



# COVID-19 EMERGENCY

## MASKS & PPE

MONITORING UNRELIABLE SALES & SCAMS  
ON SOCIAL MEDIA

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DESIGN

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# 1.

## INTRODUCTION

The COVID-19 crisis is changing the world as we know it. Over sixty thousand people have already died, while over 1.2 million people globally have contracted the virus to date<sup>1</sup>. Countries such as the United States, Italy and Spain are currently the most affected.

While no vaccine currently exists and even infection and antibody testing kits are in short supply, the WHO provides a website to inform the public on best practices to avoid the spread of the disease<sup>2</sup>.

Medical masks are among the most reliable and used methods for prevention and safety, right after washing your hands often with soap and water for at least 20 seconds. Unfortunately, masks, like many other forms of PPE (Personal Protective Equipment) are in short supply globally. As a consequence, people are getting increasingly concerned and even desperate to buy these items online, often at inflated prices and from unreliable sources<sup>3</sup>. They risk of being scammed/phished<sup>4</sup>, or maybe they land on websites offering fake diagnostic kits or even miraculous medication not approved by health officials<sup>5</sup>.

Ghost Data has issued a number of previous reports dating back to 2016 on such activities as online counterfeiting and terrorism (also mentioned by the US Department of Homeland Security<sup>6</sup>). Among other findings, these reports highlighted that today Instagram and similar platforms provide an important shopping window for

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<sup>1</sup> "Coronavirus tracker", Financial Times <https://www.ft.com/coronavirus-latest>

<sup>2</sup> "Advice for Public", WHO <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

<sup>3</sup> "Face mask prices surge as coronavirus fears grow", CBS <https://www.cbsnews.com/news/amazon-coronavirus-face-mask-price-gouging-shortages/>

<sup>4</sup> "This Website Has Been Scamming People Desperate For Coronavirus Masks", BuzzFeed News <https://www.buzzfeednews.com/article/richholmes/coronavirus-scam-masks-website>

<sup>5</sup> "Coronavirus Spurs a Wave of Suspect Websites Looking to Cash In", New York Times <https://www.nytimes.com/2020/03/24/business/coronavirus-ecommerce-sites.html>

<sup>6</sup> "Combating Trafficking in Counterfeit and Pirated Goods Report to the President of the United States", DHS [https://www.dhs.gov/sites/default/files/publications/20\\_0124\\_plcy\\_counterfeit-pirated-goods-report\\_01.pdf](https://www.dhs.gov/sites/default/files/publications/20_0124_plcy_counterfeit-pirated-goods-report_01.pdf)

the general public. However, there are also many online counterfeiters and unscrupulous people eager to take advantage of these platforms to scam and exploit consumers all over the world. Therefore we deployed our team and our technology to address this timely and important issue in the following research study.

We should first point out that obviously there are many genuine vendors selling masks and protective gears at a fair price. Instagram provides an excellent low-cost platform to promote their offering. They also use legitimate sale and payment channels to process their orders.

However, there is also no lack of dubious sellers who cannot wait to exploit platforms and channels in order to ultimately scam the public.

In this research, we explore how these opportunists are using a chain of platforms and accounts, including Instagram, Whatsapp, and ultimately shipping companies such as EMS or DHL, to sell medical masks through non-standard and potentially highly exploitative practices.

Why would these scammers take this approach when traditional marketplaces such as Amazon, Alibaba, JD or Ebay are the most obvious platforms for such activities? The answer is simple. If you have a short-term quantity of a much sought-after product or your aim is just to scam people, those channels are certainly not ideal: they require seller screening, provide feedback system and offer payment protection tools. You'd rather opt for a personal, but non-identifiable, Instagram account, then link it to Whatsapp or Wechat and provide a basic Paypal payment option. This guarantees that transactions occur with almost zero traceability and/or deny any buyer refund should a complaint arise.

Also, in the case of medical masks, sellers are activating ad hoc accounts on various ecommerce platforms in order to leverage Instagram's power to attract customers worldwide.

A quick, easy and cost-effective way to obtain a broader reach.

On 7 March 2020 an Instagram spokesperson explained that the platform had banned all ads about mask sales. However, about 14 days later, some consumer advocacy groups unveiled such ads still active on Facebook. In the meantime, these scammers came up with a simpler, cheaper and more effective option: make good use of Instagram viral hashtags.

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<sup>7</sup> "Facebook temporarily bans ads for medical face masks to prevent coronavirus exploitation", The Verge <https://www.theverge.com/2020/3/7/21169109/facebook-instagram-bans-ads-face-masks-coronavirus>

<sup>8</sup> "Ads for face masks still appear on Facebook despite company's pledge to ban them", CNN Business <https://edition.cnn.com/2020/03/19/tech/facebook-coronavirus-mask-ads/index.html>

## 2. METHODOLOGY

Ghost Data's analysis first looked at public posts containing the #Coronavirus and #Covid19 hashtags. Instagram has been particularly wary of these hashtags to monitor their use for misinformation and propaganda purposes. Unfortunately the same hashtags are also being used to sell medical masks and other COVID-19 sanitary supplies. By analysing an initial sample of 99,732 posts, we identified the most used hashtags to promote sales of medical masks:

#n95	#n95mask	#n95masks	#medicalmask
#3mmask	#kn95	#kn95mask	#ffp2
#surgerymasks	#surgerymask	#kf94	#kf80
#fp2	#3mmask	#surgicalmasks	#surgicalmask
#ffp3	#fp3	#n99	

## **3. RESULTS**

### **UNIQUE NUMBER OF SELLERS**

By analyzing texts placed on the images (OCR) and accompanying text of targeted posts, we have identified 10,450 accounts that are selling medical masks on Instagram. As a way of comparison, in our 2019 counterfeit products report we identified 56,769 accounts selling counterfeit fashion goods. It is important to note that while 56,769 fashion accounts had amassed over a period of 3 years (2016 - 2019), the reported 10,450 accounts now selling medical masks have appeared as sellers just over the last 4 months. >90% of these accounts were not selling masks before 1 December 2019.

