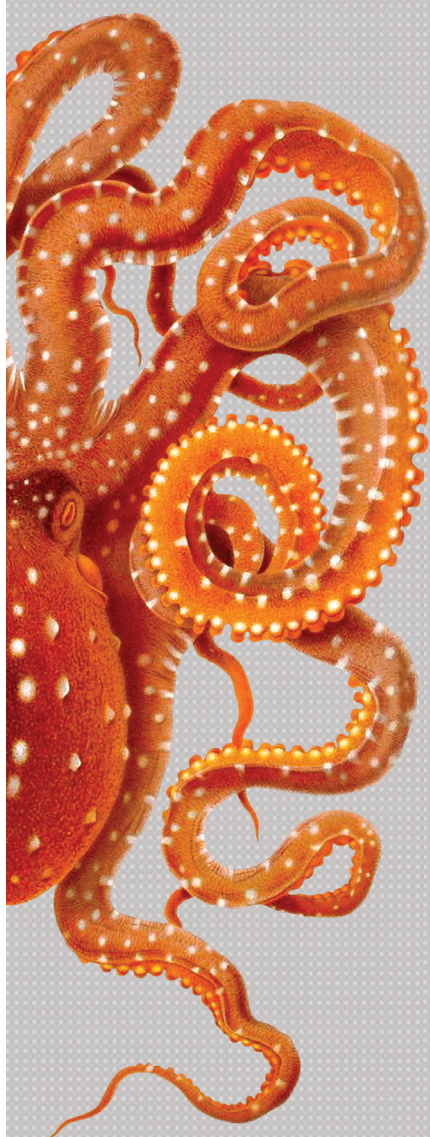


ONLINE-TO-OFFLINE (O2O) MEASUREMENT & ACTIVATION



 **vative/group™**
clarity. action. results.

“My customers are moving online and I can’t measure the impact on my business!”

- CFOs across America

With the ongoing shift of customer engagement and marketing budgets to digital channels across industries, C-Suites are demanding the ability to measure the impact of digital based on a holistic view of enterprise results.

Are you feeling this pressure?
I certainly am.

What are we going to do about it?
Read on!

This whitepaper describes how to build the capability and realize value from online-to-offline, an important element of the enterprise measurement suite, and identify the challenges and successes you can anticipate while accomplishing this strategic initiative.



BRANDON WISHNOW
*Executive Director
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Octopus Wrangler*

One in a series of whitepapers authored by subject matter experts within Ovative/group.

For simplicity, all visuals/insights contained in this whitepaper are based on real examples, but are not actual insights or metrics.

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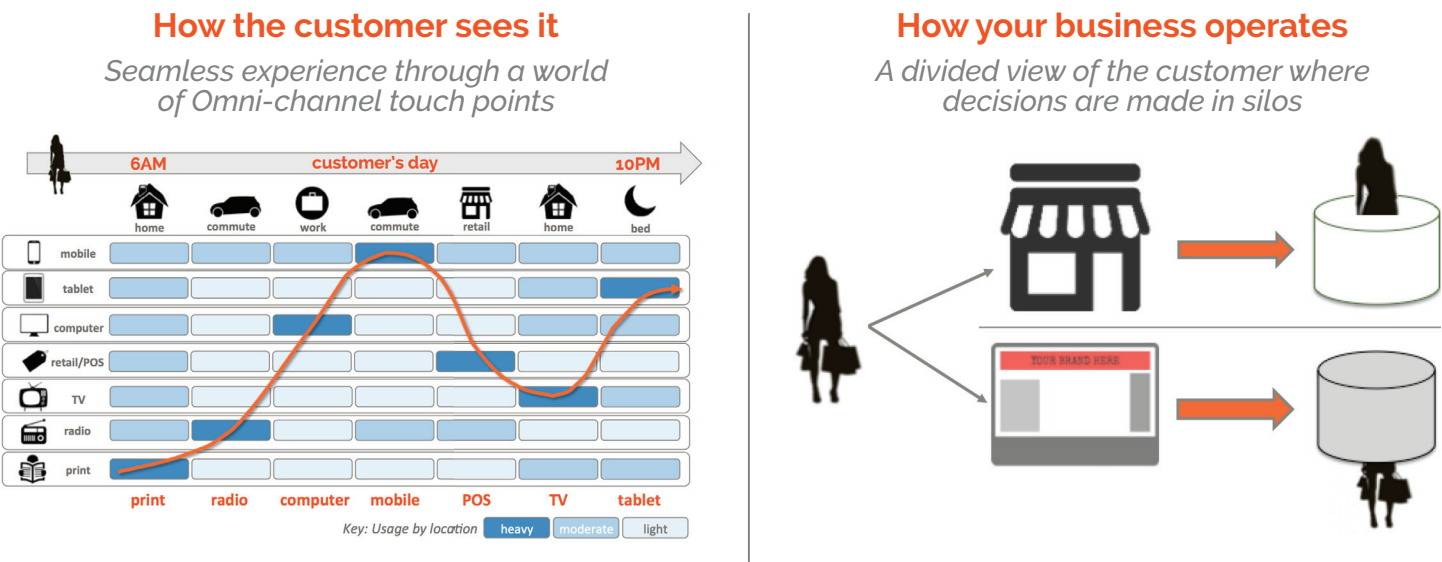
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INTRODUCTION

Online-to-offline (O2O) can unlock the potential for digital and marketing ROI on a level no other form of optimization can offer. It will address many of your businesses most complex problems by allowing you to answer questions such as: What is the impact of an online visit on offline sales? Does this impact vary by category or product type? What marketing channels influence offline most? And, can I use these channels to drive offline acquisition?

Why should you read this white paper?

If you hadn't realized yet, all marketers are faced with a pretty tough business dilemma: most businesses are siloed, offline or online. Yet customers expect one seamless experience.



Taking steps to solve this disconnect can unleash amazing potential. However, in order to build and activate an O2O capability, as well as navigate the organizational disruption that comes with such an endeavor, it takes top down support at every step and multiple people at all levels of the organization to be involved. Here we go through how Ovative/group has previously implemented O2O capabilities using a proven process, proven to *lead to an organizationally accepted capability* rather than a short term shiny penny that very few are willing to adopt.

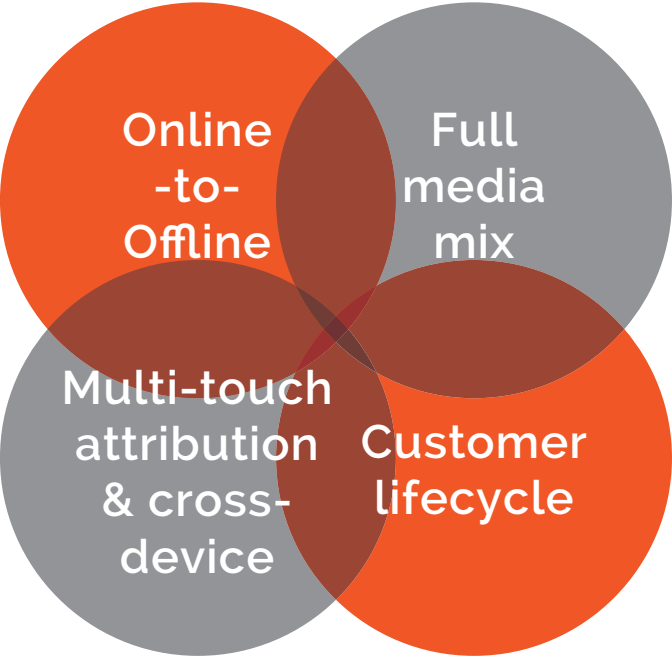
THE BENEFITS TO YOU

In this whitepaper, we thought it best to provide both summary level content to get the gist, and lower level details —both business and technical in nature—for those of you that want to really know "how to do it." With this in mind, we think about the benefits in terms of answers to the following questions:

- **Executive:** Why is O2O important? How should I prioritize it among other initiatives? Who on my team should own it? How will I need to realign my organization? How do my team's and agency's goals need to change? What does success look like?
- **Marketing:** How will O2O improve my ability to invest in, optimize, and target digital marketing? What types of site changes would I make considering enterprise metrics? How do I rethink my budget allocation and goals between off line and on line channels?
- **Analytics:** What analytical gaps will a direct cross-channel connection unlock? How will O2O work with other analytical tools?
- **CRM/IT:** What data and systems are required to build an O2O dataset? Do I need new technology in order to do so?

O2O, A SUBSET OF ENTERPRISE MEASUREMENT

At Ovative/group, we define enterprise measurement capabilities as the data, technology, people, & processes necessary to stitch together the holistic customer path-to-purchase to unlock financial value at an enterprise level. Typically, we break Enterprise Measurement into four types:



1 Online-to-offline (O2O): connect customer behavior across online and offline touch points to inform product and marketing buying decisions and develop content that considers the omni-channel impact on decision making. (This is what we're focusing on in this white paper.)

Multi-touch attribution & cross-device: allocate and optimize your marketing budgets based on customer interaction across all marketing channels and devices rather than each in a silo or based solely on the last event.



Full media mix: apply both customer-level and regression-based statistics to measure your complete media investment across both digital and traditional marketing and inform macro budget decision making and shifts across channels.

Customer lifecycle: develop customer value metrics and insights that go beyond the initial lead or purchase by analyzing behavior over longer time periods and what start as indicators become actual sales.



> *This paper initially focuses on number 1, O2O; However, because all are related and often simultaneously developed or applied, the process we go through and examples provided will touch all four components on some level.*

WHY IS ENTERPRISE MEASUREMENT IMPORTANT?

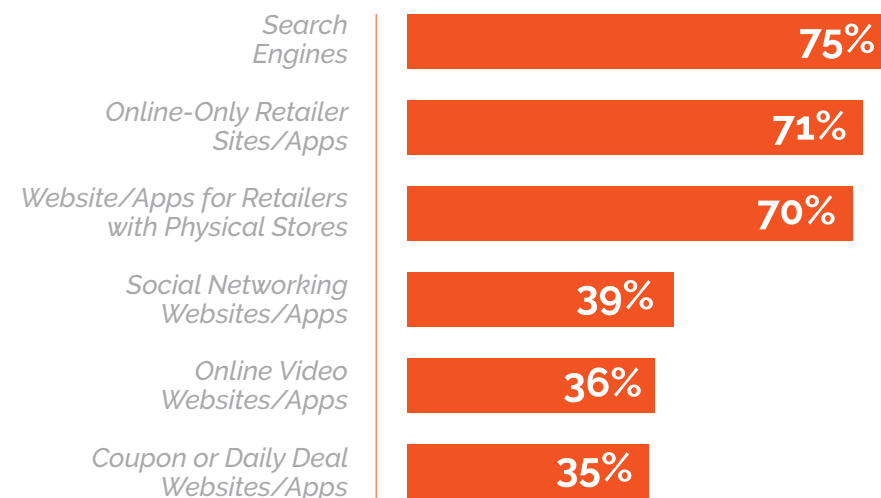
1 Business strategy has changed.

