

The Evolution of Automated Overdraft Systems:  
A White Paper from Velocity Solutions

# The Dramatic Evolution of Automated Overdraft Systems

Personalized Account Holder Communication,  
Individual Creditworthiness and Personal  
Overdraft Limits



[www.myvelocity.com](http://www.myvelocity.com)  
PO Box 460939  
Fort Lauderdale, FL 33346  
(954) 847-5800

**The Dramatic Evolution of Automated Overdraft Systems:**  
*Personalized Account Holder Communication, Individual Creditworthiness  
and Personal Overdraft Limits*

As with most things in our technology-driven society, the process of managing an account holder's overdrawn checking account at banks and credit unions has changed significantly over the past two decades. Much of this change has been encouraged by technology and by best practices suggested by the regulators.

**A Quick History**

Twenty years ago, when an account holder wrote a check that overdrew his/her checking account, common practice was to include that item on the daily "NSF List" and send the list to a manager for a "pay or return" decision on each item. Applicable fees were charged and notices sent. However, the actual decision on "pay or return" could be subject to friendships, family ties or other personal influences. The system was fraught with what regulators today call "disparate treatment." In addition, it distracted bank personnel from working with customers.

Third party vendors began to develop software and to provide consulting and training in order to establish an "automated overdraft management system." With an AOMS, account holders were either qualified into or out of the service. Those in the service were all assigned the same fixed limit (e.g., \$500), providing overdraft protection up to that amount at the bank's discretion. The providers also recommended specific communication pieces (notices, scripts and letters) to be used by bank personnel in dealing with overdrawn account holders. These systems removed much of the "disparate treatment" from the "pay or return" decisions and significantly reduced the work required by institution staff, enabling them to better serve customers.

As these automated systems were adopted by upwards of 80% of the financial institutions across the USA, a segment of the qualified account holders (usually 20% - 30%) learned quickly that they could write more NSF checks that would be honored for payment, as long as they stayed within the limit. This activity created significantly more fee revenue, but also attracted the attention of consumer activists and regulators. The concern was that the customers using the service would abuse it and create long-term problems for themselves, and undue risk for the institution.

**Regulators Weigh In**

Beginning in 2005 with the Joint Guidance on Overdraft Protection Programs, financial institutions began to face an ongoing stream of regulatory amendments, official guidance and studies concerning how the institution should treat and manage an account holder's overdraft items. Much of this scrutiny continues to be focused on the institution's responsibility to monitor the customer's creditworthiness to identify risks, and to take appropriate action when a change in creditworthiness occurs.

As stated in the 2005 **Joint Guidance on Overdraft Protection Programs**: *“Institutions should monitor these accounts on an ongoing basis and be able to identify consumers who may represent an undue credit risk to the institution. Overdraft protection programs should be administered and adjusted, as needed, to ensure that credit risk remains in line with expectations.”*

And again in 2011, the OCC reiterated the importance of individual creditworthiness in its proposed **Guidance on Deposit Related Consumer Credit Products** (which include automated overdraft protection products): *“Monitoring and Risk Assessments– Changes in customer usage should be regularly monitored to identify risk. Appropriate action should be taken to address any risks that are identified including excessive usage and nonperformance, such as reassessing a customer’s creditworthiness; adjusting credit terms, fees or limits; suspending or terminating the credit feature; or closing accounts.”*

### Three Key Objectives

Today, many institutions realize that to provide better customer service to each account holder, and to meet the compliance guidelines called for by the regulators, they need a different approach and a better system and technology. They want tools that will meet at least three objectives:

1. Automatically communicate with each account holder on an individual, personalized basis.

The need for personalized communication at the individual level is part of the drive for better customer service ... and for minimizing expenses. For example, if we know from past behavior that Jack normally “cures” his overdrawn account (brings it positive) on the 13<sup>th</sup> day, why should we spend money sending Jack the typical 10-day letter found in “one size fits all” systems? Why not wait until the 14<sup>th</sup> or 15<sup>th</sup> day if Jack’s account is not cured?

2. Regularly monitor the individual creditworthiness of each account as pertains to overdrafts.

The need for monitoring individual creditworthiness to protect the institution and to protect the account holder is not only smart, but it is what the regulators are stressing in their guidance. Until now, in almost all overdraft systems, once accounts were qualified into the program they retained the same fixed overdraft limit as granted on day one. As famous TV pitchman Ron Popeil used to say about his rotisserie, “Just set it and forget it!” How can that attitude protect either the institution or the customer from undue credit risk or simple abuse of what is supposed to be a short-term liquidity service?

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3. Automatically establish individual overdraft limits and dynamically adjust these limits (up or down) based on customer behavior.

