



**CENTRAL EUROPEAN
CASE COMPETITION**

THE TRESORIT CASE

2019

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Central European Case Competition
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On a sunny Sunday morning in March 2018, György Szilágyi, the Co-founder of Tresorit finished his 10 km run on his favorite path on Margaret Island in the heart of Budapest. He was exhausted physically but at the same time he felt energized to think about the strategy of Tresorit for the next 5 years. Tresorit closed an 11.5 million EUR Series B funding round from a consortium led by 3TS Capital Partners, a leading European growth capital investor.

„How could Tresorit scale up its activity and provide an outstanding financial opportunity to its investors”? – that was the main question György and the senior management of Tresorit were thinking about these days. Series B investors seek to exit from their investments in a 4-5-year horizon and to realize an at least 3-4x return. „Should Tresorit change anything in its strategy?” „How could Tresorit convince a large number of enterprises (100-250 users) to sign up?” – wondered György while walking up the stairs from the track.

Doing business with end-to-end encryption technology allowed Tresorit to think big, especially these days. As the pioneers of this technology, the startup was constantly thinking about the right product portfolio. Should they stick to their current offering in the Enterprise File Sync and Share (EFSS) market, or should they launch new services, such as encrypted email, chat or other security products? Germany, US, UK and Switzerland are Tresorit's core geographical markets and the management thinks that should be the focus going forward as well. Regarding the customers they see Tresorit rather as a B2B company, but the size of the targeted businesses is still an open question.

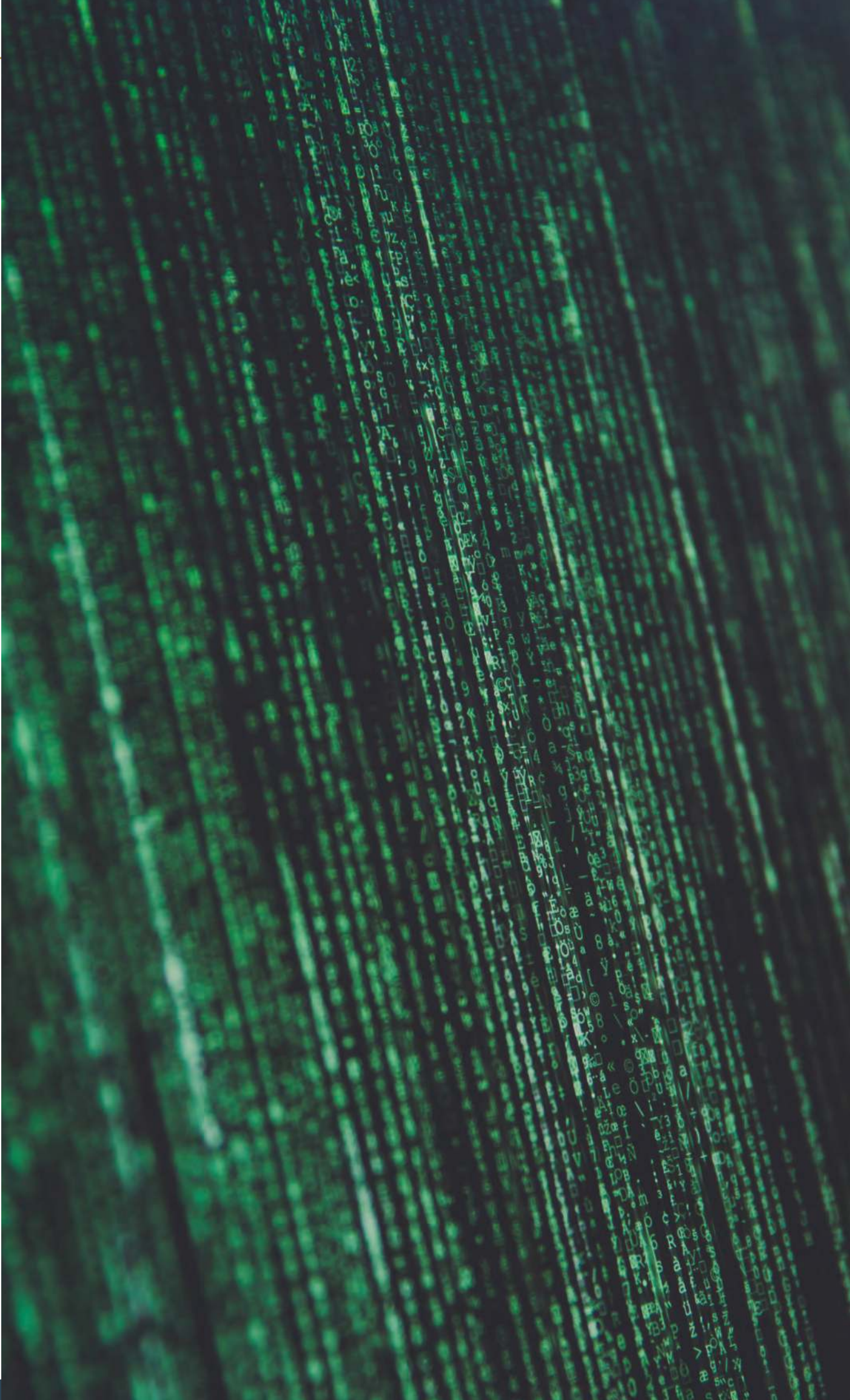
When György passed Margaret Bridge, he decided to ask young talents from all around the world to provide a comprehensive strategy to the investors about Tresorit's potential strategy for the next 5 years...



