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A Method of Rapid Evaluation of a Multipurpose Customer Relationship Management System

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Abstract

Evaluation and selection of a Customer Relationship Management (CRM) system for an organization is a complex and time-consuming process, which has all the difficulties and risks of selecting any type of enterprise-level software. Additional evaluation complexities arise for the organizations, where a versatile CRM will be used by many departments with disparate functions and a variety of the customer service processes. This paper presents a method that allows a newly formed CRM evaluation project team to perform a quick evaluation of the commercially available CRM platforms. The method makes use of reliable sources of information readily available on the internet, often without a charge. Minimal spreadsheet skills required to process information in a consistent and verifiable way, and present it in a visually compelling and clear format for further discussions. The method directs a project team to a focused area of vendors/solutions, which have the highest likelihood of being relevant to the goals of implementing a general purpose CRM for a diverse multi-unit organization.

Keywords: Customer Relationship Management, CRM, systems evaluation, system selection method, systems comparison

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1. Introduction

Customer Relationship Management (CRM) systems are widely recognized as one of the key components of achieving organizational success through improving customer experiences and gaining strategic goals. This recognition is reflected in a significant market growth. During the period from 2006 to 2012, CRM software licence revenue is expected to grow from US\$3.6B to US\$6.6B, displaying a compound annual growth rate of 10.5% despite the economic turmoil, according to independent market analyst firm Datamonitor [10].

More and more organizations are launching CRM implementation projects, or considering switching to a newer technology CRM system. One of the first steps in this endeavour (and arguably the most important one) is to perform evaluation of the possible CRM options and select the right solution for the organization.

Selection of a CRM product/vendor is a complex process, which has all the difficulties and risks of selecting any enterprise-level software, due to the complexity of the software and the necessities of alignment with the company's business strategy and customer service processes. Decisions have serious financial implications/commitments – usually, mounting to hundreds of thousands of dollars. According to our estimates, the total cost of ownership of practically any CRM from a sound vendor will require investments from \$500,000 to up to \$10M (assuming 400 users and a period of 5 years).

Evaluation and selection of the CRM system for an organization is also complicated because of:

- Literally hundreds of CRM applications available on the market;
- Volatility of the CRM market, with new companies/solutions appear almost every week and existing companies merge or go out of business.

Additional evaluation complexities arise for the organizations, where a single CRM will be used by many units/departments with disparate functions and a variety of the customer service processes. For example, an organization may have: 1. A help desk (call center) that deals with incident management; 2. Training department that needs to schedule and control educational events for external customers; 3. Human resources need to manage individual cases of the current and prospective personnel; 4. Several “production” departments delivering diverse products and services to a wide range of customers; 6. Marketing and communications department, which supports all of the above organizational units. There are CRM systems which are considered leaders in each of the functions mentioned (CRM niche markets). However, using a CRM system from a leader in a specific niche doesn't guarantee that application will be optimal to deliver a combined set of functions for all units. Obviously, implementation of several (best-in-class) CRM systems is not an option. Proposed method was developed specifically to deal with this type of situations: multi-unit organization selecting a multi-purpose (or general purpose) CRM. The ability of the CRM to be suitable in these situations is called versatility.

We define CRM versatility as a capability to effectively perform/support a variety of customer service processes, and being adaptable for inclusion of new processes and functions.

Literature review revealed many approaches and recommendations on the CRM evaluation and selection [1 – 12]. Most of them are characterized by the following:

- Present the results of the evaluation (i.e. advantages and drawbacks of certain CRM platforms at a given point in time), not a method that could be replicated when needed and under different business conditions.
- High complexity that require certain level of CRM-related knowledge from the evaluation team.
- Require detailed upfront development of the business processes.

Literature review didn't reveal any methods that would specifically embrace versatility as one of the prime evaluation indicators.