The rapid integration of offline and digital experiences and the demolition of the walls between internal teams creates the need for more sophisticated measurement. Channel centric strategies and organizations are being integrated to form an omni-channel approach, but measurement has lagged behind. **In fact, 70% of marketing executives polled said they would increase their spending on mobile, digital and social platforms if there were better ways to measure return on investment.**¹ This trend has slowed progress and prevented multi-channel organizations from competing with single channel (pure play) businesses.

2 Customer behavior has changed.

Exponential growth in the number and type of possible digital interactions – mobile-based in particular – along the path to purchase has led to greater need and investment to understand the impact of digital. According to a study by Google on Digital's impact on in-store shopping, 87% of shoppers are gathering information before entering a store. Those customers who gathered information electronically don't seem to rely on one single source, but rather use many different resources to conduct their research.²

Consumers use the following online sources for information on products/services:



¹ According to a new study by WPP agency Millward Brown Digital, more than, July 6, 2015 <http://blogs.wsj.com/cmo/2015/07/06/marketers-say-they-would-spend-even-more-on-digital-ads-if-measurement-improved/>
² "Digital Impact on In-Store Shopping: Research Debunks Common Myths." Think With Google. N.p., Oct. 2014. Web. 3 Jan. 2016. <https://think.storage.googleapis.com/docs/digital-impact-on-in-store-shopping_research-studies.pdf>.

3 Customer experiences have changed.

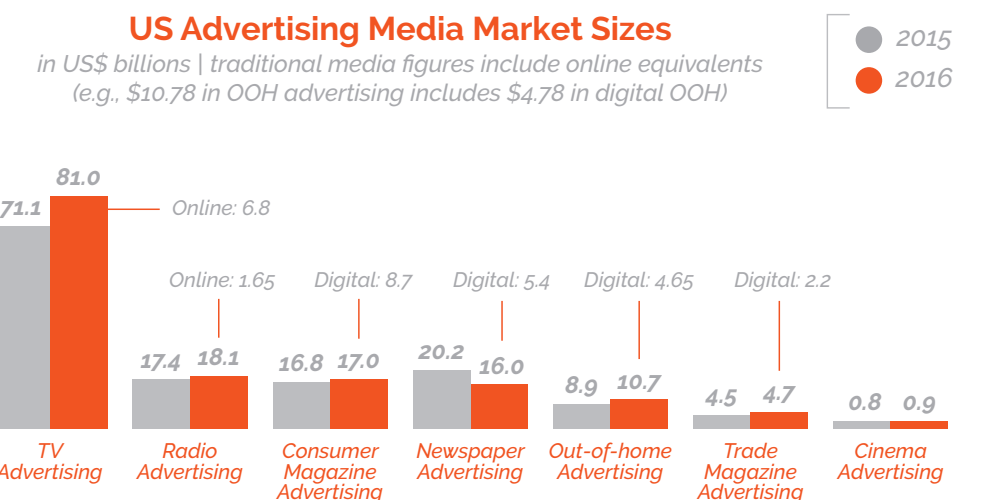
Growth in digital touch-points has inspired new online tools that help facilitate the cross-channel purchasing and exploration process, causing the role of online versus offline on consumer decision making to blur. In retail, for example, digital interactions are expected to influence 64 cents of every dollar spent in retail stores by the end of 2015, or \$2.2 trillion, according to Deloitte Digital's latest study. This dynamic makes customer-level trackability much more complex, but even more essential to understand.

4 Technology has changed.

Related, we've observed unprecedented growth in enabling emerging technologies over the past decade. According to a new "Ad Tech Vendor Benchmark" report from Technology Business Research (TBR), advertising technology revenue is set to grow over 300% by 2020 -- up from \$30 billion in 2015 to \$100 billion by 2020. This rapid innovation will continue to make customer behavior more trackable, addressable, and measurable in ways never possible before. This makes O2O synergy ever more critical.

5 Financial focus has changed.

Digital spend continues to rapidly grow causing CFOs to ask for a reliable measurement tool to understand if this shift makes financial sense. According to PWC Global Entertainment and Media Outlook, Internet advertising will outpace TV by 2019 and continue to dwarf all other traditional marketing channels, putting more pressure on CFOs to make sense of it all.



These motivators are quickly forcing an industry transformation where *sophisticated forms of data manipulation and measurement are being considered "must have" tools* as opposed to more "holy grail" achievements, as in years past. Unlocking the value from these tools has the potential to drive more return for your business than any other investment in your queue of strategic projects; while becoming a competitive differentiator that few will be able to match any time soon.

> EXECUTIVE SUMMARY

At Ovative/group, successful O2O capability development is made up of three phases:

1. Create the plan
2. Build the solution
3. Activate the insights

Step 1 of 3: Create the plan. What is it?

Successful O2O capability adoption hinges on having an aligned view on what you're trying solve, the priority of it, and that it's directed towards the agreed upon macro needs of your business. Given there are likely many competing initiatives for resources and budget, it's also essential that you understand what related tools you already have in place today and the expected value that would come from O2O, before making any substantial new investments. The Create the Plan phase is about getting the alignment you need by proving the business case for an O2O capability and creating a data-driven roadmap that helps your business achieve its top objectives. Due to the excitement around implementing a new "cool" technology, more often than not, it's this phase that is often under-scoped, ultimately leading to failure. By following the steps outlined below, you won't make this same mistake.

Create the plan. How do you do it?

- **Define business objectives.** Through interviews with relevant stakeholders, reviews of performance KPIs, and group discovery sessions, define, prioritize, and align your leadership on the objectives and specific use cases an O2O capability will address.
- **Identify data and technology gaps.** Gain access to existing systems and data samples to draw out underutilized or incorrectly configured capabilities, and to find opportunities to integrate or capture new data to achieve each defined use case.
- **Prove the business case.** Design and develop a prototype O2O system enabling new insights early on that prove the financial benefit to your leadership team.
- **Develop roadmap and action plan.** With a deep understanding of the path forward and effort required to enable desired functionality, create a roadmap and short-term action plan that outlines the timeline for development and release of capabilities by phase.

Create the plan. How do you do it well?

- **Remember, data collection always takes FOREVER.** Gaining access to systems or custom data extracts can be time consuming and unpredictable and your CRM and IT teams are pulled in too many directions already. To minimize delays, provide detailed custom data requests on day 1 or ideally, even before the official project start date.
- **Don't have a biased agenda:** Big organizations get political. Being inclusive throughout will maintain your much needed neutrality and set you up for success when you inevitably need help in later phases. Avoid the easy misses by ensuring you cover a mix of cross-functional leaders and analysts, and allow for time to speak with folks that aren't on your original interview lists.
- **Work on your short and long games:** Typically a client wants to see bottom line benefits faster than system development and organization readiness will permit. Address this tension head on by designing a roadmap that unlocks new capabilities incrementally in rapid succession and focusing on each individual use case as opposed to all of them at one time.



Client Example: Education

In the more detailed "Create the plan" section that follows, we dig deeper into the approach we took at an Education client and how these steps allowed us to quickly prove the transformative potential of O2O and empower CMO to show his board of directors why O2O should expand from 1 to all 4 schools.

Step 2 of 3: Build the solution. What is it?

With business objectives documented, interfering gaps identified, and the business opportunity for resolution quantified, we move from prototype to forming a full-functioning solution. Due to the variety of gaps that may limit your ability to take action on O2O insights, resolutions may involve actions in any one of the four areas that makeup a complete O2O capability – data, technology, people, process. These resolutions always require customizations that are specific to your company. However, there are common threads of requirements that we see across organizations and steps needed to satisfy them. These common themes will be the focus throughout the remainder of this whitepaper.

Build the solution.
How do you do it?

- **Produce technical documentation.** Build upon gaps identified and prototype built during the Planning phase to create detailed technical documentation for full scale development. This includes technical requirements to meet all priority use cases, mapping the full system data flow, and defining each integration point with new and existing systems.
- **Build the data foundation.** Execute the build out of all data elements by further augmenting or joining of existing systems, implementing solutions for capturing new data (e.g., data onboarder such as LiveRamp), and settling on the final data table organization that will power all O2O reporting and analytics.
- **Design & produce iteration 1 of reporting.** Define O2O reporting audiences (e.g., marketing, finance, merchandising, promotions team, etc.), specific questions reporting is intended to address, key success metrics, and distribution plan; produce audience-specific dashboards and integrate new metrics into existing reporting.
- **Roadshow results.** Begin education at all layers of the organization to inform about new available reporting and how you plan to use O2O to deliver incremental business value.

Build the solution.
How do you do it well?

- **Align, align again, and then keep aligning.** If teams are unclear on WHY a solution is being implemented and HOW it is expected to change the business, it will be impossible for them to articulate what capabilities are required. While progress is made during the Plan phase, maintaining and communicating a clear vision for how O2O will be used at every step will be key to adoption throughout.
- **Respect what change takes, but don't be afraid of it.** If you're implementing new technology, processes, and KPIs, "business as usual" is going to change. That should be the whole point, right?! Well, don't be surprised when pushback comes on thick just when you think O2O potential is about to open up. By making sure impacted teams are involved in the build process, you'll emerge from implementation with a fully revamped approach to marketing execution rather than taking several steps back.
- **Never stop educating.** Train early and train often. If an implementation is going to take three months, focus on methodology and delivered capabilities in the first month and grow from there. Demystify the solutions you're bringing to the table, so when you deliver that first report or activation, reviewers can focus on the results, and not get hung up on the process or methodology.



Client Example: Healthcare

In the more detailed "Build the solution" section that follows, we dig deeper into the approach we took at a Healthcare client and how to move from a prototype based on existing data to a sophisticated O2O capability that includes 3rd party technology integrations.