End-to-end encryption

End-to-end encryption is the most secure way of communication, collaboration or storing documents in a cloud. Encryption itself is important when a user wants to share or store confidential / sensitive / personal data. Although the files are safe while traveling between parties, with basic encryption they are not protected from storage owners in different touchpoints. The easiest example is the case of sending an email. • *“When you send and receive an email using a service that does not provide end-to-end encryption (e.g. Gmail), the company has the ability to access the content of your messages because they also hold the encryption keys. End-to-end encryption eliminates this possibility because the service provider does not actually possess the decryption key” (Protonmail, 2018).* • Few years ago, this technology was only used by a few smaller firms, but nowadays most mainstream service providers included it in their products, e.g. Apple uses it in iMessage and Facetime; Whatsapp, Facebook messenger and Viber also have end-to-end encryption. Despite the recent improvements there is still room to further implement this technology, for example in email service providers and document storage.

The technology has multiple advantages and risks, i.e. improved confidentiality is a superior attribute. However, if the user forgets the password, the message or content is lost in most cases, because the service provider does not have the key to access it. Also, it is more difficult to screen / filter dangerous content (e.g. terrorism related activity), because no one can look into the shared content, not even an algorithm based on specific keywords (as in usual cases).





HISTORY

Tresorit's story began almost 20 years ago, when István Lám (CEO), received his first cryptography book as a gift from his parents at age 12. That moment led his interest to the world of cybersecurity and that made him start researching cryptography. Ten years later, in 2010, István, two other university students and their professor, Dr. Levente Buttyán¹ invented something revolutionary during a university research project. The focus of the Mathematical and IT research they took part in was encrypted file sharing using peer-to-peer file systems. They wanted to design an undecodable system. One day during lunch break, an idea popped up as they were talking about the success of cloud storage software Dropbox, • *“What would happen if we applied our idea to a cloud storage software to make it more secure?”* • That was the moment when they realized what a goldmine their research could be and immediately went back to work on the integration process between these two systems.

Indeed, it turned out that the most vulnerable point of cloud services was data security and the cloud storage providers back then did not pay much attention to it. The competition in the industry was on how much more space each one could offer, not on security. Their systems had never been breached, so why bother? However, our world is filled with secrets. And there were people who wanted to share this information with the public. It was just a matter of time before somebody figured out that cloud storage centers were the unprotected mines of data. István, Szilveszter, András and their professor Dr. Buttyán started working on turning the technology into a real business soon after they realized its financial potential. András left the research team soon after to pursue his career in Google.

