

Business Card Scanner Test

A comparison of the most popular solutions

The range of apps offered for digitally capturing business cards is very extensive, which makes it difficult to select a reasonable solution. In addition, the recognition quality of individual scanners – often the most important selection criterion – varies considerably and can only be evaluated in time-consuming, manual testing.

To create a better overview, we have used scientific methods to evaluate the recognition quality of seven popular business card scanners. All tested apps are intended for B2B sales and can export scanned contacts to at least one CRM system.



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Test setup

To evaluate the recognition quality, the contact data contained in each business card has been divided into (up to) 16 categories such as first name, last name, telephone number etc. These categories correspond well to the contact fields in the tested apps and are also standard in common CRM system.

Based on this ground truth, all 200 business cards have been scanned with each of the seven apps and all contact fields have been evaluated in terms of recognition quality. Thus, a total of 1,400 scans have been made, and the corresponding 22,400 contact fields have been evaluated for correctness.

	Vendor	Company location	Price model	ODP contract available	Platforms	Duplicate check towards CRM	CRM systems
ABBYY Business Card Reader	ABBYY Production LLC	Moscow, Russia	3 €/ month, 19,99 €/ year, 60 € Lifetime	×	iOS, Android	×	Salesforce
BCR for Salesforce CRM	Magnetic-One Mobile	Ternopil, Ukraine	per scan, e.g. 32 € / 200 scans	×	iOS, Android	×	Salesforce and other CRM systems as separate apps
CamCard	IntSig Information Co.,Ltd.	Shanghai, China	0,99 € Base account, unlimited Scans: 4,49 €/ month, 45,99 €/ year	✓	iOS, Android, Windows	×	Salesforce
ScanBizCards	ScanBiz Mobile Solutions LP	New York, USA	Premium: 1,89 €, Enterprise: ~105 €/user per year (for 1-100 licenses)	?	iOS, Android	×	Salesforce, SugarCRM
HubSpot	HubSpot, Inc.	Cambridge, USA	Included in HubSpot	✓	iOS, Android	×	HubSpot
Dynamics 365 for phones	Microsoft, Corporation	Redmond, USA	Included in Dynamics 365	✓	iOS, Android, Windows	(✓)	Dynamics 365
snapADDY CardScanner	snapADDY GmbH	Würzburg, Germany	5 €/ month (1 user), 29 €/ month (10 users), 160 €/ month (100 users)	✓	iOS, Android	✓	Salesforce, Pipedrive, SugarCRM, Microsoft Dynamics CRM, SAP C/4HANA



