

# Health Care systems using machine learning algorithms

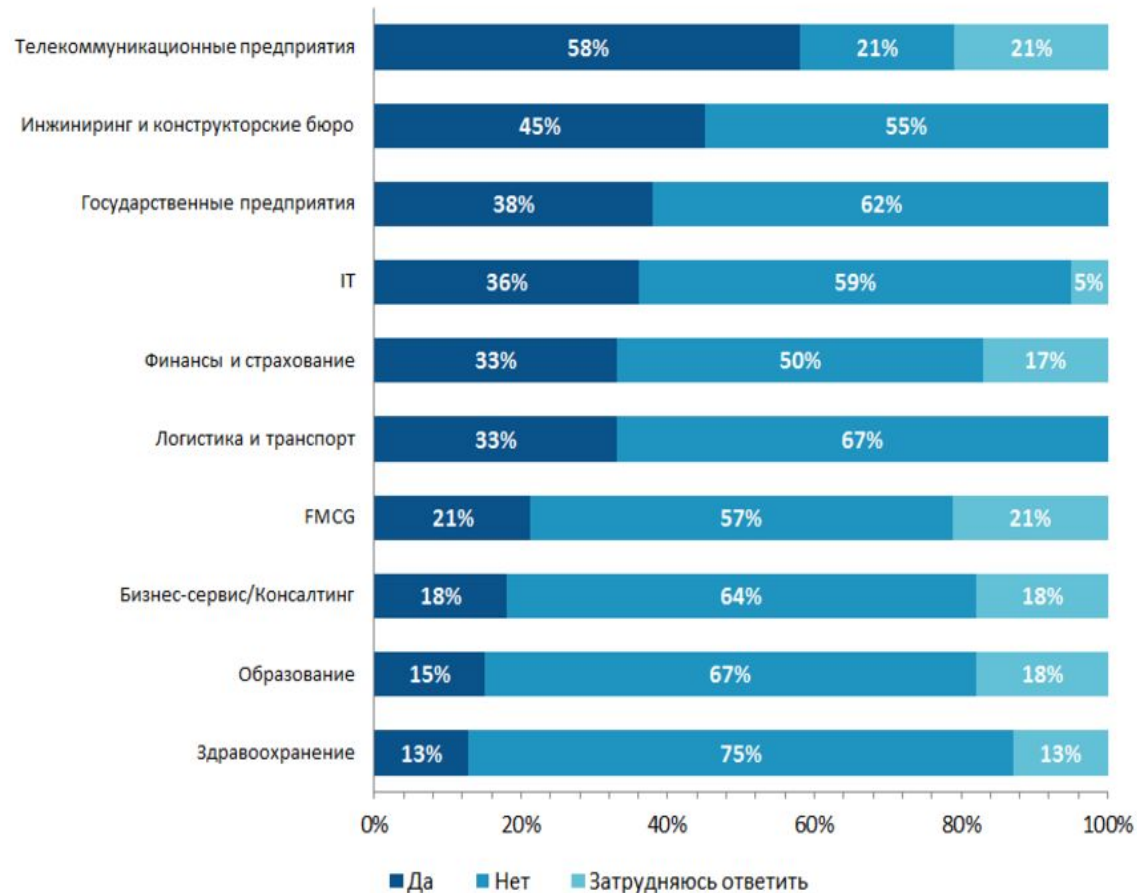
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# General description of the project



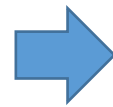
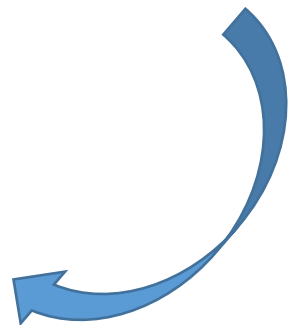
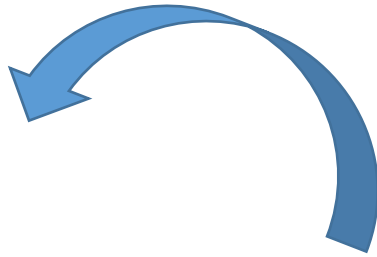
Источник: Tech Pro Research

**Goal:** Development of client-server application which is intended for health care.

**Objectives:** Create a MVP of project as client-server application on Django and IOS platform.

**The societal vision:** Creation of a application that will help in monitoring of well-being a person and give a predict value about personal data.