The purpose of this paper is to present a method that will allow a newly formed CRM evaluation project team, comprised of representatives of diverse organizational units (where team members have good understanding of their individual units' business needs, but lack knowledge of the CRM systems and their functionalities), to perform a quick evaluation of the commercially available CRM platforms, and focus further efforts on a pool of the systems that are versatile and technologically advanced.

Proposed method is not intended to replace thorough business analysis, design of the business architecture artifacts and development of the detailed system requirements. Instead, it has been conceived to expedite and streamline a long and labourious process of initial orientation in the “ocean” of the CRM solutions and determine a correct course of further exploration.

All examples (tables, graphs) in the paper aim at visual facilitation of the method. Actual vendor names and CRM solutions are not indicated explicitly. Rankings are provided based on a specific case, and should not be interpreted as a recommendation for any other cases.

2. Method Description

Proposed method is delivered in three easy phases.

Phase 1. Review Technology Leadership in Multi-Purpose CRM

The objective of the first phase is to identify technology leaders in the multi-purpose CRM software. The phase is based on a combined usage of the charts produced as part of the market reports by the leading analytic firms – Forrester Research Inc. and Gartner Inc. Both companies publish regular reports on several CRM market niches.

Note that the CRM market is developing fast and it's not recommended to use reports that date back more than 2 years.

- Process 1.1. Collect Forrester Wave and Gartner Magic Quadrant diagrams related to various CRM market niches. Most complete and up to date diagrams may be purchased from the firms online [11, 12]. Many diagrams can be found free on the internet, as vendors publish them as an authoritative proof of their market position (e.g. [13]). Sources of diagrams used in this paper are shown in references [1 – 9]. Diagrams represent such CRM sectors as e.g. Midmarket CRM Suites, CRM Customer Service Contact Centers, etc. Despite some open questions regarding

transparency and accuracy, Forrester Waves and Gartner Magic Quadrants are industry accepted sources of the market analysis in a wide spectrum of technologies including CRM.

- Process 1.2. Use collected diagrams to document CRM vendor/system rankings. Prepare a spreadsheet formatted similarly to the Table 1 shown below. This spreadsheet will be filled out on this step. Take the first diagram (e.g. Ref. 1), and write down all CRM vendors and systems mentioned on this diagram in the first and second columns of Table 1. In the third column, for each system add its rank – serial number under which the system is mentioned on the diagram when you scan it from the top down (along the axis Y). According to the methodology of the analytic firms, position of the system along the axis Y signifies its current technological and market status (as opposed to the axis X, which characterizes company’s focus on the future or strategy). Repeat the above steps for all available diagrams (e.g. nine diagrams (Ref. 1 to Ref. 9) - were used to build Table 1).

Based on the analysts’ rankings (columns Ref.1 to Ref.9), on the next steps two new indicators important for solutions evaluation will be determined: versatility (1.3) and advancement (1.4).

- Process 1.3. Calculate solution versatility indicator. As defined above, versatility is the ability of the solution to be successfully used to deliver many functions and be used in several CRM niches/categories. Data in Table 1 (columns Ref. 1 to Ref. 9) shows how many times analysts included each of the solutions in the top CRM contenders (by placing the solution on the diagram). Multiple mentions of the solution on the diagrams provide evidence of its versatility. Numerical value of the versatility indicator is calculated for each solution as a number of non-empty cells in columns Ref. 1 to Ref. 9 using a spreadsheet function COUNT. Results are entered into the Versatility column of Table 1. In the example of Table 1, versatility indicator was in the range from eight to one.

For better visual presentation (see Process 1.5), the indicator was recalculated to map the values (from a potential range from maximum – nine (number of diagrams) to minimum - one) onto the interval from 10 to one. See Appendix 1 for clarification of the calculations. Mapped values were entered in the right subcolumn of Versatility in Table 1.

- Process 1.4. Calculate solution advancement indicator. Advancement indicator shows how high (or low) is the rank of a certain solution in the categories it was ranked. Advancement indicator is calculated as an average of the ranks given to a solution by analysts.

