DREW HOMEPAGE

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>DREW</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg); background-color: red; color: rgb(0, 0, 0);"

alink="#ee0000" link="#0000ee" vlink="#551a8b">

<a href="http://www.facebook.com/profile.php?id=533634602&amp;ref=ts"><img

style="border: 0px solid ; width: 460px; height: 345px;"

alt="Drew" src="file:///C:/Users/user/Desktop/Website/drew.jpg"></a><span

style="color: white;"></span><br>

<br>

<span style="font-family: Comic Sans MS;"><span

style="color: white;"></span></span><br>

<big><big><span style="font-family: Comic Sans MS;"><span

style="color: white;"><span style="font-family: Chiller;">&nbsp;<big

style="color: rgb(255, 255, 102); font-family: Calibri;"><big>MATT

DREW NIEVERAS</big></big></span></span></span></big></big><br>

<big style="font-family: Calibri;"><big><big><span

style="color: rgb(255, 255, 102);">&nbsp;October 30, 1993</span><br

style="color: rgb(255, 255, 102);">

<span style="color: rgb(255, 255, 102);">&nbsp;School:

DLSU-MANILA<br>

&nbsp;E-MAIL: kaboinkspeak24@yahoo.com<br>

&nbsp;<br>

</span></big></big></big><a

href="PANCHO.html"><big style="color: rgb(255, 255, 102);"><big><big><br>

<span style="text-decoration: underline;">NEXT</span></big></big></big></a><br>

<span style="color: rgb(255, 255, 102);">&nbsp;<span

style="font-family: Chiller;"></span></span><br>

<br>

&nbsp; &nbsp;<br>

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</body>

</html>

PANCHO WEBPAGE

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>PANCHO</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);">

<img style="width: 370px; height: 719px;" alt="pancho"

src="pancho%202.jpg"><br>

<br>

<big><big><big><big><span

style="color: rgb(255, 255, 102); font-family: Calibri;">PANCHO

VELASCO</span></big></big><br

style="color: rgb(255, 255, 102); font-family: Calibri;">

<big><span

style="color: rgb(255, 255, 102); font-family: Calibri;">MAY

25, 1993</span><br

style="color: rgb(255, 255, 102); font-family: Calibri;">

<span style="color: rgb(255, 255, 102); font-family: Calibri;">SCHOOL:

DLSU-MANILA</span></big></big></big><br>

<big style="color: rgb(255, 255, 102);"><big><big>E-MAIL:</big>pancho\_velasco@yahoo.com</big></big><br>

<a href="jay.html"><big><big><big><br

style="color: rgb(255, 255, 102);">

<span style="color: rgb(255, 255, 102);">NEXT</span></big></big></big></a>

</body>

</html>

JAY WEBPAGE

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>jay</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);">

<a

href="http://www.facebook.com/profile.php?id=533634602&amp;ref=ts#%21/profile.php?id=535019543"><img

style="border: 0px solid ; width: 462px; height: 415px;"

alt="JAY" src="file:///C:/Users/user/Desktop/Website/jay.jpg"></a><br>

<br>

<big><big><big><big><span

style="color: rgb(255, 255, 102);">JAY ALVIN GO</span></big><br

style="color: rgb(255, 255, 102);">

<span style="color: rgb(255, 255, 102);">MARCH 6, 1994</span><br

style="color: rgb(255, 255, 102);">

<span style="color: rgb(255, 255, 102);">SCHOOL:

DLSU-MANILA</span></big></big></big><br>

<br>

<a href="HOMEPAGE.html"><big><big><big><span

style="color: rgb(255, 255, 102);">HOME</span></big></big></big></a>

</body>

</html>

HOMEPAGE

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>HOMEPAGE</title>

</head>

<body

style="color: rgb(0, 0, 0); background-color: rgb(255, 255, 255); background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);"

alink="#000099" link="#ffff33" vlink="#990099">

<div

style="text-align: center; font-family: BatangChe; color: rgb(255, 255, 51);">&nbsp;

