

6 10.0 0.25																							
4/15 /202 6 10.0 1.56	6	7	6	7	6	5	6	6	6	7	6	7	6	7	5	6	7	7	6	7	4	6	7
4/15 /202 6 10.0 5.21	7	6	5	6	7	6	7	6	7	5	7	4	7	6	7	5	6	7	4	6	6	7	6
4/15 /202 6 10.0 8.24	6	7	4	6	6	4	7	6	7	6	6	5	7	7	6	4	7	7	6	7	6	5	7
4/15 /202 6 10.1 2.37	5	6	7	6	5	6	7	6	5	6	6	5	7	6	5	7	6	7	5	6	7	7	5

4/15 /202 6 10.1 6.39	5	7	6	7	6	4	7	7	6	7	5	7	6	6	7	6	7	7	6	7	6	4	7
4/15 /202 6 10.1 9.27	6	5	6	6	6	6	5	6	7	6	6	7	6	6	6	5	6	5	6	7	6	6	6
4/15 /202 6 10.2 2.31	5	7	6	5	6	6	5	7	7	7	5	6	6	5	7	5	5	6	5	5	6	6	5
4/15 /202 6 10.2 4.03	7	6	7	5	6	7	6	4	7	6	4	6	7	6	7	6	5	6	7	6	5	6	7
4/15 /202 6	5	7	6	5	6	6	5	5	7	6	7	6	5	6	6	5	6	6	7	6	7	6	5

10.2 6.31																							
4/15 /202 6 10.2 8.42	7	5	6	7	7	4	6	6	5	6	7	4	6	6	5	7	6	7	6	7	6	7	6
4/15 /202 6 10.2 9.53	7	6	4	7	4	6	7	7	6	4	7	5	6	7	6	7	5	7	6	7	5	6	7
4/15 /202 6 10.3 0.35	7	6	7	6	7	6	5	6	5	7	7	4	6	7	6	7	4	5	7	6	6	7	6
4/15 /202 6 10.3 1.43	7	6	7	5	7	6	5	7	6	7	6	7	6	5	7	6	7	6	4	7	7	6	7
4/15 /202	7	6	7	5	5	7	6	7	4	7	7	6	5	6	4	7	6	6	7	6	7	6	5

6 10.3 4.16																							
4/15 /202 6 10.4 1.17	6	4	6	7	6	7	6	6	4	7	6	5	7	7	6	6	5	6	7	5	7	5	6
4/15 /202 6 10.4 5.42	6	7	6	7	6	7	4	7	6	4	6	5	7	6	7	6	7	5	7	6	6	7	6
4/15 /202 6 10.4 9.25	6	7	6	7	4	7	5	6	5	7	7	6	7	5	6	7	6	6	7	6	4	6	7
4/15 /202 6 10.5 3.51	7	6	7	6	5	6	7	6	7	6	5	6	7	7	6	7	6	5	7	6	6	7	6

4/15 /202 6 10.5 7.56	7	5	7	6	6	7	6	7	5	6	7	6	7	6	5	7	6	6	7	6	7	6	7
4/15 /202 6 11.0 4.48	5	7	6	7	6	7	6	5	6	7	7	6	7	5	6	7	6	7	6	6	5	6	7
4/15 /202 6 11.0 7.33	5	7	6	7	6	7	6	5	6	7	5	6	7	7	6	7	6	5	6	7	7	6	7
4/15 /202 6 11.1 9.14	2	2	6	2	4	6	5	6	3	4	3	6	4	3	6	7	2	3	3	2	3	3	3
4/15 /202 6	5	6	6	4	5	6	6	5	5	5	4	5	6	5	5	5	5	6	5	5	6	6	6

11.2 3.57																							
4/15 /202 6 11.2 8.06	3	3	3	2	6	6	6	4	4	4	2	4	5	4	6	6	4	4	4	5	4	6	6
4/15 /202 6 11.3 4.37	6	6	7	6	7	7	7	7	6	6	6	6	6	6	6	7	6	6	6	7	7	7	7
4/16 /202 6 0.05. 39	5	6	3	6	5	6	7	5	6	6	5	7	6	5	6	7	5	6	7	7	6	6	7
4/16 /202 6 18.3 9.08	4	2	6	5	4	5	5	6	5	5	7	5	6	6	6	6	6	6	7	6	6	7	7
4/22 /202	3	2	4	4	6	5	6	4	4	6	5	6	6	7	7	6	7	5	5	6	4	6	6

6 6.30. 32																							
4/23 /202 6 10.2 7.43	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	
4/28 /202 6 16.1 1.26	2	2	4	5	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
4/28 /202 6 16.1 1.41	5	3	3	3	6	6	7	5	6	4	4	3	5	6	7	5	6	5	3	6	6	7	7
4/28 /202 6 16.1 5.01	5	5	6	6	6	7	7	6	6	6	6	6	6	6	7	7	7	6	6	6	6	6	6

4/28 /202 6 16.1 6.57	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
4/28 /202 6 16.2 3.44	6	5	5	5	7	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6
4/28 /202 6 16.3 3.51	6	6	6	5	6	7	6	7	6	6	6	6	6	6	6	7	7	6	6	6	7	7	7
4/28 /202 6 17.0 5.10	5	4	5	5	6	6	6	6	6	6	4	4	5	6	6	6	6	6	6	6	6	6	6
4/28 /202 6	3	3	5	4	4	5	5	4	4	5	5	4	4	4	4	5	5	6	6	5	6	6	5

17.0 8.25																							
4/28 /202 6 17.1 0.40	7	6	6	7	6	6	7	7	7	6	6	7	6	6	7	6	6	6	7	6	6	7	6
4/28 /202 6 17.1 2.20	3	4	3	4	3	5	5	4	4	4	4	5	4	4	5	5	5	4	5	4	5	4	4
4/28 /202 6 17.1 2.45	2	2	2	2	2	2	1	4	1	4	1	3	4	1	2	1	2	1	3	2	4	4	4
4/28 /202 6 17.1 5.06	6	5	7	6	5	7	5	6	7	6	5	6	7	6	5	7	7	6	6	7	6	7	5
4/28 /202	5	5	6	3	6	6	6	6	6	6	6	5	5	6	6	6	5	5	6	5	6	5	5

6 17.1 5.48																						
4/28 /202 6 17.1 8.20	7	6	6	6	7	6	6	6	4	6	4	4	6	6	4	6	4	6	6	6	6	6
4/28 /202 6 17.2 0.09	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4/28 /202 6 17.2 6.13	5	4	5	4	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4/28 /202 6 17.2 7.14	4	4	3	3	6	6	6	6	6	6	6	6	6	6	6	7	7	6	6	6	7	7

4/28 /202 6 17.3 1.47	4	4	4	4	6	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	
4/28 /202 6 17.3 2.45	5	2	6	5	6	6	6	6	6	5	5	5	5	5	6	5	5	5	6	6	5	5	5
4/28 /202 6 17.3 5.41	2	2	2	2	4	6	6	1	1	1	2	2	2	1	4	5	2	2	2	2	2	2	2
4/28 /202 6 17.3 9.09	5	6	6	5	6	7	7	6	6	7	6	6	7	6	7	7	6	6	6	6	6	6	6
4/28 /202 6	3	3	4	3	4	5	6	6	6	6	2	2	2	3	4	6	4	4	4	3	4	4	4

17.4 5.45																							
4/28 /202 6 17.4 7.55	4	4	5	4	5	6	7	6	5	6	4	4	5	6	5	6	5	6	6	6	6	7	7
4/28 /202 6 17.4 7.58	6	4	6	5	6	6	6	7	7	5	6	6	5	7	7	7	7	6	6	6	3	4	3
4/28 /202 6 18.0 3.45	6	6	6	6	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
4/28 /202 6 18.1 0.26	6	6	6	2	6	5	6	6	6	7	2	5	6	6	6	6	7	6	7	6	6	7	6
4/28 /202	6	7	6	6	7	7	7	6	7	7	4	5	6	6	7	7	6	7	6	7	7	7	6

6 18.3 8.00																							
4/28 /202 6 18.2 4.52	3	3	3	2	4	4	5	4	3	4	4	2	5	4	6	6	5	3	2	4	4	4	4
4/28 /202 6 18.2 9.14	4	3	6	2	4	6	6	6	6	6	2	2	2	3	1	3	3	3	3	3	2	3	
4/28 /202 6 18.4 8.36	7	6	7	6	7	7	6	6	7	6	6	7	6	7	6	7	6	7	6	7	7	5	7
4/28 /202 6 18.5 0.19	4	5	5	3	5	6	6	3	6	4	5	4	4	5	3	6	6	4	5	5	5	5	5