(In our draft report up to 24 March 2020 we found about 11,544 sellers. A week later that number dropped to 10,450. A possible reason is the deactivation of such accounts by Instagram.)

### **NUMBER OF POSTS**

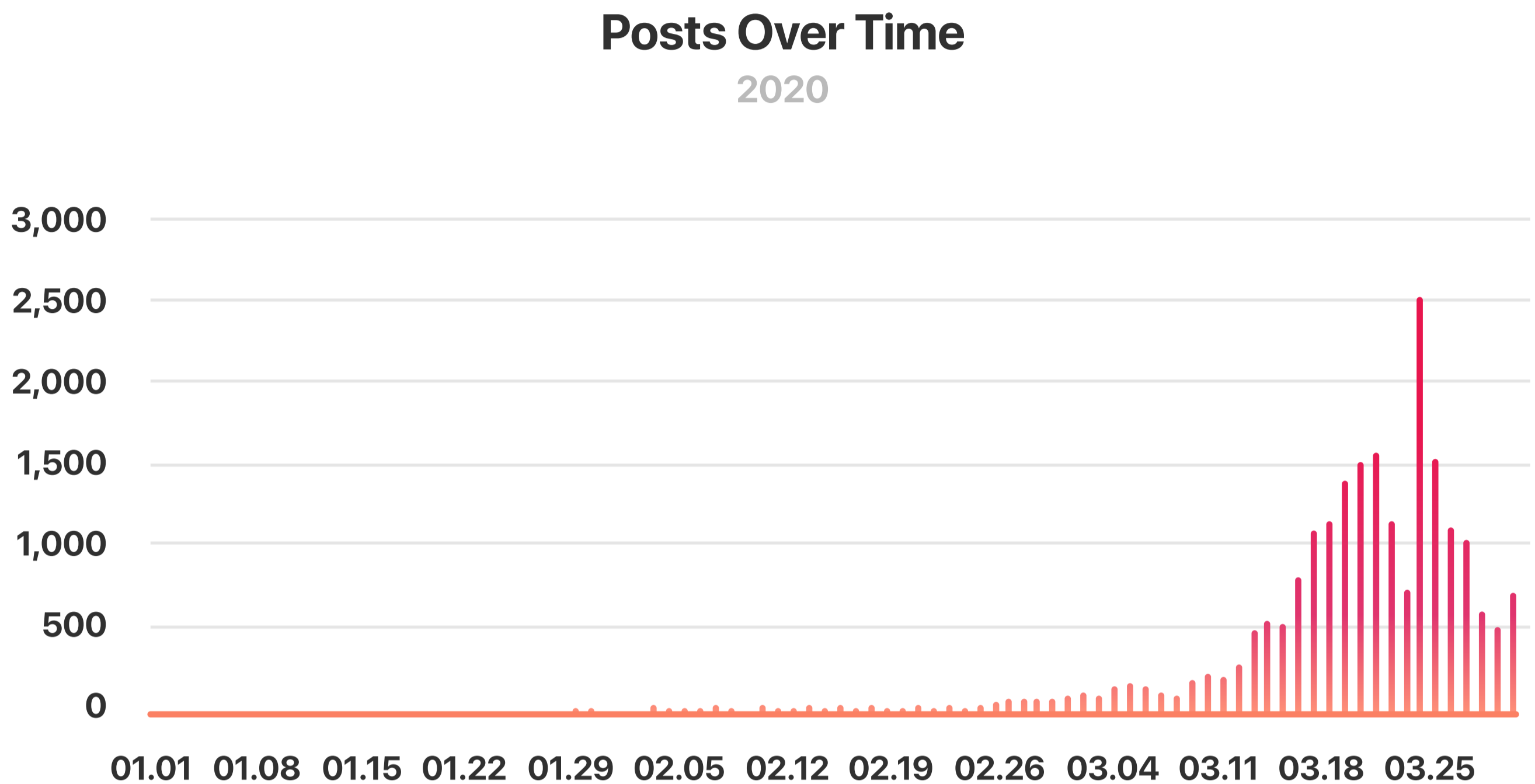
We isolated the Instagram posts selling medical masks by means of OCR and text analysis. The criteria we utilized to identify such posts were:

- The OCR includes keywords related to the sale (available, buy, wholesale, order [...])
- Caption, user's biography or overlaid text including keywords related to the sale (available, buy, wholesale, order [...])

The total of Instagram posts matching these criteria were 25,861 out of the initial sample of 99,732.

## EXPONENTIAL GROWTH OF POSTS OVER TIME

As shown in the chart below, between 1 January 2020 and 31 March 2020 there has been an exponential growth of accounts selling medical masks. This trend appears to coincide with the global explosion of the pandemic<sup>9</sup>.

