OR (consumer NEAR2 (response OR responsiveness*1)) OR ((media ADJ consumption) NEAR2 audience) OR (monitor*3 ADJ audio ADJ stream) OR (Monitor*3 ADJ television ADJ broadcast) OR (advertising ADJ strateg*3) OR (monitor*3 ADJ2 broadcast ADJ2 program*) OR (geographical ADJ monitoring ADJ areas) OR (extract ADJ2 broadcast ADJ2 signature*) OR (audience ADJ monitoring) OR ((data acquisition) NEAR4 system) OR (audience ADJ measurement*) OR ((program ADJ2 identifit*) NEAR4 system) OR (viewing ADJ2 activity) OR (personal ADJ2 people ADJ2 meter) OR (program ADJ2 consumption ADJ2 (behavio?r OR patterns)) OR (household ADJ2 signature ADJ2 extractor) OR (demographic ADJ (information OR data)) OR ((video OR audio) ADJ signature ADJ extraction) OR ((consumer OR customer OR buyer OR shopper) NEAR1 (identification ADJ information)) OR (content ADJ identify* ADJ process) OR (monitor ADJ advertisement ADJ exposure) OR (monitor*3 ADJ broadcast ADJ signals) OR (interactive ADJ program ADJ information) OR (market ADJ2 broadcast ADJ2 tracking) OR ((interactive ADJ2 service) NEAR2 metering) OR (tracking NEAR2 sequence NEAR2 events) OR (count ADJ2 people) OR (media ADJ consumption ADJ measurements) OR (identify ADJ4 segments) OR (determine ADJ audience ADJ viewing) OR (collect ADJ audience ADJ information)	H04H002014 OR H04H002028 OR H04H002031 OR H04H006023 OR H04H006027 OR H04H006031 OR H04H006032 OR H04H006033 OR H04H006037 OR H04H006040 OR H04N000544 OR H04N000591 OR H04N000716 OR H04N000900 OR H04N001700	880
5	Full patent spec.	(Broadcast ADJ2 audience ADJ2 measurement) OR (audience NEAR2 measurement) OR ((audience ADJ exposure) NEAR3 (television OR radio OR media)) OR (audience ADJ metering ADJ application*) OR ((media ADJ consumption) NEAR2 audience) OR ((audience ADJ member ADJ exposure) NEAR3 media) OR (media ADJ monitor*3 ADJ context) OR (media ADJ2 meter*3) OR ((monitor*3 OR meter*3) NEAR2 (audience ADJ2 media ADJ2 consumption)) OR (media ADJ2 consumption ADJ2 activit*3) OR (media ADJ2 consumption ADJ2 information) OR (media ADJ consumption ADJ behavio?r*) OR (demographic ADJ group*) OR ((media NEAR1 consumption) ADJ2 (trend* OR pattern*)) OR (detect* NEAR5 audio NEAR4 signal) OR ((retriev* NEAR2 data) NEAR3 audio) OR (media ADJ2 measurement*) OR (viewing ADJ behavio?r*)	G10L0019*	374
6	Claims, Title or Abstract	((consumer OR customer OR shopper) NEAR1 purchase ADJ scor*3) OR (customer ADJ purchases) OR ((consumer OR customer OR shopper OR panelist) NEAR5 demograph*) OR (purchased ADJ product ADJ information) OR (point ADJ1 purchase) OR (((consumer OR customer OR shopper OR panelist) NEAR (data or information)) AND (universal product code OR UPC)) OR ((product ADJ identif* ADJ information) AND (consumer OR customer OR shopper)) OR (market ADJ research ADJ entity) OR (content ADJ identif* ADJ code) OR ((media ADJ content) NEAR15 (consumer OR customer OR shopper)) OR (media ADJ1 exposure) OR (effectiveness ADJ2 media ADJ display) OR (population ADJ segment) OR (monitor ADJ audience) OR (demograph* ADJ1 viewership) OR	G06F001700 OR G06F001730	6853