<img src="Boy\_in\_PC.gif" alt=""><big><big><big><big><big><span

style="font-weight: bold;">AUTOMATED TELLER</span></big></big></big></big></big><img

src="Boy\_in\_PC.gif" alt=""><big><big><big><big><big><span

style="font-weight: bold;"> <br>

MACHINE<br>

</span></big></big></big></big></big><big><big><big><big><big><img

style="width: 303px; height: 322px;" alt="atm"

src="atm.jpeg"></big></big></big></big></big><big><big><big><big><big><br>

</big></big></big></big></big>

<div style="text-align: left;"><big><big><big><big><big><a

href="HOMEPAGE.html"><small><small>HOME</small></small></a><br>

<small><small><a href="INTRO.html">INTRODUCTION</a><br>

<a href="HISTORY.html">HISTORY</a><br>

<a href="HARDWARE.html">HARDWARE</a><br>

<a href="software.html">SOFTWARE</a></small></small><br>

<small><small><a href="RELIABILITY.html">RELIABILITY</a></small></small><br>

<a href="DREW.html"><small><small>DEVELOPERS</small></small></a></big></big></big></big></big>

&nbsp;<br>

<br>

<br>

COMP1BU / C41&nbsp; / IAN TABORA<br>

</div>

</div>

</body>

</html>

INTRO

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>INTRO</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);">

<div style="text-align: center;"><big

style="color: rgb(255, 204, 102);"><big><big>INTRODUCTION</big></big></big><span

style="color: rgb(255, 204, 102);"> </span><br

style="color: rgb(255, 204, 102);">

<br style="color: rgb(255, 204, 102);">

<p class="MsoNormal"

style="text-align: justify; color: rgb(255, 204, 102);"><b

style=""><span

style="font-size: 12pt; line-height: 115%; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Introduction<o:p></o:p></span></b></p>

<p class="MsoNormal"

style="text-align: justify; color: rgb(255, 204, 102);"><b

style=""><span

style="font-size: 12pt; line-height: 115%; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></b></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><span

style="">&nbsp; </span><span style="">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

</span><span style="">&nbsp;</span>An<span

class="apple-converted-space">&nbsp;</span><span

style="">automated teller machine</span><span

class="apple-converted-space">&nbsp;</span>(<span

style="">ATM</span>), also known as<span

class="apple-converted-space">&nbsp; </span><span

style="">automatic banking machine</span><span

class="apple-converted-space">&nbsp;</span>(<span

style="">ABM</span>),<span

class="apple-converted-space">&nbsp;</span><span

style="">Cash Machine</span>, or<span

class="apple-converted-space">&nbsp;</span><span

style="">Cash point</span>, is a computerised

telecommunications device that provides the<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">clients</span><span

class="apple-converted-space">&nbsp;</span>of a<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">financial institution</span><span

class="apple-converted-space">&nbsp;</span>with

access to<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">financial transactions</span><span

class="apple-converted-space">&nbsp;</span>in a

public space without the need for

a cashier, human clerk or<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">bank teller</span>. On

most modern ATMs, the customer is identified by inserting a plastic<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">ATM card</span><span

class="apple-converted-space">&nbsp;</span>with a<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">magnetic stripe</span><span

class="apple-converted-space">&nbsp;</span>or a

plastic <span style="text-decoration: none;">smart card</span><span

class="apple-converted-space">&nbsp;</span>with a<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">chip</span>, that

contains a unique card number

and some security information such as an expiration date.

Authentication is

provided by the customer entering a<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">personal identification number</span><span

class="apple-converted-space">&nbsp;</span>(PIN).<o:p></o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);">Using

an ATM, customers can access

their bank<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">accounts</span> <span

class="apple-converted-space">&nbsp;</span>in

order to make<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">cash</span><span

class="apple-converted-space">&nbsp;</span>withdrawals,<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">credit card</span><span

class="apple-converted-space">&nbsp;</span>cash

advances, and check their account

balances as well as purchase prepaid cell phone credit. If the currency

being

withdrawn from the ATM is different from that which the bank account is

denominated in (e.g.: Withdrawing Japanese Yen from a bank account

containing

US Dollars), the money will be converted at a wholesale<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">exchange rate</span>.