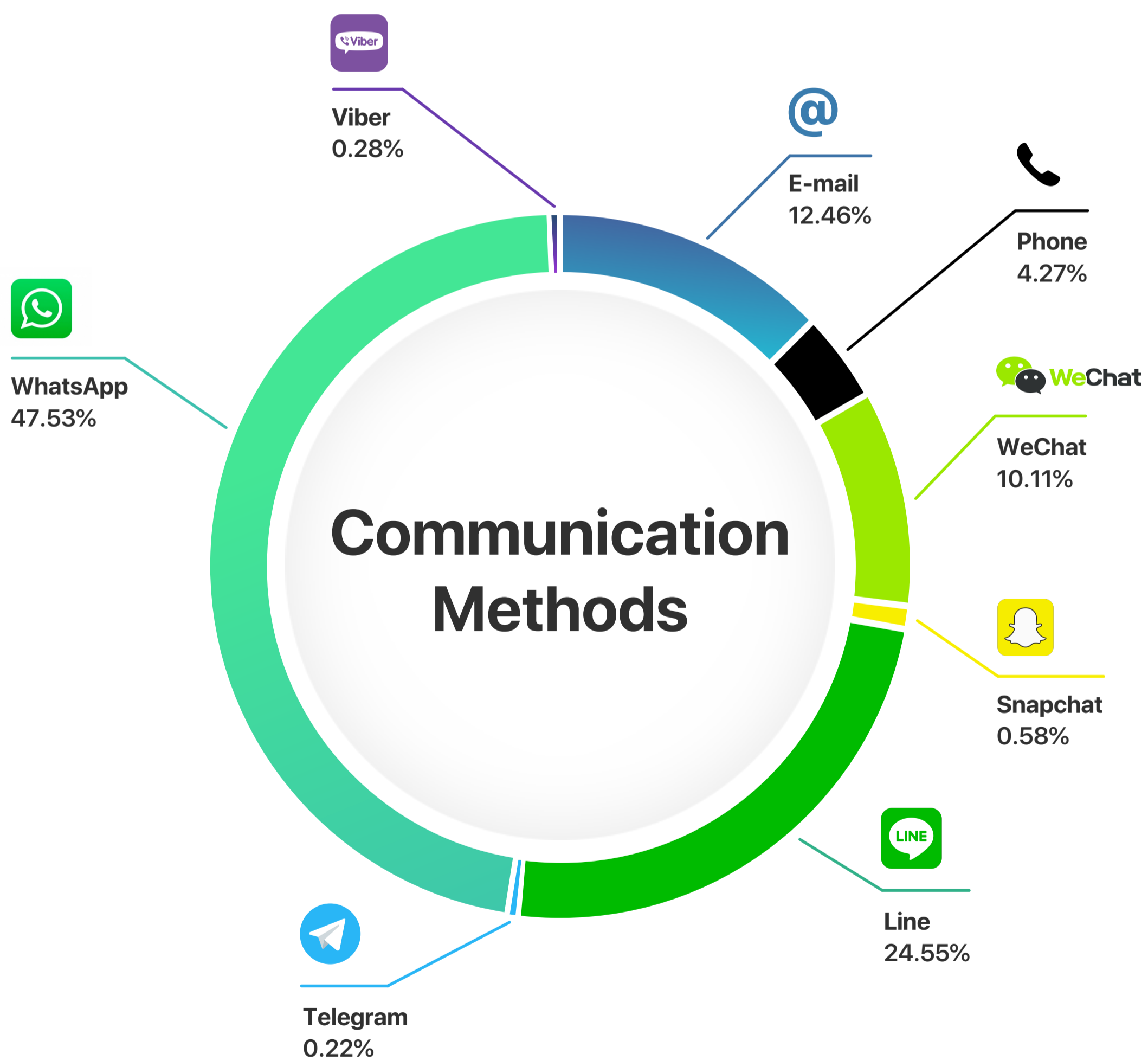


<sup>9</sup> "Rolling updates on coronavirus disease (COVID-19)", WHO <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>

