White Paper

The tours & activities industry & TourCMS

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TourCMS is the largest global distribution system (GDS) for supplier direct tour & activity product data and availability (Supplier direct as in not via a travel agent intermediary)

We maintain product data including availability for over 8500 tours (day & multi-day) & 500 airport transfers in 100+ countries. Annual booking transactions through the system reached 100 million USD in 2013.

This white paper is written from our unique position of having the complete product data and in many cases the complete transaction data for hundreds of local tour companies.

The white paper outlines three key areas where significant change is happening in the tours & activities sector:

- **Mobile**
  - Product types that mobile favours
  - The product data content requirement
  - The mobile voucher redemption process

- **Product supply**
  - Where to source product
  - The rise of P2P (AirBnB of tours & activities)

- **Likely industry structure scenarios going forwards**
  - What impact will yield management have in tours & activities
  - Where will innovation come from

The white paper is packed with background information and also contains insight as to how TourCMS exists to power the ecosystem.

Mobile

Tours & activities are primarily purchased in destination direct from consumer to supplier.

This is one reason why retail travel agent systems are not historically connected to tours & activity companies and why therefore there is little industry structure for larger online travel agencies to piggy back on in order to build services. (Unlike in the hotel industry)

In destination can mean either booked "the night before" or "on the day".

System wise, on the day tends to be easier than the night before bookings. Night before bookings can be made late (e.g. 11 pm), after supplier office closure time, and hotel pickups need to be co-ordinated often for first thing in the morning. (A system like TourCMS automates this process). On the day bookings tend NOT to require hotel pickups hence why they are easier.

Product types
Last minute mobile tends to favour products that

- Weather dependent (Lets wait and see if the weather is nice before booking to go for a Segway tour)
- Avoid the queue (I want to go to that attraction, I am standing 500 metres away, I can see a queue, let me just book that on my mobile)
- Tours with friends (I want to talk to my travelling companion before deciding whether we want to do that)

Some tours, regardless of technology, tend not to favour last minute mobile booking

- Kayak / outside adventure tours (Often a certain ratio of instructors to customers needs to be maintained. Small kayak companies tend to use freelance instructors and they are not sufficiently flexible to bring in extra staff to maintain ratios for last minute customer bookings)
- Cooking course food tours (Often ingredients need to be pre-purchased the day before, based on the group size)
- Tours that do not run when they do not meet their minimum numbers (as these often have booking time cutoffs well before "on the day" unless already going to operate)
- Multi-day tours (except perhaps those that are 2-3 days long, where the tours solves a logistics problem experienced by backpackers)

Therefore we suggest that a mobile oriented tour & activity booking platform will have a different product contracting need to a regular web based contracting requirement. Mobile is not your website product bookable on a small screen.

Mobile content requirement

Mobile services have unique requirements for tour description information. All of this data is supported by TourCMS and available for the Gray Line suppliers (and hundreds of other suppliers, as appropriate)

- **Airport transfer direction information** – A customer standing at Las Vegas airport needs to only see transfers FROM the airport to the CITY, not CITY to the AIRPORT. The context of location (standing at the airport) means that showing the customer too many choices (that they are not going to book) looks inadequate and appears clunky to the customer.

- **Small images** – designed for mobile use (previous emphasis in the industry has been on finding large images). TourCMS has CDN (Content Delivery Network) hosted small and large images of consistent size and aspect ratio for all suppliers.

- **Short tour names & descriptions** – there is a style in tours where you create a "combo" tour combining multiple elements. As a result these tour names become too long for comfortable mobile display. TourCMS has a short tour name as well as a long tour name. The UI designer can use as appropriate. Tour descriptions need a similar short version for mobile presentation.

- **Geocode start point** – so you can search for "tours near me". Normally used in conjunction with live availability and the accurate start time for each tour (taking into account local time zone) so you can do "tours near me that start in the next 3 hours that are bookable".

- **Live availability** – mobile needs instant booking (the customer can't wait for the supplier to email or phone back having checked whether they will accept a booking). Instant booking (on low availability product like many tours are) needs reservation system connected live availability otherwise suppliers will not be confident to take last minute bookings on low availability product. Without connected live availability suppliers will just provide product that is not availability volatile such as hop on hop off bus tours or third party provided attractions. (This will make the overall mobile experience less appealing to a customer as the alternative, walking into a visitor centre or to a ticket booth, becomes more satisfying as they will have access to the full product set for a destination)

- **Hop on hop off bus stop geocode data** – A hop on hop off bus tour provides a convenient way for tourists to transfer between the major sights in a city. They may get on and off where they please. In major cities (e.g. in London) a hop on hop off tour may have 50 bus stop locations. Within TourCMS we hold the geocodes for these bus stop locations hence a mobile service could do "I am on this tour – what direction do I walk to get to my nearest stop"

- **Hotel pickup geocodes** – perhaps not strictly for mobile only but knowing the geocodes for hotel pickup locations is helpful as the customer can see their nearest location.

