Neo900 Crowdfunding

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The financial requirements of the Neo900 project cannot be met with the number of order we can expect based on the funding received so far. While this could be compensated by raising the price, such an increase would move prices to levels that are likely to be considered prohibitively high by supporters.

We therefore consider increasing the number of orders by reaching new supporters through a crowdfunding campaign. This will also provide an opportunity to increase safety margins by setting a higher sales price without affecting the final price for existing supporters.

This document consists of two parts: the first part considers a possible (new) crowdfunding campaign with the goal of increasing the number of orders and raising new capital. For this, it examines the characteristics such a campaign would have and what constraints the most common platforms impose. The second part explores the marketing side of such a campaign, i.e., the interaction with supporters.

1 Crowdfunding platforms

This section discusses financial and operational aspects of a new crowdfunding campaign. The principal result expected from such a campaign would be to reach potential supporters who are currently unaware of the project, with a major increase of the number of devices ordered being the ultimate goal.

We first look at the characteristics of various crowdfunding platforms. Specifically, we look at the two market leaders Kickstarter and Indiegogo, and of the surprisingly many platforms available in and around Germany, we consider the one that is said to be the largest, Startnext.

1.1 Terminology

Different platforms use slightly different terminology for the same concepts. We will mainly use Kickstarter terminology in the following sections, also to avoid confusion with the different style of crowdfunding that was used for the first campaign of the Neo900 project.

http://www.crowdfunding.de/plattformen/

The following table lists the terminology employed by Kickstarter, Indiegogo, and Neo900. Words shown in *italics* indicate that no fixed term exists for the respective concept.

Neo900	Kickstarter	Indiegogo	Startnext	Description
Neo 900 UG	Creator	Campaign owner	Starter	Person or organization
D. J.	D 1	.	ъ .	running a campaign.
Product	Reward	Perk	Reward	Product the project
				promises to produce and
				to deliver to the backer.
Supporter	Backer	Contributor	Supporter	Person or organization
				funding the production of
				one or more devices.
(Down-)payment	Pledge	Contribution	Payment	Advance payment made to
				finance development and
				manufacturing of the prod-
				uct.

1.2 Campaign threshold

Platforms like Kickstarter and Startnext only pay out campaign funds if a threshold set at the beginning of the campaign (the "funding goal") is reached. Otherwise, the funds are returned in full to the backers. The threshold is intended to establish the minimum funds that are needed to make the project economically feasible.

Other platforms, e.g., Indiegogo, offer the option of keeping the funds pledged by the backers even if the threshold is not reached. Indiegogo call this "flexible funding".

The campaign threshold should be calculated such that, when crossing it, there is a high degree of certainty about the commercial viability of the project. It should not be set below the project's actual financing needs.

1.3 Payment options

Kickstarter² accepts mainly credit cards.³ The only exception is that German backers can pledge to a German project via SEPA debit. However, there is an EUR 250 limit on such pledges, making them unsuitable for the kind of amounts the Neo900 project requires. (Otherwise, the limit for Germany-based projects is EUR 7000.) Donations or payment for smaller (symbolic) perks could be accepted this way, though.

In the past, Kickstarter used Amazon for payments but have since switched to Stripe, which only operate with credit cards.⁴

https://www.kickstarter.com/help/faq/backer+questions

³ Kickstarter also mention "debit cards" but this seems to refer to some form of prepaid credit card.

http://techcrunch.com/2015/01/06/kickstarter-drops-amazon-payments-for-stripe/

Indiegogo offers credit cards, Apple Pay, and PayPal for flexible funding campaigns.⁵ For fixed funding campaigns, only PayPal is available. Payments received through credit cards or Apple Pay are credited to a bank account while payments though PayPal can only be credited to a PayPal account. Furthermore, there are numerous regional restrictions on PayPal.⁶

The Indiegogo help system is poorly structured and hard to navigate. Some information may have been overlooked.

Startnext offers direct debit (apparently this refers to card-based debit, not SEPA debit), credit card, and SOFORT banking.⁷ Also "advance payment" is available, but only for goods that are offered in unlimited quantities, i.e., intangible goods. Apparently, SEPA debit is not among the options offered.

1.4 Parallel payment channels

If the payment options offered by the selected crowdfunding platform do not appeal to a large number of prospective supporters, the project could accept payment through parallel channels, e.g., by SWIFT/SEPA transfer.