		(meter* ADJ1 exposure) OR (person* NEAR2 characteristic*) OR (market NEAR2 analysis) OR ((data ADJ2 record*) NEAR5 identif*) OR (identif* NEAR3 (content OR audio OR video OR program*1 OR media)) OR (metered ADJ computer*1) OR ((business ADJ decision*) NEAR6 data) OR (data NEAR2 (business ADJ analysis)) OR (response ADJ assessment) OR ((match ADJ candidates) NEAR5 probabilit*3) OR ((detect OR access OR information) NEAR5 (client ADJ cookies)) OR (customer ADJ2 data) OR (audience ADJ measurement) OR (personalized ADJ content ADJ delivery)		
7		6 and 9		3676
8		1 OR 2 OR 3 OR 4 OR 5 OR 7		7853
9	Full patent spec	consumer* OR customer* OR shopper* OR buyer* OR purchaser* OR audience*		568464
10		8 and 9		5641
11	Claims, Title or Abstract	(physical ADJ2 (characteristics OR parameter*)) OR ((request ADJ from) ADJ3 (consumer OR customer OR shopper)) OR (purchase NEAR2 incentive) OR anthropometric OR (benefits OR instruction OR demonstrat*3 OR customi* OR recommend*) NEAR5 (personal ADJ care ADJ product)) OR (informing ADJ2 consumer*) OR (selection NEAR2 purchase) OR ((consumer ADJ2 specific) NEAR2 (personal ADJ care)) OR ((consumer OR customer shopper OR buyer) NEAR2 interaction) OR (user ADJ interface ADJ input) OR (Interactive ADJ product ADJ selection) OR (interactive NEAR3 (educat*3 OR advertis*3)) OR (interest ADJ2 purchas*3 ADJ3 product) OR (potential ADJ2 (customer* OR consumer*)) OR (determin* NEAR3 (user* ADJ1 preference*)) OR (targeted ADJ2 advertising) OR (targeted ADJ2 education) OR (demographic NEAR2 (information OR data)) OR (behavio?* ADJ2 response) OR psychographics OR (personality NEAR2 (products OR services)) OR (customized ADJ2 products)	G09B*	187
12		10 OR 11		5849 (4085 unique records)

PLEASE NOTE

- Relevancy for the search is 22%
- The class codes used cover 70% of the AC Nielsen patents pertaining to the given parameters
- Attempts to cover the balance 30% of AC Nielsen patents results in too much garbage since these patents fall in several dozen different class codes.
- A pure keyword based search based on studying the 70% patents maybe attempted at the end of this project review cycle to find more relevant patents that may miss from this search.

Classification codes and definition

S. No.	IPC class codes and definition	
1	G06Q	DATA PROCESSING SYSTEMS OR METHODS, SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL, SUPERVISORY OR FORECASTING PURPOSES; SYSTEMS OR METHODS SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL, SUPERVISORY OR FORECASTING PURPOSES, NOT OTHERWISE PROVIDED.
2	G06Q 30/00	Commerce, e.g. marketing, shopping, billing, auctions or e-commerce
3		ELECTRIC DIGITAL DATA PROCESSING
4	G06F 1/00	Details not covered by groups G06F 3/00-G06F 13/00 and G06F 21/00 (architectures of general purpose stored programme computers G06F 15/76)
5	G06F 17/00	Digital computing or data processing equipment or methods, specially adapted for specific functions
6	G06F 17/30	Information retrieval; Database structures therefor
7	G06F 11/30	Monitoring
8	G06K	RECOGNITION OF DATA; PRESENTATION OF DATA; RECORD CARRIERS; HANDLING RECORD CARRIERS
9	G06K 9/00	Methods or arrangements for reading or recognising printed or written characters or for recognising patterns, e.g. fingerprints
10		SPEECH ANALYSIS OR SYNTHESIS; SPEECH RECOGNITION; AUDIO ANALYSIS OR PROCESSING
11	G10L G10L0019	Speech or audio signal analysis-synthesis techniques for redundancy reduction, e.g. in vocoders; Coding or decoding of speech or audio signals, e.g. for compression or expansion, source-filter models or psychoacoustic analysis
12	G09B	