Similar to the Process 1.3, indicator values were recalculated from the range of 1 to 15 onto the interval from 10 to one. In this case, recalculation included “reversing”, i.e. the highest rank (value of 1) got the indicator value close to 10, to ensure more convenient graphic representation on the next step. See Appendix 1 for clarification of the calculations. Mapped values were entered in the right subcolumn of Advancement in Table 1.

- Process 1.5. Build a graphic representation. In the previous processes, versatility and advancement indicators have been calculated and data was entered in Table 1. However, table representation is not convenient for visual qualitative data analysis. Graphic representation helps to overcome this limitation. Figure 1 shows a graph build on the basis of the Table 1 data. Top 20 solutions are shown. Solutions displayed closer to the top right corner of the graph are characterized by the higher levels of versatility and advancement.

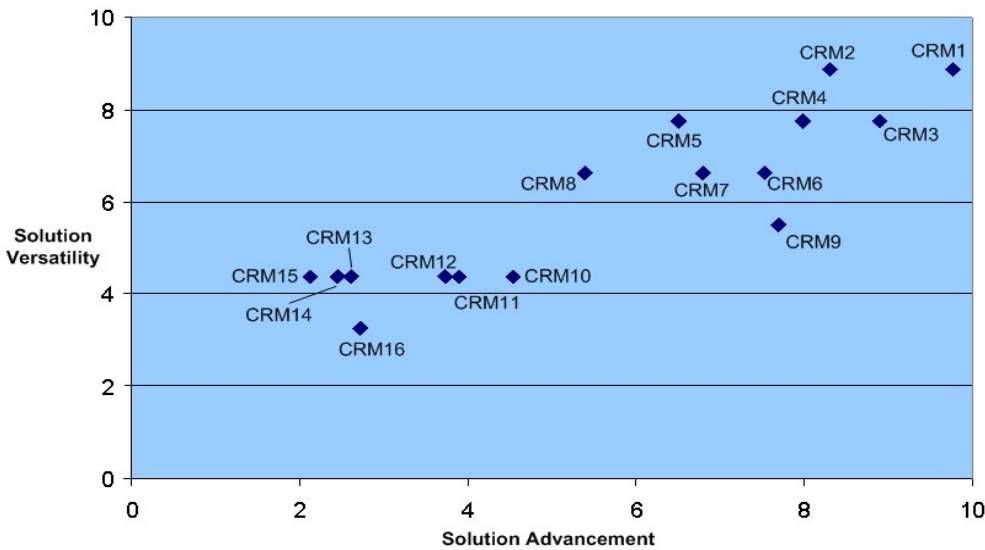


Figure 1. Phase 1 Results

Phase 2. Review CRM Business Needs Fit.

The objective of the second phase is to identify CRM solutions that exhibit the best business needs fit for the organization.

The phase is based on the usage of the Technology Evaluation Centers Inc. (TEC) online evaluation services. TEC offers tools for evaluation and comparison of many categories of enterprise software solutions (e.g. enterprise resource planning, portfolio management, supply chain, etc) including CRM. TEC has several products that vary in the input requirements, details and insights of comparison, and price of use. In this method, high-level comparison tool is used (it's available free of charge).

- Process 2.1. Apply business needs and build CRM shortlists for the organizational units. A representative of each organization's unit accesses TEC CRM trial evaluation tool [14]. The tool takes the user through a sequence of web pages with interview-like questions. The questions are designed to extract business-level user needs. There are no questions that would require the knowledge of the software or CRM architecture. Some examples of the questions are: indicate the vertical segment or industry that most applies to your business; type of business (e.g. service provider); indicate the size of the organization and type of its organizational structure; etc. At the end of the interview, the tool generates an ordered shortlist of the CRM solutions that best fit the user needs. The process takes under half an hour and can be easily completed within one day for an organization with a dozen structured units. The output of the process is a collection of CRM shortlists (one for each unit).