The need for “dynamic limits” in an overdraft program derives from both the desire to provide personal customer service for each individual customer and from the focus on creditworthiness. Over the years, deposit activity (frequency, amount, and trend) has been found to be the number one predictor of risk from overdrafts. Other attributes, such as longevity of the relationship, have been used, but today we know *deposit activity* is the major determinant. This new realization is the result of analytics and superior technology that prove that in almost all cases (and in every client’s data we have analyzed), the accounts with the heaviest use of overdrafts also have the most deposit activity, both in terms of number of deposits and amount of deposits. In fact, because of this counter-intuitive norm, these accounts are also the least likely to be charged off! (Figure 1) We have also found that when “pay ratio” is analyzed across an account base, the group that experiences the lowest “pay ratio” (i.e., has the highest percentage of items returned), is the group with the greatest ability to repay the bank and the lowest charge-off ratio.

Which Accounts are Risky?									
OD/NSF Segmentation	Number of Accounts	Percent of Accounts	Number of OD/NSFs	Percent of OD/NSFs	Paid Items	Pay Ratio	Avg. # Deposits	Avg. \$ Deposits	C - O Ratio
0	37,988	77.8%	0	0.0%	0		1.7	\$1,788	
1 - 9	8,287	17.0%	24,361	23.4%	22,816	93.7%	4.1	\$3,155	13.3%
10 - 19	1,217	2.5%	16,547	15.9%	15,158	91.6%	4.8	\$3,565	11.5%
20 - 29	491	1.0%	11,732	11.3%	10,578	90.2%	5.0	\$3,911	9.6%
30 - 39	269	0.6%	9,149	8.8%	8,017	87.6%	4.9	\$3,965	8.7%
40 - 49	173	0.4%	7,604	7.3%	6,632	87.2%	5.1	\$4,575	6.6%
50 +	419	0.9%	34,831	33.4%	29,136	83.6%	5.4	\$5,540	5.1%
<b>Total</b>	<b>48,844</b>	<b>100.0%</b>	<b>104,22</b>	<b>100.0%</b>	<b>92,337</b>	<b>88.6%</b>	<b>4.3</b>	<b>\$3,491</b>	<b>9.4%</b>
Actual Client Data									
Deposit data is for last 30 days only; all other data is for 12 months.									

Figure 1

### Dynamic Limits

Establishing “dynamic limits” in which accounts with a higher ability to repay get a higher limit and accounts with a lower ability to repay get a lower limit is the best combination of providing better customer service while addressing the compliance directives.

For years, large money center banks have made their “pay or return” decisions on overdrafts via a risk scoring matrix. Specific limits are never discussed, so a customer cannot assume a specific credit amount is promised. Historically, the cost of the technology to automate the process was beyond the reach of most community-based financial institutions. It was simply not scalable.

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However, this has changed in the last several years. Now community banks and credit unions can enjoy the same level of customer service, the same operational efficiencies and a superior emphasis on individual creditworthiness at an affordable price.

Today the “second generation” automated overdraft management system not only meets the three objectives outlined above, but also offers best practices, employee training, house-holding of account information, a compliance guarantee and ongoing consulting.

### Going After Debit Denials

And there are financial benefits, even for institutions with mature overdraft programs where increases in revenue seem improbable.

As customer preferences moved from checks to debit cards in the last 10 years, the number of NSF items (and subsequent fee revenue) declined because of “NSF debit/ATM denials.” When a customer attempts to use his/her debit card at a retailer (POS), or at the ATM, and is *denied due to insufficient funds* (NSF), no transaction is created, and there is no NSF item or fee. In the past, the check was accepted for payment and, if NSF, the NSF fee was charged, whether “paid or returned.” Even if the debit card holder has opted-in under Reg. E, the fixed limit may be denying the transaction, even when the customer may have qualified for a higher limit under dynamic limits.

Consider account holders who have not opted-in for Reg. E, but who are demonstrating that they want to use their debit card at POS and/or the ATM. Their attempts at a transaction are part of the “debit/ATM denials.” Many of these accounts have simply not responded to the institution’s invitations to opt-in under Reg. E. But, they haven’t said “No.” (Figure 2) Wouldn’t they benefit from a strategy to educate them regarding their ability to utilize this service?

Opportunity from Reg. E						
Reg. E Flag	Number of Accounts	Percent of	Number of OD/NSFs	Percent of OD/NSFs	Paid Items	Pay Ratio
Opted Out	12,905	38.7%	22,642	27.6%	17,835	78.8%
Opted In	8,505	25.5%	43,670	53.3%	31,862	73.0%
No Response	11,979	35.9%	15,658	19.1%	11,630	74.3%
Total	33,389	100.0%	81,970	100.0%	61,327	74.8%
Actual Client Data						

Figure 2

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If these “no response” accounts are being denied at POS or the ATM, demonstrating that they desire to use the debit card, perhaps it would be wise to contact them soon after a denial with details about the denied transactions to explain the Reg. E opt-in requirement and get their affirmative response, be it Opt In or Opt Out. Consider the revenue boost of capturing just 25% of these NSF denials.