Voucher redemption functionality

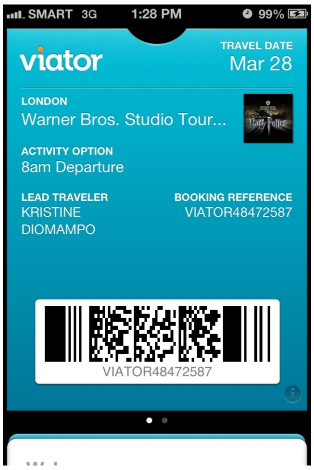
The key functionality difference between mobile generated and other bookings is the reliance on voucher redemption efficiency.

Currently a customer books and is issued a voucher that they must print out. This voucher must be physically redeemed to a supplier. Some suppliers at point of redemption then issue tickets for the actual tour / attraction.

Plainly, forcing a customer to print out a paper voucher is not ever going to be seen as anything but ridiculous to a customer who has just booked on their smartphone.

However the voucher is the "currency" that suppliers and attractions use and effectively becomes "money" to the supplier. The supplier therefore NEEDs the physicalness of the voucher.

We need a new industry process. TourCMS has it.



The new customer process (as they see it)

1. Customer books on OTA website or mobile service
2. Customer is issued with a voucher (e.g. on their phone – using a barcode) – potentially even an Apple Passbook link. This voucher is branded as the online travel agent.
3. Customer goes to the tour / attraction – and presents their voucher / barcode (this can be even straight after booking)
4. Barcode is scanned
5. Customer is admitted

The process behind the scenes is a little more complicated.

1. The booking must be transferred to TourCMS. This can be via API (if the booking is made via TourCMS), via booking data feed from the OTA to TourCMS or via scanning emails (e.g. supplier notification emails as sent from an OTA to a supplier can be read by TourCMS scripts)
2. The booking is now visible in TourCMS. The barcode to add to the voucher barcode should either be in TourCMS format OR it can be in an OTA format. If it is in a custom OTA format, as long as TourCMS knows what that reference is, that is fine
3. Kit provided by DataTrax, Palisis (two leading providers of point of sale systems for tour & activity providers) scan the barcode on the voucher. They send that barcode data to TourCMS via API. TourCMS checks that barcode data against the barcode data provided by the OTA
4. The voucher is confirmed to be redeemeable, if valid

As the voucher redemption state is in TourCMS, reports can be created as appropriate. No longer is the physical piece of paper the key for the supplier to get their money.

Additionally, apart from powering mobile by ensuring the customer DOES NOT have to print out a paper voucher, this new end to end service:

- Helps cut fraud – no double redemption – a single voucher can only be redeemed once
- No wrong date redemption – using a voucher for one day on another day
- Voucher recall – if a booking is subsequently cancelled – even if the voucher has been issued – it can now be cancelled in the system – and the voucher will not be accepted
- Improves efficiency at the supplier end

Only TourCMS has this voucher redemption capability connected up with OTAs, suppliers and the point of sale system providers. It is a cross industry, multi-technology partner, solution.

Current project status: TourCMS API is documented and operational. Viator bookings can be made on Viator, imported to TourCMS and redeemed via the TourCMS iphone app (called Vouch). Palisis point of sale system is ready for deployment and will be rolled out to some leading European city locations for live testing shortly.

Product supply

There are four models that are used by leading online travel websites to acquire product from tour suppliers:

Throw a room full of interns at it
e.g. collect leaflets, look at supplier websites. All of this, by staff paid for by the online travel agent, is then manually updated. Completely unsustainable but commonly used, especially to initially seed a supplier product database.

Extranet
Some companies create extranets where suppliers are forced to login and manually manage their product descriptions & availability.

What was once successfully part of the hotel supply acquisition playbook doesn't work so well with tours & activities

- Low availability product (e.g. tours with slot capacity of 5-15 people – like a food or helicopter tour) have highly volatile changes in availability state. No supplier can keep this updated via extranet. This either leads to unavailable product or customer service issues.
- Tours from the same supplier churn over time – the same supplier will add new tours – remove tours – on a constant basis (unlike a hotel that stays fairly constant). Extranets cannot handle continual tour churn.
- Companies like white water rafting companies have different routes on different dates – e.g. one weekend doing one river, another weekend another. Suppliers are not going to keep an extranet updated accurately

Generally what happens with extranets is

- Suppliers load high volume tours where they don't have to worry about availability changes.
- Suppliers only load 3-4 of their tours (Rather than their full set)
- Suppliers set a booking cutoff point at say 48 hours (so that any configuration issues can be fixed post booking pre trip, during office hours). Obviously useless for mobile.
- Staff at the online travel agency have to manually stay in contact with suppliers and correct data on an ongoing basis

With some suppliers accessing upto 36 extranets on a constant basis, this is not sustainable for the industry and produces sub-par data for the online travel agent.