The rest of the Phase 2 processes are similar to the processes of the Phase 1, except it uses information from the shortlists instead of the diagrams to fill out Table 2.

- Process 2.2. Use collected shortlists to document CRM vendor/system rankings. Prepare a spreadsheet formatted similarly to the Table 2 shown below. It has the same structure as Table 1. Columns Ref. 1, etc. are replaced by columns Unit 1 through Unit 6, which represent organizational units. The rank of each system from each shortlist is entered in the Table 2.

- Process 2.3. Calculate solution versatility indicator. Data in Table 2 (columns Unit 1 to Unit 6) shows how many times each of the solutions appeared on the shortlists. Multiple mentions of the solution on the shortlists provide evidence of its versatility. Numerical value of the versatility indicator is calculated for each solution as a number of non-empty cells in columns Unit 1 to Unit 6 using a spreadsheet function COUNT. Results are entered into the Versatility column of Table 2. In the example of Table 2, versatility indicator was in the range from six to one.

Similar to the Process 1.3, for better visual presentation, the indicator was recalculated to map the values onto the interval from 10 to one. See Appendix 1 for clarification of the calculations. Mapped values were entered in the right subcolumn of Versatility in Table 2.

It should be noted, that the term versatility in the Processes 1.3 and 2.3 is used with a slightly different emphases. In 1.3, it refers to the evidence supported by real-life global market data, as in 2.3 it implies “expectancy” to meet diverse business needs (which have not been precisely formulated) of the case study organization.

- Process 2.4. Calculate solution business fit indicator. Fit indicator shows how high (or low) is the rank of a certain solution on the shortlist. Fit indicator is calculated as an average of the ranks a solution has on the shortlists.

Similar to the Process 1.4, indicator values were recalculated and “reversed” from the range of 1 to 18 onto the interval from 10 to one. See Appendix 1 for clarification of the calculations. Mapped values were entered in the right subcolumn of Fit in Table 2.

- Process 2.5. Build a graphic representation. Figure 2 shows a graph build on the basis of the Table 2 data. Top 20 solutions are shown. Solutions displayed closer to the upper right corner of the graph are characterized by the higher levels of versatility and business needs fit.

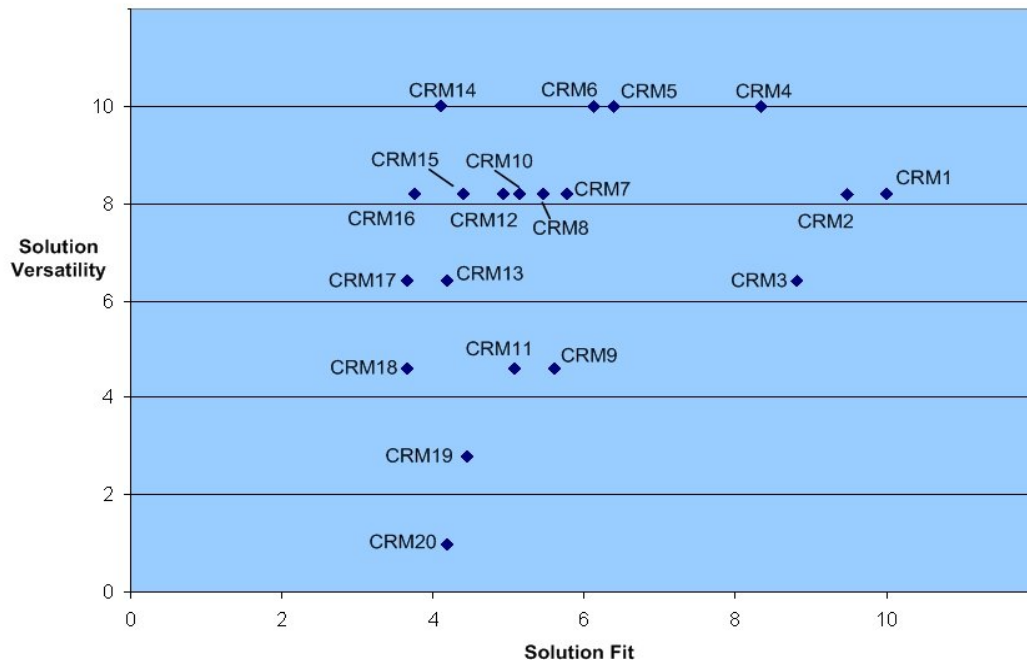


Figure 2. Phase 2 Results

Phase 3. Compare and Analyze Graphic Results from Phases 1 and 2.

