

Ordnance survey essay



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Ordnance Survey is the national mapping agency in Britain responsible for creates and updates its Geographic Information (digital and paper maps) for business, leisure, educational and administrative use. Up to 1999, it was belonging to the Government, but now its status has been changed to a Trading Fund. Thus, since the environment of Ordnance Survey has changed dramatically, if we do a Macro environmental analysis (see Appendix 1) we can see that Ordnance Survey is in a very technological dynamic environment (Stuart, 2006) as well as with a high demanded customer (Ordnance Survey, 2007) .

Due to this dynamic environment, Ordnance needs to develop strategic capabilities in order to survive and prosper in it. Therefore, next we are going to speak about the unique resources that Ordnance Survey possesses, followed by the competences needed for it and finally we will speak about the strategies that competitors can develop in order to undermine these unique resources. What are the unique resources that OS possesses? Ordnance Survey has a leading position in the Geographic information industry thanks to its unique resources. By this we mean assets that will provide to Ordnance Survey a competitive advantage, they are different from the threshold ones that are those ones that are necessary in order to survive in the industry (Johnson et al, 2005).

Thus the threshold ones are knowledge of how to collect the geographic information, surveyors, materials, technology needed. In the case of the unique ones, Ordnance Survey has mainly the intangible ones:*

- o Physical resources: o high quality and accuracy technology (Ordnance Survey, 2007),
- o TOID – TOpographic IDentifier – which is the unique identifiers assigned to

every OS MasterMap (Ordnance Survey, 2007)* Intellectual capital: o license its data (case study), o its brand, o customer database (Ordnance Survey, 2007)o reputation* Human Resources: o experience in data collection (study case)o Its surveyors (N/A, 2007)* Financial resources: o trading fund statuso funds from The National Interest Mapping Services Agreement (NIMSA)up to 2004 (NIMSA, 2004),* its shareholders – local authorities and organizations such as the Forestry Commission (Tamblyn et al, 2001) since they have an interest in the continuation of Ordnance Survey since it represents a security towards further problems that would need an accurate map. Indeed, if it was a complete private company, maybe it would invest so much in exchange of little benefit from it (NIMSA, 2004)Thus, Ordnance Survey has created an entry barrier into the Geographic information industry since new entrants will need to put some effort to undermine these resources (Porter, 1980). What competences are needed to exploit these resources? Nevertheless, these resources aren't really helpful without competences, that is, the activities and process that will improve the resources (Johnson et al, 2005).

Up to now, Ordnance Survey has been doing:* Co-specialisation, partnership (study case) , which on one hand creates dependence from the customer since it depends on Ordnance Survey in order to have competitive advantage too (Smith, 2007), and in the other hand gives to Ordnance Survey the opportunity to find ideas from other field that could be applicable in the Geographic Information one (Stuart, 2006).* Capitalizing and investing on new technologies – for instance last year Ordnance Survey improved its Master Map Integrated Transport Network, which is the only one in the British market with such accuracy (N/A, 2007). Which is more important is

that Ordnance Survey is trying hard to innovate according to the changes of the market (rapid improvement in the data collection) and to the needs of customer (for instance the necessity to know not only the location of oneself but also what kind of services one can find around there – Stuart, 2006).

Thus, for instance, IR and LIDAR which are giving the possibility to Ordnance Survey to have 3D maps (Stuart, 2006). * A better supply management (Ordnance Survey, 2007) * Being very protective with its copyright (case study).

* Off the shelf data (Ordnance Survey, 2007) * Structure of their customer database in 2 segments – on graphic based products and on digital based products – in order to better target them (Tamblyn et al, 2001) These competences are very effective and give to Ordnance Survey a Competitive Advantage since they are dynamic and customer oriented needs (Ordnance Survey, 2007; Stuart, 2006). How might a competitor undermine these resources? As it is unlikely to compete with Ordnance Survey with other maps, new entrants will enter in the industry as substitute such as satellite and aerial data. Indeed, they are substitute since, according to Porter (1980) they perform the same function as Ordnance Survey data, they represent an alternative to it but at better price, and even for free (e. g. Google maps). Moreover, according to the Product Life Cycle framework (Day, 1981) every product has a standard way of behaving in the market: from growth to decline, passing by maturity and saturation in between.

Thus, Ordnance Survey data is in its Saturation phase mainly due to the technological innovations and increase of customers' demand, so it is easier for better products to attack the capabilities of the saturated product. In the

past, competitors had been able to supplant Ordnance Survey resources by being more innovating. Hence, Ordnance Survey has been always well-known by its paper maps, however with the technology evolution; they have been replaced by electronic ones for mobiles phones, for example (Stuart, 2006). Nowadays, competitors could undermine Ordnance Survey uniqueness by providing free Geographic information, that is, without copyright, which will give to anyone the opportunity to take advantage to this kind of information. Another way of undermining Ordnance Survey is by providing better services – since it is more difficult to compete with a different geographic information database (Oxera, 1999).

Thus, Bentley is doing two-tier approach and a full enterprise solution (www.bentley.com) which is unique in the Geographic industry; Intergraph is providing a combination of special information and security service (www.intergraph.com).

With these 2 examples, we could see that competitors are being better by being complex, that is, by linking competences, which represents one of the ways of having sustainable competitive advantage (Johnson et al, 2005). In addition to that, according to Porter (1980), suppliers can not only stop supplying their customers but also do forward integration. So they represent also a threat for Ordnance Survey's resources since the suppliers can create their own data too or provide services.