After resolving some IP infringement issues with CrySyS lab, the students patented the technology and the company was founded in less than two days. Alas, a deal was made with the University and the young students were about

¹ That time senior lecturer of Budapest Technical University (BUTE)'s CrySyS Laboratory

to commercialize their technology. Before going into full operations, they realized there was a missing piece: “the hustler”. They started looking for suitable talents using their networks. Fortunately, it did not take too long. István won GE Scholar-Leader Foundation’s Award, and among many others he met the ambitious CEMS student from Corvinus University of Budapest, György Szilágyi. He immediately invited György to have a drink to introduce his ideas about forming a management team. György was surprised at first, but as the conversation continued, he was deeply influenced by István’s passion and said “This is a once in a lifetime opportunity, let’s do it!”

Eventually, the company was founded in 2011. István was the only one to have experience with start-ups. The others were never exposed in the field of company operation, nor did they anticipate the difficulties of running one. Originally, György was in charge of the business side, particularly the financial affairs. But as the company evolved, his job multiplied and included marketing, legal affairs, general administration and project management.

After burning their own capital (mostly their own scholarships), the team made proactive approaches to venture capitalists in the CEE region. “It was a mutual process. We started to look for venture capital, and partly it was us who found the money, partly the money found us. The regional investment market is small, good projects cannot hide. In addition, the Hungarian venture capital market is in a unique position characterized by oversupply of capital” – said György about getting the VC investment. By the end of their first fundraising campaign, Tresorit got 1.3 million EUR Series A funding from venture capitalists and international angel investors combined. The portfolio of these investors was mixed. Some of them were hands-off investors while others required more control and intensive updates from the company. They also supported the founders in making big decisions by sharing best practices and network connections. Tresorit had great appreciation for the networks and knowledge shared by some investors as they proved far more valuable than the money alone.

In the past 8 years, Tresorit grew rapidly and now the company employs 100+ top talent engineers & marketers and has more than 10,000 organizations in 193 countries as clients. The company is a “born global” enterprise which is partly coming from the product’s characteristics, but by now it is also true for the operations, having offices in Switzerland and in the US besides their Hungarian HQ. Tresorit also went through its second round of fundraising, with 3 million EUR raised in 2014 May, and a third round with 11.5 million EUR Series B funding in September, 2018.

PRODUCT

Tresorit has two main product groups: products for teams and products for individuals. Every product has a trial option to make sure that it fits the customers' specific needs.

TEAMS

For teams the following options are available:

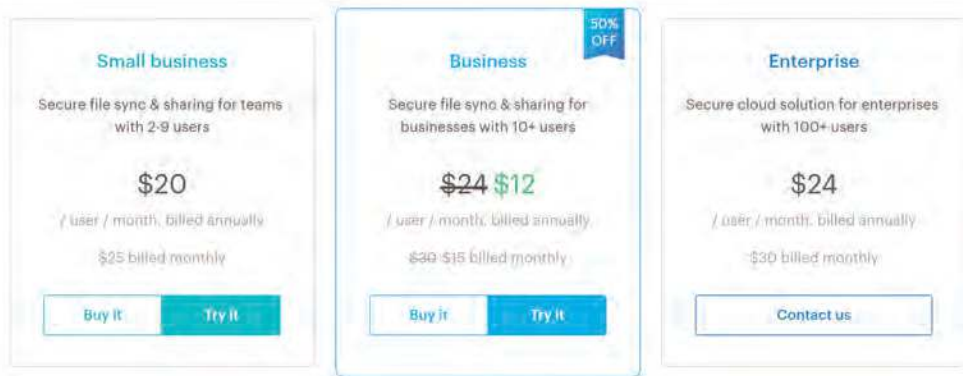


Chart #1 - Team products

Source - Tresorit (2019)

The features of the products follow the size of the businesses: the bigger the business, the more features are available. In case of large enterprises, the product can be customized.



