Samsung Note 7: from a debacle to an opportunity

Introduction

Some ideas are quick to catch, others lesser. Despite simplicity, we are used to quickly catch what we quickly recognize. Because of this, every innovative idea or approach need a bit longer of narrative than an ordinary executive presentation to get the whole picture and to connect all the elements inside it.

The intuition works fast while the rational thinking proceed slowly. This introduction aims to fill the gap between where we are and where we may want to go.

Once Upon a Time

Samsung managed to became a leader into the smartphones market pushing forward their technology for years. Unexpectedly, they hit the ground with their Note 7. Wisely, they recognize the mistake and decided to stop production and collect back 2.5 millions devices world wide.

The Broken Dream

This incident may prevents Samsung's plan to get into automotive market buying Italian Magneti Marelli company. A delay in getting into such a market will produce an experience gap in the future. Such gap will make them harder to enter or compete into infotainment market, in the future.

What would be the future of 2.5M pieces of high-end electronics? Is this huge amount of silicon hiding a big opportunity? How to regain an opportunity to get into automotive infotainment market? Did you ever compared an embedded navigator versus a Waze traffic killer application running on a smartphone?

Never say Never

Battery is not any more a component under the pressure of space and size strict limitations into a conventional cars and everybody will love the idea of having a Note 7 like a dashboard car computer but nobody likes the idea of poor cockpit integration, exposed cabling and no chance to keep with them the device off the car. This would be a problem, unless cockpit smooth integration will became a reality.

Nowadays, 3D scanners are really cheap (€400 to final consumers) and easily recognised by Windows 10 net-books (tablets with keyboards, cheap and light). 3D printers are cheap (less than €3.000 for the final customers), going to be cheaper, very useful for fast prototyping and a viable solution for a limited customized production. Moreover, the 3D models could be improved by many people (crowd intelligence, wiki economics [1]).

We have a Dream

A lot of car owners face two options: to buy a newer car or to keep their phone attached to their car cockpit with a shaking sucker, powered by a floating cable with poor or no any integration with their car audio system, etc. This is the right time to change the music.

In the space left from removing Note 7 battery, it would be possible to put a DAB USB receiver and a CAN USB interface. In the space left free from the S-pen, it would be possible to bring out all the infotainment cabling and connections. Professional car audio installers and auto body shops will do the rest of the magic with the help of 3D technologies for customized cockpit add-ons.

Wait a minute

Do you really want to attach an Internet connected Android smartphone to a car CAN bus? Relax, as long as CAN USB interface is set in reading-only mode, there will be no any danger. Optoelectronic insulators will legally and practically grant that reading the CAN bus will be totally safe for everybody like car makers, installers, vendors and car users.

The old cars could be safely extended to be smart cars. No one will be able to remotely drive out of the road such cars because an optoinsulator transforms electric signals into light and back. Data will flow in one direction only and the Smartdash platform will be electrically insulated from car CAN bus connected systems. Whatever the infotainment software does, it cannot affect the car functioning.

A bit of Temperature

Automotive electronics is certified to work in extended range temperature and to be unaffected by electromagnetic interferences. So far, the use of a mobile phones is not an issue inside a car and external antennas will improve both humans safety and signals.

Moreover, independent tests verified that Samsung mobiles are those among others able to work within the widest temperature range (working between -20 and +50, storage between -40 and +70 Celsius degrees). In any cases, humans comfortably drive in a smaller temperature range (above 0 and below +40 Celsius degrees).

The Smartdash Platform

The Samsung Note 7 will take years to be obsolete for infotainment purposes and the produced items (2.5M) will lasts enough to fuel this new market and convince many to invest on it. Multiple players will join a commercial network based on a single hardware product and will create a community interested in improving cockpit integration and new infotainment solutions.