Step 3 of 3: Activate the insights. What is it?

As defined at Ovative/group, activation is the process of unlocking the potential of your data and measurement capabilities to realize business value. It can take many forms, some of which we've reviewed already, and all of which require significant behavior change to identify and take advantage of the business opportunities uncovered. This section is all about the methodical process of unlocking and capturing your new O2O capability's potential.

Activate the insights.
How do you do it?

- **Activation management.** Cyclical approach used to align stakeholders, identify insights, test hypotheses, operationalize actions and monitor results to unlock the potential value of new capabilities. There are four phases: plan, analyze, test & optimize, operationalize.

1. **Plan.** Set goals, build strategic roadmap, and prioritize use cases to guide activation efforts.
2. **Analyze.** Glean insights from data and identify specific opportunities to pursue.
3. **Test & Optimize.** Implement changes in a controlled environment and measure results to validate opportunities.
4. **Operationalize.** Make permanent changes to capture value and implement reporting to monitor performance and further optimize tactics.

Activate the insights.
How do you
do it well?

- **KPI tradeoffs will be necessary.** In many organizations, teams that work together are not necessarily judged on the same key performance indicators. When this is the case, it is critical for all parties to align on optimization priorities, and to understand that gains in some objectives, such as offline sales, may come at a cost to others like ecommerce revenue.
- **Get wins early.** While short term wins may be smaller and less strategic than other objectives, small improvements can go a long way in building momentum for the activation team. Once some quick wins have been prioritized and implemented, the team will be ready to embark on more complex analysis and testing.
- **Don't lose sight of what you had before.** Most activation tools will continue to play an essential role even with an O2O capability in place. Being clear about how all tools fit together will lead to quicker and bigger action early on. For example, an existing media mix model may apply econometric modeling to understand the impact of media at a macro level, while O2O makes it possible to measure media at a micro- or customer-level.



Client Example: Retail

In the detailed "Activate the insights" section below, we dig deeper into the approach we took at a retail client and how even basic O2O optimizations can lead to massive incremental value.

In the sections that follow, I'll go into the detailed approach and main lessons we've learned through actual engagements, using client examples from a few industries (referenced above) as the basis for the examples provided.

You may be asking yourself, should I read on? If you have a C or Executive in your title, absolutely not. Hand this off to your team and make it clear this is important.

For the rest of you, let's dig in!

> CREATE THE PLAN

As a reminder, the 4 steps to Create the Plan are:

1. Define the Business Objective
2. Identify data and technology gaps
3. Prove the business case
4. Develop a road map and action plan

In this section, we want to get into the nitty gritty. So in addition to going into more detail about the four steps and what must be done within each, we'll feature examples based on Ovative client experiences where the process applied to a real world scenario.

Client
Example:



CLIENT: Higher Education Institution.
CHALLENGE: Years of declining applications and enrollment. Marketing budgets being slashed. Existing performance measurement system painted inaccurate and incomplete picture of digital marketing's impact on offline events (applications/enrollment.)
THE ASK: Evaluate their existing measurement and systems and ultimately enable digital marketing optimization that would drive increased enrollment with less spend.

Step 1 of 4: Define the business objective.

The purpose of this step is many fold.

In this client example, there were three overarching objectives defined:

Reduce dependency
on paid leads

> Refocus all business functions on owned marketing channels

Personalize to
student lifecycle

> Create website experiences catered to phases of student lifecycle

Enable cross school
relationship

> Encourage student engagement across schools in the system

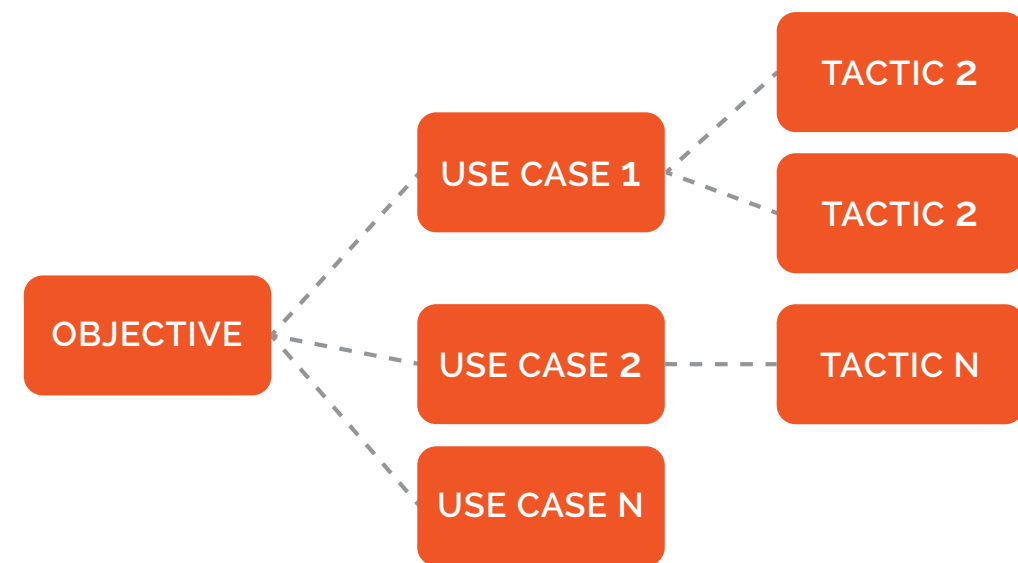


For each objective identified, its defined use cases pointed to more specific direction that was turned into a set of tactics. As a company that focuses on marketing optimization, we at Ovative/group tend to recommend more of those types of applications. But this concept can apply to any functional area.

As an example of how OBJECTIVE can trickle down to USE CASE, for the Personalize to Student Lifecycle objective in this client example, we wanted to:

- Optimize paid search with a "lead to Applicant metric" as the primary KPI.
- Dynamically present site content based on prior courses taken.

NOTE: Both use cases require access to O2O data & metrics.



*Define the business objective & use cases:
How do you do it?*

There are 3 steps.

- 1) Interview all relevant stakeholders
- 2) All supporting documentation should be reviewed
- 3) Information is summarized and prioritized

*> Interview
relevant
stakeholders*

An O2O measurement effort typically requires gathering intel from these types of people:

- Executive team members all the way up to C-suite
- Digital media channel owners (paid search, display, social, video, etc.)
- CRM-driven channel owners (email, direct mail, customer segmentation)
- CRM data and IT owners
- Both business and technical owners of web analytics
- Digital and traditional media agency partners

Though interviews will be tailored to roles, generally the objective of all interviews is to understand:

- Business objectives both short and longer term
- Process for measuring and optimizing performance
- Metrics and dimensions used to measure success
- Challenges and opportunities they face

NOTE: Overlooking important stakeholders can lead to misunderstood priorities, incomplete information, and potential roadblocks caused by those stakeholders feeling left out.



> Documentation

Especially at this stage in the process, you're not looking to completely re-create the wheel. O2O is largely meant to enable those needs that are identified but not yet possible to deliver.

- Typically, we like to review the following at a minimum, all with a tilt toward O2O:
- Company-wide view of broader objectives
 - List of planned data and IT initiatives
 - CRM/system architecture and data flow
 - Any relevant standard reporting or prior analyses

> Document & prioritize

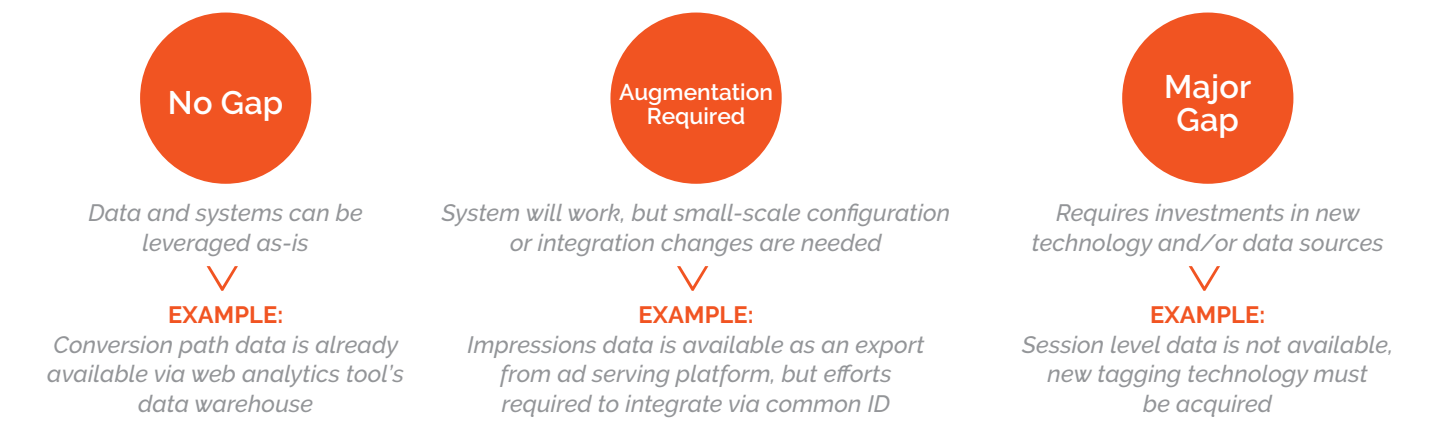
Finally, all information is summarized for prioritization and to indicate where O2O would be a clear dependency. Building on the samples from above, an example outcome of this process may look something like the table below for each objective. Obviously, there's a ton of requirements that would support our findings, but you can start to see how what can start as very ambiguous question turns into something people can get behind.

Objective	Use Case	Example Tactic	
Reduce dependency on paid leads	Optimize media focus to offset application loss from pay per lead providers	Target MBA Display campaigns on job sites	> High Priority Medium O2O Dependency
	Benchmark owned and pay per lead channel performance overlap beyond leads (i.e., Applications, Student starts)	Analyze Application contribution by pay per lead provider type to inform owned media test plan	> High Priority High O2O Dependency

Step 2 of 4: Identify data & technology gaps

Once priorities have been agreed upon, we move to understanding how existing systems can be leveraged to accomplish the defined use cases. We do this to get a more complete sense of the current data and technology situation, determine what ROI-driving tactics are possible now, and inform future roadmap development where we will try to avoid costly investments wherever possible.