While none of the major platforms seem to have prohibitions against this, funds received outside the crowdfunding platform do not count against the funding goal and the campaign could therefore fail to meet its funding goal even if the total amount offered would exceed that goal.

There may be several ways to avoid this problem: Indiegogo suggest to simply pay any funds received through parallel channels to the campaign.⁸ This of course means that the usual fees are applied to these funds.

Startnext suggest to either avoid parallel channels or to apply for an exception and have such funds "manually" counted towards the goal. 9

Kickstarter appear to have no specific advice and even disallow pledging by campaign creators, which would seem to exclude adding funds received elsewhere to the campaign. However, it still seems to be possible to avoid this restriction by involving a trusted third party. Also in this case, the standard fees would be applied on those funds.

An alternative approach may be to set the funding goal on the crowdfunding platform lower than needed and to cancel the campaign if it should fail to reach the required total amount. Kickstarter explicitly allow cancellation in case of difficulties, ¹⁰ which suggests that they should also find such a plan acceptable. Startnext requires special justification to cancel a project that has started to accept funding. ¹¹ Indiegogo only mention the option of deleting a campaign that has not raised

 $^{^{5}}$ https://support.indiegogo.com/hc/en-us/articles/204469638-Create-A-Campaign-Step-by-Step-

⁶ https://support.indiegogo.com/hc/en-us/articles/526426-International-PayPal-Restrictions

https://www.startnext.com/help/FAQ.html#q85

https://support.indiegogo.com/hc/en-us/articles/526396-How-to-Add-Offline-Contributions-to-Your-Campaign

https://www.startnext.com/help/FAQ.html#q133

https://www.kickstarter.com/help/faq/creator+questions#faq_41790

https://www.startnext.com/help/FAQ.html#q95

funds, but there seems to be no way to cancel a campaign once started if any amount of backing has been received.

One risk with such an approach is that, when setting a maximum number of orders in the crowd-funding campaign, both under- and overbooking may occur if parallel channels are accepted.¹²

In any case, it would be advisable to discuss such a plan beforehand with the crowdfunding platform operator, so that no misunderstandings will arise and that the details of the approach can be openly communicated to the community, if necessary.

1.5 Fees and charges

Kickstarter charges a fee of 5% on the funds raised, with the payment processor charging another 3%.¹³ Indiegogo also charge 5% on all funds,¹⁴ regardless of whether the campaign uses fixed or flexible funding.¹⁵

Startnext charges no specific fee but accepts a "voluntary commission". ¹⁶ The payment processors of Startnext all receive 4%.

In all cases, no fees are charged if a campaign does not meet its funding goal and therefore receives no money.

1.6 Quantity discounts

The idea of lowering the price if the total number of orders is sufficiently large to justify a quantity discount has been brought up. None of the mentioned platforms seem to support modification of prices once a perk has been chosen.¹⁷ Startnext seem to allow no changes at all after a campaign has been started, while Kickstarter and Indiegogo allow the addition of new perks.

One way to implement such quantity discounts would therefore be to create a new perk for the same product but with a lower price, then ask all supporters who have already pledged at the original price to withdraw their pledge, and pledge instead for the perk with the reduced price.

Kickstarter have confirmed that this would be allowable. However, it seems very awkward and may upset supporters who find out about the discount too late. Also, having the same product under multiple perks would bypass the maximum order limit and could therefore lead to overbooking.

Overbooking occurs when accepting pledges for more rewards than can be provided. Under-booking occurs when stopping to accept pledges at some threshold while it would be possible to provide additional rewards.

https://www.kickstarter.com/help/fees?country=DE

https://support.indiegogo.com/hc/en-us/articles/206212618-Details-on-Fees

In the past, Indiegogo charged a higher rate for flexible funding campaigns not meeting their funding goal, but have unified the fees since: https://support.indiegogo.com/hc/en-us/articles/206547447-Timing-for-Fee-Changes

https://www.startnext.com/help/fees.html

Kickstarter explicitly confirmed this and Startnext seem to allow no changes at all once a campaign is "live". The situation is less clear in the case of Indiegogo, which allow substituting perks that have already been claimed with new ones. However, it is not clear whether this new perk could have a different price. https://support.indiegogo.com/hc/en-us/articles/203444357-How-can-I-manage-my-Perk-offerings-

Furthermore, given that the difference between the minimum number of orders required for financial viability and the maximum number of complete devices that can be produced is rather small, not much would be gained by such a discount scheme.