**Solved problems:** Storage, access and visualization of medical data, and analysis and design of expert recommendation systems for decision making using machine learning algorithms and time series analysis.



# HealthAgent



## Human resource:

### -Team member:

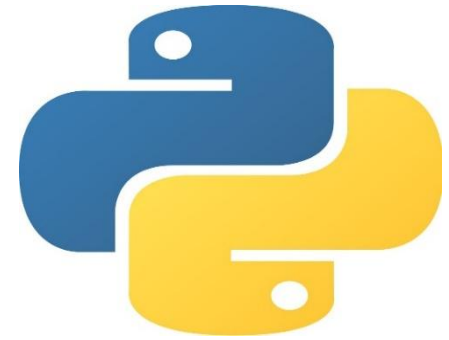
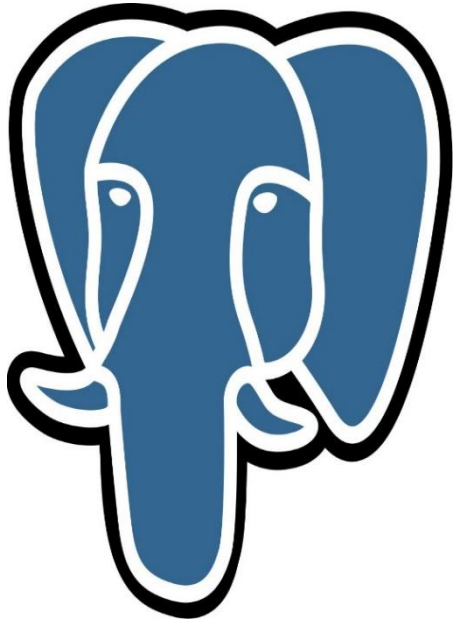
Kazhenbayeva Gulnaz (IOS-developer)

Alimbayeva Zarina (back-end developer)