		EDUCATIONAL OR DEMONSTRATION APPLIANCES; APPLIANCES FOR TEACHING, OR COMMUNICATING WITH, THE BLIND, DEAF OR MUTE; MODELS; PLANETARIA; GLOBES; MAPS; DIAGRAMS	
13		BROADCAST COMMUNICATION	
14	H04H 20/14	for monitoring programmes	
15	H04H 20/28	Arrangements for simultaneous broadcast of plural pieces of information	
16	H04H 20/31	using in-band signals, e.g. subsonic or cue signal	
17	H04H 60/23	using cryptography, e.g. encryption, authentication or key distribution	
18	H04H 60/27	Arrangements for recording or accumulating broadcast information or broadcast-related information	
19	H04H 60/31	Arrangements for monitoring the use made of the broadcast services	
20	H04H 60/32	Arrangements for monitoring conditions of receiving stations, e.g. malfunction or breakdown of receiving stations	
21	H04H 60/33	Arrangements for monitoring the users' behaviour or opinions	
22	H04H 60/37	for identifying segments of broadcast information, e.g. scenes or extracting programme ID	
23	H04H 60/40	for identifying broadcast time	
24		PICTORIAL COMMUNICATION, e.g. TELEVISION	
25	H04N 5/44	Receiver circuitry	
26	H04N 5/91	Television signal processing therefor	
27	H04N 7/16	Analogue secrecy systems; Analogue subscription systems	
28	H04N 9/00	Details of colour television systems	
29	H04N 17/00	Diagnosis, testing or measuring for television systems or their details	

Sample patents

Patent/ Publication No.	Title	Abstract	Dolcera Summary	Publication Date	Assignee
US7891488	Interactive product selection system	The present invention involves an interactive selection system for a consumer product that improves the consumer's ability to quickly sort through numerous criteria in a complex decision making process and determine whether that particular consumer product is appropriate for his or her purchase and use. The interactive selection system is designed for a consumer product wherein the product is appropriate for less than all consumers comprising: (a) an interface; (b) at least one product selection device associated with the interface, wherein each product selection device is comprised of: (i) decision criteria that are relevant to appropriate selection or deselection of the product, (ii) at least two selectable responses associated with each decision criteria, wherein there is at least one positive selectable response and at least one negative selectable response for each decision criteria, and (iii) selection indicia associated with each selectable response; (c) directive instructions which direct an operator to manipulate each product selection device to choose a consumer applicable response from the available selectable responses per decision criteria; and (d) interpretive instructions which explain how to interpret the pattern of selection	Interactive selection system for a consumer product particularly OTC pharmaceuticals, offers a visible and prominent display that allows potential consumers of the product to input personal information at the point of sale and obtain specific feedback on whether the consumer product is appropriate for the consumer.	22-Feb-11	McNeil-PPC, Inc. (Skillman, NJ) Merck Sharp & Dohme Corp. (Rahway, NJ)

		indicia which is observably associated with the chosen one or more consumer applicable responses to assist with determining whether or not the product is appropriate for the consumer's purchase or use.			
US7104800	Article and method for selection of individualized personal care products	A diagnostic article and method is disclosed wherein the article includes a mirror, a plurality of attribute selection sites arranged along or associated with the mirror with each of the sites having a plurality of choice selectors, and an output for recommending at least one personal care product based upon input from the choice selectors. A diagnostic for skin includes attribute selection sites hosting questions related to a customer's age, skin coloration, dryness, sunburn susceptibility, pimple breakout affinity, wrinkle formation and pore size. Hair, dental and underarm products may also be personalized by the diagnostic system. The mirror allows a customer in-store to more accurately answer attribute questions through reference to the customer's mirror reflection.	A interactive diagnostic article is provided which includes: (i) a mirror; (ii) a selection sites arranged along or associated with the mirror, the sites having choice selectors; and (iii) an output for recommending at least one personal care product based upon input from the choice selectors.	12-Sep-06	Unilever Home & Personal Care USA, division of Conopco, Inc. (Greenwich, CT)

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