Publish an incoming API data standard

Growing in popularity is the concept of an online travel agency publishing an incoming API format and letting suppliers develop against that.

Initially this looks ideal to all parties but there is a potential side effect:

The data standard tends to be *lowest common denominator*. i.e. better data such as provided by TourCMS will exist in API format that will not be fully consumed by the incoming API. Many fields will not be provided.

Startups and OTAs with a desire for the best data will therefore go straight to the supplier source for their data. They will create better services and the company who created the reduced capability incoming data API service will just look sadly lacking in data by comparison.

Use the suppliers outbound API

Companies such as TourCMS can provide extensive data via API using a uniform data standard for hundreds of companies.

The winning OTAs will therefore be those who are the most innovative in their use of the data, just like innovation on data has created winners in the hotel and the airline sectors.

The TourCMS model

TourCMS provides, for suppliers, an outbound API containing images, descriptions, dates, prices (including net rates), availability and bookability.

This API is documented in public: http://www.tourcms.com/support/api/mp/

Commercial contracts are between the supplier and the OTA. TourCMS is not in the booking contract, does not do customer service (for travellers) and does not touch any money. In this regard, TourCMS is like an airline GDS.

TourCMS sources product from

- Companies using TourCMS as a reservation system
- Companies using TourCMS as an extranet (e.g. as a Destination Marketing Organisation – DMO – working with suppliers in their region – through one TourCMS account)
- TourCMS has an incoming API for connecting 3rd party reservation systems to TourCMS

i.e. if an OTA would like to set up an incoming API system they can actually do one API integration with TourCMS while letting other companies update against the incoming TourCMS API.

In particular this approach is currently being implemented for a number of leading local suppliers who have their own reservation and operational system but are using TourCMS for distribution. We ensure their data is synchronized with TourCMS at all times (thus enabling mobile bookings against the TourCMS API)

The full market view

OTAs currently tend to CURATE their choice of tours & activities in destinations. (this is the opposite of their strategies for hotels and flights, where generally the goal has been to access, or AGGREGATE, all hotels and all flights on an OTA website).

This has been due to limits created by reliance on manual processes for product data acquisition (and contracting overhead).

e.g. if an OTA is working with suppliers in a medium sized city and provide 100 bookings a month to that destination. With two suppliers in that city, each may attain 50 bookings.

The OTA will not be able to support more than two suppliers (in this hypothetical example) because

- Product data still needs manual manipulation and there is no ROI on having more suppliers in that destination vs the staff time spent configuring all the tours
- If they added e.g. 10 suppliers (therefore created a great diversity of product supply), the two original suppliers themselves would lose some bookings to the new suppliers. If these suppliers (who may be currently themselves having to manage their product data via an extranet) feel that their own ROI is no longer present, they may disengage and their product data ages, causing customer service issues

Because TourCMS provides utility to all suppliers in a destination it is possible for the model to support all suppliers in this example city, even direct competitors.

With automated API based connectivity, the OTA can now feature product from e.g. 100 suppliers in a city at a viable ROI. Likewise automated connectivity ensures the suppliers can handle more connections too. They can adjust their content once and update all distribution channels immediately.

The outcome is that OTAs can, based on TourCMS technology, move to an aggregator model (similar to hotels and flights). A game changing opportunity.

The rise of P2P

We have all seen the increase in interest in P2P off the back off AirBnb and other popular services. These services are also becoming prevalent in tours & activities although none yet has achieved break through scale.

While interesting as products they have three structural issues that need to be addressed for these companies to hit scale:

- **Non-asset based tours** – The tours that the P2P providers run tend to be non asset based (e.g. they are walking tours, food tours etc). They are not involving vehicles such as white water rafts, cycles, busses etc. Due to their P2P nature it is unlikely they can move into asset based tours therefore are never going to head on compete with the entire market of local tours. They may compete for attention though.
- **Operational resiliency** – A company with 4 staff in a region, if one of them is ill, will be able to still provide the same tour service. An individual, sold via a distant marketplace, may not have local alternative backup. Ultimately operational resiliency problems are likely to cause customer service issues. Small scale local tour operators are probably the most efficient and resilient economic unit for guides, not individuals sold via marketplaces.
- **Lack of product scale** – if you have 1000 people landing a day in New York (sold by an OTA) and if you want to merchandise tours in front of those 1000, you need to have capacity for those customers to book hundreds of tours. The same merchandising space can show two tours (capacity a few hundred people) or a P2P tour (capacity two people). P2P needs more screen real estate to show the same tour capacity. [Also the P2P market needs hundreds of people in a destination, to create the larger capacity necessary for larger opportunities, which they don't have]

Therefore at this time, we don't see P2P as a viable alternative to local tour company provided tours, for large scale opportunities.