### -mentors:

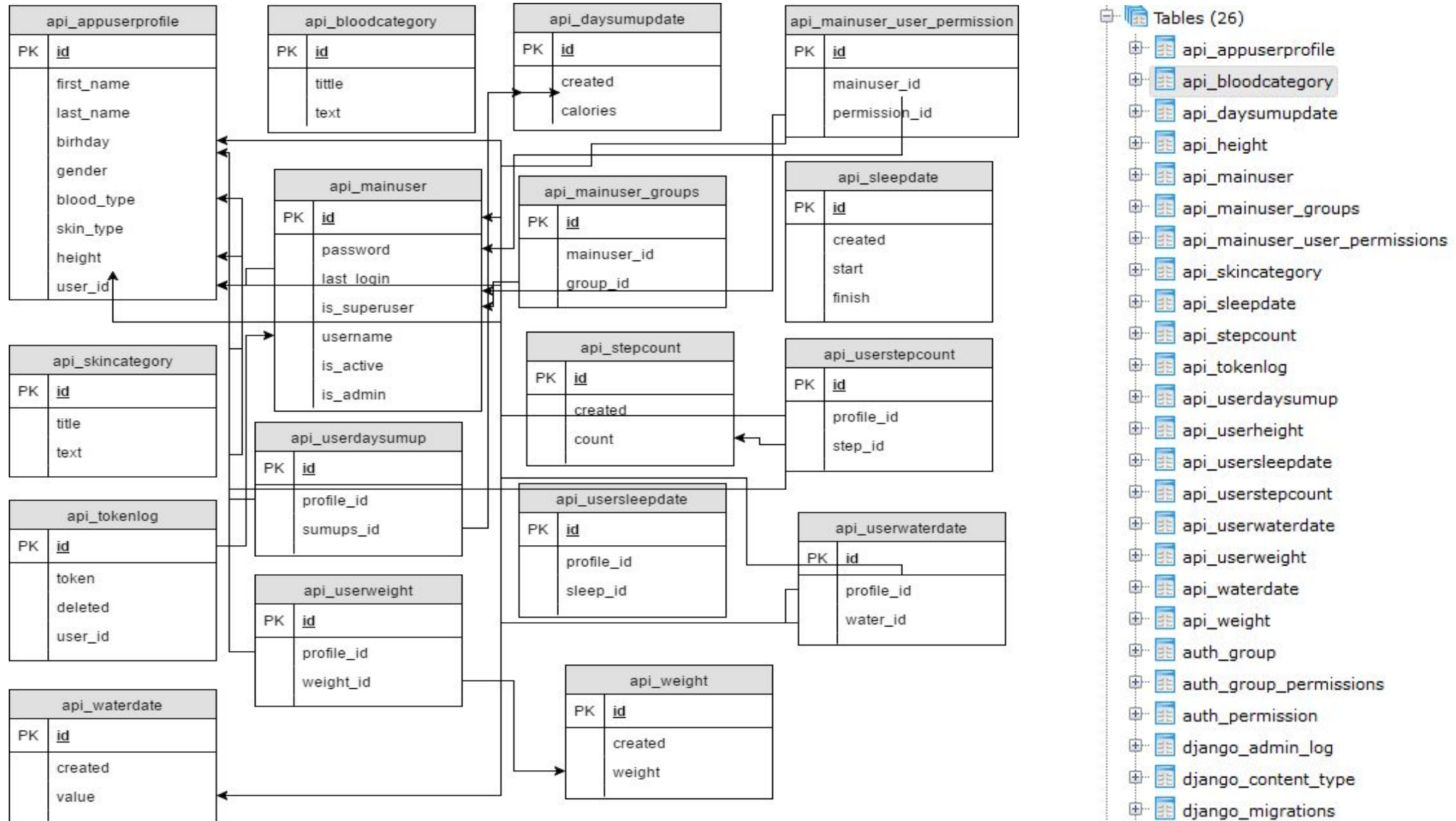
KBTU teachers

# Used technologies



**django**

# Implementation of web-API



```
class UserStepCount(models.Model):
    """
    """
    profile = models.ForeignKey(AppUserProfile, blank=False, related_name='steps')
    steps = models.ForeignKey(settings.STEP_MODEL, blank=False)

    class Meta:
        unique_together = ('profile', 'steps')
        verbose_name_plural = "Шаги пользователя"

    def __unicode__(self):
        return self.steps

        "first_name": self.first_name,
        "last_name": self.last_name,
        "birthday": self.birthday,
        "gender": self.gender,
        "blood_type": self.blood_type,
        "skin_type": self.skin_type,
        "height": self.height
        # "languages": [l.full() for l in self.languages.filter(is_active=True)]
}
```



Api Root / Weight List

# Weight List

OPTIONS

GET ▾

GET /api/weights/

HTTP 200 OK  
Allow: GET, POST, HEAD, OPTIONS  
Content-Type: application/json  
Vary: Accept

[]

Raw data

HTML form

User

CreateDate

Weight

Bmi

POST



POST ▼ http://0.0.0.0:8000/api/register/ Params Send ▼ Save ▼

Key	Value	Bulk Edit
New key	value	

Authorization Headers **Body** ● Pre-request Script Tests Code

form-data  x-www-form-urlencoded  raw  binary

Key	Value	Bulk Edit
<input checked="" type="checkbox"/> username	user5	
<input checked="" type="checkbox"/> password	user5	