At the highest level, we divide identified gaps into three categories:



Identify data & Technology gaps.
How do you do it?

Through prior interviews and documentation review, we create a list of all data and measurement systems and either gain access directly or request extracts of data samples. We then score each system based on what we observe and know is required for O2O measurement and activation.

In the end, the summary looks something like this:

This is drawn from a previously featured education client example.

Required Capabilities	Existing Data Systems			
	Web Analytics	Digital Ad Platform	TV Attribution	Leads Database
User level clicks by marketing channel	Yes	Yes Display/Video Only	Yes All Clicks Influenced by TV Spots	Yes Only Last Click
Sub-channel click details	Some	Some	Some	No
User level impressions	No	Yes	Yes TV Impressions Only	No
Common unique ID	No	No	Yes	Yes
Immediate Conversion Event	Yes	Yes Display/Video Only	Yes TV Influenced Only	Yes
Downstream Conversion Event	No	No	No	Yes

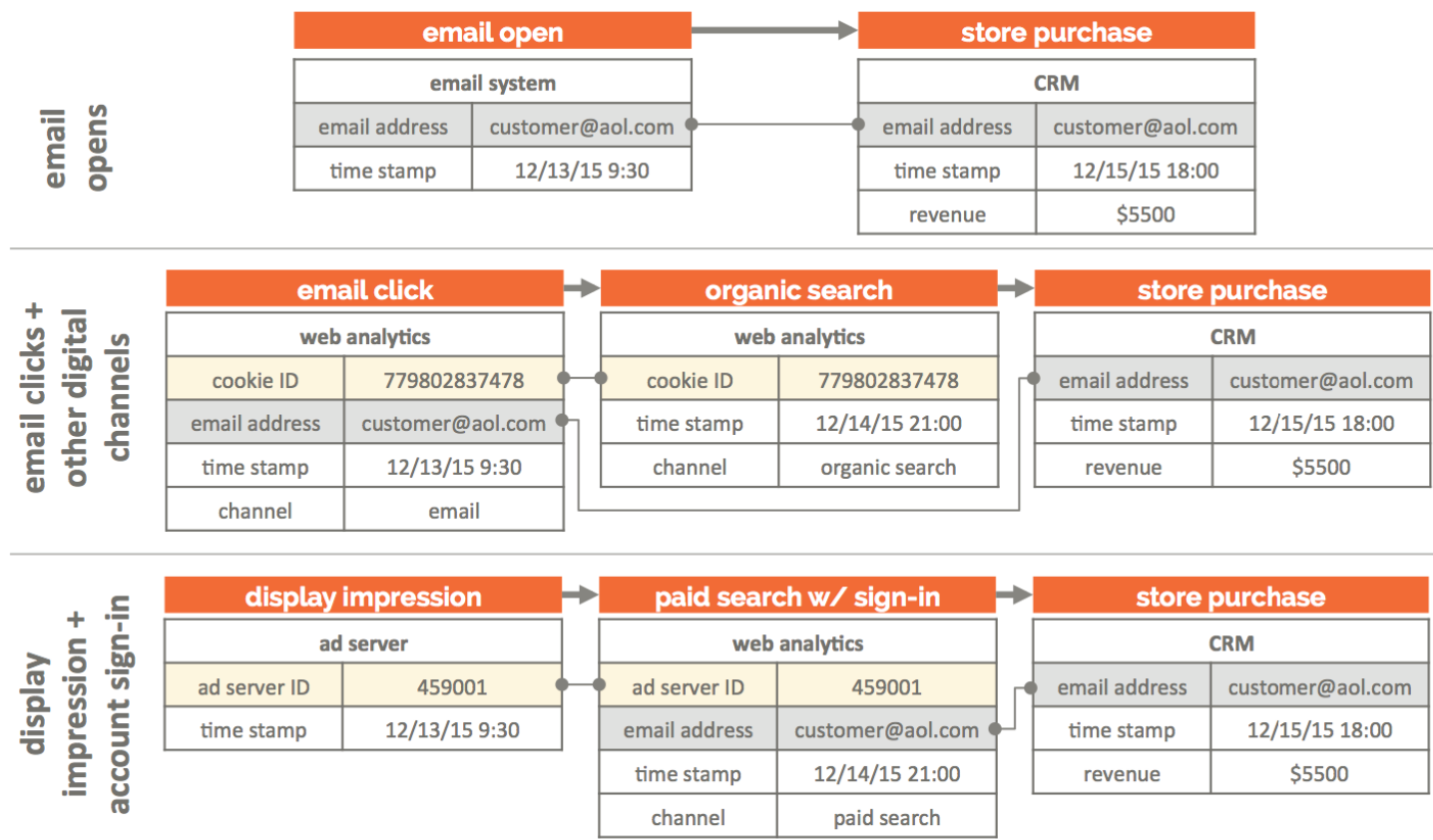
Step 3 of 4: Prove the business case

Given the complex nature of the data and systems involved, it is extremely difficult to get a clear picture of existing capabilities and the potential financial benefits without building a prototype of the end state. Let's take our education client example, if we had not had a prototype in place, we wouldn't have been able to: 1) convince their CMO of the full potential O2O can drive across all .edu systems; and, 2) empower their CMO with real insights to show his board of directors that it will be possible to reduce reliance on paid leads and have an intentional plan to do so.

Prove the business case.
How do you do it?

First, your first O2O dataset must be created – user-level time-stamped interaction logs from each disparate system must be brought together in one place. Next, the data is normalized and integrated together using common unique identifiers. This integrated data set is used to develop a prototype O2O view of the customer journey. And though not a fully functioning system, it goes a very long way towards fleshing out existing capabilities, gaps, further business objectives, and priorities.

Here's a high-level snapshot of how connections could be made using a retail store as an example:



Creating this prototype then quickly allows you to perform more nimble analytics to prove the business case of O2O. Typically, this largely means demonstrating just how different your decisions would be if you were able understand the more complete customer journey.

Once again, using our education client as an example, we see how different optimization decisions would be when considering actual students versus just prospects (i.e., leads) that are only looking to explore.

In the example below, we see how different optimization decisions would be when considering actual students versus just prospects (i.e., leads) that are only looking to explore.

post-project cross-channel capability with offline

Success events (attributed) CR = Conversion Rate			
Channel	Lead CR (online)	Applications CR (offline)	Starts CR (offline)
Total paid	2.25%	1.40%	0.73%
Paid search	2.15%	1.69%	0.86%
Branded	4.00%	3.50%	1.30%
Non-branded	1.33%	0.89%	0.67%
Display	2.48%	1.24%	0.66%
Prospecting	2.00%	1.00%	0.60%
Retargeting	3.56%	1.78%	0.80%
Video	3.33%	1.67%	0.40%
Email	2.67%	1.33%	1.92%
TV	2.00%	1.00%	0.40%
Total non-paid	4.69%	2.74%	1.91%
Organic search	5.33%	2.13%	1.60%
Direct	8.00%	6.40%	4.80%
Referral	2.91%	2.18%	1.27%
Social	3.00%	2.00%	1.20%

Numbers for illustrative purposes only

All text in orange indicates offline metrics or level of sub-channel granularity that were unlocked. Note that even in this prototyping phase, we were able to stitch in TV as a channel to show the possibility of stitching in customer-level engagement – online to offline – that includes both digital and traditional media channels. NOTE: This was very BIG! And a general trend to pay attention to in 2016 and beyond.

Even more interesting, perhaps, is how different channel performance can look when including offline metrics. For Paid Search – Non-brand and Display – Prospecting, the conversion rate (CR) story is very different when looking at Lead CR versus Start CR. And what do they want? Students to start!

Step 4 of 4: Develop roadmap & prioritize action plan

Finally, it's time to actually build "the plan." Otherwise known as the roadmap. Boring as it may sound, we are big believers in the roadmapping process. As you will learn, while it begins now, the process never really ends and will get down to an even more tactical level when turning to Activating the Insights. As you can also glean, at this phase, the roadmap is already based on hard data and more of a summary of everything we've learned to date rather than a whole other big [overly academic] process on its own.

A well-designed roadmap will accomplish four things:

1. Describe how your company will be different at the end of each phase with regards to how you implement, expand and scale o2o capabilities:

Implement

- key teams are fully educated on O2O solution
- data from all necessary sources is properly tracked
- marketing team will have initial insights to inform how to construct media optimization testing
- offline media and conversion data are loaded into the tool via direct integration & 3rd party cookie-matching tool

6 to 12 months

Expand

- key stakeholders are aligned on fractional o2o & customer-level testing methodologies
- experience cost savings by more efficiently allocating digital dollars within each channel
- Stitching in TV enables a more complete and actionable view

18 months

Scale

- greater efficiencies in media spend are realized through expanded optimization
- integration with media mix solution provides a view of all media spend
- o2o metrics are readily available for optimization and part of standard reporting

24 months

2. Define what gaps will be addressed when:

Capability Gaps	Existing	Phase 1 Complete	Phase 2 Complete	Phase 3 In Progress	Phase 4 In Progress
Complete digital path to immediate conversion event	No	Yes	Yes	Yes	Yes
Sub-channel tactics visibility	No	No	Yes	Yes	Yes
TV's influence on digital media	No	No	No	Yes	Yes
Impact of all channels on offline, downstream conversion events	No	No	No	No	Yes

3. Spell out the planned costs and benefits:

	Year 1				Year 2			
Cost Category	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Implementation	\$20	\$20	\$5	\$5				
Reporting	\$10	\$10	\$10	\$10	\$15	\$15	\$20	\$20
Onboarding	\$7.5	\$7.5	\$7.5	\$7.5	\$10	\$10	\$10	\$10
Contractors	\$15	\$15	\$15	\$15	\$10	\$10	\$10	\$10
total costs	\$53	\$53	\$38	\$38	\$35	\$35	\$40	\$40

4. Get tactical for the first 3 to 6 months:

		8	9	10	11	12	13	14	15	16	17
Week Start		7/20	7/27	8/3	8/10	8/17	8/24	8/31	9/7	9/14	9/21
Week End		7/24	7/31	8/7	8/14	8/21	8/28	9/4	9/11	9/18	9/25
SOLIDIFY MEASUREMENT FOUNDATION		Weeks	Status								
Enable and Configure GA Rollup Reporting											
Work with Google Support to initiate Rollup Reporting property creation			In Progress								
Configure rollup reporting for BigQuery export											
Configure rollup reporting for GA usability											
GA & BigQuery Integration											
Enable BigQuery			In Progress								
Extract, explore, and validate data											
Rollup session-level GA data available for analytics and insights											
Develop ongoing query process											
Education on BigQuery and any associated Google ecosystem tools											
Data Integration											
Setup sample feeds from TV attribution			Complete								
Finalize lead data export requirements and data transfer process			Complete								
Develop business logic for stitching TV attribution data to GA data			Complete								
Develop process for stitching TV attribution, GA, email, and lead data together											
Email: get tracking codes added to email click-thru URL's and setup GA to track these as email channel											
DCM: stitching in DCM display impressions data											
DCM: stitching in video and paid social data											
Downstream lead data: stitching in this data											

CONCLUSION: CREATE A PLAN

You're probably thinking: Really, that's all we've done so far?
Created a plan? Yes. But, we didn't build just any plan.

