البيانات الضخمة للمسوقين

- About IMC
  - Letting the 6 elements of promotion cross-serve to help achieve Marketing Objectives:
    - Sales Promotion
    - Personal Selling
    - Direct Marketing
    - PR/Publicity
    - Advertising
    - Internet/Interactive
- Back to Education
  - Big Data Analytics used to enhance Marketing Campaigns' ROI by helping enhance targeting.
  - Increasing the number of applicants gets them on campus where you can decide which information to feed them, ideally, turning them into advocates.
  - Importance of advocates in consumer journeys...
- Old Consumer Journey
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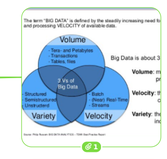
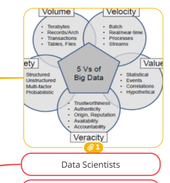
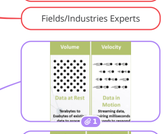
- IMC/Big Data/Education
  - Enhanced targeting & ROI of all 6 elements
  - Bringing people on campus, a chance for branding (PR/Publicity) and (Personal Selling)
  - Sales Promotion (Scholarship Options) to be determined based on predicted best matches
  - Images of huge number of applicants used for online promotions (Internet/Interactive)
  - Online and Offline Ads centered around the same notions (Advertising)
  - Actively using mailing lists to promote for the good news (Direct Marketing)
  - Generating leads online by getting more email subscribers, plus the contact info submitted by applicants
  - Feeding all the data, along with marketing campaign metrics back into the software solution, to apply further analytics and better predict/recommend future actions
  - Monitoring social media accounts of students and Alumni
  - Using their content to establish a link between students' quality, and potential and their social media presence
  - Many Enrollment Managers already look at applicants' social media profiles before deciding whether to accept them
- Bookshops and Publishers
  - Increasing the number of topic-centered books over generic books, as they allow better chances for content based and readers' analytics
  - Examples like "Rework" and "Lean In"
  - Even generic ones must be categorized
- Amazon Books/Recommendation Engine
  - Killing bookshops then launching one
  - First brick & Mortar Store in 2015
  - Great IMC
  - Huge free publicity created
  - Integrating online & offline marketing tactics
  - Getting the data from the brick and mortar store back into the system to enhance performance
- Energy & Utilities
  - Innovate business processes through analytics-driven operational excellence to increase agility and responsiveness, reduce operational costs and improve asset reliability.
  - Assume the role of energy integrator to optimally balance supply and demand points.
  - Deliver a 360-degree, individually tailored experience to increase customer satisfaction and loyalty, reduce costs and improve management of energy demand.
- Government
  - Governments' roles differ based on political settings and structures, however, these are common uses of Big Data:
  - Serving the Energy & Utilities sector
  - Serving Oil & Gas
  - Revolutionizing Healthcare
  - Infrastructure services
  - Transportation...
- Consumer Products
  - Also known as FMCG and CPG
  - A change in customers' expectations, which requires micro-segmentation, and personalization whenever possible
  - Offline purchase behavior to be collected and analyzed through retail research
  - Online purchase behavior to be collected through crawling of public data on web-store(s) pages and consumer research
  - Segmentation of actual sales audience also requires retail research
  - Social media data of your followers, based on their public data, knowing who they are (segmentation), their life interests, and how they perceive your brand versus the competitors
  - Mobile App behavior, if you own one or more
  - Data of Sales promotion tools being used; whether coupons, loyalty cards, special groups offers...
  - Analyzing historical sales records across regions and districts
  - Getting real time sales data visualized
  - Linking online and offline data for further analysis
  - Comparing segmentation data of Demo, Geo, Psycho of engaging audience online with segmentation data of purchased customers
  - Linking findings with mobile app behavior, which features does the "Golden Segment" use the most? How to increase their engagement rate?
- Healthcare
  - Predictive and Prescriptive Analytics
    - Analyzing "Patient Flight Paths" for millions of records to uncover the typical scenarios of deterioration across patients who suffer from similar problems Developing the Perspective Analytics; letting the software recommend the prescription that may help stop the patient's disease journey R Programming Language and Big Data Machine Learning
  - May help with the trend of keeping patients at home instead of hospitals
  - Multiple devices capable of sharing files through the cloud
  - iBeacons with sensors that detect a patient's status, sending instant notifications to hospital's data management system
  - Millions of patients = Volume + Velocity
  - Nature Language Processing
    - Analyzing Doctors' reports that include prescriptions, notes, diagnosis...
    - Helping integrate the outcome of this process with the previous ones, as well as integrating them with one another
- Insurance
  - The whole industry depends on information and insights
  - Pricing, Policies, and packaging depends on assessment, as well as customers' decisions
  - For car insurance, tracing driver's performance through a mobile app or better with a device installed in the car... Better accuracy, car based data collection
  - Through collecting data that belong to each customer's car(s), feeding it back into the system, comparing it with previous records of millions of other customers, predictive algorithms can come in play
  - Pricing, policies, and packages can finally become personalized
  - Better bonding with customers
- Insurance Wearable
  - Monitoring ongoing activities, acting as activity trackers
  - Assessment of lifestyles, and health habits based on activities
  - Sending data back to insurance companies
  - Customers can work on reducing their premiums by proving that they're improving their health habits
- Insurance
  - One third of the Insurance companies in the US are already integrating wearable devices within their packages and offerings
  - Some give out discount on premiums, along with free wearable Fitbit devices
  - Privacy continues to be an issue
  - Some say customers are likely to give away some data as long as they know why you need it, how it will be used, and what they get in return
- Oil and Gas main problems
  - Oil is hard to find, the inspection process
  - Oil is expensive to produce
  - Drilling for oil presents environmental threats
- المقدمة
  - الـ"بيانات الضخمة" أو "Big Data" هي طفرة تقنية في طريقة تعامل الأجهزة ومراكز البيانات مع المعلومات المتاحة، وهي التكنولوجيا الأكثر تأثيرًا على أداء الشركات في أسواق الدول المتقدمة منذ عام 2012 لأنها أتاحت فرص عظيمة للاستفادة من المعلومات داخل هذه الشركات وخارجها.
- Big Data, 3 V's
  - 