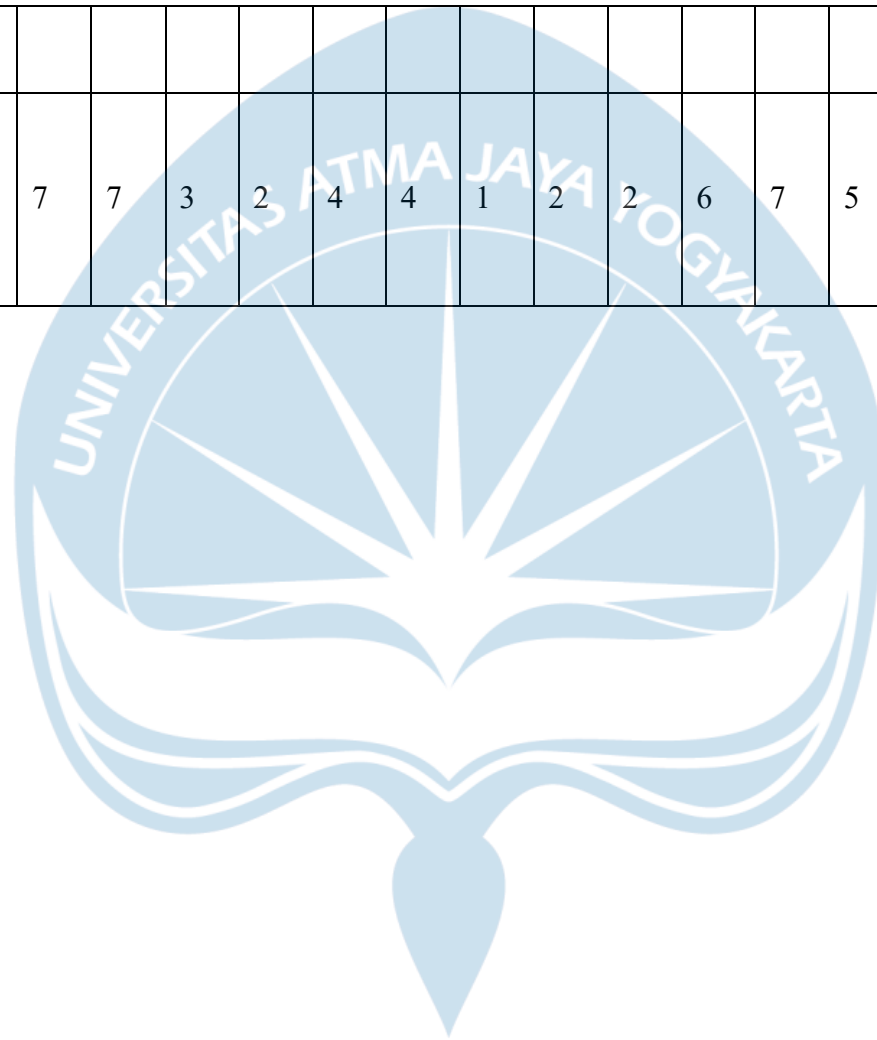
4/28 /202 6 18.5 2.32	3	2	5	3	6	6	6	4	5	5	4	4	4	3	4	5	4	4	4	5	5	5	5
4/28 /202 6 18.5 5.41	2	2	2	2	3	4	3	5	5	5	3	5	3	5	2	5	3	2	3	2	3	3	4
4/28 /202 6 19.2 8.32	5	6	6	6	7	7	6	7	6	6	6	5	7	6	7	7	6	7	6	6	7	6	6
4/28 /202 6 19.3 0.17	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4/28 /202 6	4	6	5	6	6	6	6	6	4	4	5	4	3	5	5	6	5	6	4	4	4	4	4

19.4 4.41																							
4/28 /202 6 19.5 9.01	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
4/28 /202 6 20.1 0.14	3	4	5	3	6	6	6	5	4	6	4	2	3	5	6	7	4	4	4	4	5	4	4
4/28 /202 6 20.1 1.12	3	3	6	4	5	6	7	2	3	5	2	1	1	4	6	7	5	2	4	4	4	4	4
4/28 /202 6 20.2 6.02	2	2	2	2	2	4	4	2	2	2	4	4	4	2	2	2	2	4	4	4	3	3	3
4/28 /202	3	4	3	4	7	6	5	6	4	4	4	3	5	4	6	6	5	5	5	5	5	5	5

6 20.2 8.14																							
4/28 /202 6 20.2 9.24	2	4	6	2	7	7	7	6	7	6	4	4	4	5	4	7	5	4	4	4	6	6	4
4/28 /202 6 20.3 2.23	7	6	6	6	7	7	7	6	7	7	6	5	6	7	6	6	6	7	7	6	6	7	7
4/28 /202 6 20.3 8.55	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4/28 /202 6 20.4 0.19	2	4	6	4	4	7	7	4	4	5	4	3	3	6	7	7	7	4	4	4	3	4	4

4/28 /202 6 20.4 3.17	3	4	4	4	6	6	6	6	4	4	4	4	4	5	6	6	5	6	6	6	5	6	6
4/28 /202 6 20.4 3.42	5	4	5	7	7	7	7	5	5	6	5	6	6	5	6	6	6	5	6	6	6	6	5
4/28 /202 6 20.4 6.24	5	4	5	6	7	7	7	6	6	6	4	4	6	6	6	6	6	5	7	7	5	5	5
4/28 /202 6 20.4 7.05	5	3	3	6	3	4	6	5	5	3	4	5	5	3	6	3	6	4	6	3	4	4	3
4/28 /202 6	5	2	2	4	5	6	4	3	3	5	4	2	5	3	6	6	6	4	5	5	3	3	3

20.5																						
4.29																						
4/28																						
/202																						
6	3	3	5	5	6	7	7	3	2	4	4	1	2	2	6	7	5	4	4	2	4	4
20.5																						
5.55																						



Jenis Kelamin	Usia	Pendapatan	Status Pekerjaan	Frekuensi pembelian di Shopee	Untuk tujuan apa anda pernah menggunakan chatbot Choki?
Pria	21	< Rp 1.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Pria	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, curhat
Pria	21	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Pria	21	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	21	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)

				dalam seminggu)	
Wanita	23	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Sangat jarang (kurang dari 1 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	> Rp 4.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Wanita	21	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo
Pria	19	> Rp 4.000.000	Freelance	Sangat sering (hampir setiap hari)	Mengajukan pengembalian barang (refund / return)
Wanita	23	< Rp 1.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)

Wanita	21	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Wanita	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	23	Rp 3.000.000 - 4.000.000	Freelance	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Wanita	23	Rp 3.000.000 - 4.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	21	Rp 2.000.000 - 3.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	21	Rp 1.000.000 - Rp 2.000.000	Pelajar	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)
Pria	23	Rp 2.000.000 - 3.000.000	Freelance	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)

				dalam seminggu)	
Wanita	21	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	19	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	24	> Rp 4.000.000	Wirausaha	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	23	> Rp 4.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Wanita	20	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)

Pria	17	< Rp 1.000.000	Pelajar	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	19	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	Rp 2.000.000 - 3.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	23	Rp 2.000.000 - 3.000.000	Freelance	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	20	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mencari bantuan terkait penggunaan aplikasi Shopee

Pria	17	> Rp 4.000.000	Pelajar	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	22	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1-2 kali dalam sebulan)	Menanyakan informasi produk atau promo
Pria	21	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1-2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	> Rp 4.000.000	Mahasiswa	Sangat sering (hampir setiap hari)	Mengatasi masalah pesanan atau pembayaran
Pria	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sering (3-5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1-2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman

Wanita	21	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Wanita	23	> Rp 4.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo
Pria	21	Rp 2.000.000 - 3.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	23	> Rp 4.000.000	Freelance	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	21	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman

Pria	22	Rp 2.000.000 - 3.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	26	> Rp 4.000.000	Pegawai Swasta	Sangat sering (hampir setiap hari)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	22	< Rp 1.000.000	Mahasiswa	Jarang (1-2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	22	< Rp 1.000.000	Mahasiswa	Jarang (1-2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Wanita	30	Rp 1.000.000 - Rp 2.000.000	Pegawai Negeri Sipil	Cukup sering (1-2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengajukan pengembalian barang (refund / return)
Wanita	25	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1-2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman

Pria	23	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Pria	23	Rp 2.000.000 - 3.000.000	Wirausaha	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	25	Rp 2.000.000 - 3.000.000	Wirausaha	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Pria	24	Rp 3.000.000 - 4.000.000	Wirausaha	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Wanita	22	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	24	Rp 2.000.000 - 3.000.000	Wirausaha	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran

Pria	26	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo
Wanita	24	Rp 2.000.000 - 3.000.000	Wirausaha	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Wanita	24	Rp 2.000.000 - 3.000.000	Wirausaha	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Pria	25	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran
Wanita	23	Rp 1.000.000 - Rp 2.000.000	Freelance	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Wanita	23	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Wanita	26	Rp 2.000.000 - 3.000.000	Wirausaha	Cukup sering (1–2 kali	Mengatasi masalah pesanan atau pembayaran

				dalam seminggu)	
Pria	26	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran
Pria	23	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	26	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Wanita	25	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Pria	25	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Pria	28	Rp 1.000.000 -	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo

		Rp 2.000.000			
Pria	27	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	26	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Wanita	26	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	25	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	20	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Wanita	21	< Rp 1.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran

Pria	25	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo
Pria	27	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Wanita	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)
Pria	29	Rp 2.000.000 - 3.000.000	Pegawai Negeri Sipil	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Wanita	23	Rp 2.000.000 - 3.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)
Wanita	24	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Sering (3–5 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran

Pria	23	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Pria	21	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran
Pria	28	Rp 3.000.000 - 4.000.000	Wirausaha	Sering (3–5 kali dalam seminggu)	Mengajukan pengembalian barang (refund / return)
Pria	22	> Rp 4.000.000	Pegawai Negeri Sipil	Sangat sering (hampir setiap hari)	Menanyakan informasi produk atau promo, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	23	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Wanita	27	Rp 3.000.000 - 4.000.000	Wirausaha	Sangat sering (hampir setiap hari)	Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	26	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Sering (3–5 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengajukan pengembalian barang (refund / return)

Wanita	24	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)
Pria	23	Rp 2.000.000 - 3.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Pria	24	Rp 3.000.000 - 4.000.000	Pegawai Negeri Sipil	Sering (3–5 kali dalam seminggu)	Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	Rp 2.000.000 - 3.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo
Wanita	25	Rp 3.000.000 - 4.000.000	Freelance	Sangat sering (hampir setiap hari)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran

Pria	21	< Rp 1.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengajukan pengembalian barang (refund / return)
Wanita	30	Rp 3.000.000 - 4.000.000	Pegawai Negeri Sipil	Sangat sering (hampir setiap hari)	Mengecek status pesanan atau pengiriman, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	20	Rp 2.000.000 - 3.000.000	Mahasiswa	Sangat sering (hampir setiap hari)	Mengecek status pesanan atau pengiriman
Wanita	27	Rp 2.000.000 - 3.000.000	Freelance	Sering (3–5 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	28	Rp 3.000.000 - 4.000.000	Wirausaha	Sering (3–5 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman
Wanita	24	Rp 2.000.000 - 3.000.000	Pegawai Negeri Sipil	Sangat sering (hampir setiap hari)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)
Pria	20	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran

Wanita	22	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Wanita	28	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Sangat sering (hampir setiap hari)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman
Pria	29	> Rp 4.000.000	Wirausaha	Sering (3–5 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	24	Rp 2.000.000 - 3.000.000	Freelance	Sangat sering (hampir setiap hari)	Menanyakan informasi produk atau promo, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	29	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Sangat sering (hampir setiap hari)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Pria	22	Rp 3.000.000 - 4.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengajukan pengembalian barang (refund / return)
Wanita	20	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran

Wanita	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	20	< Rp 1.000.000	Freelance	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Pria	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	21	Rp 2.000.000 - 3.000.000	Mahasiswa	Sangat sering (hampir setiap hari)	Mengatasi masalah pesanan atau pembayaran
Pria	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran
Pria	18	> Rp 4.000.000	Pelajar	Sangat sering (hampir setiap hari)	Menanyakan informasi produk atau promo

Pria	22	< Rp 1.000.000	Freelance	Jarang (1–2 kali dalam sebulan)	Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Wanita	22	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo
Pria	24	> Rp 4.000.000	Freelance	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Wanita	21	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran
Wanita	19	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo

Pria	20	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman
Pria	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman
Wanita	24	Rp 2.000.000 - 3.000.000	Freelance	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	18	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Saya driver shopee chatbot shopee menurut saya kurang efisien dalam penyelesaian masalah sehingga banyak driver shopee yg tidak nyaman atau merasa tidak berguna menggunakan chat boot dari Shopee ini.
Pria	22	< Rp 1.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	22	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee

Wanita	20	> Rp 4.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	21	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman
Pria	22	Rp 2.000.000 - 3.000.000	Freelance	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	30	Rp 2.000.000 - 3.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	17	< Rp 1.000.000	Pelajar	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Pria	28	> Rp 4.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman
Pria	20	< Rp 1.000.000	Mahasiswa	Sangat jarang	Mengecek status pesanan atau pengiriman

				(kurang dari 1 kali dalam sebulan)	
Wanita	22	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	21	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Wanita	24	> Rp 4.000.000	Pegawai Swasta	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	20	< Rp 1.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	24	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Sering (3–5 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mencari bantuan terkait penggunaan aplikasi Shopee

Pria	22	Rp 3.000.000 - 4.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Pria	20	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran
Wanita	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengajukan pengembalian barang (refund / return)
Wanita	23	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengajukan pengembalian barang (refund / return)
Pria	22	Rp 2.000.000 - 3.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengatasi masalah pesanan atau pembayaran
Wanita	19	< Rp 1.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran

Wanita	21	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Sering (3–5 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	28	> Rp 4.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran
Wanita	24	Rp 3.000.000 - 4.000.000	Pegawai Swasta	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Wanita	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return)
Wanita	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)

Pria	20	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo
Wanita	22	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Pria	21	> Rp 4.000.000	Pegawai Swasta	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran
Pria	25	> Rp 4.000.000	Freelance	Sangat sering (hampir setiap hari)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	> Rp 4.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	20	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran
Wanita	22	< Rp 1.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee

Wanita	20	> Rp 4.000.000	Pegawai Swasta	Cukup sering (1–2 kali dalam seminggu)	Mengatasi masalah pesanan atau pembayaran
Wanita	21	< Rp 1.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Pria	23	Rp 2.000.000 - 3.000.000	Mahasiswa	Cukup sering (1–2 kali dalam seminggu)	Mencari bantuan terkait penggunaan aplikasi Shopee
Wanita	19	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Mengecek status pesanan atau pengiriman
Wanita	21	Rp 1.000.000 - Rp 2.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee
Pria	22	< Rp 1.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengajukan pengembalian barang (refund / return), Mencari bantuan terkait penggunaan aplikasi Shopee

Wanita	19	< Rp 1.000.000	Mahasiswa	Sangat jarang (kurang dari 1 kali dalam sebulan)	Mengecek status pesanan atau pengiriman, Mengatasi masalah pesanan atau pembayaran, Mengajukan pengembalian barang (refund / return)
Pria	22	Rp 2.000.000 - 3.000.000	Mahasiswa	Jarang (1–2 kali dalam sebulan)	Menanyakan informasi produk atau promo, Mengecek status pesanan atau pengiriman

Lampiran 3 Screen Shoot Hasil Smart PLS

Outer loadings - Matrix

	ANTH	CEX	CIT	CUI	PE	PEOU	SI
ANTH2	0.870						
ANTH3	0.751						
ANTH4	0.852						
CEX1		0.937					
CEX3		0.938					
CIT1			0.855				
CIT2			0.780				
CIT3			0.622				
CIT4			0.836				
CUI1				0.882			
CUI2				0.903			
CUI3				0.896			
PE1					0.905		
PE2					0.918		
PEOU1						0.858	
PEOU2						0.750	
PEOU3						0.667	
SI1							0.876
SI2							0.895
SI3							0.853
ANTH1	0.904						

Construct reliability and validity - Overview

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	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ANTH	0.867	0.880	0.910	0.716
CEX	0.862	0.862	0.936	0.879
CIT	0.787	0.834	0.859	0.606
CUI	0.874	0.874	0.922	0.799
PE	0.797	0.799	0.908	0.831
PEOU	0.650	0.716	0.805	0.581
SI	0.846	0.848	0.907	0.765

Collinearity statistics (VIF) - Inner model

Discriminant validity - Heterotrait-monotrait...

	ANTH	CEX	CIT	CUI	PE	PEOU	SI
ANTH							
CEX	0.884						
CIT	0.852	0.841					
CUI	0.807	0.865	0.854				
PE	0.833	0.844	0.785	0.883			
PEOU	0.768	0.687	0.896	0.670	0.654		
SI	0.849	0.856	0.722	0.687	0.642	0.477	

	VIF
ANTH -> CEX	3.760
ANTH -> CIT	1.000
ANTH -> CUI	2.463
ANTH -> PE	1.000
ANTH -> PEOU	1.000
ANTH -> SI	1.000
CEX -> CUI	2.463
CIT -> CEX	2.745
PE -> CEX	2.124
PEOU -> CEX	1.813
SI -> CEX	2.359

Discriminant validity - Fornell-Larcker crit...

	ANTH	CEX	CIT	CUI	PE	PEOU	SI
ANTH	0.846						
CEX	0.771	0.938					
CIT	0.730	0.734	0.779				
CUI	0.709	0.752	0.729	0.894			
PE	0.697	0.700	0.649	0.737	0.912		
PEOU	0.594	0.548	0.619	0.519	0.498	0.763	
SI	0.737	0.732	0.628	0.591	0.529	0.378	0.874

R-square - Overview

	R-square	R-square adjusted
CEX	0.728	0.719
CIT	0.532	0.530
CUI	0.607	0.602
PE	0.486	0.482
PEOU	0.353	0.349
SI	0.542	0.540

f-square - Matrix

	ANTH	CEX	CIT	CUI	PE	PEOU	SI
ANTH		0.029	1.139	0.106	0.944	0.545	1.186
CEX				0.263			
CIT		0.055					
CUI							
PE		0.099					
PEOU		0.013					
SI		0.160					

Path coefficients - Mean, STDEV, T value...

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	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
ANTH -> CEX	0.173	0.167	0.083	2.091	0.037
ANTH -> CIT	0.730	0.731	0.042	17.563	0.000
ANTH -> CUI	0.320	0.320	0.113	2.825	0.005
ANTH -> PE	0.697	0.698	0.043	16.031	0.000
ANTH -> PEOU	0.594	0.595	0.055	10.895	0.000
ANTH -> SI	0.737	0.739	0.042	17.608	0.000
CEX -> CUI	0.505	0.507	0.132	3.826	0.000
CIT -> CEX	0.202	0.209	0.074	2.728	0.006
PE -> CEX	0.239	0.240	0.096	2.485	0.013
PEOU -> CEX	0.080	0.084	0.058	1.394	0.163
SI -> CEX	0.320	0.314	0.089	3.607	0.000

Specific indirect effects - Mean, STDEV, ...

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	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
ANTH -> CEX -> CUI	0.087	0.083	0.044	1.992	0.046
CIT -> CEX -> CUI	0.102	0.109	0.053	1.918	0.055
PE -> CEX -> CUI	0.121	0.129	0.070	1.737	0.082
ANTH -> PEOU -> CEX -> CUI	0.024	0.025	0.019	1.296	0.195
PEOU -> CEX -> CUI	0.040	0.042	0.030	1.337	0.181
ANTH -> SI -> CEX -> CUI	0.119	0.114	0.037	3.198	0.001
SI -> CEX -> CUI	0.162	0.154	0.048	3.336	0.001
ANTH -> PE -> CEX -> CUI	0.084	0.090	0.050	1.695	0.090
ANTH -> CIT -> CEX -> CUI	0.074	0.079	0.038	1.954	0.051
ANTH -> SI -> CEX	0.236	0.232	0.068	3.472	0.001
ANTH -> PEOU -> CEX	0.048	0.051	0.036	1.330	0.184
ANTH -> PE -> CEX	0.167	0.168	0.070	2.372	0.018
ANTH -> CIT -> CEX	0.147	0.153	0.054	2.717	0.007

Total effects - Mean, STDEV, T values, p ...