We built a plan that accomplished several critical goals all at once:

- 1 Distilled the business objectives and use cases that are most important to your company today
- 2 Determined how O2O helps address these priorities and gained alignment around them
- 3 Built an O2O prototype and data-driven business case, while starting to answer actionable questions that can drive ROI now
- 4 Identified and started to address gaps preventing short and long term opportunities
- 5 Built a roadmap that tells us where to go from here. A roadmap that wasn't just shown to the team at the end, but rather co-developed at every step to minimize surprises later on.

> BUILD THE SOLUTION

As a reminder, the four steps to Build The Solution are:

1. Produce Technical Documentation
2. Build the Data Foundation
3. Design & Produce Iteration 1 of Reporting
4. Roadshow Results

Client example:



CLIENT: Healthcare Company
CHALLENGE: Measure the performance of its digital media in driving both online and offline insurance applications. The assumption was that a multi-touch attribution (MTA) partner was in order, but the client team didn't have the expertise needed to select, implement or utilize such technology. As a culture very reliant on offline touch points, their internal team was struggling to understand where an MTA solution stopped and the O2O capability must start.
THE ASK: Capture a more holistic view of customer touch points, measure the offline touch point impact and sales performance, and integrate existing systems and datasets to inform reporting and analysis upon rollout.

NOTE: while an MTA technology was also implemented in this client example, for the purposes of this whitepaper we focus on O2O elements.

Step 1 of 4: Produce technical documentation

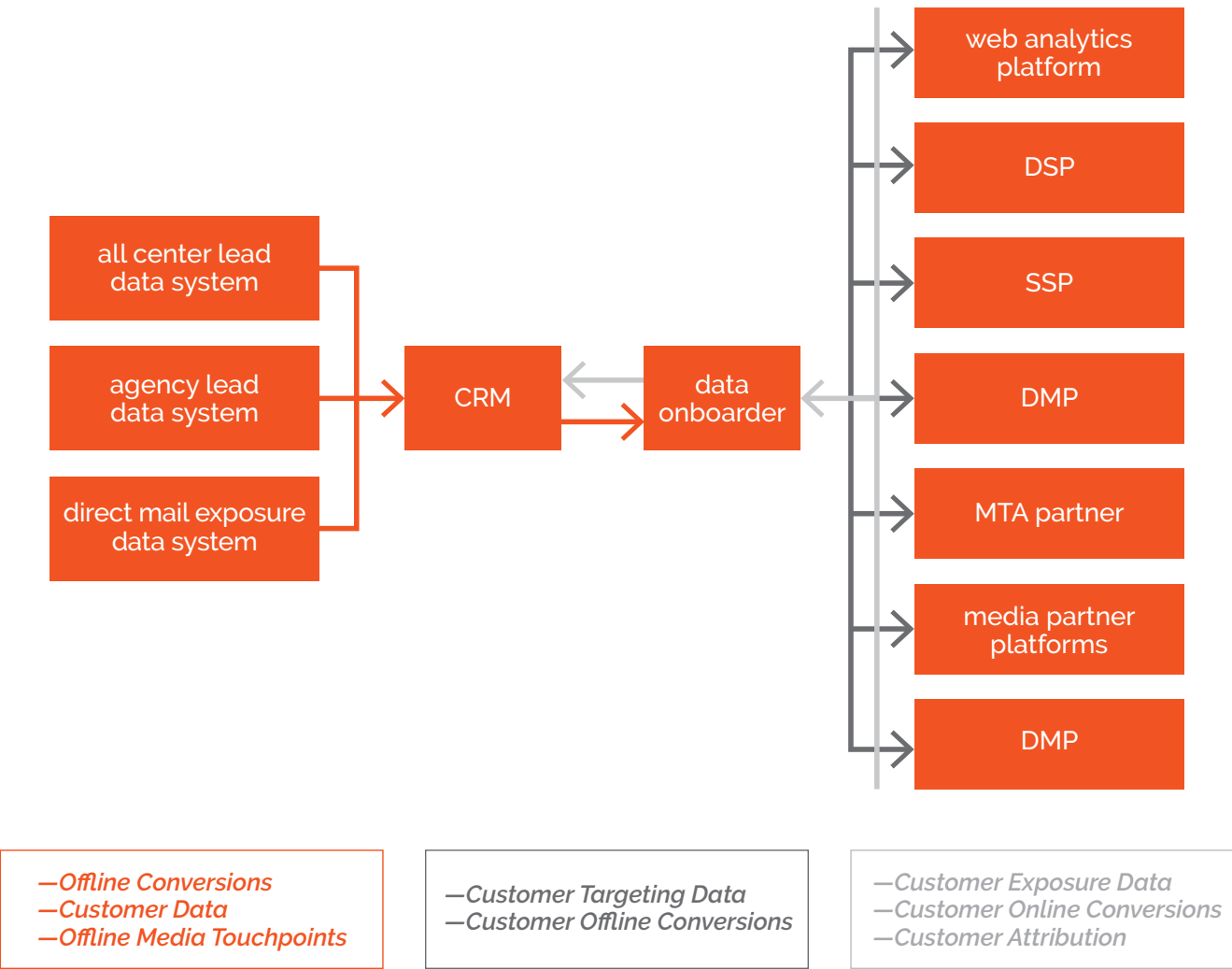
Based on the use cases and data/technology gaps identified as part of the planning phase, organizations must establish detailed documentation of their technical capabilities. For instance, if optimization to O2O is desired at a keyword-level for search, then it needs to be possible to tie individual customers to their keyword clicks. How will you associate these customers? If it is email accounts or a similar matching mechanism, is your matchable population large enough to provide viable insights? Documenting the flow of data between your technical systems will allow you to truly understand what's available, and what your end results will look like.



Product technical documentation:
How do you do it?

This process should be an extension of the gaps assessment process engaged earlier. At this stage, however, multiple forms of technical documentation may be required, depending on those use cases that have been prioritized. Examples include:

Technical system integration maps:
What tools do I have, what gaps do they fill, and how do they fit together?



Data on-boarding requirements:
Do I need to partner with a 3rd party data on-boarder?

Data On-boarding is the transfer of customer data gathered offline to identify customers online. Companies like LiveRamp match offline databases from in-store transactions or customer-service call interactions to online data. Advertisers use on-boarding services to broaden their reach (and match rates) to prospects or existing customers they could not otherwise identify online.

Having access to this data can help you build a more complete dataset, thereby mitigating sample size issues that may prevent some analyses. More relevant to activation, these tools also offer the ability to build look-a-like models and target customers.

For this implementation, an integration with LiveRamp was the best path forward to onboard offline paid sales, direct mail and call center contacts.

Detailed requirements: How can I translate higher level use cases into requirements for data file construction and integration?

Use case: Improve Digital Marketing Effectiveness Through Offline Visibility			
Gaps	o2o Role	Data	Tracking
Existing last click o2o methodology misappropriates value to individual media channels/placements, etc.	= o2o alone resolves	- Relevant Channel Impressions/Clicks/Opens, etc. - Context (costs, campaign attributes, etc.) - Conversions (all channels)	- Adobe DTM - DoubleClick - o2o pixel/log files/UTM parameters
No central hub incorporating all existing measurement tools (including digital o2o) exists	= other technologies/solutions needed in addition to attribution	- Relevant Channel Impressions/Clicks/Opens, etc. - Context (costs, campaign attributes, etc.) - Conversions (all channels)	- Adobe DTM - DoubleClick - o2o pixel/log files/UTM parameters - Additional relevant partner reporting tools
Marketing mix efforts do not incorporate digital at a low enough level	= o2o alone may resolve (pending vendor)	- Relevant Channel Impressions/Clicks/Opens, etc. - Context (costs, campaign attributes, etc.) - Conversions (all channels) - Marketing Mix Data (for integration)	- Adobe DTM - DoubleClick - o2o pixel/log files/UTM parameters
Investments in improved targeting solutions (DMP, predictive modeling) are planned, but there is a limited ability to measure their performance in a robust fashion	= other technologies/solutions needed in addition to o2o	- Relevant Channel Impressions/Clicks/Opens, etc. - Context (costs, campaign attributes, etc.) - Conversions (all channels) - Marketing Mix Data (for integration) - Customer data (owned, 3rd party, online & offline)	- Adobe DTM - DoubleClick - o2o pixel/log files/UTM parameters - Additional test & learn partner tools, where applicable - 3rd party and owned customer matching tools (Experian, Axion/LiveRamp, etc.)
Gaps	Methodology	Integrations	Reporting/Analysis
Existing last click o2o methodology misappropriates value to individual media channels/placements, etc.	-Fractional/ algorithmic based o2o		-o2o tool -hoc analysis -Financial reporting -Ad
No central hub incorporating all existing measurement tools (including digital o2o) exists	-Fractional/ algorithmic based o2o -alignment of existing measurement techniques	- SMART - Mu Sigma - Additional relevant reporting/measurement tools	- o2o tool - SAS - Tableau - Excel - Mu Sigma
Marketing mix efforts do not incorporate digital at a low enough level	-Fractional/ algorithmic based o2o	-Mu Sigma	-Mu Sigma
Investments in improved targeting solutions (DMP, predictive modeling) are planned, but there is a limited ability to measure their performance in a robust fashion	-Fractional/ algorithmic based o2o -a/b/market/customer-level testing	- Relevant targeting solutions (DMP, etc.) - data onboarder - SMART	- o2o Tool - DMP/relevant targeting solutions

Step 2 of 4: Build the data foundation

Once the systems have been inventoried and mapped, you will need to build out any missing data elements that are necessary for achieving the desired use cases. Again building upon the gaps assessment from Phase 1, this may entail a number of activities, including further augmenting or joining existing data assets, beyond the needs of the prototype, or implementing solutions for capturing new data (e.g., data onboarder such as LiveRamp).