Thus, ATMs often provide the best possible exchange rate for foreign

travellers<span class="apple-converted-space">&nbsp;</span>and

are heavily used for this purpose

as well.<o:p></o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);">ATMs

are placed not only near or

inside the premises of banks, but also in locations such as shopping

centers/malls, airports, grocery stores, petrol/gas stations,

restaurants, or

any place large numbers of people may gather. These represent two types

of ATM

installations: on and off premise. On premise ATMs are typically more

advanced,

multi-function machines that complement an actual bank branch's

capabilities

and thus more expensive. Off premise machines are deployed by financial

institutions and also ISOs (or Independent Sales Organizations) where

there is

usually just a straight need for cash, so they typically are the

cheaper

mono-function devices. In Canada, when an ATM is not operated by a

financial

institution it is known as a<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">"White Label ATM"</span>.<o:p></o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);">In

North America, banks often have<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">drive-thru</span><span

class="apple-converted-space">&nbsp;</span>lanes

providing access to ATMs.<o:p></o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);">Many

ATMs have a sign above them indicating the name of the bank or

organization owning the ATM, and possibly including the list of ATM

networks to

which that machine is connected. This type of sign is called a<span

class="apple-converted-space">&nbsp;</span><span

style="">topper</span>.<o:p></o:p></p>

</div>

</body>

</html>

HISTORY

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>HISTORY</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);">

<div style="text-align: center; color: rgb(255, 204, 102);"><big><big><big><big>HISTORY</big></big></big></big><br>

<br>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><b

style="">History<o:p></o:p></b></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><b

style=""><o:p>&nbsp;</o:p></b></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;">The

idea of self-service in retail

banking developed through independent and simultaneous efforts in

Japan,

Sweden, the United States and the United Kingdom. In the USA,<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">Luther George Simjian</span><span

class="apple-converted-space">&nbsp;</span>has

been credited with developing and

building the first cash dispenser machine<span

class="apple-converted-space">&nbsp;</span>There

is strong evidence to suggest that Simjian worked on this device before

1959

while his 132nd patent (US3079603) was first filed on 30 June 1960 (and

granted

26 February 1963).<span class="apple-converted-space">&nbsp;</span>An

experimental Bankograph was installed in<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">New York City</span><span

class="apple-converted-space">&nbsp;</span>in 1961

by the<span class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">City Bank of New York</span>,

but removed after 6 months due to the lack of customer acceptance. The

Bankograph was an automated envelope deposit machine (accepting coins,

cash and

cheques) and it did not have cash dispensing features<span

class="apple-converted-space">&nbsp;</span>The

Bankograph embodied the

preoccupation by US banks in finding alternative means to capture core

deposits, while the concern of European and Asian banks was cash

distribution.

Thus the Bankograph was NOT the first cash dispenser machine, as it did

not

dispense cash.<o:p></o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;">A

cash dispensing device was first

used in Tokyo in 1966.<span class="apple-converted-space">&nbsp;</span>Although

little is known of this first device, it seems to have been activated

with a

credit card rather than accessing current account balances. Thus it is

not a

true Automated Teller Machine. This technology had no immediate

consequence in

the international market.<o:p></o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><o:p>&nbsp;</o:p></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;">After

looking first hand at the

experiences in Europe, in 1968 the networked ATM was pioneered in<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">Dallas</span>, Texas, by<span

class="apple-converted-space">&nbsp;</span><span

style="text-decoration: none;">Donald Wetzel</span><span

class="apple-converted-space">&nbsp;</span>who was

a department head at an

automated baggage-handling company called Docutel. In 1995, the

Smithsonian's

National Museum of American History recognised Docutel and Wetzel as

the

inventors of the networked ATM.<o:p></o:p></p>

</div>

</body>

</html>

HARDWARE

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>HARDWARE</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg); color: rgb(0, 0, 0);"

alink="#ee0000" link="#0000ee" vlink="#551a8b">

<div style="text-align: center; color: rgb(255, 204, 102);"><big><big><big>HARDWARE</big></big></big><br>

<br>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><b

style="">Hardware<o:p></o:p></b></p>

<p

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><b

style=""><o:p>&nbsp;</o:p></b></p>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">An

ATM is

typically made up of the following devices:<o:p></o:p></span></p>

<ul style="text-align: left;">

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">CPU</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;(to

control

the user interface and transaction devices)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Magnetic</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;and/or&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Chip

card</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;reader

(to identify the customer)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">PIN</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;Pad

