

The Shades of Grey in Real-Time Management – a Multi-Method Study

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Overview

One of the research aims of CTM is to improve our understanding of the relationship between technology and business processes. Technology can be used as a disruptor to address new opportunities, respond to competitive pressures, and to reduce operational costs. Such goals demonstrate the potential value of technology-driven projects but most such projects fail to achieve their complete potential. The chasm that exists between potential and realization is often related to corporate culture. This research seeks to uncover new ways that companies can better match technology to their culture and evolve the culture to match their technology prowess.

CTM has been collecting a statistically significant amount of data from companies that were growing much faster than their peer competitors to better understand the organizational processes that enable technology to drive business process breakthroughs. This report covers one portion from a set of eleven research projects that were undertaken to provide businesses with operational guidance that they could use to improve their competitive position in a rapidly changing market.

This project, along with other CTM projects that may be of interest, inspired our efforts to explore the topic further in a book entitled [*The Real-Time Revolution – Transforming Your Organization to Value Customer Time.*](#)

Disclaimer: This material is intended to provide information and analysis of the evolving trends impacting contemporary markets and is provided without warranty or promise of on-going support. This analysis may be based on focus groups, executive interviews, secondary research and other methodologies conducted by the USC Marshall School Institute for Communication Technology Management (CTM). Acknowledgement is given to the CTM members, USC Professors and USC students who participated in the study. All files and information contained in this package are copyrighted by the USC Marshall School of Business CTM and may not be duplicated, copied, modified or adapted, in any way without written permission. Use of this material and data does not grant you the right or license to use service marks or trademarks without the prior written permission of the USC Institute for Communication Technology Management. Our Content is protected under the United States and foreign copyrights. The copying, redistribution, use or publication by you of any such Content is prohibited. Use of this information does not grant you any ownership rights in our Content.

Background of Survey Respondents (1 of 2)

These industries are most relevant to our research issues

Industry	Frequency	Percent
Finance, Banking, and Insurance	254	25%
Health Care and Social Assistance	249	25%
Manufacturing	251	25%
Retail/Wholesale	250	25%
Total	1,004	100

Large Companies in North America (more than 500 employees – sufficient to have significant tech resources)

Firm Size	Frequency	Percent
500 - 999 employees	303	30%
1000 - 4999 employees	369	37%
5,000 - 7,499 employees	128	13%
7,500 - 9,999 employees	86	8%
10,000 employees or more	118	12%
Total	1,004	100

Source: CTM Enterprise Survey, January 2016

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Background of Survey Respondents (2 of 2)

Respondents must have some level of budgetary & managerial authority

Position/Role	Frequency	Percent
Owner / CEO	178	18%
Senior executive	325	32%
Executive	207	21%
Senior Manager	147	15%
Manager or supervisor	147	15%
Total	1,004	100

These departments are most related to the topics

Function/Department	Frequency	Percent
Marketing/Sales	334	33%
Information Technology (IT) / Information Services	333	33%
Research and/or Product Development (R&D)	337	34%
Total	1,004	100

Source: CTM Enterprise Survey, January 2016

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Executive Summary

In a dynamic digitally-intensive business environment, response time is critical, but Real-Time Management is not just about minimizing time, it is about maximizing the digital experience. Enterprises see the need to adopt Real-Time technologies and organizational structures that enhance the customer experience and ecosystem relationships, but are not sure where to start, and/or how aggressively to invest. This study analyzes the best practices for shifting to a Real-Time operational paradigm, and what organizational characteristics and platforms enable that transition. The study also identifies key technologies and enabling mechanisms best poised to serve this market, and explains how Real-Time Management translates into increased business value.

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Background

- **Why Shades of Grey in Real-Time Management ?**
 - The concept of Real-Time is highly nuanced, and consequently so is Real-Time Management...
 -there is a lot about the perception of time that we don't yet fully understand.....
- **There is a Push and Pull towards Real-Time structures in enterprises**

Push from The Technology and Business Ecosystem

Increasing ubiquity of digital platforms and connectivity in multiple industries

Internet of Things and multiple sensors generating tons of Real-Time information

Speed of innovation requires agility in seizing opportunities

Pull from Customers with Growing Real-Time Expectations

Social media (Facebook, Twitter,..) and Google have conditioned customers to increasingly want to know "now"

Amazon has single-handedly changed customer expectations of getting our stuff "now"

Uber and Netflix have ushered a whole slew of on-demand services with rising expectations of "now"