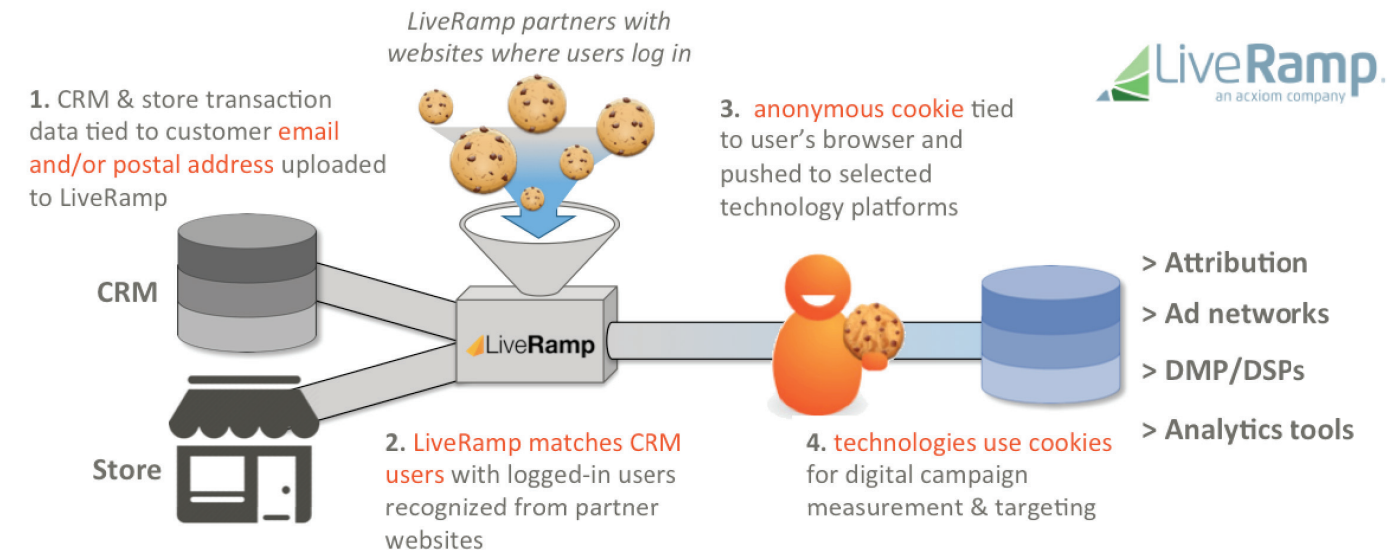
Build the data foundation:
How do you do it?

From prototype development, you already have a working foundation, but not a solution that can address all desired use cases. This was never the plan at that stage. But now that the initial O2O value is proven and detailed technical documentation has been developed, we have the opportunity to revisit our goals. And with an understanding of what data you have and where your data lives in the context of o2s, it's time to take the solution several steps further.

- 1. Implement 3rd party technology
- 2. Lock-in final data architecture
- 3. Finalize data table organization
- 4. Build the data set

> Implement 3rd party technology

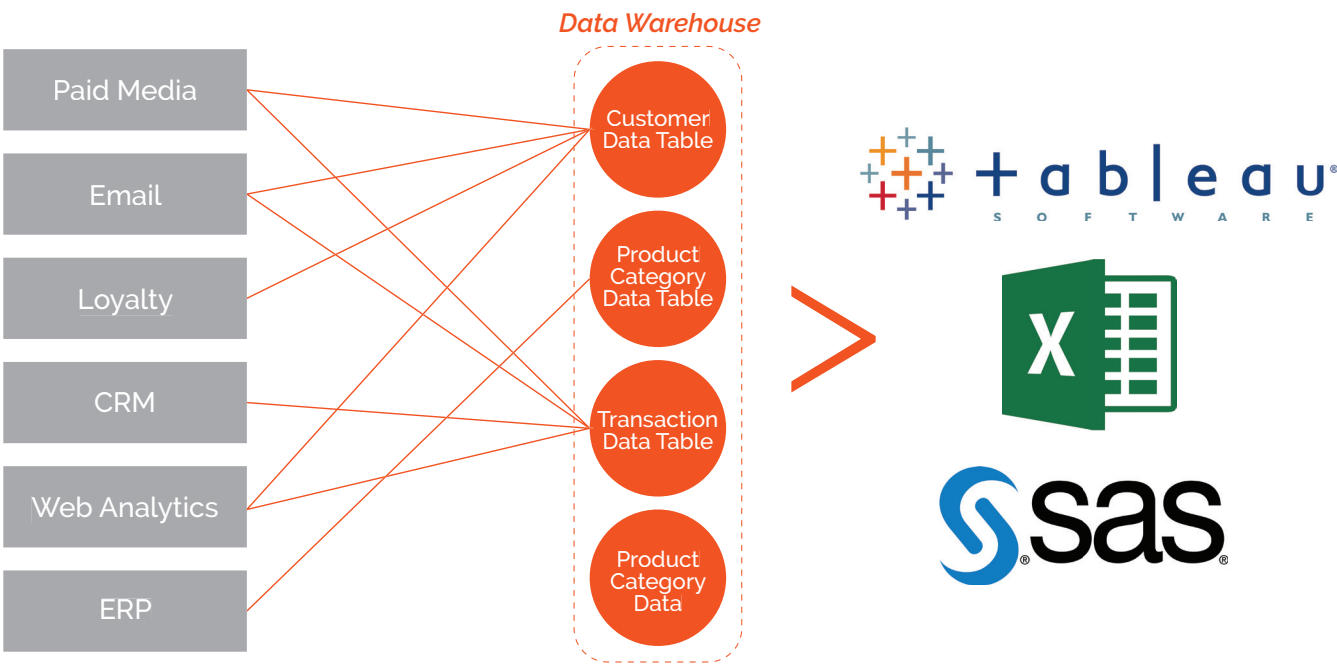
Onboarding partners elevate your matching and targeting game significantly. Find the one who's right for you (a different exercise we'll discuss in a future whitepaper...) and implement with a relentless focus on the use cases you've already developed.



personally identifiable information (PII) is stripped as it is on-boarded by LiveRamp

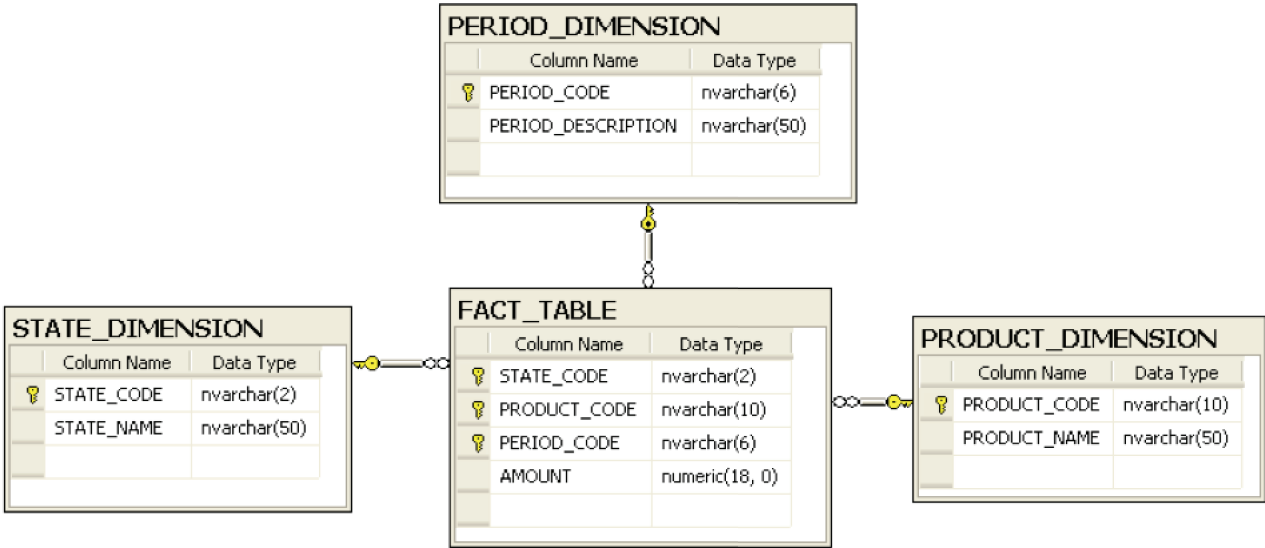
> Lock in the final data architecture.

With detailed data flows, it becomes much easier to determine the few systems and output data that will be needed.



> Finalize data table organization (Fact, Dimension, Summary)

It's these tables that will make reporting and analytics automation possible.



Build the dataset. Basically, your data team (known as those that do "magic" at Ovative) now build several giant tables that will be used for analytics and reporting automation.



By building data sets that are flexible, easily maintained, and regularly QA'd, you can improve the odds of being able to deliver against use cases identified in the future. This is why "magic" from the start is essential to achieve long term success.

Step 3 of 4: Design and produce iteration 1 of reporting
In conjunction with analytics to identify new opportunities, it is essential to build reporting that the organization can align around. O2O capabilities will lend themselves to new KPIs and ways of looking at channel performance. Quickly delivering consistent views of these new measurements will support more rapid adoption by the broader organization.

How do you do it? In terms of measurement, O2O data will be consumed in two primary ways: standardized reporting dashboards and ad hoc analytics.



Reporting dashboards are made up of modules that focus on a specific business questions. To flesh out what modules will be needed, we like to think in terms of these components:



In the end, you'll have automated reports, custom to the needs of the many consumer types, and that can be used to benchmark summary performance and take action a very tactical level.

