**המכללה האקדמית להנדסה אורט בראודה**

**המחלקה להנדסת תוכנה - קורס מחשוב ענן**

**תרגיל בית 2**ב – עבודה ביחידים

בחרו מאמר מהמאמרים אשר נמצאים בפורום "מאמרים אקדמיים בנושא מחשוב ענן" (ניתן להציע מאמר משלכם, יש לקבל אישור מהמרצה).

ניתן להיעזר גם באתרים של כנסים אקדמיים למציאת מאמרים, כגון כנס closerאשר הוצג בהרצאה.

**Name**: Eliran Hadad.

**ID**: 204297667

**שם המאמר:** Public vs Private vs Hybrid vs Community - Cloud Computing: A Critical Review

**מטרת המאמר:**

The purpose of this article is to review the four types of clouds that exist today, which are private, public, hybrid and community. In addition to answering the key question, what type of cloud is best for your business

**תיאור טכנולוגיות\ מחקרים במאמר:**

**Public cloud:** is a type of computing in which a service provider makes resources available to the public via the internet is owned by organization selling cloud services such as Google, Amazon and Microsoft. Public cloud allows for scalability and resource sharing that would not otherwise be possible for a single organization to achieve.

**The benefits of a public cloud are:** Data availability and continuous uptime, 24/7 technical expertise, Easy and inexpensive setup, No wasted resources.

**The disadvantages of a public cloud are**: Data security, service effectiveness, compliance with laws and

Regulations.

**Private cloud:** is a computing model that offers a proprietary environment dedicated to a single business entity. private cloud provides extended, virtualized computing resources via physical components stored on-premises or at a vendor's datacenter. A private cloud strategy may be comprised of hardware hosted locally at a facility owned by a business, or it may be hosted by a cloud service provider. In addition, it provisioned hardware and storage configurations maintain the benefits of a secure, exclusive network.

**The benefits of a private cloud are**: Reduces capital expenses as part of the organization’s infrastructure, needs are outsourced. to public cloud providers. Improves resource allocation for temporary projects. at a vastly reduced cost. Helps optimize the infrastructure spending during different stages of the application lifecycle.

**The disadvantages of a private cloud are**: Higher cost than public cloud, Also there is a huge Maintenance.

**HYBRID CLOUD:** it combines a private cloud with one or more public cloud services, with proprietary software enabling communication between each distinct service. Hybrid cloud services are powerful because they give businesses greater control over their private data. An organization can store sensitive data on a private cloud or local data center and simultaneously leverage the robust computational resources of a managed [public cloud](https://www.citrix.com/glossary/what-is-public-cloud.html).

**The benefits of a Hybrid cloud are**: perfect for projects requiring faster implementation. Reduced costs. Improved security and risk management. Need to manage multiple vendors and platforms.

**The disadvantages of a Hybrid cloud are:** difficult to implement as much as it is to maintain, Security Concerns and Visibility

**COMMUNITY CLOUD:** A community cloud falls between public and private Clouds. community cloud aspires to combine distributed resource provision from grid computing, distributed control from digital ecosystems and sustainability from green computing.

**The benefits of a COMMUNITY cloud are**: Cost of setting up a communal cloud versus individual private cloud can be cheaper due to the division of costs among all participants. Management of the community cloud can be outsourced to a cloud provider. Tools residing in the community cloud can be used to leverage the information stored to serve consumers and the supply chain

**The disadvantages of a COMMUNITY cloud are:** Costs higher than public cloud and fixed amount of bandwidth and data storage is shared among all community members

**סיכום המאמר:**

In the article we were presented with a number of cloud options, what is the architecture of each of them, their approaches and what are the pros and cons of each cloud. The purpose of this article is to review all the existing cloud options available today, and help a business choose and know which cloud is best for it.

**האם מטרת המאמר הושגה?:**

The purpose of the article was achieved, the article extensively reviewed all types of clouds, explained in detail the pros and cons of each cloud and gives us more information to decide what is good for our business

**הצעות נוספות שלי:**

I think it is worth thinking about a private cloud intermittently, at certain hours it functions as a private cloud while the rest of the time it functions as a public cloud, these clouds will replace the data in them and thus can lower costs for businesses.