УДК 658.511

Savitsky D., Lapko O. Successful Production

Belarusian National Technical University Minsk, Belarus

The main goal of all production is to get as much income as possible, so there is a question to answer "How can I organize production to make it more stable, competitive and profitable at the same time?". Different companies tried to solve this problem in different ways, so my goal is to describe how ideas have evolved over time and what companies do now to be successful.

The best examples of how to make a profit are Apple (one of the richest corporations) and video game industry. So, what do we commonly imagine when we hear about Apple? iPhone, iPod, iMac and their services. If we look at their history they were a typical company not standing out among others, but everything changed after 2001. After a "dotcom" crisis Apple had a lot of losses, so they decided to prevent them in future. The answer was to diverse company products. They knew that producing just one type of the product they would make the company depend on the current demand and competitors. The first step of diversification was developing iPod, just a music player but completely digital and small in comparison to others. As a computer company they used their experience to make something that was completely unlike other audio players. They just made a small simple computer with minimalistic design and it was enough to be a success. The same thing they did with iPhone: they "reinvented" a phone by making it not just a cellphone, but a little computer with a lot of functions [1]. After diversification they have a guarantee

that if they have losses with something, they will compensate them with profit from another product.

Game industry also became more profitable after the crisis of 2008 [2]. That was a really hard year for the whole industry. After such successful games as "crisis" and "half life 2" there were very high expectations for that year, but because of financial losses it was impossible to make something great at good prices to attract gamers. And they made something nobody had ever expected from them - they made their products free [3,4,5]! But they were not completely free, it was the time when microtransactions, DLC's and mobile gaming appeared [6]. Instead of selling games they made customers make a lot of in-game-purchases that were cheap and added something unusual to the game process. And as we know it wasn't a temporary measure as all customers today have to buy additional functions. Summarizing all the mentioned we can say that if you want to make a maximum and a stable profit you must try to get income from everything you can in your sphere.

Another important characteristic of every company is flexibility. It means that production must be prepared to change its volume, quickly replace their broken parts to serviceable ones or to reconsider their logistic ways on demand. To my mind the best example was Toyota's solution. After WW2 they concentrated on making cheap cars. As people said "they were just little more than recycled cans", but now we know Toyota to be one of the most reliable car producers [7]. So what did Toyota do to change their reputation? First of all, to improve the quality of their production they gave every worker from conveyor the opportunity to stop it if they saw a defect. Each employee monitored the quality of the used parts and components in their area. In the event of a defect or breakdown, he pulled on a special cord that stopped the conveyor belt. So all the flaws were detected at the early stage

and defective cars did not reach the market. Also they introduced principle "Just-In-Time" which is widely spread all over the world now [8]. This principle means that company starts reducing its losses for any actions that add production value, but do not increase the value of the product -unnecessary material movements, excess stocks etc. In other words, they tried to sell cars just from the conveyor and produce them according to orders. It was an awesome opportunity to respond to demand because they did not have such problem as overproduction. Instead of trying to predict demand like Ford and making as many cars as they could, Toyota started to use current demand. They also stimulated their employees with bonuses for initiatives and rationalization proposals, which allowed to increase production efficiency and staff motivation significantly [9].

Every successful company has its own history of success. I must say that looking for the answer is a very creative process and you will hardly find the same or even similar solutions in the history of outstanding companies. So, first of all to be a success you must be creative and not be afraid of brave and sharp actions. As Winston Churchill once said, "Success is not final, failure is not fatal: it is the courage to continue that counts".

References:

1. Apple is the true survivor of the dotcom bubble [Electronic resource]. – Mode of access:

https://www.thenational.ae/business/apple-is-the-true-survivor-of-the-dotcom-bubble-1.493646/. – Date of access: 01.05.2020.

2. Video Games Survive Recession, But At What Cost? [Electronic resource]. – Mode of access: https://kotaku.com/video-games-survive-recession-but-at-what-cost-5449233/. – Date of access: 01.05.2020.

- 3. Blizzard: Free-to-play WOW 'possible' [Electronic resource]. Mode of access:
- https://www.gamespot.com/articles/blizzard-free-to-play-wow-possible/1100-6213042/. Date of access: 01.05.2020.
- 4. Valve's Team Fortress 2 Goes Free to Play [Electronic resource]. Mode of access:
- https://www.forbes.com/sites/insertcoin/2011/06/24/valves-team-fortress-2-goes-free-to-play/#c52570f758a6/. Date of access: 01.05.2020.
- 5. Dota 2 officially free to play, all heroes will be free, store to sell community-created items [Electronic resource]. Mode of access: https://www.pcgamer.com/dota-2-free-to-play-store/. Date of access: 01.05.2020.
- 6. EA announces online pass on EA sports simulation games on Xbox 360 and PlayStation 3 [Electronic resource]. Mode of access: https://www.ea.com/news/online-pass-for-ea-sports-simulation-games/. Date of access: 01.05.2020.
- 7. Financial Results [Electronic resource]. Mode of access: https://global.toyota/en/ir/financial-results/. Date of access: 01.05.2020.
- 8. Why Toyota's Just-in-Time Method Is Critical to Its Success [Electronic resource]. Mode of access: https://marketrealist.com/2016/05/toyotas-just-time-method-critical-success/. Date of access: 01.05.2020.
- 9. Jeffrey H. Bell. Factory Physics For Managers/H.Bell Jeffrey, Edward S. Pound, Mark L. Spearmen, 2014, -10 p.