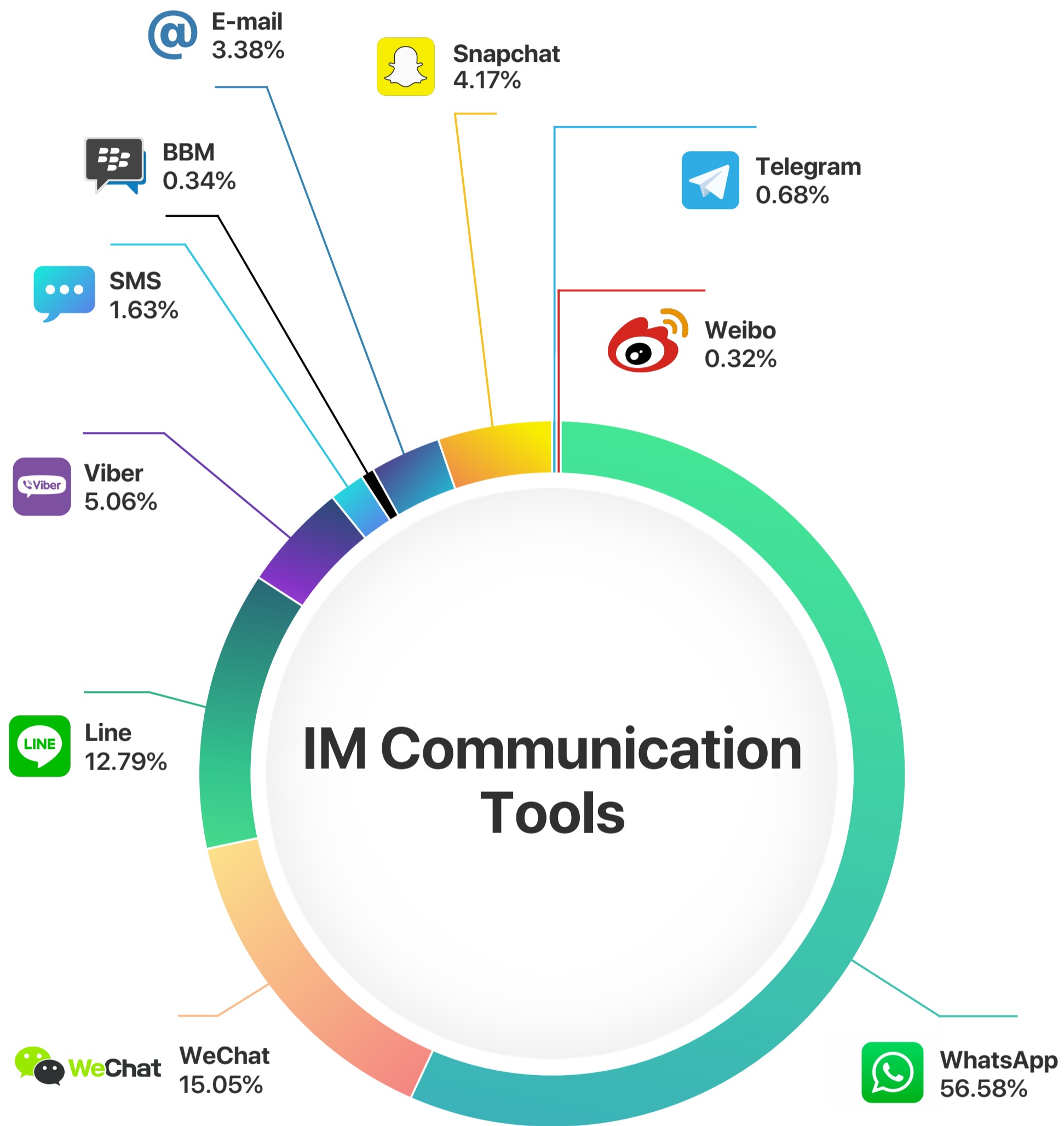
## COMMUNICATION METHODS

As shown here below, the communication methods mentioned most often in these posts are Whatsapp and Line. Whatsapp is used by over 47% of the sellers. Interestingly, the Chinese apps Line and Wechat are used collectively 35% of the time.

Furthermore it is worth it to note a certain similarity with the communication methods used for the sale of counterfeit fashion goods on Instagram (see % similarity in charts further in next page).



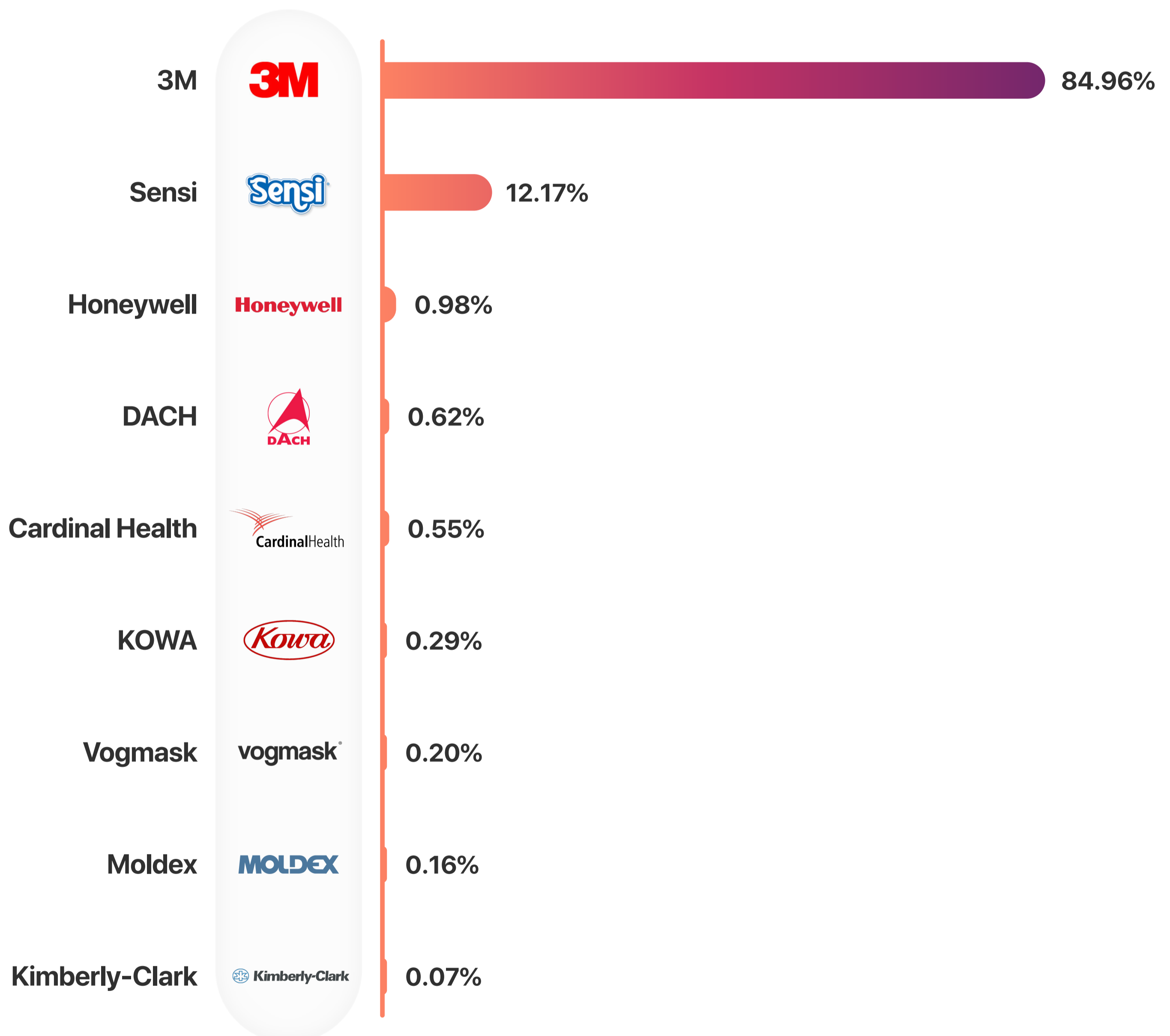




<sup>10</sup> "Instagram and counterfeiting in 2019", Ghost Data [https://ghostdata.io/report/Instagram\\_Counterfeiting\\_GD.pdf](https://ghostdata.io/report/Instagram_Counterfeiting_GD.pdf)