Data set

150

German
business cards

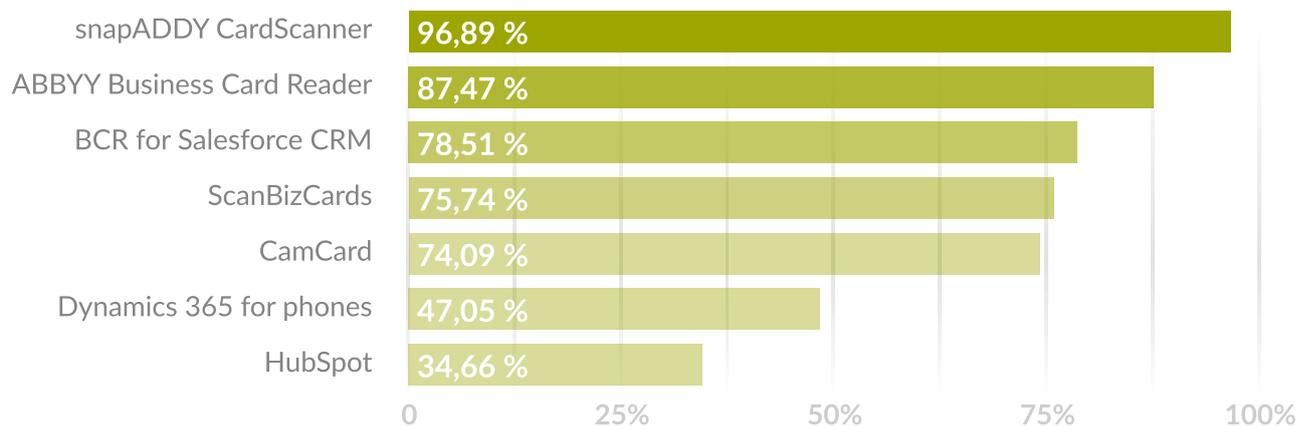
50

international*
business cards

* 60% from the USA, 20% from Italy
and 20% from France

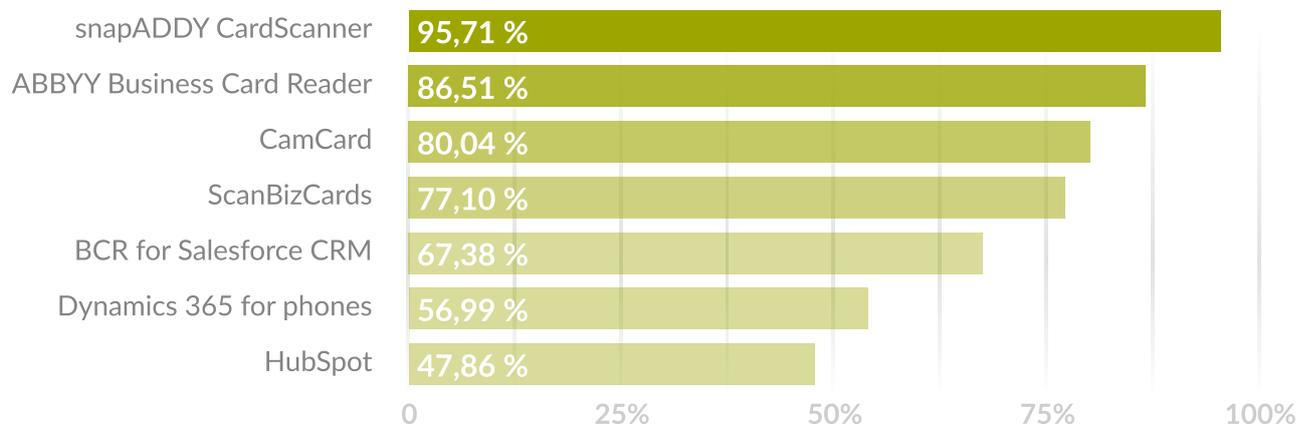
Results for German business cards

Quality **F1-Scores**



Results for international business cards

Quality **F1-Scores**



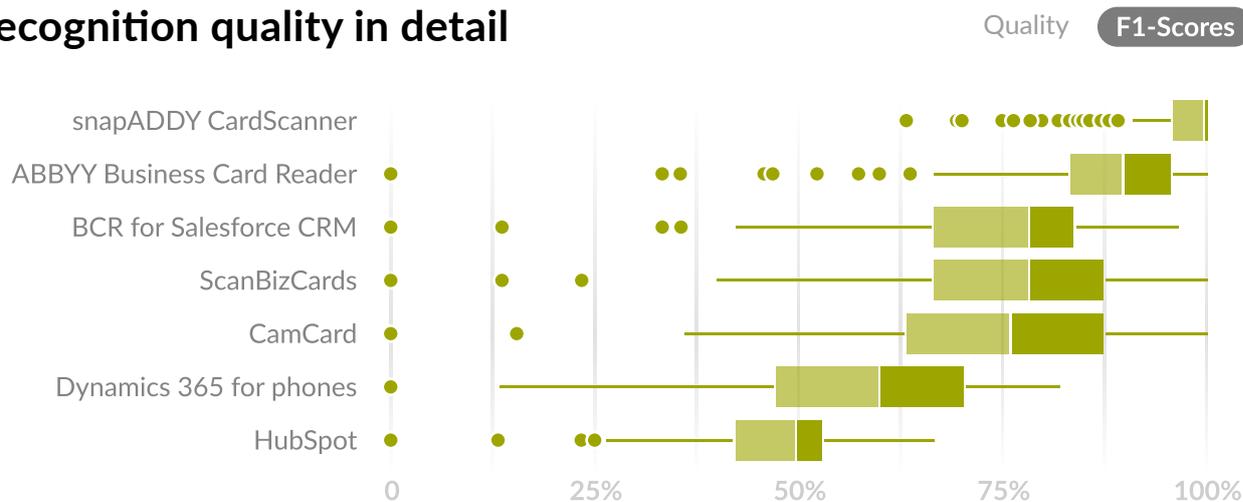
The displayed results show the average **F1-Scores** of the respective app that was tested. The F1 score is an informative measure for the evaluation of the recognition quality as it combines precision and recall. Thus, both the quality of the recognized information as well as the completeness of the extracted contacts is taken into account.

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Recognition quality in detail



A significance test (*Mann-Whitney-U* test, significance level 5%) was performed on the test results to ensure they are statistically meaningful. The graph above illustrates the distribution of the recognition quality (F1 score) of the seven scanners across all 200 tested business cards.



The further to the right a box is drawn and thus approaches 100 %, the better the recognition quality of the respective scanner.

The individual points represent quality outliers in the recognition of single business cards. The further to the left these points are located, the worse the corresponding business cards were recognized.

Conclusion

The snapADDY CardScanner stands out as its average recognition quality (median, vertical line) has by far the highest value in the test; at the same time its variance is the lowest. The other six scanners show a higher variance, lower average recognition quality and more outliers with poor recognition results. HubSpot is an exception in that the detection quality is acceptable, but only very few field types are detected.

snapADDY's scanner clearly outperforms the other four scanners. Second place goes to ABBYY's app, which still showed considerably better results than the remaining five apps in our test. By far the worst recognition quality was provided by Dynamics 365 for phones from Microsoft and – due to the few supported fields – the app from HubSpot.