



Social Media Analytics for UMKM

Desthalia

Data Scientist at Widya Analytic

22 Maret 2021

Introduction

About Me:

- Data Scientist
- Ilmu Komputer UGM 2015
- Previous experience: System Analyst at Dattabot (2017)



About Widya Analytic:

- Since 2019
- Part of Widya Group under UMG Labs
- Provide data solutions to businesses





Agenda

- ❑ UMKM
- ❑ Objective dan Problem
- ❑ Potential Solution
- ❑ Key Takeaways

UMKM

- Diatur oleh Undang-Undang Nomor 20 Tahun 2008 tentang Usaha Mikro, Kecil, dan Menengah
- UMKM merupakan salah satu tenaga terbesar yang mendorong perekonomian negara
- Ada demand untuk meningkatkan competitiveness

Sumber: <https://www.ukmindonesia.id/baca-artikel/62>



Objective:

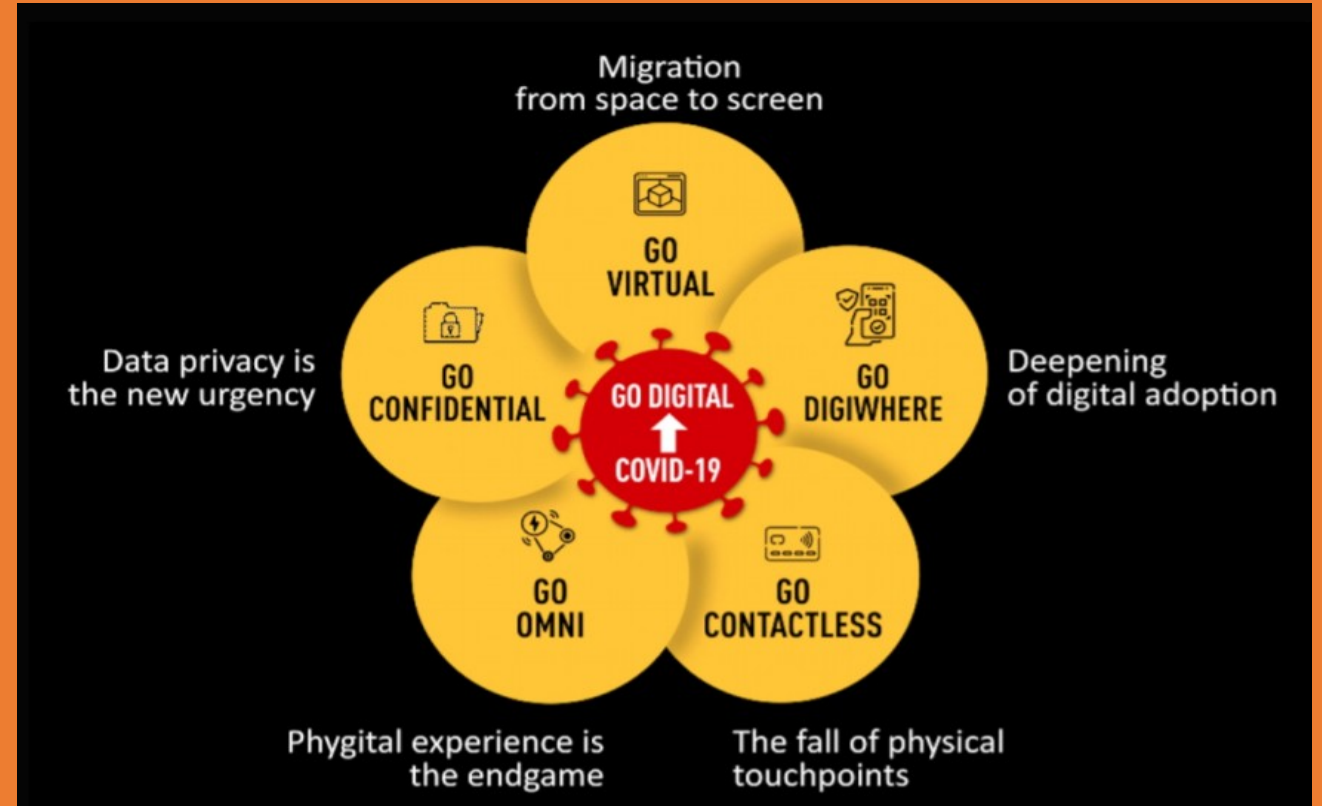
Go digital and be data-driven



Kenapa

*Go digital dan data-
driven?*

Accelerated digitalization



Accelerated digitalization

GO VIRTUAL:

