

# Nokit

The invisible drum kit

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## To set the rhythm for thousands of people someday!

Perhaps your kid wants a drum kit? Or you had a band in the past and want to start jamming again?

We designed Nokit.

And in fact, Nokit is more than the best virtual drum kit for today. More than a tool to generate other, unusual audio effects in real time, and a wireless controller with 1 ms response (0.001 of a second).

The step was planned from the very beginning, 4 years ago.

This is the first step to a new section in the music industry - non-linear music.

## Product

### Spheres

- Musical instruments
- Education (rhythm, playing drums)
- Games, entertainment

### Business model

- Selling electronic devices
- After-sales of lessons, drumless tracks, notes

### The essence of the project

Alternative to the drum set. Cheaper, more compact, advantages for training.

With wireless motion sensors on your hands and feet, our proprietary software detects hits and gestures, then plays the drum or cymbal sound. You play virtual drums with the sensors in your hand or attach them to a drumstick and play with a practice pads.

## The essence of the problem

Drum kits are huge, noisy, and expensive.

## Target audience segments

- Children and adults who want to learn how to play the percussion instrument.
- Musicians, unable to buy and place a drum set at their workplace.

## Usecases

- The child is studying at a music school. To train at home he use Nokit.
- The musician writes music and use Nokit to compose drum parts.
- The amateur drummer experiment or learn new complex rhythms during a break at work.
- Progressive musician use Nokit to create unusual sounds, timbres and melodies.

## Is the business model tested?

The first sales can not be done. It is possible to make 10 kits manually in Moscow, to test the response.

## What is done and work?

- Virtual kit working prototype: wireless sensors and usb-host that meets the requirements (1 ms delay and close to zero jitter). 4 generations of prototypes were made.
- Soft, algorithms to recognize gestures and strokes. Drum kit sounds emulation.

## What should be done

- Ready for production final prototype
- Production process, Manufacturer
- End-user soft (simplify UI, more settings)
- Marketing

## More



[Story on Medium](#)

# Economy and Demand

Is the demand confirmed?

- Successful crowdfunding campaigns on Kickstarter: Freedrum and Drumistic. Despite the minuses of their product, they collected \$622,877 and \$103,070 (more than 4 thousand orders and 655 orders), respectively.
- Did not collect pre-orders for Nokit. No mentions of Nokit in the press.

## Expenses

\$900 per month

Outsource software engineer, designer and radio engineer work piecework.

## Expenses structure

- Outsource engineers
- Radio Components, PCBs

## Financing of the project and the team now

Personal resources of the founder

# Team

## Alan Verne - CEO, Founder

Finished "Software Engineering" in Bauman Moscow State Technical University in 2014.

First places in competitions of autonomous robots and programming contests (2006-2010).

Electronic musician between 2010 and 2014 in the band and by myself.

## Experience

- Any Tide - precise hourly tide forecast. MVP ([Bali tide widget](#)) - over 1k users daily. No monetisation. Development is frozen.
- Any Surf - surf weather. Alternative to magicseaweed.com. MVP ([Bali surf - designing hybrid UI](#)) is used by 100 users daily. Frozen.

What led the founder to decide to do exactly this project? Why in this area?

Competence and experience. Knowledge of drummers problems. Positive feedback on the idea of the product. Interest in developing new, solving problems, and making the world better.

I think about adaptive music since 2010, search for a new ways of making music and how to use it.

## Invested in Nokit

\$6000 and 300 working hours

## How long does the founder work on the project?

3 years with 2 pauses

## Works in another company

Role            Product Designer, Developer in [Alphaopen](#) (Automation, Smart house)  
Involvement   50% of total working time, can reduce

## Eugeniy Ulyanov - Market

Two higher educations: law and psychology, candidate in psychology of advertising

## Experience

- The owner of [hakk.ru](#) marketing agency
- Worked with brands: Neste oil, Silja Line, Valio, Натр Продукт
- Marketing consultant in Embria Ventures, on the start-ups promotion questions

## Startups launch experience

- Domoby - Mobile applications constructor (closed)
- Adalitycs - Mobile advertising analytics (sold)
- Appness - AI platform for purchasing on facebook (works)

## Gennady - Radio Engineer

Finished "Electronics and laser technology" in Bauman Moscow State Technical University in 2001. 5 month in Nokit team. Designed the last prototype.

## Experience

More than a hundred projects, one of the largest - the development of a hardware key for encrypted data in the cloud access (30,000 copies)

## Works in another company

Role            Developer in [Yandex](#)  
Teacher in [Bauman MSTU](#) of "Digital signal processing" and "Digital devices and microprocessors"  
Involvement   80% of total working time, can reduce

## Alexey Mogilnikov - Software Engineer

Finished "Software Engineering" in Bauman Moscow State Technical University in 2014.  
Made 20% of Nokit's software.

### Experience

4 years.