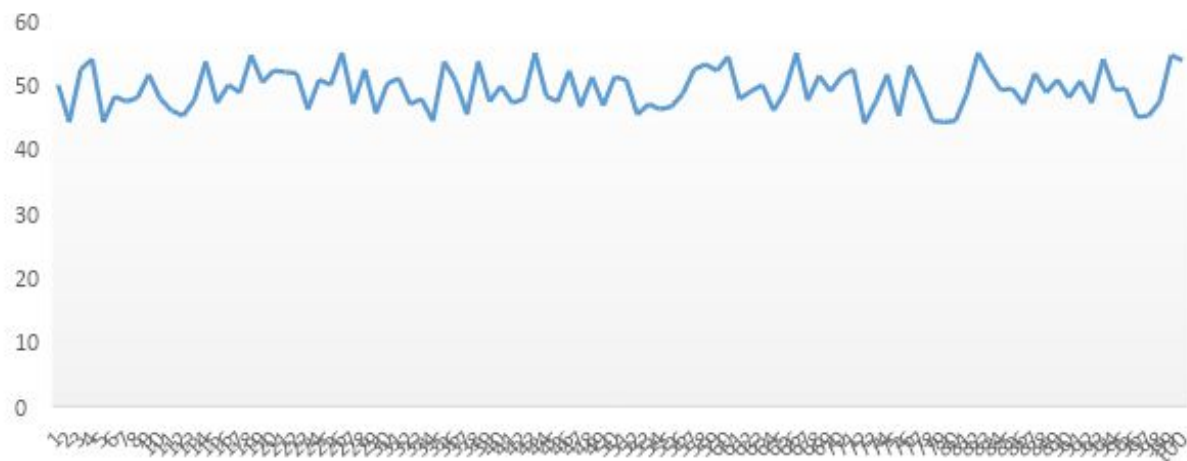
New key  Text ▼ value

Body Cookies Headers (4) Tests Status: 200 OK Time: 99 ms

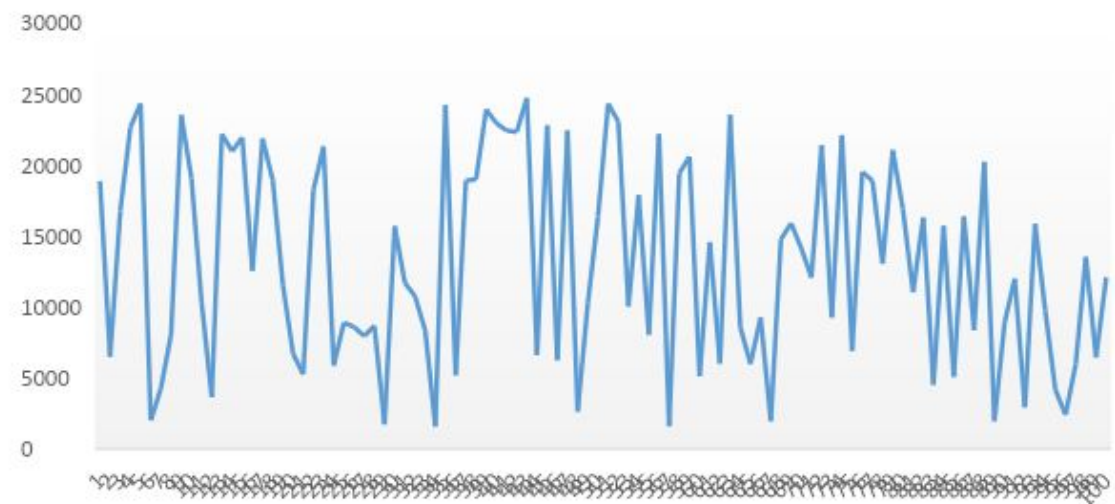
Pretty Raw Preview JSON ▼ ≡ 📄 🔍

```
1 {
2   "code": 0
3 }
```