Summary example: Offline Conversion Performance

While a simple view, this report offered our healthcare client's channel managers the first view ever into offline conversion performance by traffic source, making optimizing to sales possible for the first time.

	cost	YoY cost	impressions	YoY Δ impressions	clicks	YoY Δ impressions	attributed conversions
direct mail	2,635,856	-19.18%	0		0		53,797
display	1,098,684	6.55%	623,670,901	-0.28%	184,624	-7.93%	143,921
affiliate	358,657	-34.21%	94,954,038	-17.99%	6,041,207	-5.64%	45,299
organic search	0		0		5,558,778	-1.19%	6,869
paid search	1,187,957	-19.32%	0		4,580,314	-19.44%	11,885
social	307,012	84.62%	17,927,325	10.36%	124,408	-1.99%	826
affiliate	67,378	-12.55%	11,381,986	-4.09%	1,505	41.18%	0
video	699,476	0.53%	42,369,669	-27.37%	1,077,161	-14.99%	2,338

Step 4 of 4: Roadshow results

Now for the fun part! Reports and initial insights should be shared widely with the organization, across the various teams (Finance, Merchandising, etc.) that will want to consume the newly unlocked metrics.

Roadshow results: This step is especially custom to your organization and the players involved, but here are a few keys to success in our experience.
How do you do it?

Education should be primary goal of roadshow. Your analytics will very likely inform significant (or at least rapid) changes to media strategy. Teams need to understand how analytics were conducted, and how they should interpret the results. This will help to ensure they buy-in and don't freak out by just how different the results will be.

Keep pushing to start activation. While it is absolutely essential to spend appropriate time evaluating analytics results and educating teams on processes, the key is to ensure teams take action on the results. You established a roadmap, with hypothetical outcomes and plans for execution mapped from the beginning—don't hesitate to implement change where the answers you've developed point clearly to significant opportunity.

CONCLUSION: BUILD THE SOLUTION

This is big. Initial implementation is complete. And we have a fully-functioning O2O capability that can be used to impact business performance on an enterprise level. Yes!

What did we accomplish in this Phase?
A lot.

1. Developed technical requirements that fully documented what exists for an automated O2O solution rather than just a one-time prototype
2. Considering gaps that would prevent priority use cases, 3rd party technology was implemented and a final data architecture and dataset was developed to power future reporting, analytics, and activation
3. First views of reporting were created based on each audience type, unlocking relevant insights never seen before by these groups
4. The education process continued with hard O2O insights in hand, taking a big step forward in the adoption process



> ACTIVATE THE INSIGHTS

As explained in the Executive Summary, there are four steps that live within the Activation Management process:

1. Plan
2. Analyze
3. Test & Optimize
4. Operationalize

Client example:



CLIENT: Major national retailer

CHALLENGE: Better understand & optimize for the O2O impact of their digital media. The retailer has a robust ecommerce business with significant digital media spend. Leaders at the company believed that digital marketing has a significant impact on in-store sales and focused their media spend on driving online traffic as a proxy for influencing customers to shop online and in-store.

THE ASK: Create the Plan and Build the Solution. With the business case justified and solution in place, we then moved to full scale rollout where we began a disciplined test & learn approach for how to realize the full suite of benefits of the newly implemented O2O capability.

Activation management

Activation doesn't happen by itself. While the development & implementation of measurement solutions requires significant effort across many parties, a capability alone does not deliver value to the enterprise. The ongoing effort to align stakeholders, identify insights, test hypotheses, operationalize actions and monitor results requires continued coordination to unlock the potential value of capabilities.

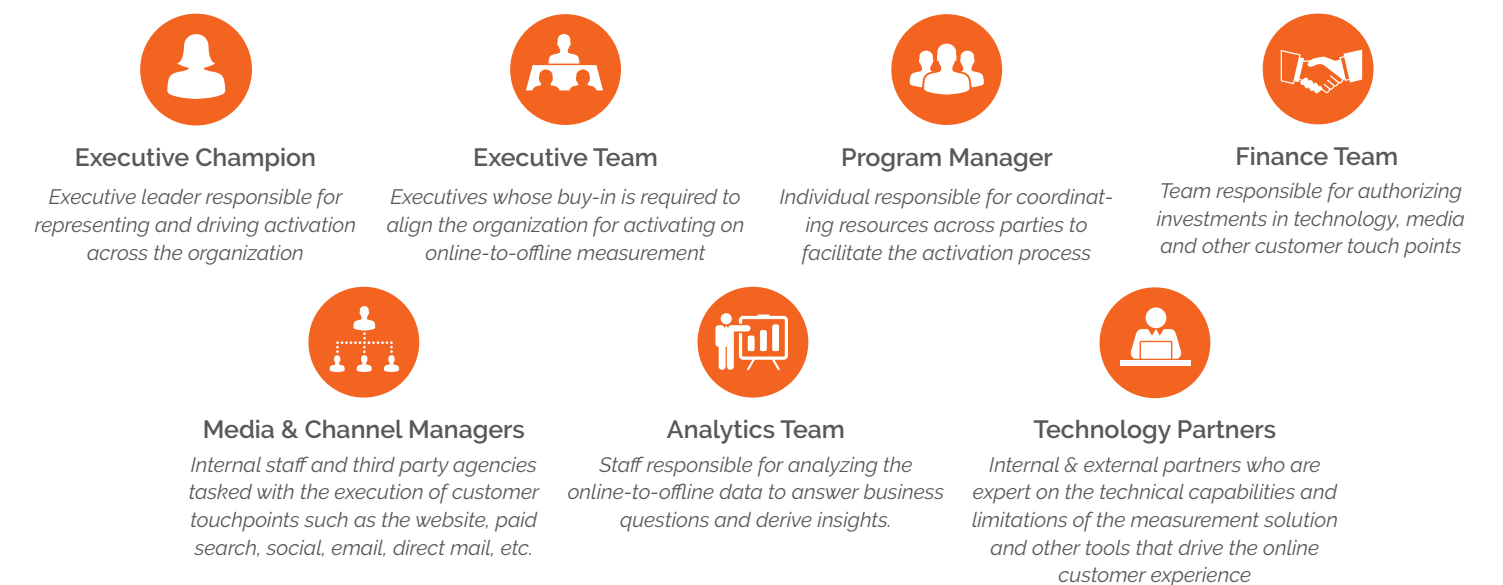
Activation Management: How do you do it?

Just as technology selection and implementation require experienced managers to coordinate the project, successful adoption and activation by an organization requires a disciplined approach with clear planning and accountability. When successful, activation becomes a cycle of activity with four distinct phases.



Who needs to be involved?

Although activation is an ongoing, cyclical process, it can be looked at similarly to a complex project, and requires involvement from many stakeholders to be successful.



Often times, like this client example, we'll develop a RACI matrix to illustrate all key roles and responsibilities necessary for successful O2O activation.

Resource	Plan		Analyze		Test & Optimize		Operationalize	
	Business Objective	Prioritize Use Cases	Review Measurement Insights	Prioritize Opportunities	Optimize Tactics	Run Test	Inform Business Strategy	Operationalize
Executive Champion	A	C	I	C			A	A
Executive Team	C		I				C	I
Program Manager	R	R A	A	R A	A	A	R	R
Media/Channel Managers	C	C	C	C	R	R	C	R
Technology Partners	I	C	I	C	I	I	C	C
Analytics Team	C	C	R	C	I	R	C	R
Finance Team	C		I	C		I	C	I

R—Responsible, A—Accountable, C—Consulted, I—Informed

Step 1 of 4: Plan

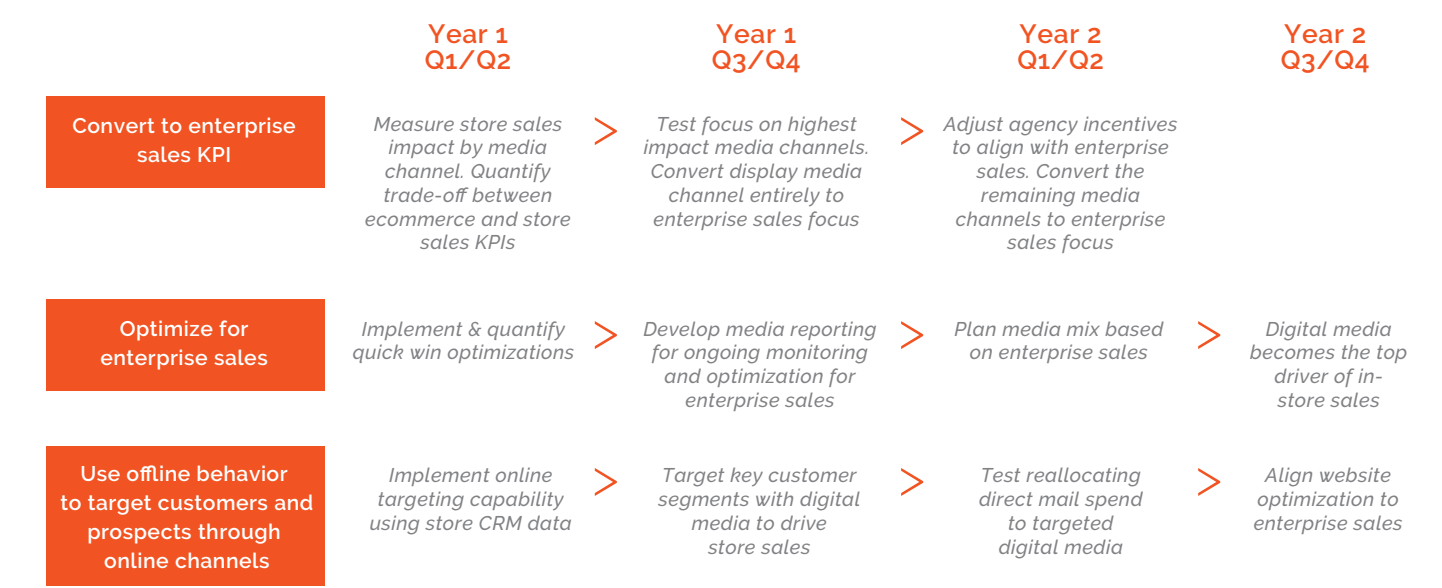
- 1. Set goals
- 2. Build the roadmap
- 3. Define & prioritize activations an use cases

Similar to the Build the Plan phase, activation starts with aligning the enterprise's strategic objectives with the O2O capabilities. Throughout the course of implementing a measurement solution, organizations frequently advance their knowledge of activation, its potential, and its challenges, far beyond what it was at the project's start. For this reason, it is important to continually revisit and adjust strategic objectives and use cases. A full scale capability is now built, opening up the possibility to broaden reach and get much more tactical.