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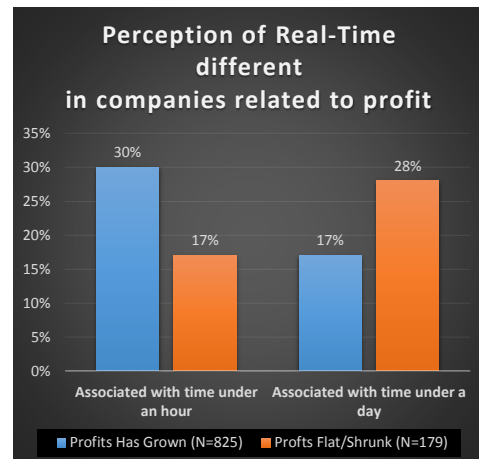
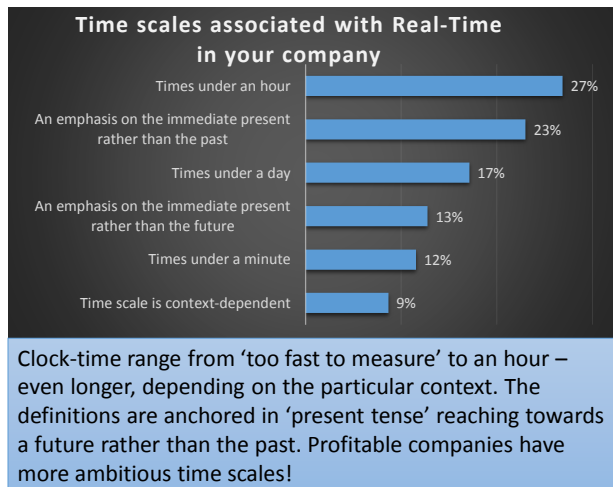
The Way Managers Perceive Real-Time

Individual Employees Perceive “Real-Time” Differently Than Their Managers

Production Focus	%	Customer Focus	%
Individual Perception		Individual Perception	
24x7 high speed/reliable access to corporate information resources	43%	Immediate response to customers	48%
Instant employee-to-employee communication and knowledge sharing	37%	Operating in the Internet world in order to provide our customers with direct digital access	39%
Monitoring of operational, business, or regulatory risk	37%	Management Perception	
Management Perception		Operating in the Internet world in order to provide our customers with direct digital access	41%
Immediate response and action to problems	46%	On-demand delivery of customized services	40%
Sense & Respond mode of management	35%		

Managers, Manufacturing /IT Managers, Marketing/Sales

Faster Turnaround on Real-Time Scale Is Associated with Increased Company Profits



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Real-Time is Not 'Real', but Rather 'Imagined'

- The functional domain influence how a manager frames Real-Time. Consequently, context-bound interpretations influence on where Real-Time is assessed to provide value
 - The respondents tend to interpret their superiors' perceptions by applying their individual frame. This indicates the difficulty of changing perspective
- ➔ Some managers describe 'Real-Time' as hype to impress customers, partners, and sponsors, who associate Real-Time Management such as analytics, excellence, and being visionary



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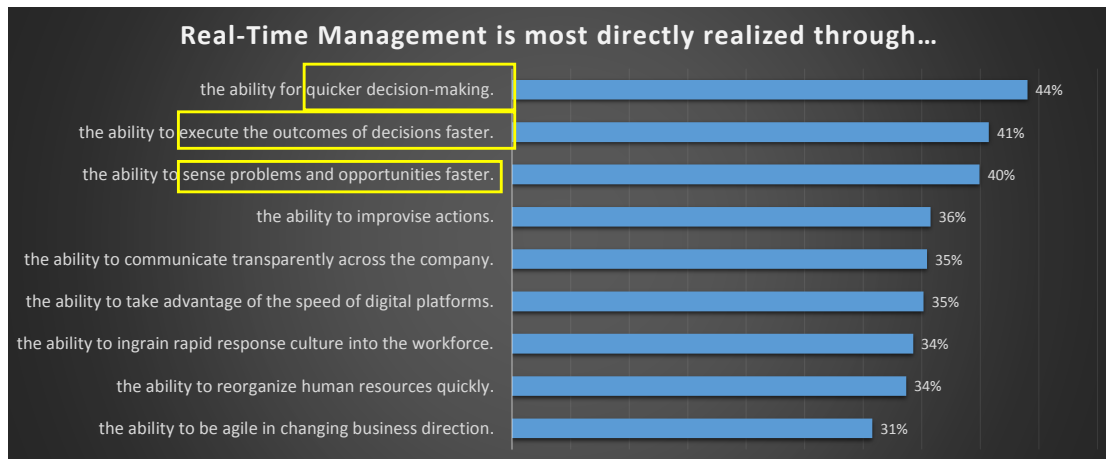
Real-Time Understandings