1.7 Differential pricing

If assuming overall fees and deductions of 8% (in the case of Startnext this would mean a voluntary commission of 4%) on the total amount received, the crowdfunding price should be at least 8.7% that of the actual cost.

One way to increase the average price without changing the estimated price announced so far (thus upsetting the existing supporters of the project) would be to set a higher price for the crowdfunding campaign. This would be justified by earlier supporters having shared more risk and having committed (part of) their money for a much longer time.

For example, a complete device currently has an estimated price of EUR 990 + 130 = 1120. With crowdfunding fees, this would become EUR 1218 plus taxes. Adding a moderate surcharge of 15.0% would yield a crowdfunding price of EUR 1400 plus taxes.

If a parallel payment channel is desired, the equivalent price without fees would be EUR 1288.

The following table shows calculations of overall cost and income for various numbers of devices to build. Two variants of the safety margin are calculated, one for the scenario that the funds held by PayPal become available early enough to be useful for the execution of the project, and one for these funds remaining unavailable.

Total	Funding goal Income (kEUR)		JR)	Project cost	Safety margin	
devices	(kEUR)	Crowdfunding	Total	(kEUR)	PP	No PP
600	392	361	705	711	-0.7%	-6.1%
700	532	490	834	784	6.4%	1.6%
800	672	619	963	858	12.3%	7.9%
900	812	748	1092	931	17.3%	13.2%
1000	952	876	1221	1005	21.5%	17.7%

Note: none of the above numbers include taxes or shipping charges. The real funding goal may therefore be higher, depending on how taxes and shipping are handled in the price calculation.

1.8 Taxes and shipping

Crowdfunding prices are final prices that include shipping and in some cases taxes. Information regarding the handling of such costs is surprisingly spotty. Kickstarter¹⁸ and Indiegogo¹⁹ seem to have the most developed systems in this regard, with the possibility of setting different shipping costs depending on the backer's country. This shipping cost is added to the price of the reward

https://www.kickstarter.com/blog/weve-made-shipping-rewards-a-lot-more-flexible

https://support.indiegogo.com/hc/en-us/articles/205784868-How-do-I-add-shipping-on-the-perks-I-create-

and does not count towards the funding goal. No corresponding information could be found for Startnext.

All three platforms mention taxes only in passing, at best pointing out that they need to be taken care of and that campaign starters should talk to their accountants for details. None seem to offer automatic tax calculations or similar.

One way to handle taxes would be to offer an EU and a non-EU variant of the product. (Or to use finer granularity, if desired.) On platforms where availability of perks can be restricted by country, the respective choice could also be protected against supporters incorrectly selecting a perk that applies to a different region.

One issue with this approach is that taxes would count towards the funding goal. The funding goal would therefore have to be adjusted based on a best estimate of the expected distribution of taxed and non-taxed rewards. This in turn would create a – hopefully small – risk of missing the funding goal despite receiving enough orders, in case of over-estimating the share of orders that includes tax. The opposite risk, reaching the funding goal despite not receiving enough orders, in case a disproportionate number of orders requiring taxing, should be covered by the overall safety margin included in the campaign.

Another possibility would be to add the taxes to the country-specific cost. Given that the tax cost is considerably larger than any shipping fees, this should be coordinated with the platform providers, and may need to be communicated carefully to prospective supporters.

For shipment within the EU, also WEEE²⁰ and possibly further regulations that affect the sales price need to be considered.

1.9 Quantity limitations

All platforms support quantity limitations for individual perks. However, it does not seem to be possible to share a limitation among multiple rewards.

This means that offering different rewards with regional prices, as discussed in section 1.8, or with device variations (e.g., modern type), may defeat the purpose of such quantity limitations.

Likewise, use of multiple payment channels as discussed in section 1.4 would cause a similar problem.

One possibility for avoiding such issues would be by starting with low quantity limits and raising them during the campaign. Although none of the platforms seem to support changing quantity limits during a campaign (though this would need confirmation), at least Kickstarter and Indiegogo support the addition of new rewards, which could be used to extend the limits, even if this would be slightly messy.

