

---

**XVII Міжнародна конференція «Політ. Сучасні проблеми науки»**

---

Process Innovations are regarded as the introduction and use of new or significantly improved methods of production of the product or delivery to the consumer (storage, transportation).

Strategy Innovations involve the revision of existing industry practices to meet the newly emerging needs of customers, enhance the value of products, and create new markets and new customer groups.

Worth to mention an innovation management – it is a part of the strategic management that is based on market research, financial analysis, analysis of personnel structure, as well as internal company culture and image.

In general, the innovation process is the unity of two processes: the development of innovation and its application (commercialization).

The process of innovation management involves the following steps:

Identification of innovation needs is referred to context analysis, forecasting innovation and diagnostic of company, the determination of the need for innovation. Creation of innovation deals with innovation planning, finding criteria of choosing alternatives, the development of alternatives, choosing the best, i.e. innovating presupposes plan-design, implementation management, monitoring and evaluation of results.

To ensure the best innovation management, all the stages and steps should have both direct and reverse connection.

In today's rapidly changing world successful development of various companies brings diversity of market, advancement of technologies and stability. That is why process of implementing innovations in the companies is considered to be important for the whole society.

*Scientific supervisor: Maksymovych G.O.,  
Senior Lecturer*

UDC 336.764.2(477) (043.2)

**Trukhan A.A.**

*National Aviation University, Kyiv*

**QUADCOPTERS AS A PART OF THE ULTRALIGHT AVIATION**

During recent years, quadcopters are becoming more popular as a format of the ultralight aviation.

Quadcopter – is a flying machine with four rotors, also referred to as a drone. Sometimes it is also called copter (short version) or multicopter, but the last name is applicable to aircraft with more than four rotors. Quadcopters differ from conventional helicopters using rotors that are able to vary the pitch of their blades dynamically as they move around the rotor hub.

Drones are truly a spectacular phenomenon, more and more becoming commonplace.

Now it is not just a device that serves the interests of the military. There are many branches of quadcopter applications, such as:

1. **Cargo delivery.** For example, two giants of Internet commerce, Dominos and Amazon, realized the potential of autonomous light aircraft devices and declared the possibility of their use for delivery of purchases to customers in the near future..

2. **Changing traditional journalism.** Modern journalism is now enhanced by developments in areas such as video recording and photo materials, but the idea of using drones to submit a "picture" from a new perspective and with a previously inaccessible point, lifts journalism to a new level.

3. **Helping search and rescue teams.** Very often, for the search and rescue teams it is difficult to find victims. Moreover, sometimes it is very difficult to get to the affected people. The presence of virtual eyes and ears of the drone can significantly enhance the ability of rescuers and increase the chances of victims to survive.

4. **Crime fighting.** Any society is suffering from the phenomenon of crime, and fighting with it as far as possible. Unmanned aerial vehicles can facilitate the investigation of crimes, increase the effectiveness of preventive measures, providing «managed» monitoring in areas with high criminogenic risk.

Of course, there are just a little number of applications of the quadcopters so far.

As was mentioned above, quadcopters are the future of the ultralight aviation. Therefore, I'd like to show that the need for aircraft with greater maneuverability and hovering ability has led to a rise in quadcopter research. The four-rotor design allows quadcopters to be relatively simple in design yet highly reliable and maneuverable. Research is continuing to increase the abilities of quadcopters by making advances in multi-craft communication, environment exploration, and maneuverability. If these developing qualities can be combined, quadcopters would be capable of advanced autonomous missions that are currently not possible with other vehicles.

Summing up, I can say that quadcopter – is a smart-device whose functionality is extended with innovative technologies in the production process. The modern market is constantly updated, so operators can acquire the technique with any possibilities in various price categories.

*Scientific supervisor: Akmal'dinova O.M.,  
Professor*

UDC 004.33 (043.2)

**Tryndiuk V.V.**

*National Aviation University, Kyiv*

## **FLASH MEMORY CARDS**

As we all know, flash card or memory card used to store information in a digital form. Today they are widely used for different devices, for instance mobile phones, electronic books, laptops, tablets and so on.