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	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
ANTH -> CEX	0.771	0.771	0.032	24.111	0.000
ANTH -> CIT	0.730	0.731	0.042	17.563	0.000
ANTH -> CUI	0.709	0.712	0.041	17.210	0.000
ANTH -> PE	0.697	0.698	0.043	16.031	0.000
ANTH -> PEOU	0.594	0.595	0.055	10.895	0.000
ANTH -> SI	0.737	0.739	0.042	17.608	0.000
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SI -> CUI	0.162	0.154	0.048	3.336	0.001

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The impact of chatbot anthropomorphism on customer experience and chatbot usage intention: a technology acceptance approach

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Abstract

Purpose – This study aims to investigate the effect of chatbot anthropomorphism on chatbot acceptance, initial trust, customer experience and chatbot usage intention.

Design/methodology/approach – Data were collected through an online survey. A sample of 369 higher education students from Tunisia was selected. To test the hypotheses, the data analysis was conducted using structural equation modeling (SEM) with AMOS 23.

Findings – Results reveal that, anthropomorphism has a significant effect on perceived ease of use, performance expectancy, social influence and initial trust. These factors, in turn, influence customer experience. Furthermore, anthropomorphism positively stimulates customer experience with chatbots, and chatbot usage intention.

Originality/value – This paper attempts to enrich the existing body of chatbot anthropomorphism literature by proposing and testing, under the umbrella of technology acceptance model and unified theory of acceptance and use of technology theories, a novel conceptual model that highlights the role of chatbot anthropomorphism in technology acceptance, customer experience and chatbot usage intention.

Keywords Chatbot anthropomorphism, Customer experience, Initial trust, TAM, UTAUT, Social influence

Paper type Research paper

1. Introduction

In the last decade, the rapid advancement of artificial intelligence (AI) has radically transformed consumer behavior and revolutionized the marketing landscape. This transformation has led to an exponential growth of research on this topic (Jain *et al.*, 2024). This development in AI marketing, consumer research and customer psychology has made it possible for companies to integrate chatbots into the customer service frontline (Mariani *et al.*, 2023). They have emerged as a pivotal tool for customer interaction. Also called digital assistants, conversation entity and smart bot, the chatbot system can be defined as “a software program that interacts with users using natural language” (Ciechanowski *et al.*, 2019, p. 540). Hence, it’s a dehumanization of what is human and a humanization of technology (Kaczorowska-Spychalska, 2019, p. 253). These trending new technologies, designed to simulate human-like conversations through text or speech, are functioning as interactive virtual assistants for users (Bakkouri *et al.*, 2022).

Chatbot integration in marketing operations enables companies to provide an immersive experience to customers (Mogaji *et al.*, 2021), as anthropomorphic features in nonhuman



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entities help consumers form connections and relationships with them (Waytz *et al.*, 2014). According to Epley *et al.* (2007, p. 864) anthropomorphism is “the tendency to imbue the real or imagined behavior of non-human agents with human-like characteristics, motivations, intentions or emotions.” In other words, anthropomorphism refers to the extent to which customers or users perceive robotic technologies as human-like (Barneck *et al.*, 2009). Researchers have demonstrated that chatbot anthropomorphism enhances the effectiveness of human-computer interactions, creating a more comfortable and engaging communication experience for users (Lajane and Dohm, 2024; Park *et al.*, 2024).

However, despite the growing use of chatbots, challenges often lead to user frustration and mistrust in these novel technologies, pushing many consumers to prefer human agents over automated solutions (Lajane and Dohm, 2024). While trust plays a critical role in shaping customer acceptance of AI-driven technologies, its role in chatbot interactions has been insufficiently explored (Nguyen *et al.*, 2023). Thus, understanding the relationship between anthropomorphism and trust is essential for enhancing customer acceptance of these technologies (Chi and Hoang Vu, 2023). Moreover, previous research has also demonstrated the direct relationship between chatbot humanlike behaviors and consumers’ intention to use it more frequently (Wei *et al.*, 2024).

What distinguishes the current study from existing ones is its simultaneous integration of key elements from the technology acceptance model (TAM) and unified theory of acceptance and use of technology (UTAUT) theories while extending them with chatbot anthropomorphism and additional factors to explore their collective impact on chatbot usage intention in the specific context of emergent markets.

Despite their extensive use in the field of technology adoption research, TAM and UTAUT models have limitations when applied individually. TAM focuses on user acceptance through individual-level perceptions (perceived ease of use and perceived usefulness), whereas UTAUT addresses the social psychological challenges (Robles-Gómez *et al.*, 2021) providing a holistic understanding of user behavior by incorporating social and facilitating factors (performance expectancy and social influence) (Ilieva *et al.*, 2024). Hence, the combination of the TAM and UTAUT models is particularly relevant to provide a more comprehensive understanding of user intentions to adopt new technology (Robles-Gómez *et al.*, 2021). To note, social value is more important in determining various behaviors of customers in the context of developing countries (Ernest Mfumbilwa *et al.*, 2024). Aligning with recent studies aiming to understand the factors that drive users’ intentions to adopt chatbots (Wei *et al.*, 2024; Pizzi *et al.*, 2023), the present research addresses customers technology acceptance identified by TAM and UTAUT models.

While it is widely recognized that UTAUT is an extension of TAM, it has been argued that the actual structure of UTAUT framework is somewhat obsolete and outdated, asserting an integrated analysis or reexamination of both theories (Bayaga and Du Plessis, 2023). The proposed model builds on both TAM and UTAUT, combining their strengths to address the technological and psychosocial aspects of adoption, leveraging the advantages of both frameworks (Robles-Gómez *et al.*, 2021) while contributing to their sustained popularity in both research and practice (Ilieva *et al.*, 2024).

Furthermore, existing chatbot research has predominantly been concentrated on European, North American and Asian regions, with Europe leading the field of studies on AI chatbots in customer service (Nicolescu and Tudorache, 2022). However, there remains a critical gap in understanding chatbot usage intentions in emerging markets, where adoption is still in its early stages and the influence of technology acceptance drivers may differ significantly from those observed in more established markets

(De Keyser and Kunz, 2022; Malik *et al.*, 2021). Although AI has been acknowledged as a significant disruptor in these regions, the dynamics of anthropomorphism in consumer behavior within developing economies remain underexplored (Nguyen *et al.*, 2023). More specifically, there is a lack of empirical studies exploring whether reactions to anthropomorphism are more favorable in Eastern countries (Baskentli *et al.*, 2023). For instance, the developed countries with their individualistic values, often prioritize efficiency and achievement (Liu *et al.*, 2024). In contrast, collectivistic culture emphasizes community connections and family bonds (Hofstede, 2011). These essential cultural values may impact how conversational agents’ services are perceived, particularly in terms of competence and warmth (Mostafa and Abioudy, 2021). Notably, the collectivistic consumers exhibit a significantly stronger preference for anthropomorphic conversational agents (Yansia *et al.*, 2024).

This fulfills a gap we address in the following research question:

RQ1. How does chatbot anthropomorphism affect initial trust, customer experience and usage intention, considering key factors from TAM and UTAUT?

By clarifying how chatbot anthropomorphism influences consumer perceptions and behaviors, the present study contributes to the growing field of AI in marketing and offers fresh perspectives on enhancing the effectiveness of AI chatbots in customer service. The findings aim to provide valuable insights for marketers and developers seeking to optimize chatbot design to improve customer experience and technology adoption. In addition, this study follows the interesting need for examination of UTAUT and TAM models when applied in the context of a developing country service, to see if usage intention in this specific context either supports or contradicts existing findings (Bayaga and Du Plessis, 2023).

2. Theoretical basis

2.1 Chatbot anthropomorphism

Anthropomorphism is an important attribute that provides increased novelty and appeals to virtual assistants’ technologies (Pizzi *et al.*, 2023). Among other aspects, anthropomorphism (or humanness) represents a central topic in research that studies human-chatbot interaction (Rapp *et al.*, 2021).

Anthropomorphism in chatbots has been explored in two primary areas: studies that examine the chatbot’s linguistic features leading consumers to ascribe humanness such as grammar and language, as well as its conversational style, and studies that focus on the chatbot’s human-like appearance and external design (Araujo, 2018). The general theory of anthropomorphism (Epley *et al.*, 2007) supports this view, positing that both appearance (the personification of the chatbot) and behavior (the social orientation of its communication style) are equally significant in eliciting human-like perceptions.

The present study focuses on chatbot anthropomorphic language and conversational style rather than the physical personification of chatbot design, as a way to enhance user experience and build trust. This choice is supported by prior research findings suggesting that chatbot text messaging is more preferred than a chatbot with a human voice (Ciechanowski *et al.*, 2019). In addition, a key characteristic of chatbots anthropomorphism is the ability of these technologies to offer polite responses and provide conversational expressions, which users typically expect when interacting with service personnel (Lajane and Dohm, 2024). This characteristic is crucial because it aligns with users’ expectations of human-like interactions in customer service scenarios.

2.2 TAM and UTAUT theories

For more than three decades, the foundational studies on the TAM by Davis (1989) and the UTAUT by Venkatesh *et al.* (2003) have established a new paradigm for investigating information systems (IS) (Bayaga and Du Plessis, 2023). These models figure as two of the most critical theories in explaining technology usage intentions from a technology adoption perspective (Gopinath and Kasilingam, 2023). In fact, UTAUT demonstrated a strong predictive power in its original validation study, explaining 77% of the variance in behavioral intention to reuse technology (Venkatesh *et al.*, 2003; Ammenwerth, 2019).

TAM, rooted in the theory of reasoned action, identifies perceived ease of use and perceived usefulness as key drivers of customer behavior (Venkatesh *et al.*, 2003). Widely recognized as a reference point for technology acceptance studies (Zhang *et al.*, 2018; Faqih, 2016), TAM primarily focuses on technology-related features but overlooks crucial nontechnological factors, such as individual traits, that significantly influence technology usage (Zobeidi *et al.*, 2023).