There is a model that does work for P2P which is grouping sets of individuals together around a centrally defined set of tours. E.g the marketplace says "here is the food tour – who wants to be a guide on this one" – and ten people may come forward.

This improves operational resiliency (alternative guides to run the trip if needs be) and reduces the UI design burden of letting the customer select between hundreds of alternative food tours. Perhaps we will see this type of model adopted by whoever ultimately hits scale with the P2P model.

Note: merchandising user interface space requirements of P2P could be fixed by personalisation based approaches, showing just the right tours to a known person, but technologically they are a long way from that at the moment.

Likely industry structure scenarios going forwards

So where is all this tech taking us!

We believe that the core driver of structural change will be as a result of how local tour operators introduce yield management into their businesses.

Example approaches

- **Larger last minute bookings –** you would take a 2 person booking for a tour in 3 weeks time, but not a 2 person booking for a tour leaving tomorrow (as you may need 4 people to run the tour profitably). Therefore systematically adjust the minimum booking size based on time prior to trip start and existing booking numbers for that slot
- **Kite flying –** advertise two tours and only run the one that looks like it will meet minimum viable numbers. Very popular in some destinations where there are hundreds of options but low visitor numbers.
- **Bucket pricing** – used on some tours where as a booking is received, subsequent bookings will be at another price (generally more expensive)
- **Weather based pricing –** if it is forecast to rain tomorrow afternoon, automatically reduce your prices for your outdoor tours by 20%
- **Classic special offers -** A group booking for next Wednesday has cancelled, put the tour back into general public sale but on a 20% discount to drive demand to that slot.

There is a debate to be had around whether yield management will be mainly class based (i.e. availability adjustments between several price classes) or whether price adjustments (as per hotels and flights) will be more popular.

For some tours where prices have historically only been adjusted on an annual basis, class based yield management will likely to be most applicable (initially).

Speculation

So speculating forwards from this point, if we know yield management is coming, why is that so important to the future of the sector?

Assume that for various reasons different OTAs will likely have different levels of connectivity to supplier systems. Those who are NOT direct API connected will not be getting the special offers or the shifts in availability.

Then customers may learn that they can get best opportunities by shopping around various different sites. At this point this could create an environment where meta-search providers could add value to consumers. Right today there isn't value in meta-search because with annually priced tours the benefits are slight. In a yield managed world, with differing levels of connectivity to supplier systems, meta search looks a distinct possibility for helping customers hunt the best deals from competing OTAs.

OTAs probably are not looking for meta search companies to create a layer between them and their consumers. One defensive measure to be taken now would be to integrate the supplier direct data now (including tactical pricing created by suppliers) , before the meta search companies get any traction – this will remove the business opportunity for the meta-search companies to build up services in the first place.

Where will the innovation come from?

Customer profiling - there is a specific problem with tours in that when you are travelling and booking with inbound tour operators all the time, the customer is starting from a cold start with every supplier. The supplier doesn't know who you are, what you are interested in, and whether you have any white water rafting experience.

i.e. there is no unified data store that records that because the customer liked a food tour in New York that on their visit to London they should be suggested a food tour as one of their options.

Interestingly, OTAs are one of the few companies in the sector who ARE able to maintain a multi-trip customer profile. Or it could be an extension to a social profile – e.g. Facebook, Google+ etc. – and kept directly under the control of the customer (rather than the commercial entity). E.g. a Gravatar style service.

Maybe this profile, if it existed, would also be able to feed back to hotel choice functionality hence be able to fund a viable project based on that additional, potential, return on investment.

Hotel concierges – there will be innovation in working with hotel concierges. Many of them do not want to transfer bookings to suppliers via a travel agent intermediary layer. Tech companies, like TourCMS, have an opportunity to build hotel concierge networks using technology based approaches.

Data - Additionally innovation will come from just having more data in the industry available for people to tinker with. E.g. for example on a hop on hop off bus tour, TourCMS holds the geocodes for all the bus stops. You can see a city guide app using this data to create a guide designed solely for those on the specific hop on hop off tour that tells the customer what all the sights are, in the order that the bus drives. They can also be told (when they are off the bus) where their nearest bus stop is to get back on…. Simple innovations like these are empowered by data. More data = more innovation.

ENDS