Phases 1 and 2 produced graphically presentable results (Fig. 1 and 2) for visual comparison and qualitative analysis. The graphs accumulated information from several authoritative research organizations combined with the knowledge of the local business needs from the CRM evaluation project team. Solutions presented on the figures were selected from hundreds of market contenders, and even those located at the bottom left corner of the diagrams should be given consideration in the further analysis. Despite the fact that the method uses numerical data and mathematical tools, it should be noted that the results are qualitative in nature and should be treated as such.

3. Conclusion

Proposed method facilitates fast early steps in the CRM evaluation projects. The method makes use of reliable sources of information readily available on the internet without a charge. Minimal Microsoft Excel skills required to process information in a consistent and verifiable way, and present it in a visually compelling and clear format for further discussions. Instead of several weeks of collecting and studying tonnes of disparate business and technical literature, and later holding discussion sessions, the method directly takes a project team through a shortcut to a focused area of vendors/solutions, which have the highest likelihood of being relevant to the goals of implementing a general purpose CRM for a diverse multi-unit organization. Rapid evaluation allows building a shortlist of solutions for further detailed analyses and preparing targeted request for proposals. Presented results are based on a case study which was conducted at the MOHLTC and proved usability of the method. Final disclaimer: the purpose of the method is to help find the right direction for the CRM vendor/product selection journey, and not to determine the single winner.

Acknowledgement

The work was prepared in connection with both authors' official duties at the Ontario Ministry of Health and Long-Term Care. The views, opinions and conclusions expressed in this document are those of the authors alone, and do not necessarily represent the views of the Ontario Ministry of Health and Long-Term Care or any of its individual departments. The copyright for the paper is with the Queen's Printer for Ontario.

Table 1. Technology Leadership

CRM		Ref. 1	Ref. 2	Ref. 3	Ref. 4	Ref. 5	Ref. 6	Ref. 7	Ref. 8	Ref. 9	Number of Times Product is Mentioned	Number of Mentions Mapped to [1;10]	Average Rating	Reversed Rating and Mapped to [1;10]
Vendor	Solution										Versatility		Advancement	
Vendor 1	CRM 1		1	2	2	1	1	1	2	1	8	8.9	1	9.8
Vendor 2	CRM 2		4	3	4	3	4	6	1	4	8	8.9	4	8.3
Vendor 3	CRM 3		3	1	1	2		2	4	6	7	7.8	3	8.9
Vendor 4	CRM 4		7	6	3		2	5	3	3	7	7.8	4	8.0
Vendor 5	CRM 5		6	7	6	8	5	7	6		7	7.8	6	6.5
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---	---													
Vendor 38	CRM 38									1	1	1.0	14	1.6
Vendor 39	CRM 39									1	1	1.0	15	1.0
Vendor 40	CRM 40								1	5	1	1.0	15	1.0

Table 2. Organization's Business Needs Fit

CRM		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Number of Units Selected the Product	Mapped to [1;10]	Average Rating	Reversed Rating, Mapped to [1;10]
Vendor	Solution								Versatility		Fit
Vendor 1	CRM 1	1		1	1	1	1	5	8.2	1	10.0
Vendor 2	CRM 2	2		2	2	2	2	5	8.2	2	9.5
Vendor 3	CRM 3	3		4		3	3	4	6.4	3	8.8
Vendor 4	CRM 4	4	2	6	4	4	5	6	10.0	4	8.3
Vendor 5	CRM 5	17	1	5	3	17	4	6	10.0	8	6.4
---	---										
---	---										
---	---										
Vendor 29	CRM 29			18	16		16	3	4.6	17	1.7
Vendor 30	CRM 30			19			17	2	2.8	18	1.0
Vendor 31	CRM 31			20	17		18	3	4.6	18	1.0