Consequently, most studies include additional variables, alongside with the two original ones. This highlights the relevance of considering the UTAUT theory, which includes four variables: social influence, performance expectancy, effort expectancy and facilitation conditions (Chimborazo *et al.*, 2021). According to its authors, UTAUT outperformed the TAM and other technology acceptance models (Venkatesh *et al.*, 2003). Furthermore, applying the UTAUT and TAM model in the context of a developing country, is particularly important to examine whether the findings align with or contradict existing studies (Bayaga and Du Plessis, 2023).

Several previous studies have shown that performance expectancy is the most significant factor in the UTAUT theory for explaining individuals' behavior, and have identified social influence as the second most influential driver of behavioral intention (Venkatesh *et al.*, 2003; Dwivedi *et al.*, 2011). Therefore, in our study, performance expectancy and social influence were selected from UTAUT. On the other hand, perceived usefulness in TAM is analogous with performance expectancy from the UTAUT (Venkatesh *et al.*, 2003; Oliveira *et al.*, 2014). Consequently, perceived ease of use is the sole factor selected from the TAM to integrate in the present study.

The review of previous studies (Table 1) reveals two key aspects underexplored in the existing literature. The first concerns the tendency of studies on chatbot anthropomorphism to apply a single theoretical perspective, either TAM or UTAUT, rather than integrating them into a unified framework. The second highlights the lack of such research in emerging countries. Hence, this study adopts a dual-theory approach to address gaps in prior research and provide a more comprehensive understanding of the factors influencing chatbot adoption in the emerging market context. Furthermore, several researchers hardly recommend the integration of chatbot anthropomorphism when investigating antecedents of chatbot adoption. They consider this factor as a critical driver of user's behavior that has been overlooked in the literature, and should be incorporated in future studies' research models (Gopinath and Kasilingam, 2023; Paraskevi *et al.*, 2023). In addition, chatbot anthropomorphism has a significant impact on the customer journey in developing countries: in these collectivist areas, individuals tend to feel a stronger sense of social belonging to chatbots with higher degree of anthropomorphism compared to those in individualistic countries (Yanxia *et al.*, 2024). Moreover, previous studies highlight that one of the major barriers to the widespread adoption of chatbots is the lack of trust, with users often perceiving chatbots as unreliable sources of information (Ashfaq *et al.*, 2020). Consequently, users' behavioral intentions toward chatbots in these regions can be enhanced through factors such as trust, satisfaction and anthropomorphic cues (Youn and Cho, 2023).

Table 1. Review of the literature on the integration of chatbot anthropomorphism within technology acceptance model frameworks

Study	Industry	Country	Research methods	Independent variables	Dependent variables	Theoretical foundations	Major findings
Kuberkar and Singhal (2020)	Public transport information services	India	Survey	Performance expectancy Effort expectancy Social influence Facilitating conditions anthropomorphism trust	Adoption intention	Extended UTAUT	Performance expectancy, effort expectancy, social influence, facilitating conditions, anthropomorphism and trust affect the adoption intention of the chatbot
Melián-González et al. (2021)	Travel and tourism	Spain	survey	Performance expectancy Effort expectancy Social influence Hedonism Habit Inconvenience Anthropomorphism Automation Perceived innovativeness	Attitude toward self-service technologies Chatbots usage intention	UTAUT2 model	Intentions behind using chatbots are influenced by performance expectancy, habit of using chatbots, hedonism, attitude toward using self-service technologies, social influences and anthropomorphism. Inconvenience has a negative influence
Moriuchi (2021)	Not specified	America	Survey	Performance expectancy Effort expectation Social influence Perceived risk	Anthropomorphism engagement Usage experience Usage re-use intentions	The realism maximization theory UTAUT	Effort expectation (EE) has a strong positive impact on consumers' usage experience anthropomorphism and engagement are mediators between usage experience and usage re-use intentions

(continued)

Table 1. Continued

Study	Industry	Country	Research methods	Independent variables	Dependent variables	Theoretical foundations	Major findings
Balakrishnan et al. (2022)	Any pre-purchase, purchase, or post-purchase service interactions	India	survey	Performance expectancy Effort expectancy Facilitating conditions Social influence Perceived intelligence Anthropomorphic features	Attitude toward chatbot service Interactions Continuation Intention to use chatbot service Interactions	meta-UTAUT	Performance expectancy, effort expectancy, facilitating conditions, social influence, perceived anthropomorphism and perceived intelligence have a positive effect on attitude toward chatbot services Performance expectancy, effort expectancy, facilitating conditions, perceived intelligence and perceived anthropomorphism affect continuation intention The effect of social influence on continuation intention is insignificant
Klein and Martorez (2022)	Food sector	Most of the participants were higher-education students of German nationality but nationalities from other European countries, the USA, Africa, India and Australia were also recorded	Experiment	Anthropomorphic design cues	Customer satisfaction Perceived enjoyment Attitude	Anthropomorphism theory	Anthropomorphic cues are positively associated with customer satisfaction and mediated by the variables Enjoyment, attitude and trust
Nyagadza et al. (2022)	e-banking customer service	Zimbabwe	Survey	Customers' trust chatbots usage intention	Performance expectancy Effort expectancy Social influence Hedonic motivation Habitual usage Perceived innovativeness Attitude toward self-service technologies Inconvenience Anthropomorphism Automation Perceived privacy risk	UTAUT2 model	The factors: performance expectancy, effort expectancy, social influence, hedonic motivation, habitual usage, perceived innovativeness, attitude toward self-service technologies, and anthropomorphism have a significant effect on customers' trust customers' trust influences chatbots usage intention

(continued)

Table 1. Continued

Study	Industry	Country	Research methods	Independent variables	Dependent variables	Theoretical foundations	Major findings
Cheng et al. (2023)	Not specified	Not specified	A meta-analysis	Chatbot social presence cues Chatbot emotional message cues Chatbot mixed cues	Chatbot anthropomorphism Attitudes toward Purchase and use. Perception of fun Perception of social presence. Perceived trust Usage intention Purchasing behavior satisfaction	Not specified	Chatbot anthropomorphism positively impacts the customer Journey The chatbot anthropomorphism is significantly influenced by social Presence cues, emotional message cues and mixed cues
Zhang et al. (2023)	Tourism industry	China	survey	Performance expectancy Effort expectancy Social influence Hedonic motivation Habit Time risk Privacy risk Anthropomorphism Personalization	Customers' continuance intention to use chatbots	UTAUT2 Theory of perceived risk	Performance expectancy, social influence, habit, time risk, privacy risk, anthropomorphism and personalization influence continuance intention to Use chatbots. Effort expectancy and hedonic motivation have insignificant impact on continuance intention

(continued)

Table 1. Continued

Study	Industry	Country	Research methods	Independent variables	Dependent variables	Theoretical foundations	Major findings
Singh et al. (2024)	Not specified	Not specified	Survey	Usefulness ease of use Performance expectancy Social influence Social presence Sociability anthropomorphism sociability enjoyment Rumort Privacy risk Anxiety	Attitudes toward online shopping assistants trust Acceptance of online shopping assistants	Extended TAM	Anthropomorphism, attitude, ease of use, enjoyment, privacy, trust and usefulness are crucial determinants of acceptance variables
Park et al. (2024)	Banking industry	Not specified	Survey	Anthropomorphism Personalization of AI chatbots	Product knowledge. Perceived usefulness Perceived ease of use Customer satisfaction	Technology acceptance model (TAM)	The anthropomorphism and personalization characteristics of the chatbot have an influence on the consumer's intention to use and customer satisfaction

Source(s): Authors' own work

3. Research hypothesis

3.1 Chatbot anthropomorphism

3.1.1 Chatbot anthropomorphism and functional attributes. In the current study, functional attributes include “perceived ease of use” and “performance expectancy”. Perceived ease of use is defined as “the degree to which a user expects to use a technology free of effort” (Davis, 1989, p. 320). Interacting with an AI device in a purely mechanical manner requires a big effort. The integration of human-like interfaces into technology adoption help address this challenge. Anthropomorphized AI chatbots help reducing the effort users expend while simultaneously improving their experience by facilitating interactions with accurate and reliable responses (Burgoon *et al.*, 2000). By appearing more humanlike, robots and chatbots are perceived as friendlier and more familiar (Park *et al.*, 2024). This perceived friendliness fosters a high degree of interactivity, leading to an enhanced perception of ease of use (Prakash *et al.*, 2023). Therefore, the interaction becomes easier and more natural (Blut *et al.*, 2024, 2021). Thus, our first hypothesis is the following:

H1. Chatbot anthropomorphism has a positive effect on perceived ease of use.

Performance expectancy, selected from UTAUT, is conceptualized as the extent to which using a technology application is presumed to offer advantages and improvements in job performance (Venkatesh *et al.*, 2003). In marketing context, a technology’s performance expectancy facilitates the purchasing process for customers, such as easy payment and searching for information (Loureiro *et al.*, 2018).

Most of research based on the extended UTAUT framework illustrates that, consumers when interacting with anthropomorphic goods or services, find human-like qualities attractive, so they become more reliant on using them. Anthropomorphism enhances performance expectancy of robots by fostering a sense of efficacy, thereby improving the quality of interaction with them (Epley *et al.*, 2007). Therefore, anthropomorphism tends to be positively correlated with performance expectancy (Aw *et al.*, 2022). Thus, we hypothesize that:

H2. Chatbot anthropomorphism has a positive effect on performance expectancy.

3.1.2 Chatbot anthropomorphism and social influence. By consistently enhancing the level of intelligence and displaying a broader set of social cues, AI technologies are making chatbot interactions more anthropomorphized and humanized, enhancing “warmer” and more reliable social interactions (Tajib *et al.*, 2023).