(similar

in layout to a&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Touch

tone</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;or&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Calculator</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;keypad),

often manufactured as part of a secure enclosure.<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Secure

crypto processor</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">,

generally within a secure enclosure.<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Display

(used by the customer for performing the transaction)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Function

key</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;buttons

(usually close to the display) or a&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Touchscreen</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;(used

to select the various aspects of the transaction)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Record

Printer (to provide the customer with a record of their transaction)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Vault</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;(to

sto&nbsp;&nbsp;&nbsp; re the parts of the machinery

requiring restricted access)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Housing

(for aesthetics and to attach signage to)<o:p></o:p></span></li>

</ul>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.25in; line-height: 18pt;"><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></p>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.25in; line-height: 18pt;"><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Recently,

due to heavier computing demands and the falling price of computer-like

architectures, ATMs have moved away from custom hardware architectures

using&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">microcontrollers</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;and/or&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">application-specific

integrated circuits</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;to

adopting the hardware architecture of a&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">personal

computer</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">,

such as, USB connections for peripherals, Ethernet and IP

communications, and

use personal computer operating systems. Although it is undoubtedly

cheaper to

use&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">commercial

off-the-shelf</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;hardware,

it

does make ATMs potentially vulnerable to the same sort of problems

exhibited by

conventional computers. Business owners often lease ATM terminals from

ATM

service providers.<o:p></o:p></span></p>

<p class="MsoNormal"

style="background: rgb(102, 102, 204) none repeat scroll 0%; margin-bottom: 0.0001pt; text-align: justify; text-indent: 0.5in; line-height: 16.8pt; -moz-background-clip: initial; -moz-background-origin: initial; -moz-background-inline-policy: initial;"><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p><span

style="background-color: rgb(102, 102, 204);">The

vault of an ATM is within the footprint of the device itself and is

where items

of value are kept.&nbsp;</span></span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none; background-color: rgb(102, 102, 204);">Scrip

cash

dispensers</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><span

style="background-color: rgb(102, 102, 204);">&nbsp;do

not incorporate a vault.</span><o:p></o:p></span></p>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Mechanisms

found

inside the vault may include:<o:p></o:p></span></p>

<ul style="text-align: left;">

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Dispensing

mechanism (to provide&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">cash</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;or

other items of value)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Deposit

mechanism including a Cheque Processing Module and Bulk Note Acceptor

(to allow

the customer to make deposits)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Security

sensors (Magnetic, Thermal, Seismic, gas)<o:p></o:p></span></li>

<li><!--[if !supportLists]--><span

style="font-size: 10pt; font-family: Wingdings;"><span

style=""><span

style="font-family: &quot;Times New Roman&quot;; font-style: normal; font-variant: normal; font-weight: normal; font-size: 7pt; line-height: normal; font-size-adjust: none; font-stretch: normal;">&nbsp;

</span></span></span><!--[endif]--><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Locks:

(to ensure controlled access to the contents of the vault)<o:p></o:p></span><b

style=""><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></b></li>

</ul>

</div>

</body>

</html>

SOFTWARE

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>software</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);">

<div style="text-align: center; color: rgb(255, 204, 102);"><big><big><big>SOFTWARE</big></big></big></div>

<br style="color: rgb(255, 204, 102);">

<p class="MsoNormal"

style="margin-bottom: 1.2pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><big><big><b

style=""><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Software<o:p></o:p></span></b></big></big></p>

<p class="MsoNormal"

style="margin-bottom: 1.2pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><big><big><b

style=""><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></b></big></big></p>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt; color: rgb(255, 204, 102);"><big><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">With

the migration to commodity PC hardware, standard commercial

"off-the-shelf" operating systems and programming environments can be

used inside of ATMs. Typical platforms previously used in ATM

development

include&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">RMX</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;or&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">OS/2</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">.

Today the vast

majority of ATMs worldwide use a&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Microsoft</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;OS,

primarily</span><span style="font-size: 12pt;">

Windows</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;or&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Windows

XP

Embedded</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">.

A small number of deployments may still be running

older versions such as&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Windows

NT</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">,&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Windows

CE</span><span style="font-size: 12pt;"> </span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">or&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Windows

2000</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">.