INDIVIDUALS

For individuals Tresorit offers the following options:

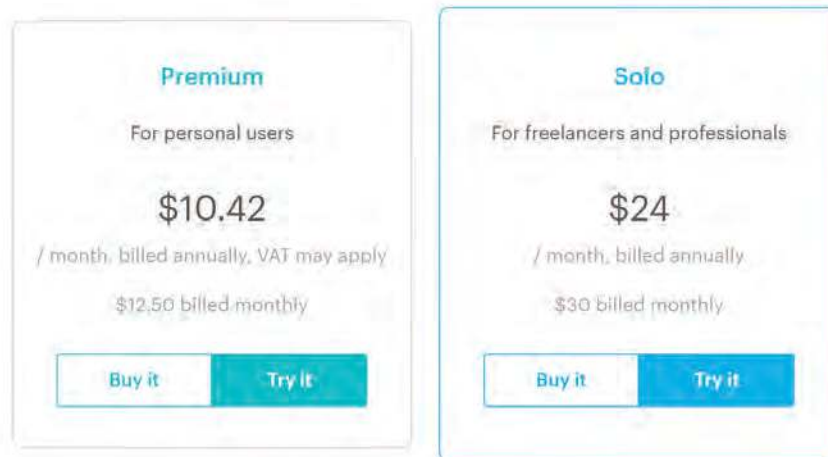


Chart #2 - Individual products

Source - Tresorit (2019)

The two products (Premium and Solo) differ in features: Solo has superior characteristics, e.g. it can do unlimited version recovery (versus Premium's maximum 10 version recovery) and has unlimited activity history (versus Premium's 90 days). Besides these add-ons, Solo has permission control, file sharing with password protected link, Outlook integration, Access logs for tracking openings and GDPR Data Processing Addendum among the unique features.





Customers



As we know well, the issue of security had assumed extreme importance in today's business world. Tresorit's goal from the very beginning - which was to become the market leader among cloud service providers - was made possible with their unique shareable encryption features. They assumed that the key customers would be individual professionals storing many confidential files, but after a while it turned out that businesses are interested in their model as well. At that point, they felt that only the sky was the limit. The main target market in the business segment contained SMEs as well as larger companies working with a lot of clients. These enterprises could use the product to share confidential information with their clients in a convenient and secured way. Most of private users did not give much attention to data security as they believed that nobody would care about it. Another challenge of private users was to 'upgrade' them. In the beginning, Tresorit had a freemium model, so every user got a 5 GB space for free, but they lacked the willingness to upgrade their accounts and make payments as long as the 5 GB was sufficient. After not being able to convert as many customers as desired from free to paid, Tresorit changed the freemium model, and now it provides only a trial period for free, but otherwise every package is paid. Currently 1/3 of the revenue comes from private users (however, based on their feedback it turned out they also use it mostly for business, e.g. freelancer lawyers, etc.) and 2/3 comes from organizations. In that segment, the revenue coming from SMEs is the main component and it keeps on growing continuously. The revenue coming from larger enterprises is much less at the moment, but there is an ongoing effort to improve in that segment, too.

The company is a "born global" enterprise, and therefore it is not bound to any particular geographical markets. The founders believed in the universal demand for secured cloud service. Due to the globalized nature of the Internet, the company had an international presence from the beginning. Also, most users came from Western Europe and North America, with only a few percent of users being Hungarian. The key markets are Germany, UK, the US and Switzerland.

Competitive landscape

Tresorit's core market is the EFSS (Enterprise File Sync and Share) market (this terminology was first used by Gartner and recently changed to ECM – Enterprise Content Management market).



DIRECT COMPETITORS

Tresorit is operating in a subset of the market, which is the end-to-end encrypted niche of the EFSS market. There are not many players in the market, only MEGA, SpiderOak, Sync.com and pCloud are considered as direct competitors.



MEGA is a cloud storage and file hosting service offered by an Auckland-based company, Mega Limited. Mega is known for its security feature where all files are end-to-end encrypted locally before they are uploaded. This prevents anyone (including employees of Mega Limited) from accessing the files without knowledge of the pass key used for encryption. The service was previously noted for a large 50 GB storage allocation for free accounts. However, this was reduced to 15 GB, with additional amounts offered only on an expiring trial basis. Up to 8 TB is available for paid accounts. As of January 20, 2018, Mega claims to have 100 million registered users in more than 245 countries and territories, and more than 40 billion files have been uploaded to the service.



SpiderOak is a US-based collaboration tool, online backup and file hosting service that allows users to access, synchronize and share data using a cloud-based server, offered by a company of the same name. According to SpiderOak, the software uses encrypted cloud storage and client-side encryption key creation, so SpiderOak employees cannot access users information. SpiderOak distinguishes itself from its competition in provision of encryption and syncing files and folders across multiple devices, and in automatic de-duplication of data.