- Big Data, 5 V's. From Telxperts
  - 

- Big Data Team
  - Data Scientists
  - Statistician
  - Software Programmers and Engineers
  - Fields/Industries Experts
- 5 V's Challenges. From Information Catalyst
  - 

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- Data Driven Marketing
  - It all started with analytics
  - Switching from intuition to facts
  - Decision making opportunities
  - Better Cross Departmental communication
- The Marketing Process
  - Market research
  - Data analysis
  - Plan construction
  - Execution
  - Evaluation
- Big Data in Action
  - Types of Services, on premise or cloud
    - Cloud Services
      - Popular "IAAS":
        - Computing Infrastructure, Virtual Machines, Virtual Local Area Networks...
          - Amazon Web Services
          - Digital Oceans
          - Microsoft Azure
      - Popular "PAAS":
        - Allowing Software Engineers to develop software solutions
          - Apache Stratos
          - Google App Engine
      - Popular "SAAS":
        - The only layer that non-techs can use
          - Social Networks
          - Google Docs, Slides... the Drive itself
          - Qualtrics (Market Research & Analysis)
          - DataPlay (Market Research & Analysis)
          - Adwords, Twitter Ads, LinkedIn Ads...
  - Transforming from "Legacy Technology" to Big Data Solutions.
  - Developing custom software solutions that suit your business model (Outsourced or internally).
  - Buying/Subscribing to gain value from software solutions available in the market.
  - The influence on services we're already using.
- Handling the Transformation
  - Internally, usually handled by a team of 5 or more professionals who are only associated with this mission.
  - Working under a Chief Digital Officer, Chief Technology Officer, Head of Analytics...
  - It is a must for most businesses, whether they choose to do it on now or postpone
  - Research shows that "companies in the "top third" of their industry in the use of data-driven decision making were on average 5% more productive and 6% more profitable than their competitors," as shown in a research paper conducted in October 2012 by Harvard Business school
  - If not internally held, it needs to be outsourced
  - It starts with "Infrastructure As A Service"
  - Data privacy is the main issue, trust is the main concern
  - Can be handled while the old system continues to undergo processes
  - Great benefits for all departments
  - All based on Hadoop
  - An Apache open source project
  - Based on Map Reduce, a Google project
- Transformation Solutions
  - Ready made solutions by big corporates like IBM, SAP, Microsoft...
  - All based on the open source Hadoop
  - Companies apply a few changes, add a few features to open source technologies, and package them as their own unique innovations
  - Usually overpriced
- First Influenced Industries
  - Automotive
    - Monitoring Technologies
    - Car Automated Tasks
    - Driverless Cars
  - Banking
    - Fraud Detection
    - Compliance and Regulatory Requirements
    - Customer Segmentation
    - Personalized Marketing
    - Risk Management
  - Gaming
    - Online Multiplayer games in which a huge network of online users should play together at the same time.
    - Each single click by a player sends command(s) that require computing, causes effects that should influence the backend, and other players' user interface as well.
  - Education
    - Enrollment Managers applying analytics on student records over the years, with main focus on Academic history, demographics, geographics...
    - Using Predictive Algorithms to uncover future best matches.
    - Targeting their Marketing Campaigns accordingly, especially within the locations that are predicted to yield most.
    - High number of applicants best serves branding, lets Educational Institutions be perceived as desirable.
    - Sets a unique "IMC" example, as the high number of applicants can be promoted by institutes through various channels.
    - The number of applicants is used a key metric by the "US News" and "World Report Ratings" for universities.
  - Book shops and publishers
  - Consumer products
  - Energy and Utilities
  - Government
  - Health care
  - Insurance
  - Oil and Gas
  - Retail
  - Media and entertainment
  - E-commerce
  - Telecommunications
  - Logistics and Supply Chain firms
  - Travel and transportation
  - Agriculture