The “social influence” variable, derived from the UTAUT theory, is recognized as a key predictor of behavioral intention across various technological contexts (Kaba and Touré, 2014; Venkatesh *et al.*, 2012). Venkatesh *et al.* (2003) define social influence as “the degree to which an individual perceives that important others believe that he or she should use the new system” (p. 470).

In this regard, anthropomorphism has emerged as a crucial factor influencing the quality of interactions and user engagement with chatbots, thereby playing an increasingly significant role in shaping social influence (Fatima *et al.*, 2024). Therefore, this study hypothesizes that:

H3. Chatbot anthropomorphism has a positive effect on social influence.

3.1.3 Chatbot anthropomorphism and initial trust. Trust has gained a growing attention with the rise of e-commerce, leading to numerous studies focusing on the conceptual structure and formation mechanisms of this concept. In the services context, trust is the

psychological expectation that others will keep their promises and will not behave opportunistically when delivering the promised service (Xoi and Tan, 2016). In fact, organization should be trustworthy with their customers to enhance their experience. When an innovative new technology is launched, there is no existing experience to draw upon. The trust that is typically built through repeated interactions, based on experience or knowledge, may be absent (McKnight *et al.*, 2002; Kousafaris and Hampton-Sosa, 2004).

Initial trust, distinct from experiential trust, is defined by its early stage of development (Kousafaris and Hampton-Sosa, 2004). It emerges without prior experience, assuming that participants lack reliable and meaningful information or emotional connections about a new innovation. As customers engage with this innovation, their trust can either strengthen or diminish, eventually developing into experiential trust (McKnight *et al.*, 2002).

Prior research showed that the anthropomorphic traits of AI assistants and humanoid services is a pivotal factor in developing customer trust (Waytz *et al.*, 2014; Van Pinxteren *et al.*, 2019): when people assign human abilities to a nonhuman agent, they typically believe in its competent performance and consequently, enhancing trust in more humanlike robot to deliver a service (Zhan *et al.*, 2024; Blat *et al.*, 2021). Thus, we hypothesize that:

H4. Chatbot anthropomorphism has positive effect on initial trust.

3.1.4 Chatbot anthropomorphism and affective and behavioral outcomes. The present study focuses on two main outcomes of chatbot acceptance: "customer experience" as an affective outcome and "chatbot usage intention" as a behavioral outcome. Customer experience can be defined as a customer subjective internal response to any direct or indirect contact with a company (Meyer and Schwager, 2007). It is a multidimensional construction that focuses on customers' cognitive, emotional, behavioral, sensory and social responses to company offers (Lemon and Verhoef, 2016).

Several researches indicate that customer experience can be enhanced by chatbots capable of initiating human dialogues (Rose *et al.*, 2012). Rham *et al.* (2022) demonstrate that users' perceptions of chatbots can be easily influenced by incorporating anthropomorphic traits, as individuals are more likely to interact with technology that offers experience reflecting human-like features through aesthetic cues influenced by anthropomorphism (Han, 2021). In fact, implementing anthropomorphic elements in a customer's journey fosters the presence of a perceived partner, generally leading to the establishment of an emotional connection between chatbots and consumers, which increases positive feelings and improves customer experience (Gaining and Clark, 2021; Rizomyliotis *et al.*, 2022; Wan and Chen, 2021). Consequently, we suggest the following hypothesis:

H5. Chatbot anthropomorphism has a positive effect on customer experience.

Usage intention refers to the perceived likelihood that an individual will engage in a specific behavior (Bar, 2018). Intention to use a technology is a central concept in both TAM and UTAUT. Perceived humanlikeness can familiarize and facilitate human-robot interactions (Duffy, 2003), making the robot appear more predictable and controllable, which increases people's preference for, and adoption of chatbots (Stavroulakis and Benitez, 2019). According to Felstad and Skjive (2019), anthropomorphism enhances chatbots' perceived ability to handle questions accurately and appropriately, which can significantly boost users' intention to use chatbots in the future (Elisier *et al.*, 2022; Wei *et al.*, 2024). These results support a positive effect of robots' anthropomorphism on the usage intention.

However, this relationship is not always hold. Gossaly and Boinin (2016), for example, found that the anthropomorphism of a companion robot did not increase usage intention.

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Some studies suggest that people prefer less humanlike robots (Broadbent *et al.*, 2011) and explicitly machine-like robots (Vlachos *et al.*, 2016), reflecting a negative effect of anthropomorphism. This supports Mori's (1970) uncanny valley hypothesis, which posits that a robot's usage intention does not always increase with its humanlikeness; a too humanlike robot may be perceived as creepy and uncanny, leading to discomfort and eventual rejection. Goetz *et al.* (2003) add that while people prefer humanlike robots for social roles, they prefer machine-like robots for more investigative and functional roles, such as lab assistants. For our study, we hypothesize the following:

H6. Chatbot anthropomorphism has a positive effect on chatbot usage intention.

3.2 Perceived ease of use and customer experience

The concept of "perceived ease of use" used interchangeably with effort expectancy from the UTAUT theory (Mostafa and Kasamani, 2022), is frequently studied in the context of chatbot adoption (Araujo and Casais, 2020; Gopinath and Kasilingam, 2023; Li *et al.*, 2023; Shoui *et al.*, 2024). Specifically, prior studies have explored its impact on initial trust (Mostafa and Kasamani, 2022), engagement (Maduku *et al.*, 2024) and usage intention (Pillai and Sivathanu, 2020). However, the effect of perceived ease of use on customer experience has received little attention, likely because chatbots are designed to require minimal learning effort for operation (Rizomyliotis *et al.*, 2022). However, users should perceive using chatbots as easy to benefit from a great experience (Trivedi, 2019). In fact, according to Bhilgani *et al.* (2016), e-commerce companies ensure user acceptance by meeting the criteria of perceived ease of use, to stimulate an engaging customer experience. The simpler and easier-to-use chatbots are, the more customers are likely to perceive the experience as enjoyable (Shoui *et al.*, 2024). Therefore, we propose the following hypothesis:

H7. Perceived ease of use has a positive effect on customer experience.

3.3 Performance expectancy and customer experience

The interaction with human-like AI assistants is seen as more competent, intelligent and improving the consumer experience (Jee *et al.*, 2022; Blat *et al.*, 2021). Individuals have a positive user experience when the product performance is satisfactory or exceeds their expectation. According to Shoui *et al.* (2024), perceived ease of use and performance expectancy are fundamental constructs to creating positive experiences. Therefore, we suggest that performance expectancy is a crucial determinant of customer experience with AI chatbot. Hence, we posit the following hypothesis:

H8. Performance expectancy has a positive effect on customer experience.

3.4 Social influence and customer experience

It is widely acknowledged that people's behaviors are shaped by the opinions and recommendations of their social references. Encouragement from peers can enhance individual's decision to adopt one behavior over another. Mortuochi (2021) suggests that social influence is a pivotal factor in developing customer experience with new technologies, as individuals are more likely to engage in an experience with a chatbot when they observe their peers expressing positive opinions about its usage. Therefore, we could posit the following hypothesis:

H9. Social influence has a positive effect on customer experience.

H9. social influence has a positive effect on customer experience.

3.5 Initial trust and customer experience

Several studies highlight the importance of high-level initial trust in fostering positive experience. In fact, Rose *et al.* (2012) show the crucial role of emotional experience in the digital context and Sun *et al.* (2017) proved the influence of initial trust on customer experience among smartphone users. In the context of conversational agent, previous research highlighted the important role of the initial trust in shaping customer experience with chatbots (Amnen *et al.*, 2021; Roy *et al.*, 2024; Sun *et al.*, 2017). Consequently, we hypothesize the following:

H10. Initial trust has a positive effect on customer experience.

3.6 Customer experience and usage intention

Achieving an AI-enabled customer experience is crucial for determining consumers' e-commerce behavior patterns (Jee *et al.*, 2022). The post-adoption model of information system continuance suggests that consumers' confirmation of a technology post-adoption is achieved when they are satisfied with their usage experience with it, leading to a continuance usage intention (Bhatnagar, 2001; Lee *et al.*, 2021). A unique and enriching experience builds the basis for desirable behavioral outcomes, such as the intention to or the continued use of a service or a technology. Accordingly, Felstad and Taylor (2021) argue that customers who have a positive experience with a chatbot are likely to use it in the future. Thus, chatbot adoption for customer service depends on the user experience. Consequently, our final hypothesis is the following:

H11. customer experience has a positive effect on usage intention.

The overall conceptual model is illustrated in Figure 1.

4. Methodology

4.1 Sample and data collection

To test the hypotheses underlying the research model, an online survey was administered via Google Forms targeting Tunisian university students, considered as digital natives (Dish and Park, 2023). Students were selected because digital tools are seamlessly embedded in their daily routines and their proficiency with technological devices exceeds that of previous generations (Mandal *et al.*, 2022). Furthermore, given the limited research on chatbot experiences in emerging African markets Lubbe and Ngoma (2021), the Tunisian market context was chosen for this study.

A readability test was conducted before distributing the questionnaire. Three academic professors evaluated its content validity, while a pilot sample of five students familiar with chatbots assessed the clarity of the items. The questionnaire, written in English with an Arabic translation, was distributed via emails and social networks to align with typical chatbot use on websites and social media. The invitation included the study's purpose, a survey link and an estimated completion time. The data collection lasted four weeks.

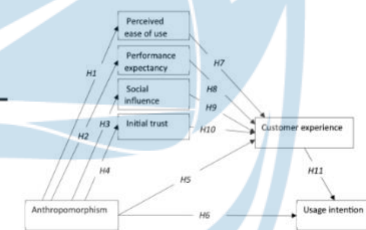
Prior to starting the survey, participants were informed about the study's objectives, the voluntary and anonymous nature of their participation and their right to withdraw at any time without consequences. Informed consent was obtained from all participants before they proceeded with the survey. This study was conducted in accordance with established ethical principles for research involving human participants, ensuring anonymity and confidentiality.

