

A study of queues and customer service in retail bank agencies

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Abstract

This paper focuses queues lengths and customer service offered by retail banks agencies in São Paulo, the largest Brazilian and South America city. Through almost 800 instantaneous observations during one year of queues and ATM-automatic teller machines, the service level was appraised and found to be fair.

Key Words: Queues in banks, Waiting time, Bank customer service

Introduction

The objectives of this paper are to describe and comment the occurrence of customer queues in bank agencies (branches) of São Paulo, the Brazilian megalopolis. The paper aims also to debate the influence of queues upon the customer service quality. The study focuses queues at the traditional cashier front end and at the ATM – Automated Teller Machines – section

Background

Long customer queues mean loss of time and much inconvenience for the clients, all the more when they have to wait standing, in an uncomfortable position. They can even consider a long waiting time – or any waiting time – a lack of respect, an abuse of their patience. The customer is aware that the service could be improved but the bank prefers to cut costs at his expenses. He could consider shifting to another financial institution, but he doubts that the situation would be different elsewhere.

In Brazil, ten years ago, bank queues had become so extensive and frequent that the Central Bank decided that all bank agencies should install ticketing devices at the entrance, to allow customers to know the time to service, duly registered. There was a consensus that the maximum waiting time should not exceed twenty minutes. When the client waited more than this limit, he could issue a complaint against the bank. Indeed, banks are, after telemarketing companies, the institutions which get more complaints in Brazil, through more about excessive rates and undue charges than about waiting times. One of the largest retail bank has

approximately 30 million clients. . If it gets 3,000 complaints in a month, it means only 0.01% angry customers in that period.

The banking system in Brazil is very large. With its 200 million inhabitants, the country is the 5th most populated in the world. São Paulo City holds about 12 million inhabitants , being the sixth largest and the western largest city in the world

There are 157 banks in Brazil. Six of them are huge commercial (retail) banks, which own about one hundred million customers and operate more than 90% of all banking transactions concerning people. They operate over 50 thousand agencies, aside from the “posts” or offices, which they maintain in large firms, to facilitate payments, deposits or cash withdrawals. It is these six largest institutions which are the object of the present research.

The problem

As said before, a decade ago, bank queues had become so frequent and obnoxious that authorities started to pay attention to the problem. The paper focuses this point: Has the problem be solved? Are files so frequent and unbearable as to be considered a serious administrative, economic and social question?

Hypotheses

Assuming that a perfect banking system should have no queues whatsoever, in any time, any agency, three hypotheses can be formulated to explain their existence:

1. Queues are the result of a careless attitude of bankers, who could not care less about the users loss of time and predicaments.

2. Queues are purposely maintained by bankers in order to discourage the client to go to the agency, stimulating him, this way, to shift to the internet (on line) banking. Bankers want to cut (or reduce) personal expenses, using, instead, IT devices. These are cheap and probably more reliable than human tellers. They do not ask for more salary or better working conditions, or even for more benefits. A bank transaction made by a clerk costs ten times more than the same transaction made by an ATM or made online.

3. Queues are unavoidable. Financial services do not show a linear demand. Instead, they are marked by peaks. There are monthly, weekly, daily, hourly peaks. In Brazil, for instance, payment day is the fifth working day of the month. Huge files crowd the bank branches on that day. State taxes are paid in January, city taxes in February, Federal taxes in April. At lunch time, clients swarm to the agencies. How could any kind of business deal with these bursts of people, in a rational way, without excessive expenses?

Literature review

Bank queuing seems to be, or to have been at same times, in same places, a frequent problem. Conjectural bank queuing occurs in a economic crisis , when the government threatens to confiscate savings and accounts, or when there exists a risk of devaluation. Structural bank queuing is due to some systemic deficiency. Most authors figure out that shortcomings could be

solved through better and more advanced technology. Automated Teller Machines helped to reduce lines at the traditional human teller section; online banking is substituting advantageously the ATM; better technology, like RFID chips – Radio Frequency Identification – will contribute to eliminate the remaining files. More managerial attention , more training, more friendly software applications at the ATM, would also help.

Methodology

The method used to study the length of queues at the traditional cashier service and at the ATM, as well as the number of machines out of order and other characteristics, was the classic “instantaneous observations” procedure, a technique of work sampling in use since the days of the School of Scientific Management (BARNES, 1957, 1980)

It consists in observing the existing situation - no queues, long queue, all ATM working, one ATM down - at random times, hundreds of times, till the researcher reaches a stabilization of the results. In the present case, the researchers made 632 visits to 20 different bank agencies, belonging to six different banks. Since those visits were chosen by convenience, the research cannot be considered to be a random project.

Of the six banks studied, two are the largest Brazilian public banks; two are the largest Brazilian private banks; and two are the largest foreign banks established in Brazil. Visits were in number of 159, 288 e 185, respectively, as shown in Table 1. The number of branches visited was 6, 9 and 5 respectively

Table 1: Number of banks, agencies and visits performed

	Number of agencies visited	Number of visits
Public Brazilian	3	77
Public Brazilian	3 6	82 159
Private Brazilian	6	243
Private Brazilian	3 9	45 288
Private Foreign	3	147
Private Foreign	2 5	38 185

Source: Authors, 2014

The visits started in November, 2012. The last ones were performed in January, 2014. They were done on all the seven days of the week. In Brazil, bank office hours extend from 10:00 a.m. till 4:00 p.m. but the ATM section remains open from 6:00 a.m. to 10:00 p.m. As a result, more observations were carried at the ATMs than at the traditional teller section.