Notably,&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Vista</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;was

not widely adopted in ATMs.<o:p></o:p></span></big></big></p>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt; color: rgb(255, 204, 102);"><big><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Linux</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;is

also

finding some reception in the ATM marketplace. An example of this

is&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Banrisul</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">,

the largest bank in the south of&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Brazil</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">,

which has

replaced the</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">MS-DOS</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;operating

systems in its ATMs with Linux.&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Banco

do Brasil</span></big></big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><big><big>&nbsp;<small>is

also migrating ATMs to Linux.</small></big></big><o:p></o:p></span></p>

<br style="color: rgb(255, 204, 102);">

</body>

</html>

RELIABILITY

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

<html>

<head>

<meta content="text/html; charset=ISO-8859-1"

http-equiv="content-type">

<title>RELIABILITY</title>

</head>

<body

style="background-image: url(file:///C:/Users/user/Desktop/Website/Pancho.jpg);">

<div style="text-align: center; color: rgb(255, 204, 102);"><big><big><big><big>RELIABILITY<br>

<br>

</big></big></big></big>

<p class="MsoNormal"

style="margin-bottom: 1.2pt; text-align: justify; line-height: 18pt;"><big><b

style=""><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">ReliabilityA<o:p></o:p></span></b></big></p>

<big></big>

<p class="MsoNormal"

style="margin-bottom: 1.2pt; text-align: justify; line-height: 18pt;"><big><b

style=""><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></b></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Before

an ATM is placed in a public place, it typically has undergone

extensive

testing with both&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">test

money</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;and

the&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">backend</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;computer

systems that allow it to perform transactions. Banking customers also

have come

to expect high reliability in their ATMs,&nbsp;which provides

incentives to ATM

providers to minimize machine and network failures. Financial

consequences of

incorrect machine operation also provide high degrees of incentive to

minimize

malfunctions<sup>.<o:p></o:p></sup></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">ATMs

and the supporting electronic financial networks are generally very

reliable,

with industry benchmarks typically producing 98.25% customer

availability for

ATMs<sup> </sup>and up to 99.999% availability for host

systems. If ATMs do go

out of service, customers could be left without the ability to make

transactions until the beginning of their bank's next time of opening

hours.<o:p></o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">This

said, not all errors are to the detriment of customers; there have been

cases

of machines giving out money without debiting the account, or giving

out higher

value notes as a result of incorrect&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">denomination</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;of&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">banknote</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;being

loaded in the money cassettes. Errors that can occur may be&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">mechanical</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;(such

as card transport mechanisms; keypads; hard disk failures);&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">software</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;(such

as&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">operating

system</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">;&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">device

driver</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">;&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">application</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">);&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">communications</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">;

or purely down to operator error.<o:p></o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">To

aid in reliability, some ATMs print each transaction to a roll paper

journal

that is stored inside the ATM, which allows both the users of the ATMs

and the

related financial institutions to settle things based on the records in

the

journal in case there is a dispute. In some cases, transactions are

posted to

an electronic journal to remove the cost of supplying journal paper to

the ATM

and for more convenient searching of data.<o:p></o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;"><o:p>&nbsp;</o:p></span></big></p>

<big></big>

<p class="MsoNormal"

style="margin: 4.8pt 0in 6pt; text-align: justify; text-indent: 0.5in; line-height: 18pt;"><big><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">Improper

money checking can cause the possibility of a customer

receiving&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">counterfeit</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;banknotes

from an ATM. While bank personnel are generally trained better at

spotting and

removing counterfeit cash,&nbsp;the resulting ATM money supplies

used by banks

provide no absolute guarantee for proper banknotes, as the&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Federal

Criminal Police Office of Germany</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;has

confirmed that there are regularly incidents of false banknotes having

been

dispensed through bank ATMs.&nbsp;Some ATMs may be stocked and

wholly owned by

outside companies, which can further complicate this problem.&nbsp;</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;; text-decoration: none;">Bill

validation</span><span

style="font-size: 12pt; font-family: &quot;Times New Roman&quot;,&quot;serif&quot;;">&nbsp;technology

can be used by ATM providers to help ensure the authenticity of the

cash before

it is stocked in an ATM; ATMs that have cash recycling capabilities

include

this capability.<o:p></o:p></span></big></p>

<big></big></div>

</body>

</html>