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Figure 1. Conceptual model

While no formal ethics review was conducted due to the absence of an institutional ethics committee, the study adhered to widely accepted ethical guidelines. After participants accepted to take part in the study, they were required to interact with a customer service chatbot of a telecommunication company.

To ensure clarity, a brief definition of chatbots was provided at the survey's start. Participants were instructed to interact with a local telecommunication chatbot, simulating task-oriented customer service interactions. Tasks included inquiries about services, promotions, billing, or issue resolution. Participants were asked to engage with the chatbot by asking three to five questions in their preferred language (French, English or Tunisian dialect). Such task-oriented interactions emphasize formal communication, where the chatbot provides guidance and information to help users complete tasks (Cai *et al.*, 2024). Afterwards, participants proceeded to complete the survey.

The telecommunication industry was targeted as the research focus in response to calls by several researchers (Gattuso and Supriks, 2022; Trivedi, 2019) to investigate customers' experience with chatbots. In addition, this sector exemplifies frequent chatbot adoption in customer service (Shin *et al.*, 2023). Moreover, previous research highlights that telecommunication services are extensively used by consumers, who generally exhibit high levels of involvement with these services (Maslita and Wirtz, 2004).

A total of 369 participants have completed the survey. The age range of subjects was 20–22 years. Among the respondents, 78.3% (n = 289) were female and 21.7% (n = 80) were male.

4.2 Measures

The current study used measurement scales from the existing literature. Participants indicated their level of agreement with all the items on a seven-point Likert scale, ranging

from 1 “strongly disagree” to 7 “strongly agree” (see Table 2). To measure anthropomorphism, four items were adapted from Melián-González *et al.* (2021). Perceived ease of use was measured with three items based on Davis (1989) and customer experience was adapted from Trivedi (2019) and measured with three items too. Performance expectancy and chatbot usage intention scales were adapted from the study of Venkatesh *et al.* (2003). Following Oliveira *et al.* (2014), three items were used to inspect social influence and four items to assess initial trust.

5. Results

5.1 Confirmatory factor analysis and assessment of validity and reliability

Exploratory factor analysis was conducted to assess the reliability and validity of the scales used in this study. A principal component analysis extraction model was applied. The item CIT3 was removed because its communality (0.428) is below 0.5. Using Amos version 23, a confirmatory factor analysis was performed. The check of variance values disclosed a negative error variance of the item CIT4 ($\text{ecit4} = -0.15$). Following the recommendations of (Bagozzi and Yi, 1988), this item was dropped. The measurement model manifested a satisfactory fit to the data ($\text{CMIN/df} = 2.171$; $\text{GFI} = 0.916$; $\text{RMSEA} = 0.056$; $\text{NFI} = 0.942$; $\text{CFI} = 0.968$) (Kline, 2005).

As presented in the Table 3, the values of Cronbach's alpha and composite reliability (CR) for all constructs exceed the acceptable threshold of 0.7, indicating a satisfactory level of internal consistency. Convergent validity is established because all values of average variance extracted (AVE) are above 0.5 (MacKenzie *et al.*, 2011). We adopted the Fornell and Larcker (1981) procedure to verify the discriminant validity. As illustrated in the Table 3, the values of square root of AVE surpass the interconstruct correlations, supporting discriminant validity.

5.2 Structural model and hypotheses testing

Structural equation modeling (SEM) was conducted using AMOS 23 to test the hypotheses. The model fit indices of the structural model revealed an acceptable model fit ($\text{CMIN/df} = 3.059$; $\text{GFI} = 0.876$; $\text{RMSEA} = 0.075$; $\text{NFI} = 0.914$; $\text{CFI} = 0.940$) (Hair *et al.*, 2015). The results of the structural analysis are illustrated in Table 4.

The first six hypotheses ($H1-H6$), proposing that anthropomorphism positively influences perceived ease of use, performance expectancy, social influence, initial trust, customer experience and usage intention, are all supported. Anthropomorphism also has a high effect on initial trust ($\beta = 0.576$, $p < 0.001$) and on social influence ($\beta = 0.556$, $p < 0.001$). In addition, the findings demonstrate that $H7-H10$ are supported. More precisely, the results show that anthropomorphism is the most important predictor of customer experience ($\beta = 0.308$, $p < 0.001$), followed by perceived ease of use, initial trust, social influence and performance expectancy. Moreover, results supporting $H11$, indicate that experience registers a significant and positive influence on usage intention (Figure 2).

5.3 Additional findings

Other results related to the mediation effects can be highlighted in the current study. Using the bootstrapping method (Zhao *et al.*, 2010), we carried out a mediation analysis. More precisely, we tested the mediating effect of customer experience on the relationships between the variables (i.e. anthropomorphism, perceived ease of use, performance expectancy, social influence and initial trust) and chatbot usage intention. The outcomes displayed in the Table 5, indicate that customer experience fully mediates the impacts of anthropomorphism and social influence on chatbot usage intention. In addition, customer experience partially

Table 2. Constructs measures

Constructs, sources and items		Mean	SD	Factor loading
Anthropomorphism (Melías-González et al., 2021)				
ANTH1	The conversations I have with chatbots provided, are as if I have a dialogue with real human being	4.34	1.827	0.798
ANTH2	My interaction with the chatbot I use feels natural	4.50	1.644	0.877
ANTH3	The chatbot I use is like understanding who the chatbot is interacting with	4.59	1.613	0.796
ANTH4	Conversations with chatbot that I use don't seem artificial (natural)	4.09	1.713	0.729
Perceived ease of use (Davis, 1989)				
PEU1	My interaction with chatbots would be clear and understandable	4.78	1.535	0.680
PEU2	I would find chatbots easy to use	5.41	1.433	0.890
PEU3	Learning to operate chatbots would be easy for me	5.39	1.443	0.827
Performance expectancy (Venkatesh et al., 2003)				
PE1	I find chatbot services useful in the purchasing process	4.71	1.648	0.823
PE2	Using chatbot services enables me to accomplish the purchasing process quickly	4.89	1.692	0.901
PE3	Using chatbot services increases my efficiency in the purchasing process	4.67	1.648	0.812
Social influence (Oliveira et al., 2014)				
SI1	My friends and family value the use of chatbots	3.79	1.746	0.659
SI2	The people that influence me use chatbots	4.52	1.668	0.692
SI3	The use of chatbots gives me professional status	4.37	1.726	0.775
Chatbot initial trust (Oliveira et al., 2014)				
CIT1	Chatbots seem dependable	3.49	1.668	0.960
CIT2	Chatbots seem secure	3.49	1.693	0.905
CIT3	Chatbots were created to help the client	4.91	1.623	Deleted
CIT4	Chatbots seems trustworthy	3.55	1.591	Deleted
Customer experience (Trivedi, 2019)				
EW1	I enjoyed using (brand) chatbot	4.70	1.605	0.941
EW2	The experience of using (brand) chatbot was interesting	4.81	1.579	0.965
EW3	I am happy with the experience of using (brand) chatbots	4.88	1.581	0.889
Chatbot usage intention (Venkatesh et al., 2003)				
CU1	I intend to use chatbot services the next time I do an online purchase	4.39	1.733	0.952
CU2	I will probably use chatbot services the next time I do an online purchase	4.46	1.719	0.968
CU3	I am decided to use chatbot services the next time I do an online purchase	4.36	1.736	0.929
Source(s): Authors' own work				

Table 3. Reliability, convergent validity and discriminant validity

	α	CR	AVE	1	2	3	4	5	6	7
1. Anthropomorphism	0.875	0.877	0.643	0.802						
2. Perceived ease of use	0.833	0.843	0.646	0.443	0.809					
3. Performance expectancy	0.862	0.882	0.715	0.451	0.418	0.830				
4. Social influence	0.749	0.753	0.505	0.549	0.454	0.616	0.710			
5. Chatbot initial trust	0.969	0.930	0.870	0.475	0.279	0.175	0.530	0.932		
6. Experience with the chatbot	0.913	0.965	0.860	0.401	0.162	0.472	0.556	0.512	0.932	
7. Chatbot usage intention	0.995	0.965	0.992	0.420	0.213	0.564	0.511	0.489	0.522	0.949

Notes: The diagonal elements illustrate the square root of AVE

Source(s): Authors' own work

Table 4. Summary of hypotheses

Hypotheses	Paths	β	P	Results
H1	ANTHROPO → PEASEUSE	0.294	***	Supported
H2	ANTHROPO → PEXPECT	0.479	***	Supported
H3	ANTHROPO → SOCIALINF	0.556	***	Supported
H4	ANTHROPO → INTRUST	0.576	***	Supported
H5	ANTHROPO → EXPERIEN	0.308	***	Supported
H6	ANTHROPO → USAGEINT	0.271	***	Supported
H7	PEASEUSE → EXPERIEN	0.718	***	Supported
H8	PEXPECT → EXPERIEN	0.123	**	Supported
H9	SOCIALINF → EXPERIEN	0.157	***	Supported
H10	INTRUST → EXPERIEN	0.202	***	Supported
H11	EXPERIEN → USAGEINT	0.400	***	Supported

Notes: ***p < 0.001; **p < 0.05; ANTHROPO: anthropomorphism; PEASEUSE: perceived ease of use; SOCIALINF: social influence; PEXPECT: performance expectancy; INTRUST: initial trust; EXPERIEN: experience; USAGEINT: usage intention

Source(s): Authors' own work

mediates the effects of perceived ease of use, performance expectancy and initial trust on chatbot usage intention.