But most institutions don’t even monitor how many NSF debit/ATM denials they have each month (Figure 3), let alone link the denials to the specific account so that communication may be considered. The NSF items lost since 2007 didn’t just disappear. Most became NSF debit/ ATM denials trapped in the debit card system. Today, they can be integrated into the automated overdraft management system, linked to the account and analyzed for action.

Institutions that want to provide better customer service to the very customers demonstrating their desire for the overdraft service can now do so.

Cardholder Transaction Denial Analysis			
June 1 - 30, 2012			
Number Denied	Percentage	Transaction Type	Denial
Transactions			
INVALID PIN	3,527	26.64%	POS DEBIT
TOO MANY INVALID PIN ATTEMPTS	374	2.82%	POS DEBIT
INSUFF. BALANCE, NO OVERDRAFT OR READY R	790	5.97%	CASH WITHDRAWAL
INSUFF. BALANCE, NO OVERDRAFT OR READY R	576	4.35%	POS DEBIT
INSUFF. BALANCE, NO OVERDRAFT OR READY R	56	0.42%	POS PREAUTHORIZATION
DAILY CARD LIMIT EXCEEDED	55	0.42%	POS DEBIT
TRANSACTION AMOUNT TOO LARGE	39	0.29%	CASH WITHDRAWAL
AMOUNT EXCEEDS STAND-IN WITHDRAWAL LIMIT	76	0.57%	POS DEBIT
CARD STATUS ABNORMAL	244	1.84%	CASH WITHDRAWAL
FROM ACCOUNT DOES NOT EXIST	362	2.73%	CASH WITHDRAWAL
FROM ACCOUNT HAS NO DEBIT ABILITY	27	0.20%	CASH WITHDRAWAL
FROM ACCOUNT HAS NO INQUIRY ABILITY	18	0.14%	ACCOUNT BALANCE
INVALID FROM ACCOUNT CODE	13	0.10%	CASH WITHDRAWAL
INVALID TRANSACTION	127	0.96%	PIN CHANGE
LOST CARD	13	0.10%	ACCOUNT BALANCE
STOLEN CARD	49	0.37%	POS DEBIT
STAND-IN DENIAL AT SERVICE LEVEL = 0	364	2.75%	ACCOUNT BALANCE
TRAN NOT AUTH FOR INSTITUTION/TERMINAL	16	0.12%	SPECIAL TRANSACTION
CASH DISPENSER HARDWARE ERROR	150	1.13%	CASH WITHDRAWAL
TERMINAL OUT OF SERVICE	22	0.17%	CASH WITHDRAWAL
TRANSACTION DATA NOT ON FILE	594	4.49%	3D SECURE ENROLLMENT
TRANSACTION NOT SUPPORTED BY PROCESSOR	397	3.00%	Alltel Block
Percentage:13,240		100%	
Sum:			

**What Are They Worth?**  
 1,422 NSF Denials  
 25% Est Approval Rate  
 356 Add'l NSF Items  
 \$30 NSF Fee  
 \$10,665 per month  
**\$127,980 per year**

Figure 3

## Summary

The options for managing a customer's overdrawn account have changed significantly over the past two decades. Today a responsible institution can access technology to provide excellent customer service at the same time that it meets the best practices suggested by the regulators. The next generation of automated overdraft management systems has arrived.

For more details, please see...

Federal Reserve, et al – February 2005 – Joint Guidance on Overdraft Protection Programs

<http://www.federalreserve.gov/boarddocs/press/bcreg/2005/20050218/attachment.pdf>

FDIC – November 2010 – Overdraft Payment Supervisory Guidance

<http://www.fdic.gov/news/news/financial/2010/fil10081b.pdf>

OCC – July 2011 – Guidance on Deposit-Related Consumer Credit Products

<http://www.occ.gov/news-issuances/news-releases/2011/nr-occ-2011-87a.pdf>

## About Velocity Solutions, LLC

Velocity Solutions is the leading provider of digital revenue enhancement solutions to regional and community banks and credit unions. Founded in 1995 and servicing the transaction accounts of over 25 million consumers and business owners, Velocity has unparalleled expertise and insight into deposit account activity and transactional trends. Velocity's solutions are designed to automate overdraft services, drive new profitable accounts, provide digital consumer and business lending platforms, generate new non-interest income, and address regulatory scrutiny. For more information, please visit [www.myvelocity.com](http://www.myvelocity.com).



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