

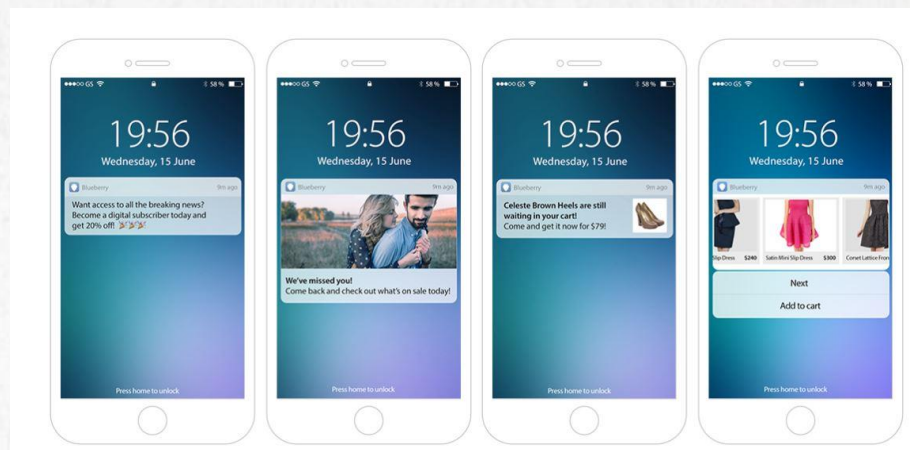
# DYNAMIC YIELD STUDY

FEI WU

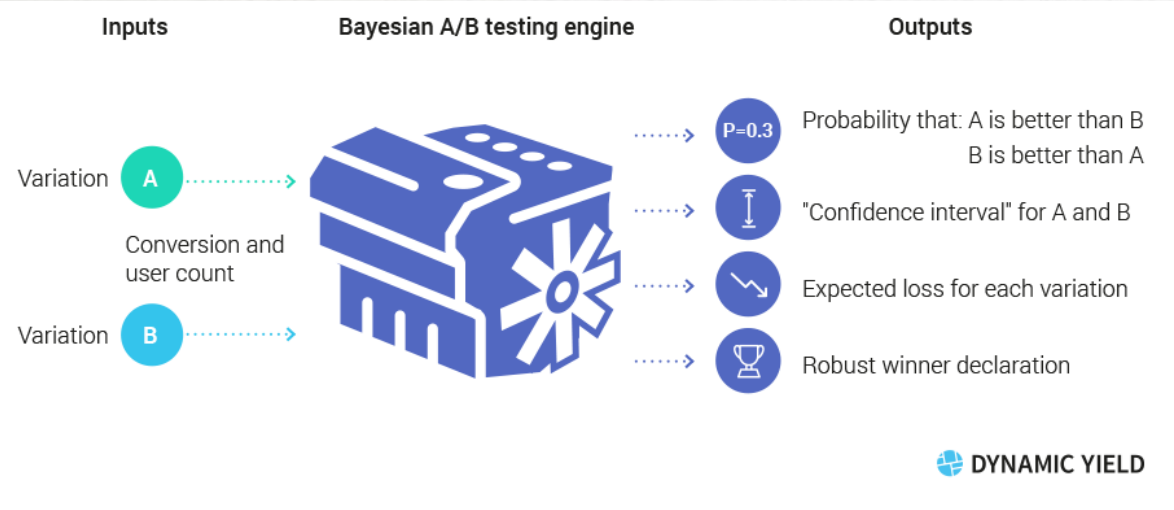
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# 产品特性

- 核心：1：1的完全个性化定制
  1. 个性化的商品推荐
  2. 个性化的搜索结果
  3. 个性化的app通知，邮件通知
  4. 展示关键信息（某件商品存货有限之类）
- Case study
  1. DY CASE1
  2. DY CASE2



# 核心技术： 贝叶斯A/B测试



基于贝叶斯的A/B测试比基于假设的测试（hypothesis）更加简单。普通的A/B测试严格的统计显著性（p-value）， 相比之下贝叶斯的A/B测试不那么严格。  
Demo: [https://marketing.dynamicyield.com/bayesian-calculator/?\\_ga=2.158237951.416806466.1522968258-470820896.1522118066](https://marketing.dynamicyield.com/bayesian-calculator/?_ga=2.158237951.416806466.1522968258-470820896.1522118066)

	Hypothesis Testing	Bayesian A/B Testing
Knowledge of Baseline Performance	Required	Not Required
Intuitiveness	Less, as p-value is a convoluted term	More, as we directly calculate the probability of A being better than B
Sample size	Pre-defined	No need to pre-define
Peeking at the data while the test runs	Not allowed	Allowed (with caution)
Quick to make decisions	Less, as it has more restrictive assumptions on distributions	More, as it has less restrictive assumptions
Representing uncertainty	Confidence Interval (again, a convoluted interpretation which is often misunderstood)	Highest Posterior Density Region – highly intuitive interpretation
Declaring a winner	When sample size is reached and p-value is below a certain threshold	When either "probability to be best" goes above a threshold or the expected loss is below a threshold (in which case a "tie" can be declared between multiple variations)



# 核心技术：CONTEXTUAL-BANDIT

Variation Allocation in Different Test Methodologies Over Time