- Living in the virtual century
- The surge of children's screen time
- Remote working: the birth of Zoom generation
- Thriving of digital stay @ home jobs
- The emergence of cloud workstyle
- Digital signature: the dawn of "wet" signature
- The birth of real-time consumers

GO DIGIWHERE

- Essentials are moving online
- Wider usage of digital services
- Every consumer is hyper-value consumer
- Digital reputation: the rise of AI-base credit scoring
- TV goes online

GO CONTACTLESS:

- The end of cash
- Is it the end of in-branch banking? The birth of Digital Branch
- Chatbot attack: The death of Customer Service
- QR-code is the new pin-code
- The birth of self-service travelers

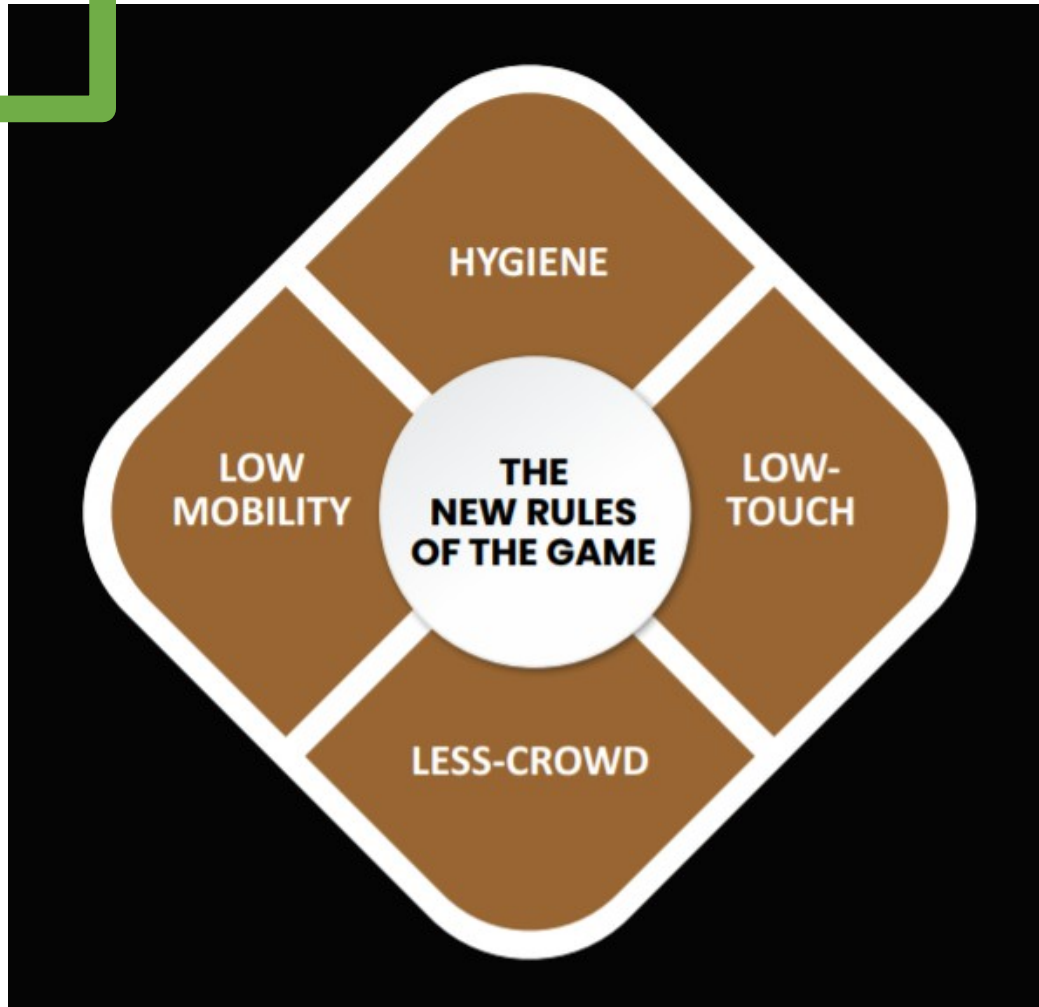
Accelerated digitalization

GO OMNI:

- Hybrid learning is the ultimate solution
- Omnichannel becomes mainstream
- Cloud kitchen is the new normal
- Virtual or hybrid concert?
- Digital nomad
- Travellers want a seamless "look-book-pay"