The creation of a dedicated application market, a knowledge base about car cockpit customization, CAN integration and installation manuals will lead Samsung to collect a lot of knowledge about a lot of car models and car makers, even in the case that authorized branded car dealer networks will decide to not initially join this opportunity.

On the other side, used car owners and used car dealers will have the opportunity to upgrade their cars choosing a single brand product integrated by many professionals and among many options and gadgets.

A bit of Business

Could Samsung be interested in developing a Smartdash platform based on refurbished Note 7? Is their interest in automotive and car infotainment systems strong enough for stepping in despite Note 7 losses? It depends on other options, they may have.

Unbranding and reselling the hardware may drive them to face a cheaper smartphone clone competitor in their more profitable market segment. Safe and ecological disposal will be an extra cost and recycling will rescue only a little part of consumed resources. Refactoring Note 7 and storing them will be an extra cost, as well. This last one option has a good chance to let Samsung to enter into a new market with an innovative approach.

Undoubtedly, the car parts market is not as fast as the consumer electronics mass market. So far, pushing a huge budget on it, will not accelerate the sales proportionally. The budget is necessarily the most important KPI for starting a new business. Samsung has 2.5M of returning but gorgeous devices to make the difference. A sunk cost, otherwise.

An open community approach could lower significantly the investment on the Smartdash platform and it will be able to collect much more knowledge and new ideas because innovation happens elsewhere [2]. This approach is the only one could face the challenge to investigate the huge number of different car models without the need to rely on automotive producers only. Once a car model will be successfully included into Knowledge Base Centre (KBC), everyone else owning the same car could do the same upgrade with much less effort and may improve the current solution, as well.

Mass consumers may not be happy to mod their cars but a lot of people are significantly involved in car modding for years. A Knowledge Base Centre and the Smartdash platform could bring the infotainment car modding out of hobbysm and drive it to a wider segment of consumers. For car modders this initiative will constitute an extra incoming to fuel their own passion about car modding: the same pleasure but get paid, instead of spending for it. Let them do what they dream to do.

An investment plan will be necessary to ignite and sustain the Smartdash platform and community. As less start-up resources will be deployed as long the warehouse costs need to be planned. The right balance between these two dynamics could be initially estimated and quarterly managed: the supporting investments versus adoption curve speed.

How to Collect the Budget

How to collect the budget to ignite the Smartdash platform? Electronics consumer mass market is fast and appreciate new products. Technology evolves and products as well. After a while technology evolved enough to be able to reinvent those product were a icon in the past. Do you remember ZX Spectrum?

Take a Deeper Look

Are you interested in and wonder how facts may fit in this picture? Download this PDF for more information.

- http://www.roberto.foglietta.name/pub/smartdash-proposal-rev055.pdf

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Notes

[1] WIKINOMICS: How Mass Collaboration Changes Everything.

The knowledge, resources and computing power of billions of people are self-organizing into a massive, new collective force. Interconnected and orchestrated via blogs, wikis, chat rooms, peer-to-peer networks, and personal broadcasting, the web is being reinvented to provide the first global platform for collaboration in history. − *Anthony D. Williams, Don Tapscott, Atlantic Books Ltd, March 1st, 2011, 300 pages.*

[2] INNOVATION HAPPENS ELSEWHERE: Open Source as Business Strategy

It's a plain fact: regardless of how smart, creative, and innovative your organization is, there are more smart, creative, and innovative people outside your organization than inside. Open source offers the possibility of bringing more innovation into your business by building a creative community that reaches beyond the barriers of the business. The key is developing a web-driven community where new types of collaboration and creativity can flourish. Since 1998 Ron Goldman and Richard Gabriel have been helping groups at Sun Microsystems understand open source and advising them on how to build successful communities around open source projects. In this book

the authors present lessons learned from their own experiences with open source, as well as those from other well-known projects such as Linux, Apache, and Mozilla. − *Ron Goldman, Richard P. Gabriel, Morgan Kaufmann, April 25th, 2005, 424 pages.*