## MEDICAL MASKS MANUFACTURERS

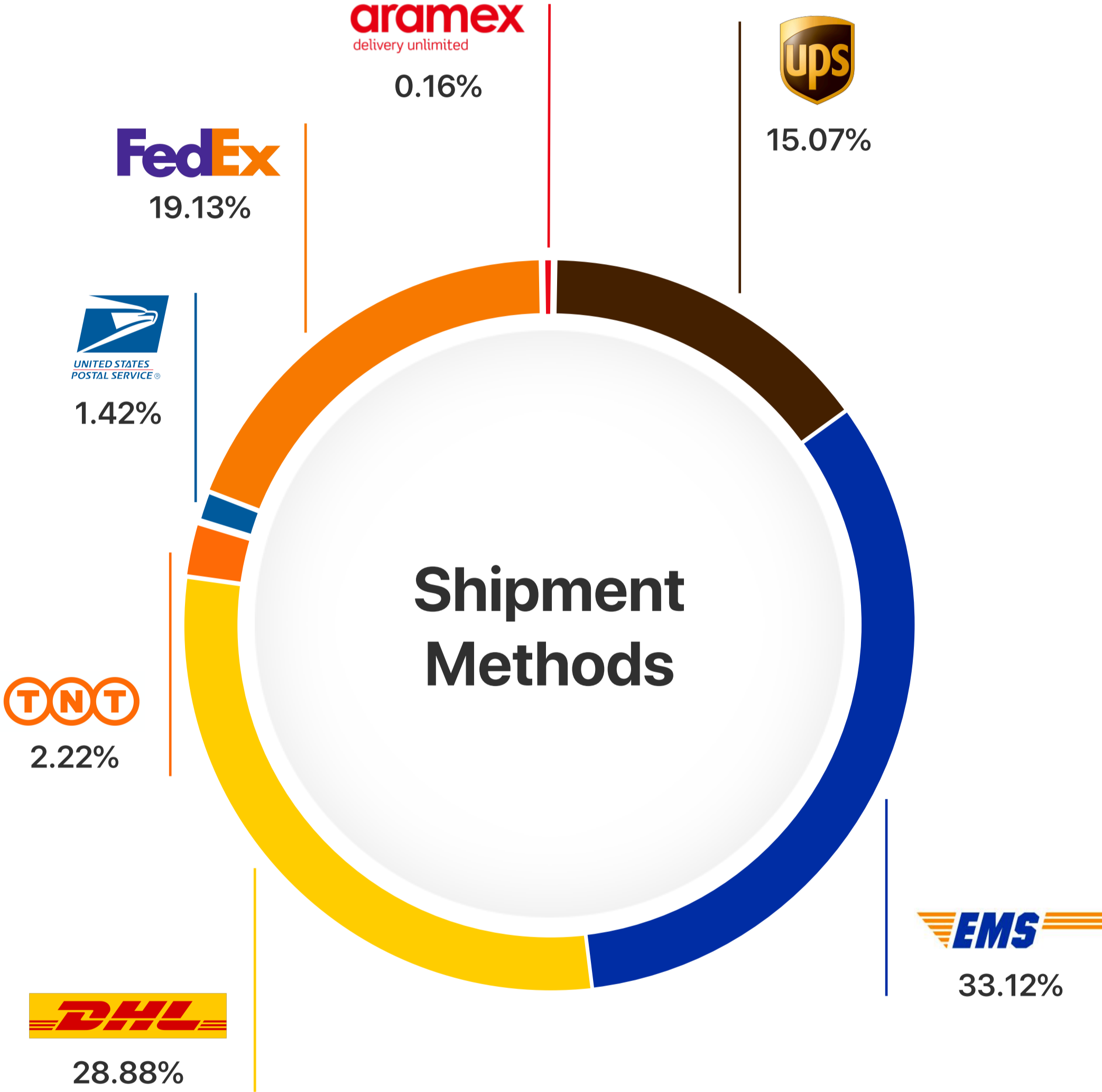
The following chart illustrates which masks manufacturers received most mentions in those posts. 3M is the most frequent brand, appearing in over 84% of the post images. Just recently 3M announced an increase in the distribution of counterfeit 3M goods<sup>11</sup>.



<sup>11</sup> "3M doubles global production of respiratory masks; warns of counterfeits", Star Tribune, March 20, 2020 <https://www.startribune.com/3m-has-doubled-global-production-of-respiratory-masks-warns-of-counterfeits/568967952/>