Plan:
How do you do it? The planning phase should begin even before the new O2O measurement capability is fully implemented.

- > Set goals.
- Simply put, what are the goals an O2O plan can help solve?
- > Build the activation roadmap.
- We recommend forming a two-year activation roadmap. Starting with simple, tactical quick wins can be a great way to build early momentum, building up to more strategic impacts later on. Although it is common for this roadmap to change with time, having a documented plan clarifies priorities and next steps.

Example activation roadmap for our retail client example:



- > Define and prioritize activation use cases.
- With the strategic roadmap in hand, the activation team should next compile activation use cases that align to the roadmap, and prioritize them on the basis of estimated effort and impact. This list of use cases will help guide where to start with analysis, and may also uncover additional activation gaps such as ability to execute changes, influence media planning, or collect necessary data.

Example activations use cases

Good activation use cases are based on a hypothesis that a certain action can be performed better with the new measurement data than previously possible. In some cases, this may involve launching a completely new activity, or simply optimizing current activities. Each use case should also have a specific action enabled once the analysis has been performed. Without a clear action to take, the use case is not actionable and will provide no value.

1.

USE CASE > Adjust paid search keyword bids

FOCUS AREA > Optimize for enterprise sales

Impact > Medium Effort > Medium Priority > Medium
2.

USE CASE > Adjust affiliate commission structure

FOCUS AREA > Optimize for enterprise sales

Impact > Low Effort > Medium Priority > Low
3.

USE CASE > Identify best channels for driving store sales

FOCUS AREA > Convert to enterprise sales KPI

Impact > High Effort > High Priority > Medium
4.

USE CASE > Recommend add-ons for online purchase of items recently purchased in-store

FOCUS AREA > Use offline behavior data to target customers and prospects through online channels

Impact > Medium Effort > High Priority > Low

Step 2 of 4: Analyze

Glean insights from data and identify specific opportunities to pursue

During analysis, data that has been collected as part of the measurement solution is used in structured analysis to uncover insights. These insights generate excitement and build momentum for activation by unlocking the potential for improving behavior by answering the questions posed in each use case.

Analyze:
How do you do it?

Activation analysis is similar to many other forms of analysis in that collected data is structured to identify patterns and hypotheses about why the patterns exist. Analyses should be designed to be *goal-oriented, actionable, and repeatable*.

Goal-Oriented. Develop a roadmap for analytic execution that aligns with originally stated and high priority use cases. This will prevent your analytics teams from spinning with a lack of direction. Prioritize analytics both on their ability to drive meaningful changes to media strategy as well as their ease of execution. Use prior prioritization from planning phase as your guide.

Actionable. Within the vein of “ease of execution,” focus on analytics that your teams can actually use to implement strategic changes. Some analytics may expose significant strategic opportunities, which may require new technology, organization changes, etc. Build the roadmap to deliver measurable outcomes, and ensure it includes short-, medium-, and long-term deliverables.

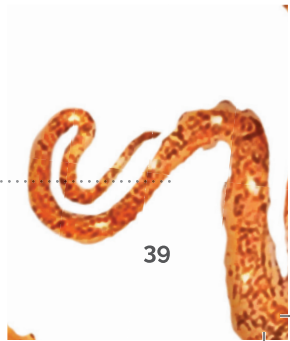
Repeatable. Once opportunities have been identified and new strategies implemented, it will be necessary to measure performance, and re-run analytics to validate successes. Ensure clear documentation is maintained for analytics execution so teams can repeat like experiments over time. Ideally, this will include some automation to minimize future resource needs.

To illustrate, let's look at our retail client and build on the use case question posed earlier: How can digital media tactics be optimized to influence offline behavior?

In this case, we're looking at an SEM keyword comparison of cost per acquisition for online only versus when store is also considered.

Campaign	Spend	Cost per Acquisition		Δ
		online	store + online	
keyword 1	\$ 2,500	\$ 50.00	\$ 15.00	-70%
Keyword 2	\$ 2,300	\$ 80.00	\$ 5.00	-94%
keyword 3	\$ 1,750	\$ 45.00	\$ 40.00	-11%
keyword 4	\$ 2,100	\$ 30.00	\$ 18.00	-7%
keyword 5	\$ 1,000	\$ 26.00	\$ 20.00	-23%

A very simple, but extremely powerful analysis, only made possible because of your newly developed o2s capability. In this case, there are clear winners (keywords 1 & 2), those that improve, but more moderately (keywords 3 & 5), and one keyword that remains ~flat (keyword 4). These distinctions are important to pay attention to when moving to the decision to either optimize immediately or test.



Step 3 of 4: Testing & Optimization

Carefully implement changes and measure results to validate opportunities.

At the end of the analysis phase, the analysis should provide an answer to the use case's question informed by data. The next step is to either implement the use case's action using the new insight ("optimize"), or to design a "test" to prove the insight can be applied to influence future results. In either case, results must be carefully measured to validate the change had the intended consequence. In most cases, it will make sense to design an experiment to prove out an opportunity in a somewhat controlled environment.

Experiment design. Historical performance data can uncover many valuable insights about customer behavior and offline impact of digital, but often the insights come in the form of observed correlations, rather than proven causations. Designing reliable experiments is critical to proving causal relationships, understanding scalability of a tactic, and gaining credibility with partners to move forward with a tactical change.

For example using the SEM keyword analysis, we may decide to take the following actions:

Campaign	Spend	Cost per Acquisition		Δ
		online	store + online	
keyword 1	\$ 2,500	\$ 50.00	\$ 15.00	-70%
Keyword 2	\$ 2,300	\$ 80.00	\$ 5.00	-94%
keyword 3	\$ 1,750	\$ 45.00	\$ 40.00	-11%
keyword 4	\$ 2,100	\$ 30.00	\$ 18.00	-7%
keyword 5	\$ 1,000	\$ 26.00	\$ 20.00	-23%

Testing: design and execute a geo-based test to confirm impact of keywords 3 & 4, due to their more moderate improvement that still exceeds 10%.

Optimization: Increase bids by 100% on keywords 1 & 2 due to the obvious misevaluation of those keywords when considering store impact

Testing & Optimization.
How do you do it?

1. **Develop hypothesis.** The first step in test design is to document a specific hypothesis to prove. This hypothesis should clearly demonstrate the causal relationship of the observation made during the analysis phase.
2. **Define success metrics.** Next, determine what specific data and metrics need to be collected and validate they are measurable with the tools available.

.....
CREATE THE PLAN

.....
BUILD THE SOLUTION

.....
ACTIVATE THE INSIGHTS

3. **Design experiment.** Once the measurement plan has been considered, controls must be designed to limit the influence of outside variables on experiment design. There are many variables that may threaten to skew results, but some common variables include geography, seasonality, promotions, customer segmentation, and advertising tactics.
4. **Gain buy-in.** Once the experiment has been designed it is also important to get buy-in from key decision makers on the test methodology. Depending on the experiment, you should include decision makers controlling such considerations as media budget, goals & incentives, and staffing & workload.

For the retail SEM keyword analysis, here's what a high-level test design may look like:



Depending on the test complexity, many more requirements can be detailed out in a standard requirements document.

5. **Execute & measure.** Once the experiment launches, it is often valuable to begin monitoring results immediately to detect any surprising results that could indicate a mistake in test design, execution, or data collection. Media managers, technology partners, and analysts should all validate the test's execution at points throughout the experiment lifecycle.

A test results summary, may looking something like:

Market	Spend	Clicks	CPC	Sales	CPA
Test	\$1,000	2,000	\$0.50	\$40,000	\$40
Control	\$900	1,750	\$0.51	\$40,500	\$45
				CPA improvement	-11%

STEP 4 OF 4: Operationalize

Make permanent changes to capture value and implement reporting to monitor performance and further optimize tactics

Once analysis is complete and test results have been documented, it is finally time to complete the activation cycle by implementing the change and capture value on-going.

Operationalize:
How do you do it?

Ideally, each party required to institutionalize the change has been involved in the activation process up to this point, so operationalizing can often be a mere formality. Nevertheless, it is important to consider all of the parties that should be involved or aware of the change. Common parties to consider include finance, channel owners, channel & media execution teams, and the other members of the activation team.

Operationalizing a change also includes establishing monitoring in order to validate that the expected results have the anticipated long-term impact, and that the tactical changes remain in effect as planned. Often this monitoring can be performed using existing reporting, but sometimes additional reporting may be necessary to develop. Monitoring can also help set the stage for continuous improvement of the tactic.

Finally, it's important to keep everyone (especially the executive team) informed on progress. To do so, we recommend a monthly newsletter that highlights what's been accomplished, recent test or optimization successes and failures, and what's next.



CONCLUSION: ACTIVATE THE INSIGHTS

I would say the end has arrived, but the truth is, the opportunity to activate your O2O capability has only just begun. By continuing to follow the activation cycle, you will have endless opportunity to realize benefits from O2O and all it can do for your organization.

In this section, we covered the following:

- 1 Reviewed the steps that makeup the Activation Cycle—Plan, Analyze, Test/Optimize, Operationalize, and the resources that are needed to make it work
- 2 Showed the value planning will continue to offer as part of the activation process and the tools that can be used to manage it (i.e., roadmap, use case priorities, RACI)
- 3 Looked at an example analysis that demonstrated even simple views of O2O data can drive very meaningful benefits
- 4 Determined when to Optimize (it's an obvious change) versus when to Test, and the best practices for test design from hypotheses to final measurement
- 5 Outlined the keys to success when Operationalizing—keep everyone involved, monitor results even after the "win," update your executive team on progress



In a time when it's critical for marketing and data to work together, Ovative/group stands alone as a unique team of specialists and experts who help clients "wrangle the octopus" of data to activate their enterprise value through marketing, measurement and technology services.

Through 20+ related engagements over the past three years in this space, O/g has observed some common themes that, when considered, greatly increase the probability of building solutions that lead to lasting capabilities rather than shiny pennies few are willing to adopt.

O/g clients span multiple industries, including retail, healthcare, education, CPG, and hospitality; for companies with sales that range from \$250M to \$100B. They engage with clients both as advisors and as outsourced service providers; as a neutral measurement partner or as an end-to-end measurement and activation solution provider. These experiences and associated lessons learned serve as the basis for this white paper.

Contact us at info@ovative.com

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