6. Discussion and conclusion

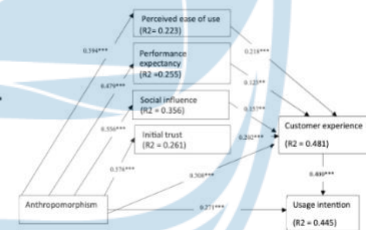
Based on TAM and UTAUT theories, the present study investigates the impact of chatbot anthropomorphism on customer experience and usage intention. Our results provide new insights and raise questions for future studies. To start with, findings suggest that chatbot anthropomorphism is a significant determinant of the two functional factors in our model (performance expectancy and ease of use). This result aligns with previous research's findings (Aw et al., 2022; Prakash et al., 2023; Blot et al., 2021, 2024) and shows that these factors are essential in understanding the mechanisms of chatbot anthropomorphism in the specific context of emergent markets (Garvey et al., 2023; Davis, 1989). Hence, anthropomorphizing chatbots' conversational style stimulates its perceived usefulness and ease of manipulation.

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Figure 2. Results of the research model

Table 5. Mediation analysis

Path relationships	β	Results
Direct effects		
ANTHROPO → USAGEINT	0.010 ^{ns}	
PEASEUSE → USAGEINT	0.158 ^{ns}	
PEXPECT → USAGEINT	0.374 ^{**}	
SOCIALINF → USAGEINT	0.102 ^{ns}	
INTRUST → USAGEINT	0.224 ^{**}	
Indirect effects		
ANTHROPO → EXPERIEN → USAGEINT	0.451 ^{**}	Full mediation
PEASEUSE → EXPERIEN → USAGEINT	0.044 ^{ns}	Partial mediation
PEXPECT → EXPERIEN → USAGEINT	0.027 ^{ns}	Partial mediation
SOCIALINF → EXPERIEN → USAGEINT	0.035 ^{ns}	Full mediation
INTRUST → EXPERIEN → USAGEINT	0.055 ^{ns}	Partial mediation

Notes: ***p < 0.001; **p < 0.05; *p < 0.01; ^{ns} = not significant; ANTHROPO: anthropomorphism; PEASEUSE: perceived ease of use; SOCIALINF: social influence; PEXPECT: performance expectancy; INTRUST: initial trust; EXPERIEN: experience; USAGEINT: usage intention

In addition, chatbot anthropomorphism significantly impacts social influence. These findings align with previous research conducted in developed countries contexts (Chuah and Yu, 2021; Moore et al., 2022; Fatima et al., 2024), reaffirming that collectivistic consumers indeed exhibit a significantly stronger preference for anthropomorphic conversational agents

(Yoniss et al., 2024) driven by communal consumption patterns, and an attraction to anthropomorphic objects as social substitutes (Baskerville et al., 2023).

Moreover, the positive impact of chatbot anthropomorphism on customer experience is significant as well. This finding, consistent with prior studies, highlights that prioritizing interactive service characteristics over purely technical attributes can significantly enhance customer experience (Pagani et al., 2019). Hence, linguistic anthropomorphic features such as conversational style help establishing conversational AI chatbots as interaction partners with whom customers can share personalized experiences (Lajante and Dohn, 2024).

As it was initially unclear whether anthropomorphism exerts a positive or a negative effect on customer behavioral intention, our findings confirm that intrinsic chatbot anthropomorphism exerts a significant positive effect on chatbot usage intention. This suggests that regardless of the market's developmental stage, anthropomorphic conversational style plays a critical role in shaping user perceptions and interaction quality. This consistency supports the idea that anthropomorphism is a foundational element of effective chatbot design across diverse economic and cultural contexts.

Furthermore, little attention in literature has been addressed to the effect of initial trust on customer experience in the realm of digital technology context (Ameen et al., 2021; Sun et al., 2017). In the present study, the significant positive impact of initial trust on customer experience, aligns with previous researches (Mousafa and Karamani, 2022), emphasizing the importance of human-machine initial trust in virtual emerging technologies. This result contrasts with the assertion that in emergent countries' context, consumers exhibit significant distrust toward technologies in general and chatbots in particular, perceiving it as a high-risk device due to its reliance on virtual systems (Nguyen et al., 2023). Consequently, in this specific context, if customers trust a chatbot, this trust can swiftly lead to a positive customer experience. In addition, the significant positive impact of anthropomorphism on initial trust supports the proposition that anthropomorphism can foster customer trust in AI applications when accompanied by high-quality communication (Chi and Huang, 2023; Chen and Park, 2021).

On the other side, aligning with the findings of prior studies (Ginsley and Cark, 2021; Laube and Pignata, 2021; Anajou and Canis, 2020), this study confirms the positive effect of perceived ease of use and performance expectancy on chatbot customer experience. In other words, participants who consider chatbots as useful and easy to manipulate tools were more likely to have a favorable customer experience (Mortwack, 2021). Therefore, designing highly performant chatbots that not only exceed customer expectations but are also easy to use, will enhance the efficiency of customer interactions and make task completion more seamless, which consists a key advantage of utilizing chatbots in emergent countries (Ben Mounam et al., 2017).

In addition, the significant positive impact of social influence on customer experience is consistent with several previous studies (Aw et al., 2022; Chakrabarty et al., 2021). This result reinforces the importance of considering social factors when addressing technology adoption in developing countries. It suggests that service marketers should recognize the social pressure exerted by the groups their customers interact with, which can influence their behavior.

Finally, the positive impact of customer experience on chatbot usage intentions aligns with previous research (Bhattacharya, 2001; Lee et al., 2021; Aw et al., 2022). This finding reaffirms that customer AI-enabled experience is crucial in determining customers' behavioral patterns.

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6.1 Theoretical implications

This study makes a substantial contribution to the existing body of chatbot anthropomorphism literature by proposing and testing, under the umbrella of TAM and UTAUT theories, a novel conceptual model that highlights the role of chatbot anthropomorphism in technology acceptance, customer experience and chatbot usage intention, in the specific context of an emerging market. For instance, the UTAUT and TAM models have been predominantly validated outside the North African context (Abosagami, 2023; Rizomyliotis et al., 2022; Park et al., 2024). By extending these frameworks to chatbot services in developing countries, we offer valuable insights for both theoretical advancement and practical application.

Our findings, with all hypotheses supported, confirm the relevance of technology acceptance models regardless of the market's developmental stage. Moreover, the integration of chatbot anthropomorphism, initial trust and customer experience into these models to examine behavioral intentions has yielded compelling results stressing the originality of the study.

This research contributes significantly to existing frameworks and literature. First, within the service sector, companies increasingly deploy chatbots to overcome operational constraints and efficiently address consumer needs. While most empirical studies have focused on chatbot adoption in customer service, our research extends this exploration to the telecommunications industry, aligning with the recommendations of Gatzafra and Sapkalis (2022).

Second, TAM was widely applied while combined with other theories (TAM and DOI; TAM, ECM and IS; TAM and SST; TAM, DOI and TOE) (Ashfaq et al., 2020). However, few researches combine TAM and UTAUT. The originality of our model is illustrated in the integration of both theories (TAM and UTAUT) extended by chatbot anthropomorphism, chatbot initial trust and customer experience to provide a more comprehensive understanding of the service chatbot adoption.

Finally, the present study contributes to the existing literature by enriching the theory of anthropomorphism associated with chatbot services. Investigating the crucial role of anthropomorphic characteristics in chatbot adoption as suggested by Roy and Naidoo (2021) and Sando et al. (2021), the findings suggest that integrating human-like conversational cues can improve chatbot acceptance, trust and online customer experience.

6.2 Managerial implications

The research results deliver perspectives in e-commerce companies. Management groups need to interact with designers to integrate pertinent anthropomorphic feature into chatbot adoption. This entails comprehending user prediction and improving user experience by integrating human-like traits in chatbot designs.

The findings of the present study support the positive and significant impact of anthropomorphism on perceived ease of use, performance expectancy, social influence and initial trust. Therefore, companies should develop comprehensive training programs to guide users on effectively interacting with anthropomorphic chatbots, thereby enhancing perceived ease of use. Moreover, it is important to systematically evaluate the social effects of chatbot anthropomorphism and implement strategies as needed to maintain a favorable social influence and user experience. In addition, managers should leverage anthropomorphism to enhance performance expectancy by designing chatbots with features that strengthen users' perception of competence.

The significant impact of social influence on customer experience suggests that managers should spend more pre-attentional efforts to shape consumer opinions. One effective approach

is to incorporate images of social interactions in companies' communication and encourage e-commerce reviews and recommendations through promotions or discounts. In addition, online sellers can leverage their customers' social media usage by encouraging them to share their experiences and post product reviews. Moreover, it will be efficient to engage with opinion leaders through various advertising activities and promotional events. Influencer marketing can be particularly effective in this context, as influencers possess a social capital that encourages consumers to conform to their ideas and even mimic their behavior (Chimborato, et al., 2021).

Eventually, managers should maintain trustworthiness and transparency by incorporating anthropomorphic features to enhance trust with novel technology leading to improved user experience and intention to adopt chatbot service.

6.3 Limitations and future research

The present research shows some limitations despite the valuable insights gained for the field of consumer behavior in the realm of AI and technology acceptance. First, we focused on the direct relationship between anthropomorphism, perceived ease of use, performance expectancy, social influence, initial trust and customer experience. Future research may examine the moderating effect of the latest variable on the relationships between all these variables and chatbot usage intention (Araujo and Lacroix, 2023). Moreover, the data in our study were cross-sectional. We recommend a longitudinal data which may provide more insight on customers' experiences with chatbots. Besides, we addressed customer experience with chatbots in one sector. Therefore, to gain more information into customers' experiences with chatbots, it would be interesting for future studies to focus on various sectors (banking, healthcare, e-shopping, etc.).

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