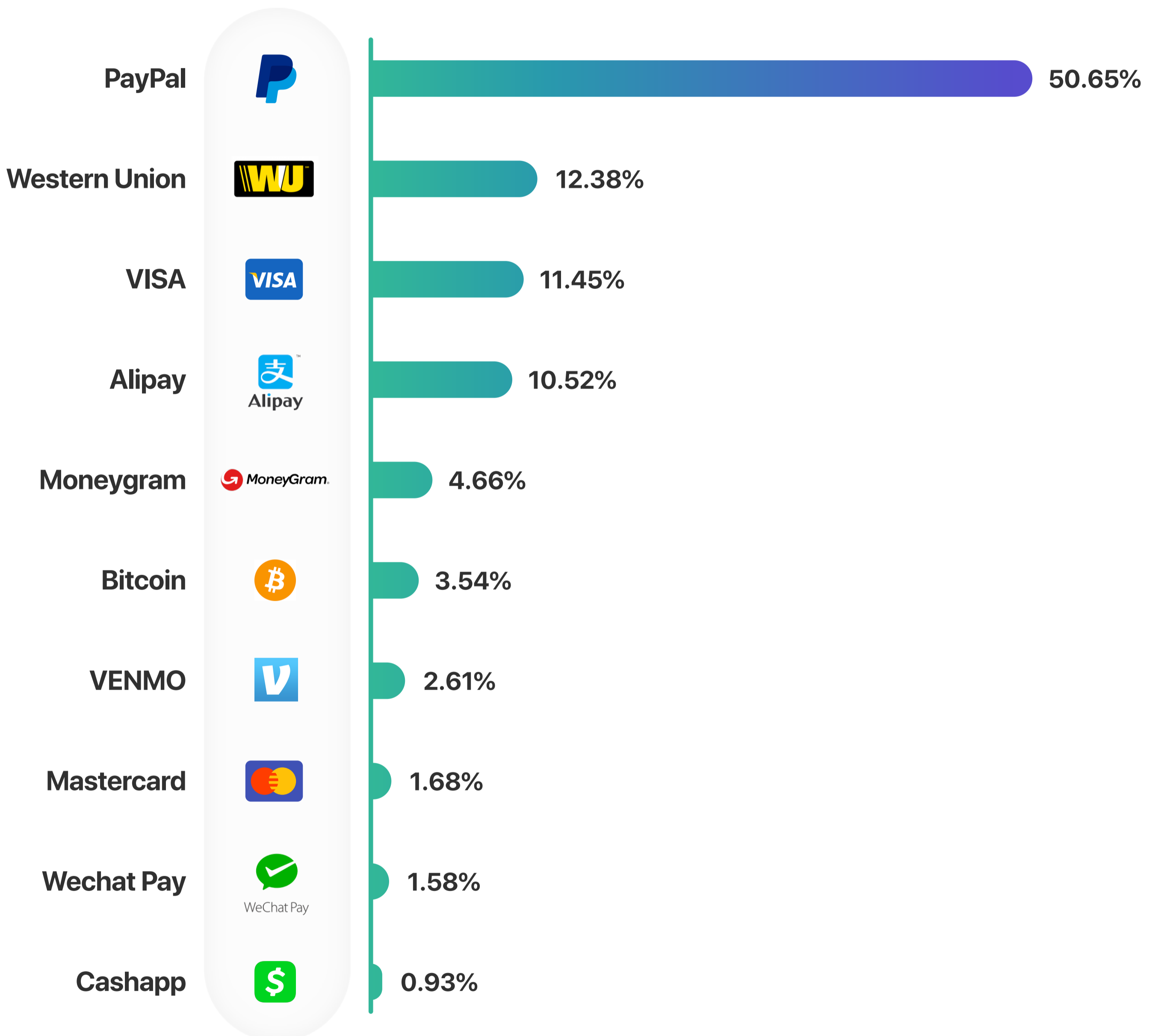
# SHIPMENT METHODS

Instagram’s medical masks sellers utilize different shipment methods worldwide. By analysing their post texts and images (OCR), we found that the most common methods are EMS and DHL, followed by FedEx and UPS.