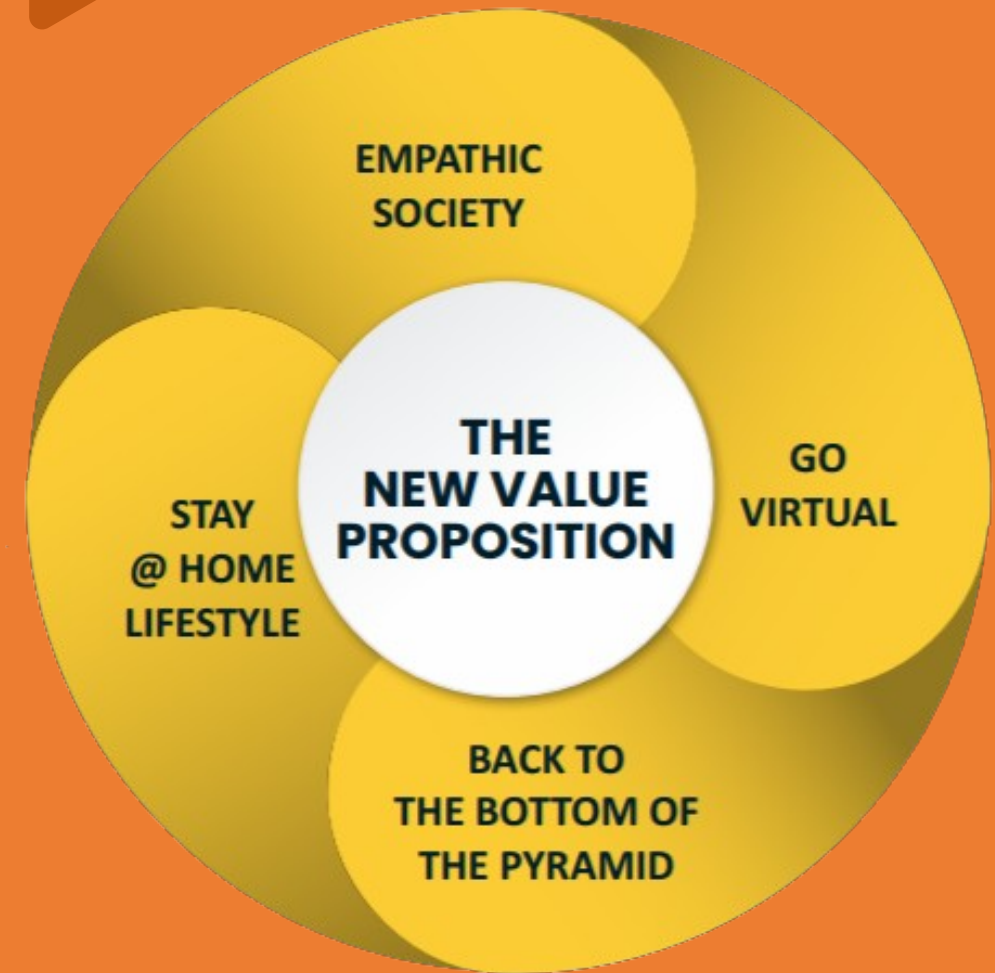
GO CONFIDENTIAL:

- Data tracking & tracing
- Customer centricity
- Micro influencers are more powerful and relevant
- Marketing is about experimentation
- Welcome the age of personalization



New Rules of the Game

Shifting Customer Value



A black and white photograph of a person sitting at a desk with their head buried in their hands, suggesting a state of frustration or being overwhelmed. The person is wearing a white long-sleeved shirt. In the foreground, there is a glass of dark liquid and a pair of glasses. To the right, there are several crumpled pieces of paper. The background shows a window with a grid pattern.

Problem

Literasi digital nil



Problem

- Hanya 8% dari total UKM yang go online
- Belum lihat value dari digital dan data
- Menggunakan data apa dan caranya



Potential Solution

How we try to help

Potential Solution

Social Media Analytics

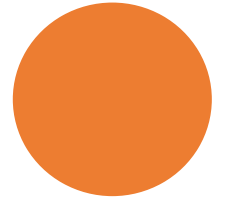
- Kami membangun data analytics platform untuk melakukan social media analytics

Customer Education

- As part of our service, kami menyediakan personalized customer support

What we have done

- Kami ada 2 iterasi development
- Iterasi pertama:
 - Pure experimentation
 - Sumber data Twitter
- Iterasi kedua:
 - Mengaplikasikan product design thinking
 - Tambah sumber data: Instagram



First iteration

- Modular analytics.
- Sumber data: Twitter
- Terdiri dari engine analytics, engine scoring, dan engine decision
 - Engine analytics: sentiment analysis, NER, graph-based topic modelling
 - Engine scoring: z-score, Euclidean score
 - Engine decision: if-else rule