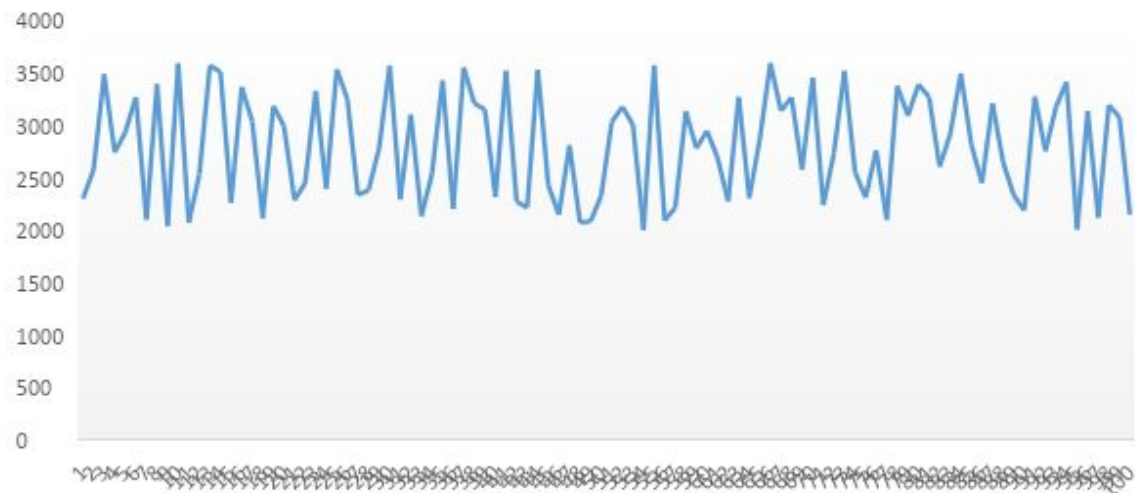
Weight

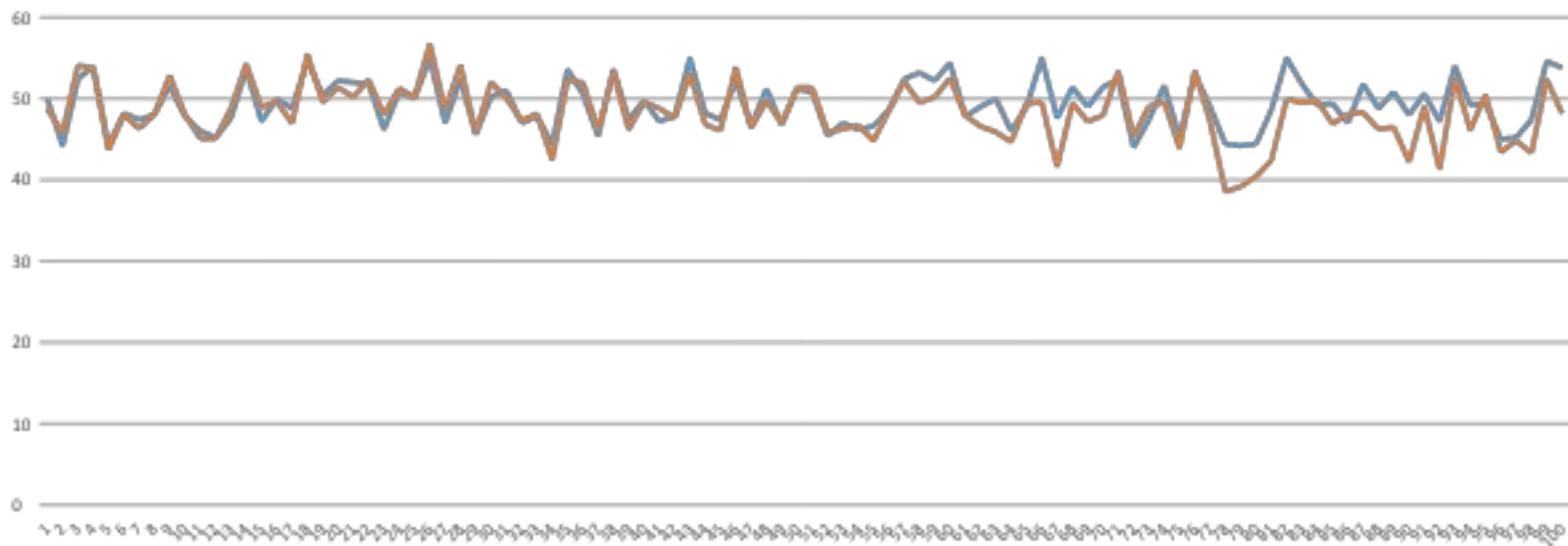


activity



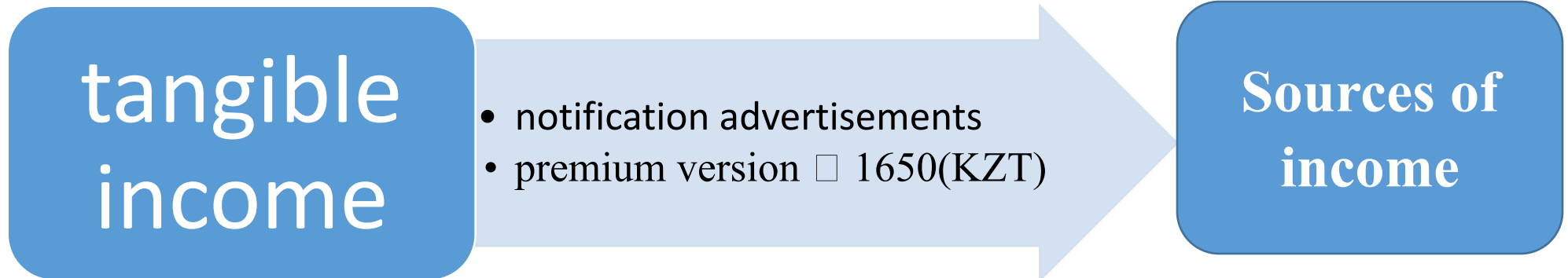
Calories





# Economic estimations

<b>Profitability Index</b>	<b>1.43</b>
Revenue	8 136 000 (KZT)
Payback Period	0.7
Profit	2 443 640 (KZT)
Cost	5 692 360 (KZT)



# Success criteria

- ✓ Profitability Index = 43%
- ✓ In market has no competitors
- ✓ Has a big opportunities for changing health care sphere
- ✓ Originality and relevance in today
- ✓ Users get a motivation lead a healthy lifestyle



**Thank you for a  
attention!!!**