### Works in another company

Role                Software Engineer, C++ in [RTI](#)  
Involvement    70% of total working time, ready to leave PTI to work on Nokit

## Mary, Valery - Designer and Illustrator

### Need to complete the team

Person with experience in manufacturing in China, logistics, sales.

## Concurrents

### How is the problem solved now?

- Buying of the electronic drum kit
- Buying of acoustic drums and searching for the garage to place it.
- Renting a rehearsal room
- Training at home with a rubber practice pad
- Midi-keyboards, graphical editor to compose drum lines

### Direct competitors

There is no competitors that satisfy the requirements of delays, jitter, compactness, and cheapness.

### Indirect competitors

Small acoustic drum kits (Hipgig Rick Marotta Signature (HG6T41ARM),  
Club Jordan Cocktail Drum System (CD-15CJ))

Price: \$200 - \$550 - \$900

Strengths        Natural sound, natural drumstick rebound.

Weaknesses    Loud, bulky

## Electronic drum pads

	Price: \$70 - \$220 - \$450
Strengths	Real physical pads
Weaknesses	Несоответствие настоящему расположению перкуссии, size

## Electronic drum kits

Strengths	Real physical pads Real positions of pads
Weaknesses	Bulky, not silent completely, price (\$450 - \$850 - \$3000)

## Virtual drums: Aerodrums

Strengths	Compact, precise, price: \$230 Known on the market, have a good feedback
Weaknesses	8 ms latency Requirements for environmental conditions: lighting, background, correct position of the player

## Virtual drums: Freedrums и Drumistic. Successfully funded on Kickstarter (\$600k and \$100k)

	Price: \$200 and \$250
Strengths	Compatible with phones (but with big overall latency)
Weaknesses	14 ms sensors latency Did not delivered to sponsors Did not recorded videos with professional drummers playing or jamming complicated rhythms

## Renting a rehearsal room

Strengths	Real acoustic drum kit, soundproofing
Weaknesses	Not at home (You need to go, book in advance, carry things with you) Price (In Moscow: \$9 - \$22 for 3 hours + to rent a set of plates \$4, \$90 - \$220 per month (\$100 - \$300 per month))

## Practice pad (rubber Pad)

	Suitable for training the right kick and bounce Learning simple rhythms
Strengths	Cheap (\$20 - \$80)
Weaknesses	No drums sound Can't play complex rhythms Boring, requires perseverance

## Why Nokit is better?

- The only one virtual drum kit, that provides comfortable delay between hit and sound.
- Additional opportunities when learning rhythms: haptic feedback, LEDs, trajectory and rebound correctness analysis.
- Alternative usage - complex sound effects generation. Shakers, termenvox modeling.

## Market

### Segments

#### Drummers and people who want to become them

22 - 7400 purchases of Nokit per month.

- Drummers in USA (324 mil \* 1% = 3.2 mil), drummers in the world (7,432 mil \* 1% = 74 mil)
- With people who want to become drummers - 2-9%  
222 mil - 740 mil
- One of the thousand (0.1%) want and can buy Nokit with a \$300 price.  
222,000 - 740,000
- If during the month 0.01-1% of them will buy Nokit.  
22 - 7400 purchases of Nokit per month.

#### Other musicians

2-740 purchases in month.

#### Motion tracking for VR

We can get 0.1-10% of the motion tracking market for VR.

### How to scale

- Use of developments in high-speed transmission of accelerometer measurements and gyroscope to track movements for VR.
- Adaptive music player for sportsmans.

### Resources we need to start selling

- Production of 1000 pcs (\$60000)
- Team (CEO, Production Director, Marketing Director, Radio Engineer, 2 Software Engineers) - \$12000 per month
- Website, marketing: community creation - \$35000

# Promotion

Two types of promotion Brand Awareness and Performance marketing.

At the early stages - presale, focus on sales through our own website. Line-up of the Performance marketing system.

With increasing of product recognizability - shift focus to the brand recognition. Sales through reseller networks, for wholesale deliveries.

## Online marketing channel

### Website

Cost	\$6000
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Website and apps (Android, iOS) with drumless tracks and lessons for drummers with Nokit support

Cost	\$18000
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### Youtube

- Purchasing reviews from entertainment bloggers, and drummers  
Review cost \$0-8000 + \$60 Nokit + shipment  
Volume Up to 2 mil subscribers. 10,000-10,000,000 video views  
Efficiency This is the target audience.
- Targeted advertising on music channels on youtube, through adwords.

### Blogs, news, websites

	ultimate-guitar.com
Volume	62 mil users per month

### Facebook ads

SMM, work with the community

## Offline marketing channel

### Musical instruments stores

### Rehearsal points (try to play)

One point cost	\$60 Nokit + shipment
One point volume	5 drummers, 40 musicians (daily)



	30 drummers, 250 musicians (monthly)
Efficiency	This is the target audience

## Master classes

In music schools or at events