Table 2 shows some main results of the research, which are explained ahead.

Table 2: Main results of the research

					(6)		(8)	
					Average		Average	
			(4)	(5)	number of	(7)	waiting time	
			Average	Average	persons in	Average	in traditional	
			number of	number of	traditional	waiting time	queues	(9)
		(3)	persons	persons in	queues	in traditional	when there	Maximum
(1)	(2)	% of ATM	in ATM	traditional	when there	queues	exists a queue	waiting time
Bank	Agency	Down	queues	queues	exists a queue	(minutes)	(minutes)	(minutes)
1	1.1	6.5%	21	6.5	8.7	NR	NR	NR
1	1.2	8.8%	0	NR	NR	NR	NR	NR
2	2.1	NE	NE	3.8	4.2	4.0'	4.0'	5.0'
3	3.1	10.2%	0.38	3.8	5.7	6.4'	16.6'	23.0'
3	3.2	20.3%	1.85	11.2	11.2	25.5'	25.5'	41.0'
3	3.3	15.3%	1.50	25.0	25.0	22.0'	22.0'	45.0'
3	3.4	17.4%	0.07	1.4	2.5	NR	NR	NR
4	4.1	3.6%	0	12.0	13.3	NR	NR	NR
5	5.1	18.9%	0.06	3.5	5.5	7.1'	10.6'	30.0'
6	6.1	0%	0	1.8	5.1	1.1'	5.2'	9.0'

Source: Authors, 2014

Observations: NR means Not Registered and NE means Non Existing condition

Explanations of table 2

Columns (1) and (2) refer to the codes of the bank and agencies.

Column (3) reproduces the percentage of ATM which were down / out of service

Column (4) shows the average numbers of persons in ATM queues, a very small number

Column (5) represents the average numbers of persons waiting in traditional service queues

Column (6) uses the same numerator as in column (5) but the denominator is the number of observations for which there was a queue

Column (7) is the total waiting time in traditional service, divided by the number of observations

Column (8) uses the same numerator as column (7) but the denominator is the number of observations for which there was a queue

Column (9) is the maximum waiting time observed in this agency

Final considerations

The method used in this research: instantaneous observations, was worked out by the paper`s authors themselves. It was not financed or sponsored by any institution; all the expenses were borne by the authors. The advantage of this arrangement is the total independence of the

researchers. This increases the research reliability. Banks would be in much better condition than external observers to conduct such a research, but their results probably would not carry much reliability. Anyway, banks would not be willing to show their data.

The proportion of ATM down, shown in column (3) of table 2, is rather high for banks 3 and 5; but the average number of persons in ATM queues, column (4) is low, since, in almost all agencies, the number of ATM is large, compared to the flow of clients. A better machine maintenance would allow banks to invest less in equipment. Aside from being out of service (down), ATM frequently present service restrictions; for instance, no cash withdraw available, for lack of bills or other problems. It would be interesting, to improve the research, to operate each ATM and register each time which services are not available.

The research included only six banks and 20 agencies, of which 10 had their results shown in table 2 . On the whole, 632 observations were recorded. In some agencies there are no ATM, in others it was difficult to register the waiting times, due to intricate layout and various waiting lines existing. This sample of agencies is very small compared to the number of bank agencies existing in the country. For instance: bank 1 has 7,929 agencies, most of them in Brazil; bank 2 has 5,272 major agencies and an even number larger of third party active correspondents. Even considering only the São Paulo City, the sample is small. The number of ATM observed was 151, when bank 5, alone, claims to have 13,000 ATM operating in the country.

The selection of the agencies was done by convenience, mostly in business and commercial districts, close to the center of São Paulo. Since the sample was not selected by a random process, results cannot be extrapolated to other agencies. Only a limited light has been thrown on the subject by this modest inquiry.

Aside from routine maintenance and peak problems, occur, rarely, severe disruptions, either by lack of power, by the fall of the system, by lack of connection between the central system and the agency, due to a severe failure, by the action of robbers who invade agencies and destroy the ATM to steal cash, or by labor strikes. All this events occurred during this research, affecting practically the agencies performance. Through they do not damage the average queue size and the average waiting time, these outliers create consumer outrage and are much more remembered than averages. This fact explains the popular concept that bank queues are common and very long, while, as a matter of fact, long queues are rare and the customer service is usually fair, and, most of times, quite good.

Conclusions

The main conclusions which can be drawn from this research are the following:

There are indeed long lines in the traditional bank teller service. In some agencies, the average queue length was more than 10 people; the average waiting time more than 20 minutes; the maximum waiting time as high as 40 minutes. The best performance was reached by the foreign bank 6.

Queues are very rare in the ATM section. The average number of people in ATM queues is close to zero in most agencies and does not exceed 2. The percentage of machines

down never exceeds 20%. The ATM performance can be considered acceptable, through it could be improved.

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