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Appendix 1. Mapped Indicator Calculations

Mapping equation for the Processes 1.3 and 2.3:

$$y - y_{\min} = \frac{y_{\max} - y_{\min}}{x_{\max} - x_{\min}} (x - x_{\min})$$

where:
 (see Figure 3 for illustration of parameters)

X – initial indicator values;

X_{\min} , X_{\max} – minimum and maximum values of the initial indicator (e.g. 1 and 9, respectively in Table 1; and 1 and 6, respectively in Table 2);

Y – mapped indicator values;

Y_{\min} , Y_{\max} – minimum and maximum values of the mapped indicator (e.g. 1 and 10, respectively in Tables 1 and 2).

For the Process 1.3, equation reduces to:

$$Y = (9/8)*X - 1/8$$

For the Process 2.3, equation reduces to:

$$Y = (9/5)*X - 4/5$$

Mapping equation for the Processes 1.4 and 2.4:

$$y - y_{\max} = \frac{y_{\min} - y_{\max}}{x_{\max} - x_{\min}} (x - x_{\min})$$

where:
 (see Figure 4 for illustration of parameters)

X – initial indicator values;

X_{\min} , X_{\max} – minimum and maximum values of the initial indicator (e.g. 1 and 15, respectively in Table 1; and 1 and 18, respectively in Table 2);

Y – mapped reversed indicator values;

Y_{\min} , Y_{\max} – minimum and maximum values of the mapped indicator (e.g. 1 and 10, respectively in Tables 1 and 2).

For the Process 1.4, equation reduces to:

$$Y = - (9/14)*X + 10.64$$

For the Process 2.4, equation reduces to:

$$Y = - (9/17)*X + 10.53$$

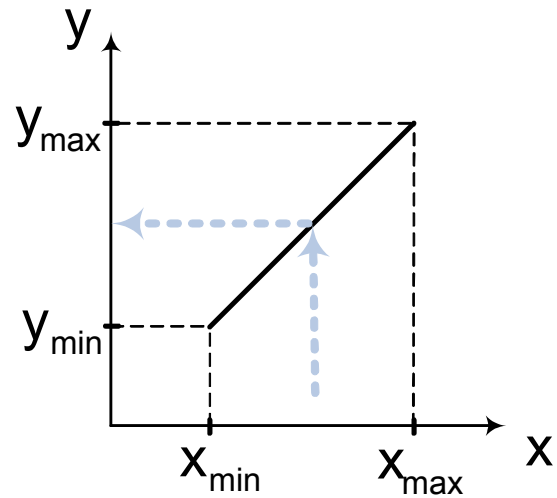


Figure 3

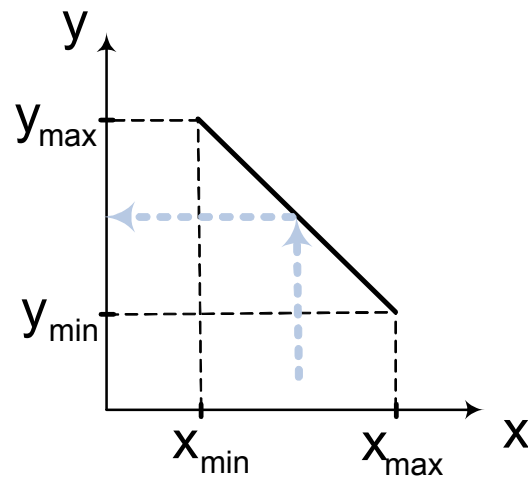


Figure 4

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