8.1.2 Bottom of the Pyramid (2/2) : Electric Mobility

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As you learned in previous videos, electric mobility can be very interesting for any population in order to improve the environmental impact of mobility, reduce pollution and improve access to mobility. Mobility is one of the major current issues of the BoP. For the BoP, there are less constraints linked to existing networks. This is one of the major weaknesses linked to mobility since networks do not exist.

Which electric mobility solutions can be offered to the BoP ?

Many propositions have been made in order to improve the BoP's mobility. Among these propositions, there are subsidies and the development of new lines.
However, subsidies are not always a good solution. For instance, when 95% of the population belongs to the BoP, it is impossible to subsidize all the BoPs. In addition, in many countries, there are no funds to subsidize transports. Or the available public transportation is not physically accessible.
In that case, innovative low-cost solutions can be a solution in order to add new functionalities and reduce costs at the same time, and thus propose solutions for the BoP's mobility.
How can we offer the BoP innovative low-cost solutions ? By looking at the different existing low-cost offers on the market, two different models can be identified. The first model is the one used by airlines. Airlines have reused the aviation model, removed uninteresting functionalities, and thus managed to reduce the price for the user while only slightly reducing the value of these offers for the user.
But there are other low-cost offers. We are going to analyze innovative low-cost offers. We start from the functionalities we want to offer the user and we try to propose an offer for the lowest possible price for these functionalities.
We want to work on this kind of offer for the BoP's electric mobility, thus creating new products instead of adapting existing products. To do this, we can work on several levers.

Levers for action

New technologies New technologies are the first lever for action. As we previously said, many existing offers in the developed markets are not adapted to the BoP. Thus, there is no history to consider and we can implement new technologies that would be rejected otherwise because existing technologies must still be amortized.

New business models New business models are another lever for action. Here are a few examples : social business such as proposed by Yunus, shared or community-based models, crowdfunding- or crowdsourcing-based models, models with cross-subsidies, or even pay-per-use.

BoP as a co-producer Another lever is to include the BoP as a co-producer. The BoP can become a resource for companies but also become a consumer of these offers since they will have more resources to spend.

Creation of new functionalities and value The last lever is the creation of new functionalities and value. To do this, local constraints must be included such as the fact that many persons in the BoP cannot access running water or electricity for instance. This makes electric mobility even more interesting since the battery of an electric bicycle can be used to provide electricity to other devices in the BoP's house. Lifestyles and usages must also be taken into account. These offers will not be meant for the BoP globally but for the BoP located in a specific city. Just like classic transport offers are always adapted to the local population.

One example from a train operator, SNCF

The SNCF and the Haute-Normandie region have already worked on the inclusion of the BoP to build a mobility offer. For that case, we observed that there were vulnerable populations in this region and at the same time, there was a lack of services for the other populations.
The interesting fact about this approach was to work by including the BoPs in order to develop services they could produce and that enabled them to return to the social and economic life in the region.
The greatest challenge was not finding the service offers on which the BoPs could work. It was gathering all the interesting actors for this approach. This approach started only with the SNCF and the Haute-Normandie region but then got broader by including the whole regional ecosystem. Indeed, for this kind of co-construction, we need the local populations but also all the other actors such as companies and public authorities located in the region.

Conclusion

To conclude this video on electric mobility solutions for the BoP, remember that we have a mobility need but that several solutions exist.
There are specific issues with different constraints and opportunities in the different BoP populations we analyze. Many actors inside and outside the transportation sector must be recruited but each time we will have a different solution. So, each time a new product must be redesigned without forgetting the goals of this mobility design : better serve the BoPs and include them in the design and production.