Second iteration

- Apply product design thinking
- (New) Sumber data: Instagram
- cekTrend:
 - Scrap ide modular analytics
 - Mengganti konsep menjadi cekTrend
- cekBrand
 - Engine analytics: growth analysis dan sentiment analysis



Social Media Analysis



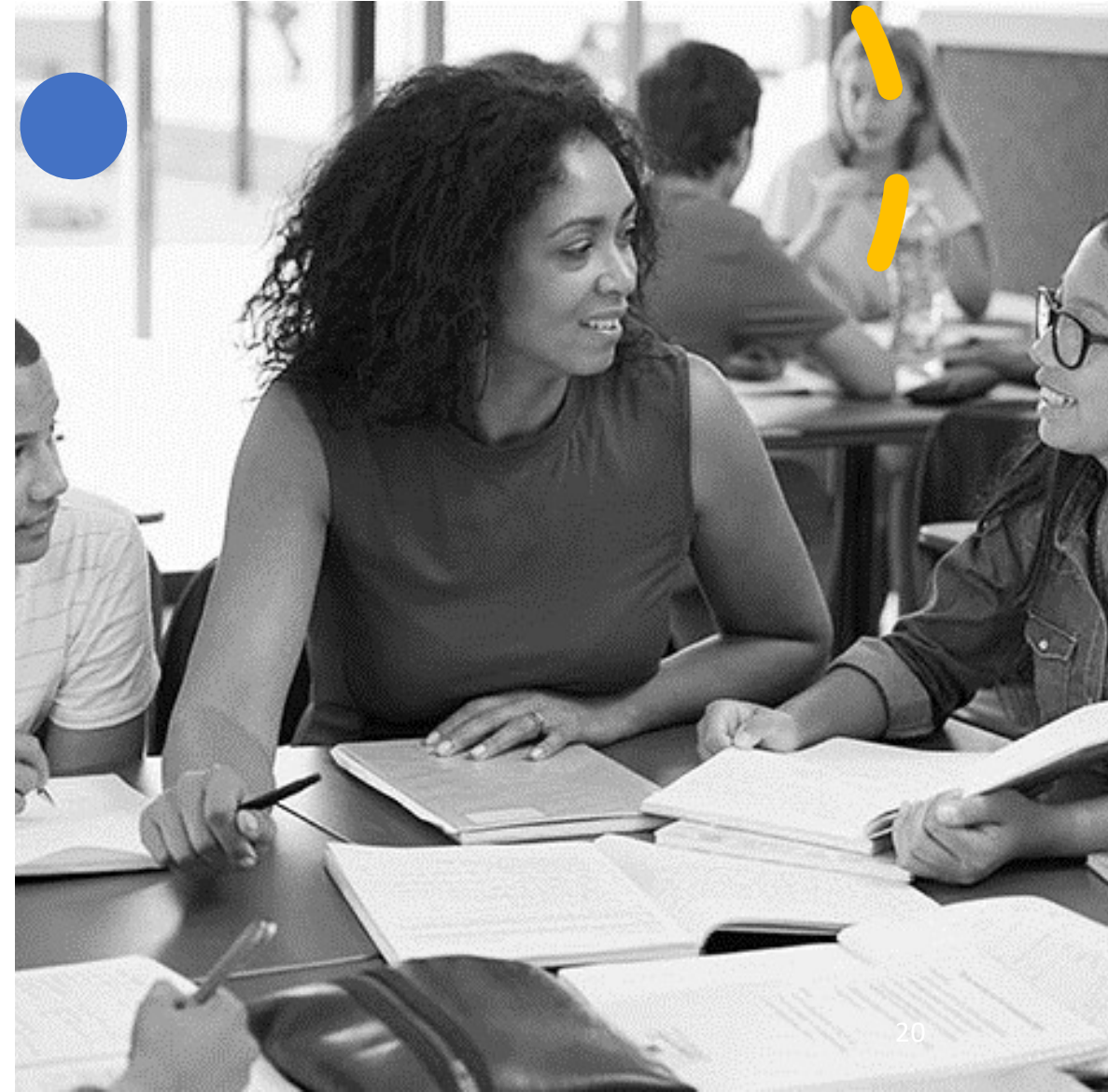
What we learn



AI yang terlalu kompleks



AI itu hanya sebagian kecil dari keseluruhan produk



What's next?



MARKET
VALIDATION



ANALYTICS ENGINE
OPTIMIZATION



NEW ANALYTICS
ENGINE PERHAPS?



MORE PROJECTS!



Thank you!