The company was founded in 2011 and launched an application-driven platform and cloud storage combination in 2013. At the end of 2018, sync.com had 400k registered users in more than 150 countries.



pCloud is a Swiss-based company which provides top-notch cloud storage solutions for personal and business consumers. At the end of 2018, the company had more than 5 million users.

Table #1: Direct competitors of Tresorit

Source: Tresorit (2019)

Since all the above companies mainly focus on individuals and have a massive freemium model, Tresorit competes with them mainly on the consumer market. These services are operated by private companies; thus the exact revenues and number of users are not published.

LARGE EFSS COMPETITORS

When it comes to Businesses, Tresorit's most important competitors are the big players who are either born B2B companies or are currently in transition from B2C to B2B business model and put more and more efforts to Admin functions.



Besides Egnyte, all the other companies are publicly traded companies so their revenue is public, but software giants like Microsoft and Citrix are not publishing the split between their different services. Box' revenue was 506 million USD last year and Dropbox's 2018 revenue was 1.4 billion USD. Egnyte is not a public company but they have provided a guideline that their revenue is just below 100 million USD.



Dropbox is a public company, founded in 2007, with headquarters in San Francisco, California, U.S. and additional offices in the U.S., Australia, Europe, Israel and Japan. Dropbox delivers Dropbox Business, an enterprise secure content platform for content and team collaboration. Dropbox made its much anticipated and highly successful initial public offering (IPO) in late March 2018, entering the market with an initial price that was higher than expected.



Box is a cloud computing business which provides file-sharing, collaborating and other tools for working with files that are uploaded to its servers. Users can determine how their content can be shared with other users. Users may invite others to view and/or edit an account's shared files, upload documents and photos to a shared files folder (and thus share those documents outside Box), and give other users rights to view shared files. Box offers three account types: Enterprise, Business and Personal. Box's enterprise clients include IBM, GE, Schneider Electric, and Procter & Gamble.



Egnyte is a company that provides software for enterprise file synchronization and sharing. The technology can store files in a company's existing data repository, as well as cloud computing storage. Egnyte received \$1 million seed venture capital in 2007, \$6 million in July 2009, \$10 million in 2011, and \$16 million in 2012. Egnyte announced a \$29.5 million investment that included Seagate, CenturyLink, Northgate Capital, and prior investors Kleiner Perkins, Google Ventures and Polaris Partners. The full list of investors include: Google Ventures, Kleiner Perkins Caufield & Byers, Floodgate Fund, Polaris Partners, Northgate, CenturyLink and Seagate.



Microsoft OneDrive is a file hosting and synchronization service operated by Microsoft as part of its suite of Office Online services. First launched in August 2007, OneDrive allows users to store files and personal data like Windows settings or BitLocker recovery keys in the cloud, share files, and sync files across Android, Windows Phone, and iOS mobile devices, Windows and macOS computers, and the Xbox 360 and Xbox One consoles. Users can upload Microsoft Office documents directly to OneDrive. OneDrive offers 5 GB of storage space free of charge, with 50 GB, 1 TB, and 5 TB storage options available either separately or with Office 365 subscriptions.



ShareFile is a secure content collaboration, file sharing and sync solution that supports all the document-centric tasks and workflow needs of small and large businesses. The company also offers cloud-based/on-prem storage, virtual data rooms and client portals. ShareFile is owned by Citrix Systems.

Table #2 Largest EFSS players on the market

Source: Tresorit (2019)

SUBSTITUTES: OTHER ENCRYPTED COLLABORATION SOLUTIONS

These companies are not direct competitors but Tresorit considers e2e encrypted chat and email providers kind of competitors, because they are solving similar use cases.