1.10 Campaign type

Kickstarter and Startnext only offer all-or-nothing campaigns while Indiegogo offers campaigns where the contributions are kept regardless of whether the funding goal is reached or not.

Article about survival despite of WEEE: http://www.mikrocontroller.net/articles/WEEE-Anmeldung

However, Indiegogo point out that owners of campaigns using flexible funding are still obliged to provide all that has been promised as a reward, even if the funding goal is not reached. Given that, in the case of Neo900, a strong causal relationship exists between reaching the funding goal and economical feasibility of the project, there seems to be no useful role for flexible funding in the case of the Neo900 project.

1.11 Conclusion

All three platforms considered in this brief overview offer similar services. Kickstarter has the benefit of having well-known processes and easy access to a large body of experience with the platform. Kickstarter have had very large campaigns, and are known to be relaxed and permissive about how campaigns are being run.

Indiegogo is quite similar to Kickstarter, with the additional features of accepting PayPal and being able to offer flexible funding, and the restriction of only accepting PayPal in the case of fixed funding.

Startnext offer payment options attractive for the European market while a campaign with the competitors may need to be accompanied by accepting payments through the Neo900 shop, with all the complications that may result from this. However, it is unclear whether Startnext can handle pricing specific to countries or regions. Startnext may also be uncomfortable with the size a Neo900 campaign would have.

EU-friendly payment options being a major benefit for Startnext, it may make sense to approach them, present the project and its concerns, and ask if they would be comfortable with running this campaign.

If Startnext should not be available, the next best choice would be Kickstarter. Given that Kickstarter only accept credit cards, it may be desirable to open a parallel channel for supporters who have no card or who do not wish to use their credit card.

Choosing Startnext and Kickstarter, which both only offer all-or-nothing campaigns, would also help to reduce the prominence of the inconvenient question of what happens with the project in case of the campaign not reaching its funding goal.

2 Campaign marketing

With crowdfunding campaigns, marketing the idea behind a project is often more important than the technical merits of the product. This section discusses some of these aspects and also considers possible reward structures.

The reader should be advised that the author is no expert on marketing, and that someone with actual experience in the field should be approached for additional feedback.

2.1 Target audience

The Neo900 project has so far been marketed almost exclusively to "insiders" with strong ties to the N900 and Maemo community. A campaign on one of the major crowdfunding platforms will change the exposure dramatically.

On the upside, the project should be able to reach a considerably larger group of people and a more varied demographic.

On the downside, this will cause a strong shift towards "regular" consumers, many of which may be attracted by some specific property of the product and may have only a superficial understanding of the rest.

2.2 Presentation

The first impression created by the presentation on the campaign page is generally considered to play a key role in convincing backers to support a project.

Below, we discuss some key aspects of the presentation. This should perhaps also be presented to the community (after an introduction of the campaign idea and an explanation of the circumstances), to receive more feedback.

2.2.1 Marketing message

The marketing message should establish the unique characteristics of the product and instill the desire of owning the product in the prospective supporter.

Some of the unique characteristics that have been emphasized so far appeal mainly to the existing N900 community and may not be convincing for the broader audience this campaign would address. Other characteristics, such as the counter-intelligence features, would have broader appeal, though, and should be adequately developed.²¹

The level of technicality would depend on how wide an audience the campaign wishes to appeal to. E.g., it may be preferable to have fewer backers than a large number that does not understand the product or its development process.

²¹ Perhaps some catchy picture of this kind could be added: http://www.ismycellphonebugged.com/Test%20for% 20Leaks.html

2.2.2 Campaign video

It is standard practice for crowdfunding campaigns to have a presentation video, and even sites where a video is optional indicate that projects that have a video have a much greater chance of meeting their funding goal than those that don't.²² Elements that are often found in such videos include:

Creator The campaign creator or creators introduce themselves and present their vision, a prototype, etc., and make the plea for support.

Team The entire team is shown or individual team members present their area of specialization.

Product The product and its features are explained or demonstrated.

Prototypes Existing prototypes, drafts, or samples are presented.

Use story The product (or a prototype or mock-up) is shown in scenarios that highlight the product's benefits.

The most important elements are the campaign runner²³ and the product presentation. Where actual prototypes are missing, drawings or short animated sequences can be an acceptable substitute.