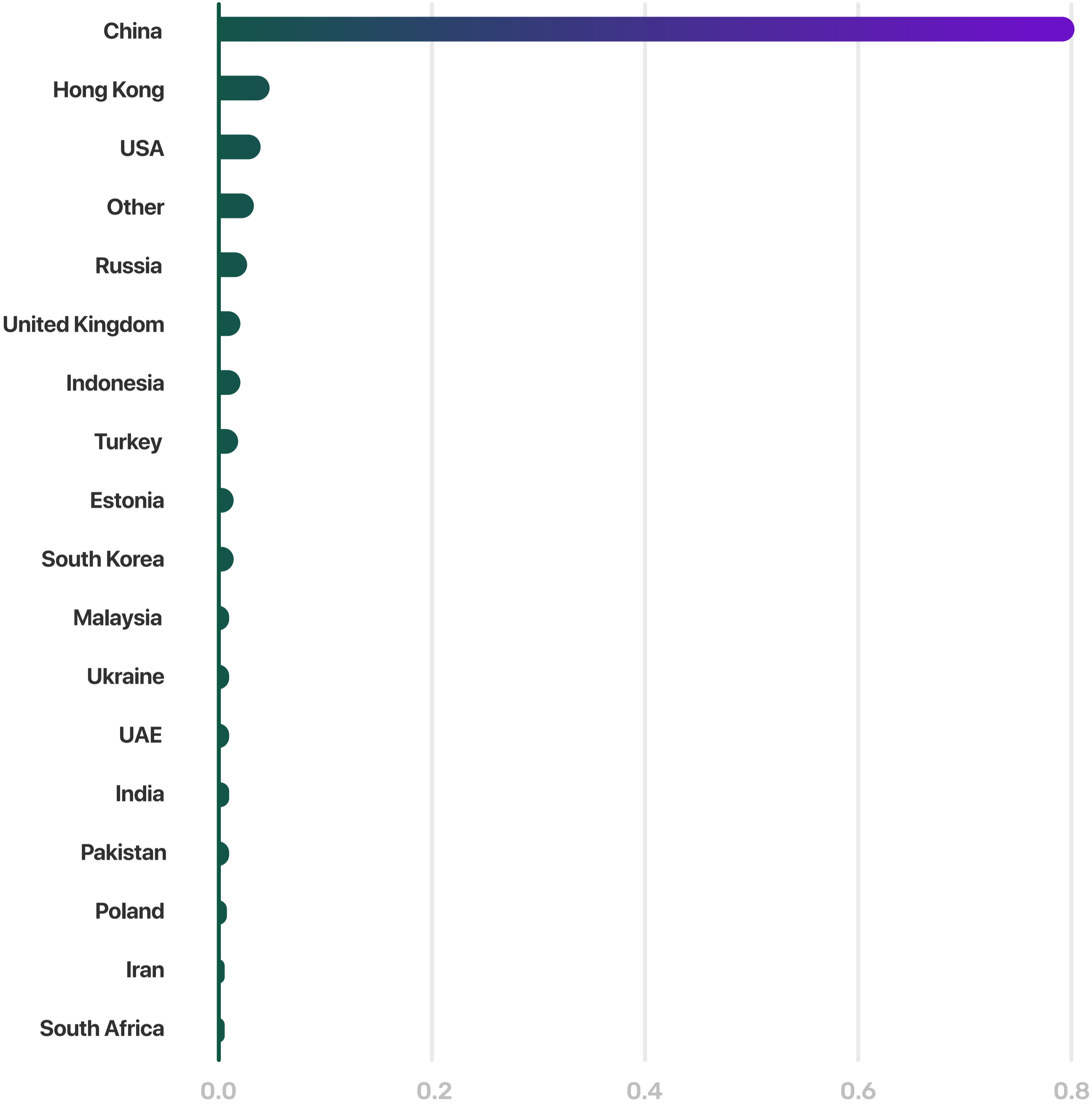


## PAYMENT METHODS

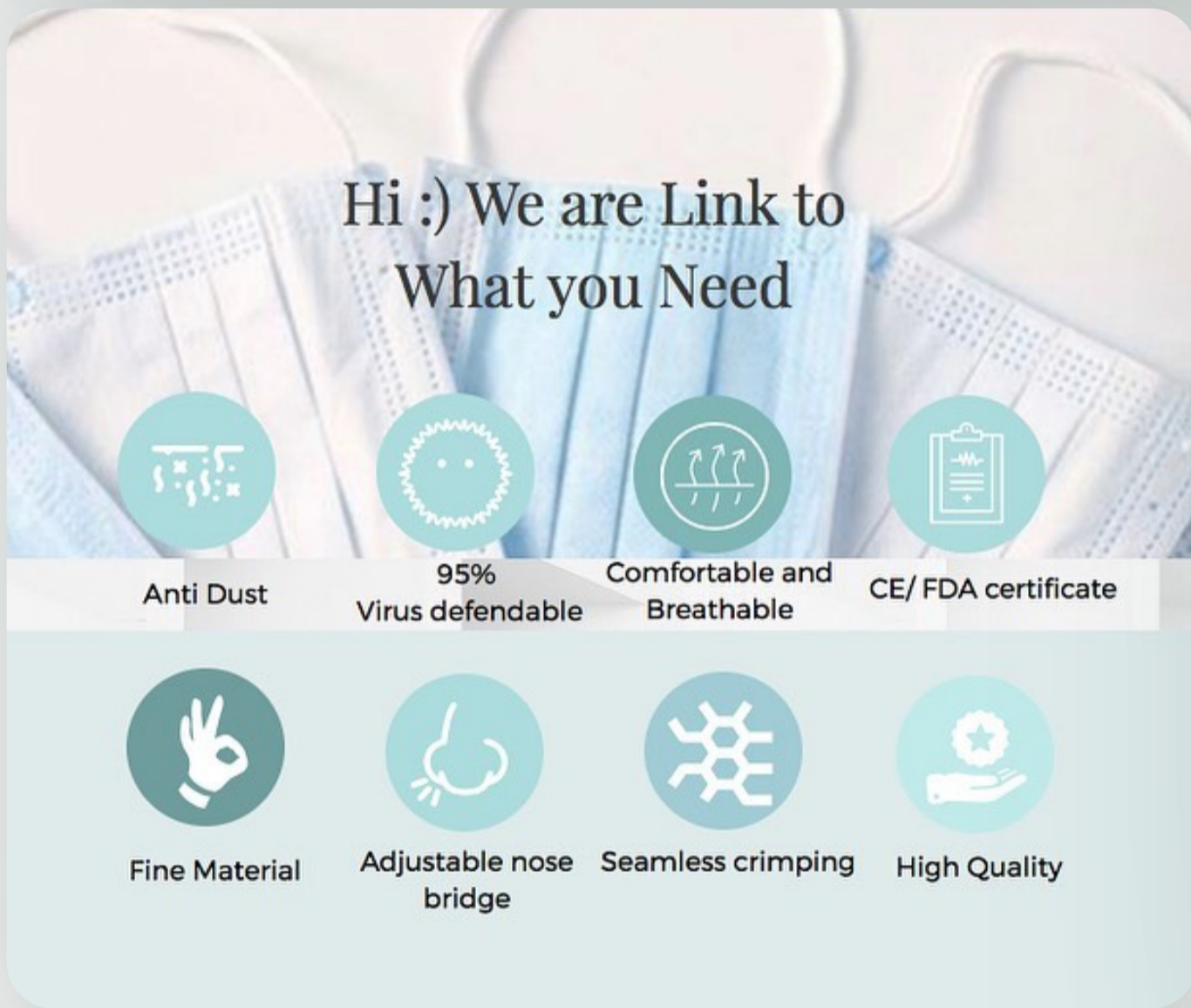
As shown in the following chart, the most common payment method is Paypal, with an adoption rate of over 50%. Farther away we have Western Union transfers (12.38%) and Visa cards (11.45%).