Encrypted chat competitors	Encrypted email providers
<ul style="list-style-type: none"> ● Wickr (Business) ● Semaphore (Business) ● Threema (Individual, moving to Business) ● Wire (Individual, moving to Business) ● Telegram (Individual) 	<ul style="list-style-type: none"> ● Protonmail ● Tutanota ● Lavabit

Table #3: Other encrypted collaboration solutions

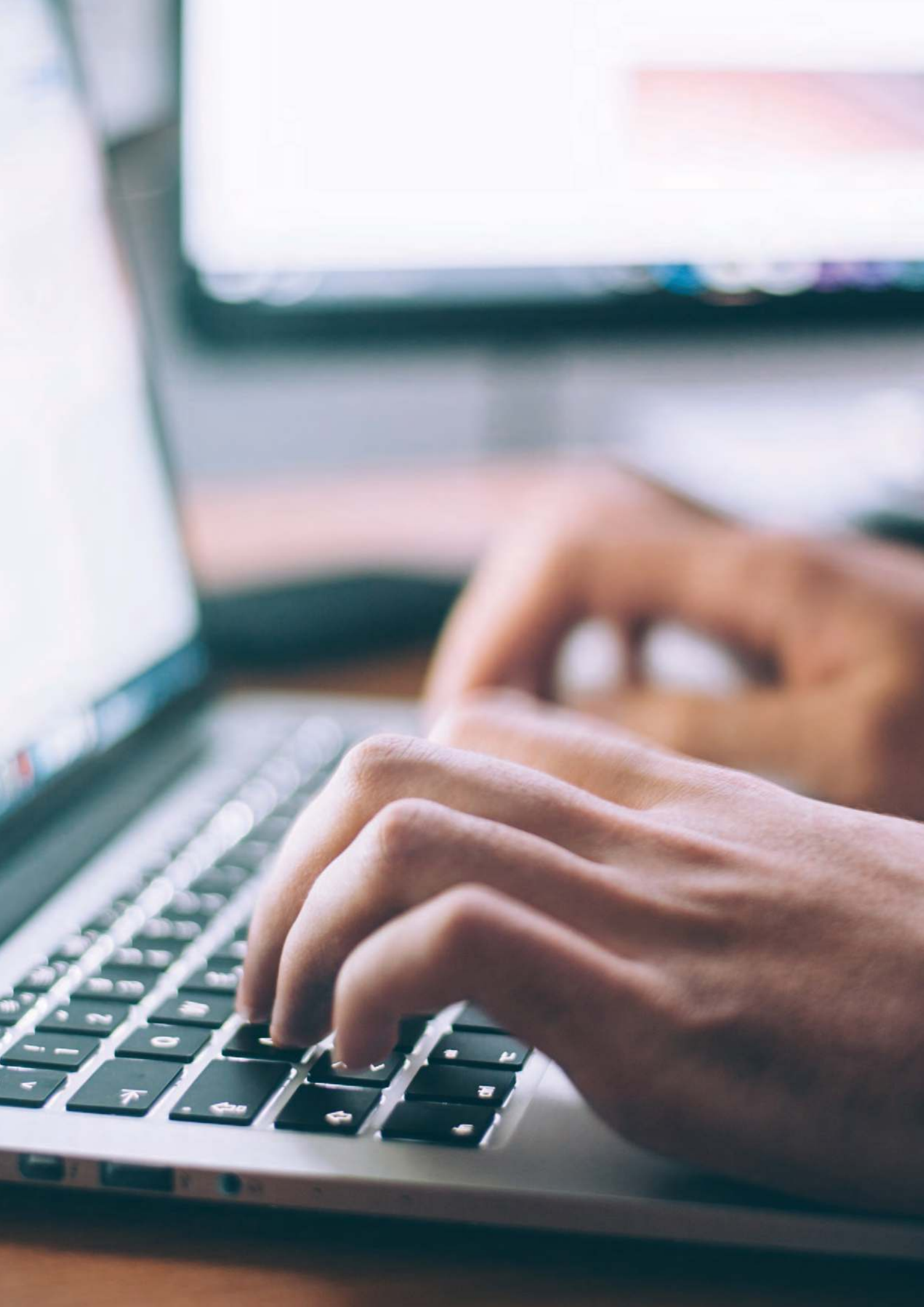
Source: Tresorit (2019)

The above mentioned chat and email providers have millions of users and they can be a significant threat once they decide to move to the EFSS market.