Production values are apparently of lesser importance and readily available tools and settings should therefore be sufficient.

2.2.3 Static content

Image or text content usually repeats and expands on the key points of the video, and adds:

- possibly minor details that had no place in the video,
- a production and delivery schedule,
- assurances and warnings about the riskiness of life in general and crowdfunding in particular, and
- questions that may have come up or that are anticipated.

Given that producing such material has proven to require considerable effort, as much of the existing presentation material as possible should be reused, especially when it comes to text fragments and specifications.

2.3 Rewards

There are two considerations regarding rewards: the core product offering, and rewards below or above that offering.

http://www.forbes.com/sites/neilstclair/2014/11/27/how-to-make-a-crowdfunding-video-that-works/

https://www.fracturedatlas.org/site/blog/2015/03/02/6-tips-for-creating-a-successful-crowdfunding-video/points out that "crowdfunding celebrates the individual".

If we assume that Neo900 has already reached most potential supporters interested in the NeoN upgrade kit, then it would make sense to keep the campaign simple by offering only the complete Neo900 device as core product.

If the modem variants affect the price, this would translate to different rewards. Alternatively, there could be one unique price and modem variants could be selected later. At least Kickstarter offer a questionnaire mechanism for such feature selections.²⁴

Rewards below the core product can be used to add funds in exchange for an inexpensive reward, e.g., a t-shirt or an honorable mention. There should be at least one "honorable mention" item with a zero-cost reward and a low price. Kickstarter and Indiegogo support pledging more than the asked price and such items can therefore be used as a means of collecting donations. It is not clear whether Startnext support paying more than the asking price for a reward, but they seem to have a separate donation system for such purposes.

Rewards above the core product fall into two categories: bundles that combine multiple products, usually with some discount, and extravagant additions (fancy color, dinner with the team, etc.) for which a premium is charged for supporters who wish to act in a sponsor role.

One such extravagance that could be easily supported is to include initials or short texts (names, etc.) in some otherwise unused areas of the PCB.

2.4 Stretch goals

Stretch goals are enhancements that are added to the product if the campaign reaches certain levels of support beyond the funding goals. The basic idea behind stretch goals is to provide incentives for supporters of projects that have already reached their funding goal to engage in peer marketing to attract more supporters, and benefit from this themselves through the improvements that are then made to the reward.

In the case of Neo900, it would seem difficult to do this, since already the specifications promised in the original campaign are at the limit of what may be achieved, leaving little room for extras.

Furthermore, the small difference between the minimum funding goal that ensures economical viability and the maximum number of devices that can be made does not leave significant room for stretch goals.

2.5 Campaign duration

According to Kickstarter statistics, ²⁵ projects rarely benefit from long campaigns.

One month should be sufficient time for the word to spread and people to ask questions they may have before deciding to support the project.

The questionnaire can be generated after the campaign has succeeded and all backers are asked to complete the questionnaire. Kickstarter allow only one such questionnaire to be generated per campaign.

 $^{^{25}}$ http://www.kickstarter.com/blog/shortening-the-maximum-project-length

Given the large cost, there may be a small number of people who need more time, but they can always be accommodated through the shop.

2.6 Effect on existing supporters

Starting the campaign will implicitly set a final price. However, it should be made clear that the final price for existing supporters depends on the outcome of the campaign.

Furthermore, if the crowdfunding campaign uses a higher price, the Neo900 shop should stop accepting partial down-payments from new customers after the campaign is launched, to prevent prospective supporters from trying to dodge the higher price this way.

The different price could be explained as a "loyalty bonus" for the original supporters.

2.7 Publicity

A campaign is likely to draw attention, maybe even by the press. This could lead to new contacts with potential investors or possibly companies that may wish to play a role in the project.

Given that, no matter how well the campaign goes, it is clear that project finances will be tight, it is advisable to pay attention to such opportunities and to follow up on those that may look promising in a timely manner.

2.7.1 Conclusion

Given our collective lack of first-hand experience with this type of "open" crowdfunding campaign and the inherently complex structure of the project, it seems advisable to try to streamline the campaign and to avoid gaudy features that require a lot of time and effort but add little value.

If possible, feedback from people with experience in running such campaigns should be sought, especially in order to create and to deliver a convincing marketing message.