# SELLER'S COUNTRY OF ORIGIN

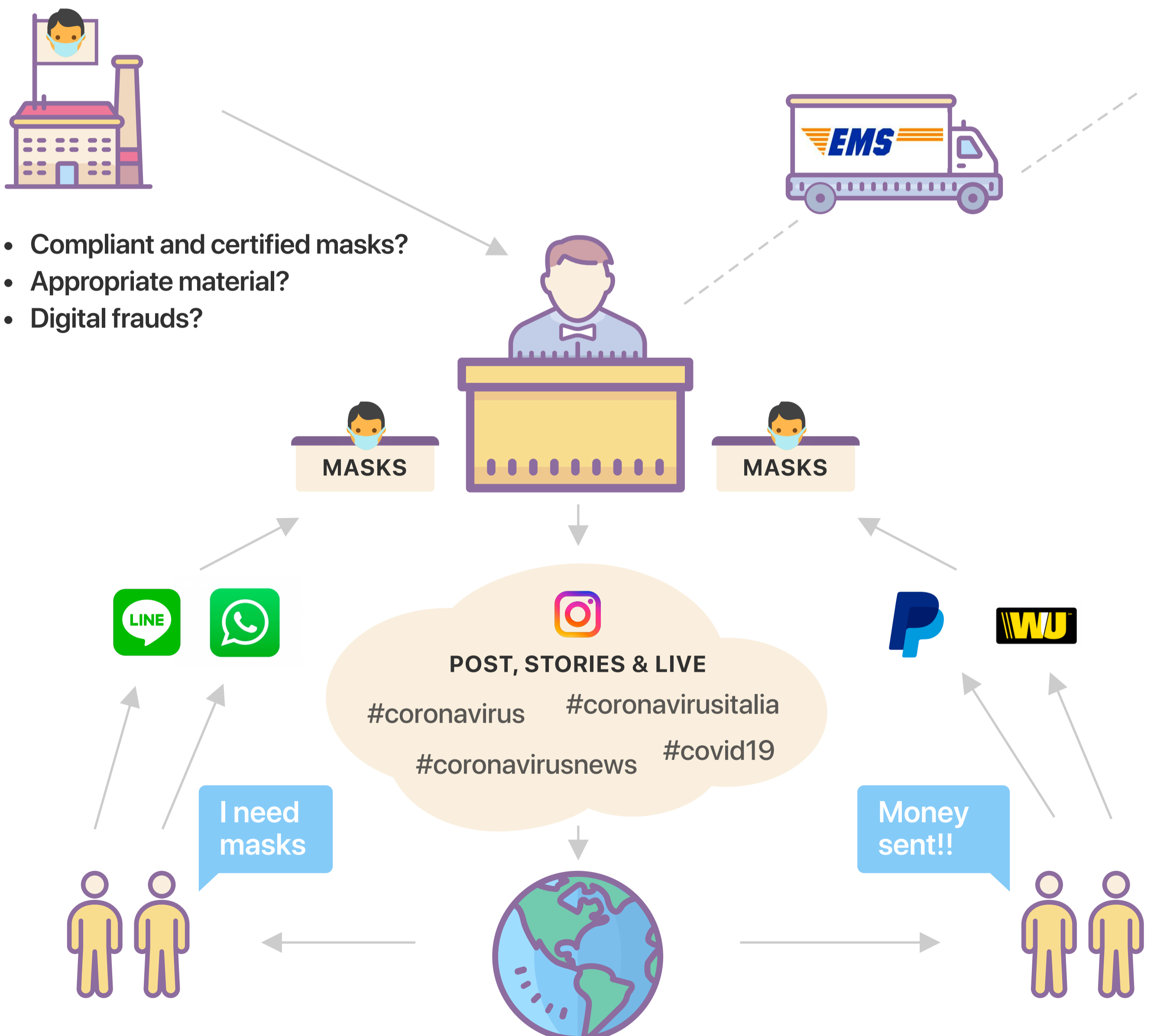


# EXAMPLES OF POSTS



## 4. CONCLUSION

Social Networks deliver high societal value especially in times of crisis. Platforms that allow people to connect, share data, images and videos, are crucial to allow efficient communication at scale. As Ghost Data has been documenting since 2013, such powerful tools also carry great responsibilities for their owners and managers. Instagram has been making great efforts to moderate, restrain and limit the circulation of illicit content associated with COVID-19 hashtags. Our report shows that despite these efforts, scammers have found ways to abuse the broader reach of Instagram and similar platforms.



We found at least 10,450 of such dubious accounts on Instagram up to 31 March 2020. The vast majority of them purposely sell medical masks and originate from China. Overall we found 25,000 Instagram posts exploiting COVID-19 hashtags to attract potential buyers.

This trend poses great safety and economic risk to the many people using social network platforms every day. The sale of goods is carried out by sellers who are not legit or certified. There are no guarantees that advertised products are genuine and safe, not to mention the possibility of health and safety threats for a potential buyer. Their communication, payment and shipment methods should be aggregated in a multi-layered strategy deployed by the platform managers, in order to coordinate and verify the authenticity and reliability of anybody interested in selling items through large social platforms such as Instagram.

Social networks should approach their e-commerce effort in a more decisive and constructive way, at least by implementing a feedback and seller profile verification system in the short-medium term. This would allow for a higher consumer confidence and safety, while providing an on-going control on sensible items sold on their platforms. This is particularly true and necessary in a situation like the current pandemic. Our hope is that our independent research could provide some useful help in this direction.