SUBSTITUTES: ENCRYPTION PLUGINS

There are some smaller companies who are not providing a full service, only an encryption plugin to a mainstream EFSS solution, like Dropbox. Their users can store their data in their convenient place, and if they want, they can encrypt some of their files, but these files can be opened only in the plugin app. Other examples are Boxcryptor, Cryptomator and Sookasa.

Tresorit do not consider this segment as an attractive market, all the above mentioned companies are relatively small.

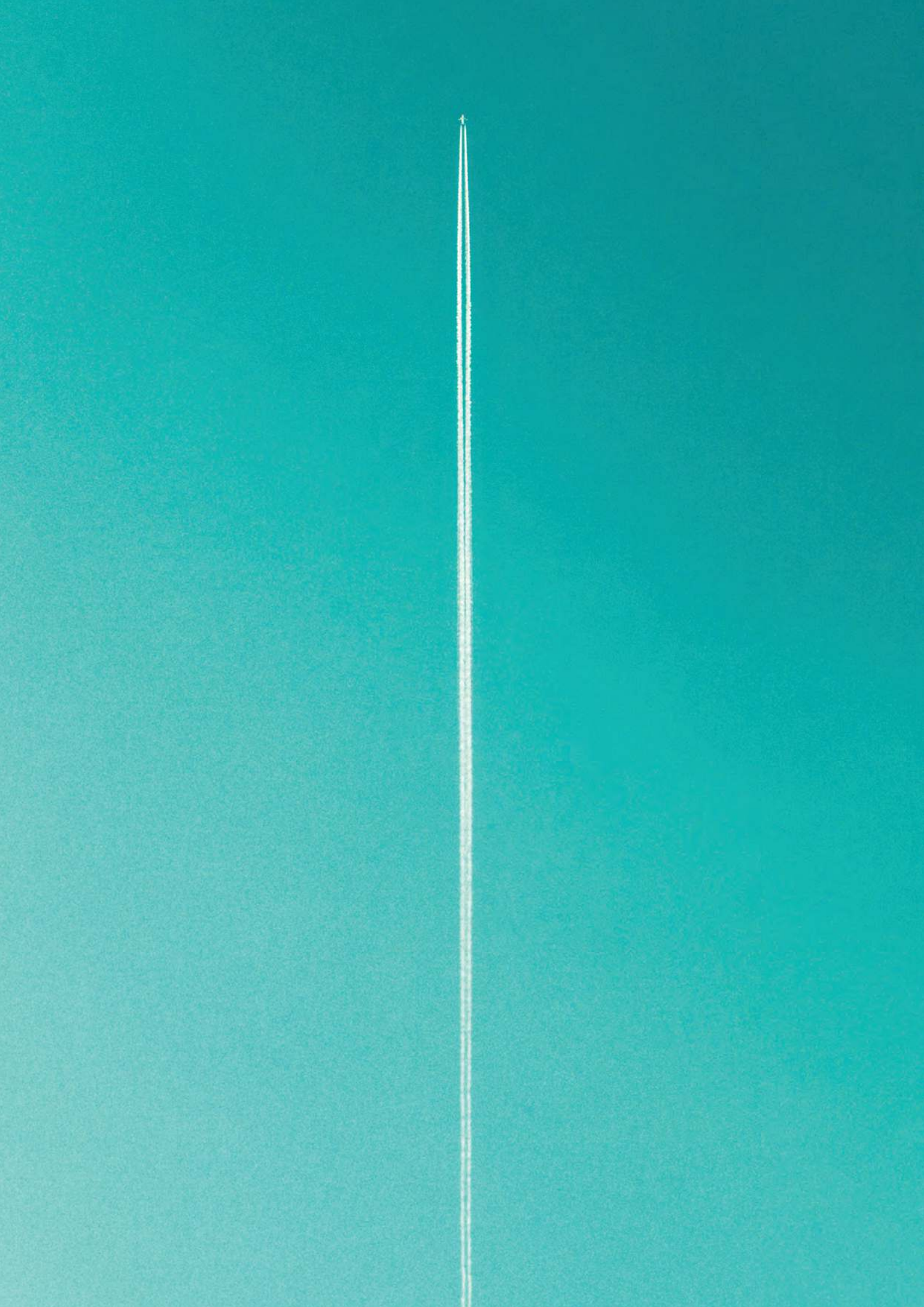


THE MANAGEMENT DILEMMA:



WHAT'S NEXT?

As György was walking home, he was thinking about the questions he would expect to be answered by the young consulting teams. For him the most important question was about spending the 11.5 million EUR Tresorit has just got. “What would be the best strategy for growth in the future?” “What projects should be funded with the new sources?” It was important that the consultants keep in mind that the strategy needs to enable Tresorit to grow rapidly and significantly to give the investors an exit in 4-5 years with a minimum 3-4x return...





Appendix

Appendix #1: Features' comparison

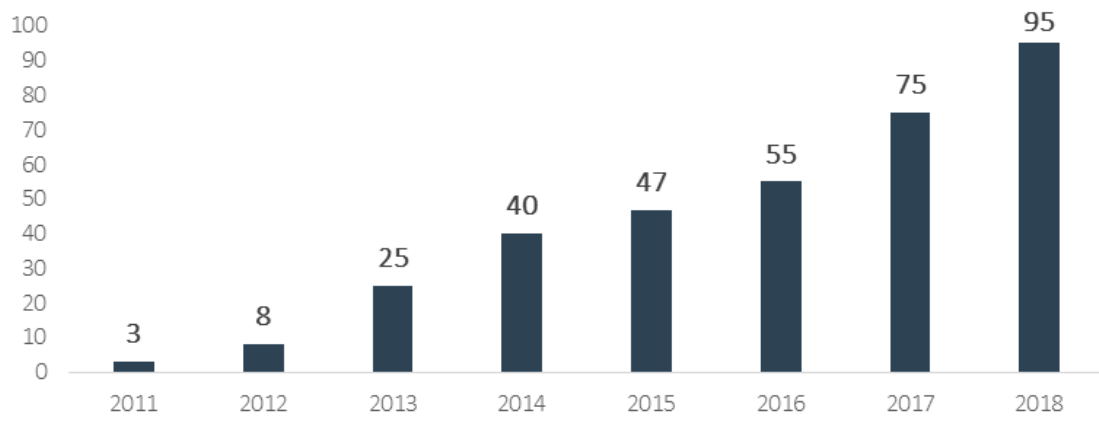


Encryption & security							
Encryption at rest and in transit	X	X	X	X	X	X	X
End-to-end encrypted storage	X						X
End-to-end encrypted sharing	X						
Zero-knowledge authentication	X						X
2-Step Verification	X	X	X	X	X		
HIPAA Compliance	X	X	X	X	X		X
Server location	EU	US + EU	US + EU	US + EU	US	US	US
Storage & file management							
Sync any folders	X					X	
Desktop sync app	X	X	X	X	X	X	X
Linux sync app	X					X	X
Network drive	X	X	X	X			X
Selective Synchronization	X					X	X
Mobility							
Edit files on mobile devices	X	X	X	X	X	X	
Automatic Camera Upload	X	X	X	X	X	X	
Remote wipe of mobile devices	X	X	X		X	X	Android & iOS only
Passcode Lock on mobile devices	X	X	X	X	X		X
Cross-Device Support	X	X	X	X	X	X	
Mobile App Rating	4.3	4.4	4.2	4.4	4.3	4.1	3.7
Zero-knowledge access from browsers	X						



Collaboration							
Unlimited file versioning	X	120 days only	X	X	X	5 versions only	X
Deleted file recovery	X	120 days only	X	X	X	X	X
Outlook integration	X		X	X	X	X	
Live, in-app collaboration		X	X	X	X		
Controlled sharing							
Granular permission levels for collaborators	X	X	X	X	X	X	
Password protection for links	X	X	X				
Expiration date for links	X	X	X	X			X
Download limits for links	X		X				
Digital Rights Management	X			X			
Administration							
Admin console	X	X	X	X	X	X	X
Company-managed groups	X	X	X				X
Device restriction policies	X		X	X	X		
IP-restriction policies	X			X			
Active directory integration	X	X	X	X	X		X
Deployment							
Support center	X	X	X	X	X	X	X
Live chat support	X	X	X				
Deployment support for SMBs	X			X			
On-premises deployment	X						
Custom branding	X	X	X		X		X

Appendix #2: Number of employees





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