Production Focus	Customer Focus
Real-Time is the reduction of clock-time	Real-Time is experienced and defined by the customer
Time is absolute and measurable by e.g., delays or interruptions	Time is relative and a mental phenomenon measured by the unique experience
Time is money	Time is more than money (quality of life)
Management: schedules, recording, planning	Management: conversation, context, align expectations

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The Way Managers Seize Real-Time Value

Implementation of Real-Time Management Is Typically Associated with Fast action by Employees



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In a Hierarchical Culture, Strong Senior Management Is Critical to Real-Time Implementation, Whereas in an Egalitarian Open Culture Transparent Communication Is Paramount

Hierarchical Culture	%	Egalitarian Open Culture	%
Strong top management support for Real-Time Management practices	44%	Open & transparent communication throughout the company	38%
A company's culture where speedy decisions are encouraged	38%	A company's culture that encourages experimentation and iteration	37%
A company's culture where consensus is not necessary	29%	A company's culture that tolerates failure	28%
		Flat company's structure	21%

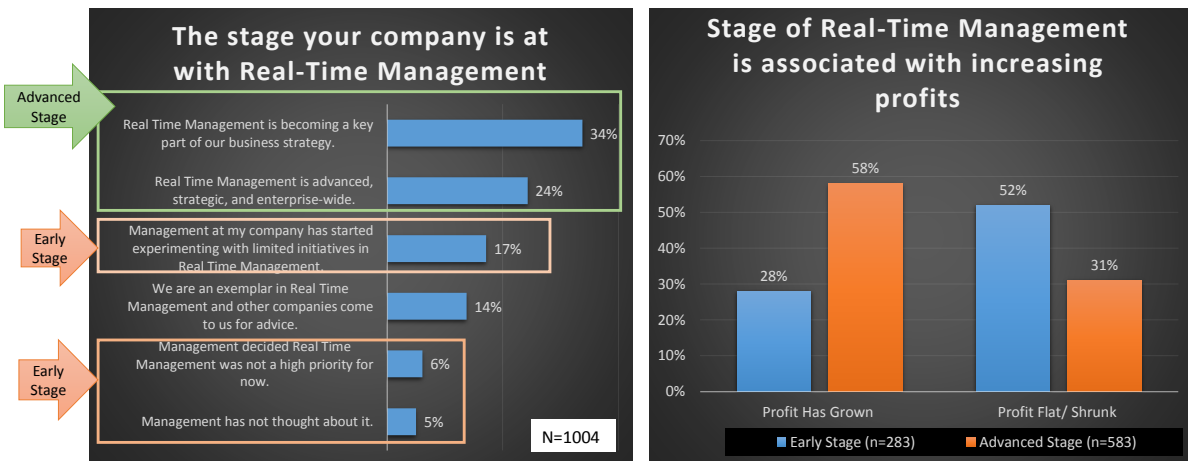
Managers, Manufacturing/IT Managers, Marketing/Sales

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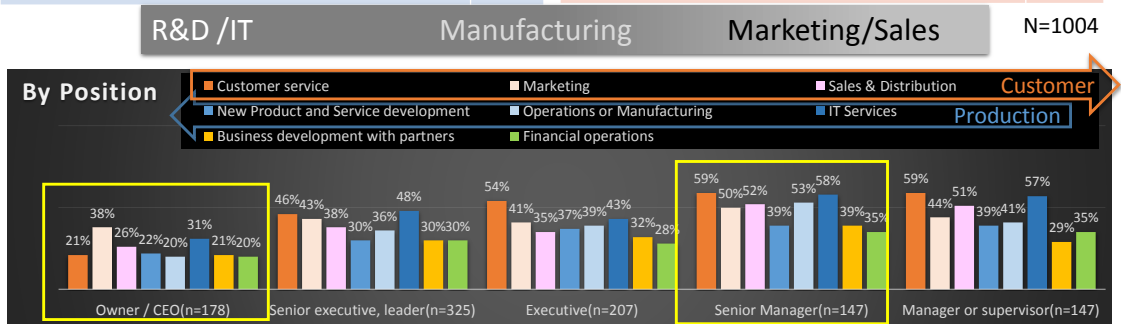
The Suggestions for Companies to Manage and Embrace Real-Time

Successful Real-Time Management Practices Are Positively Associated with Profits



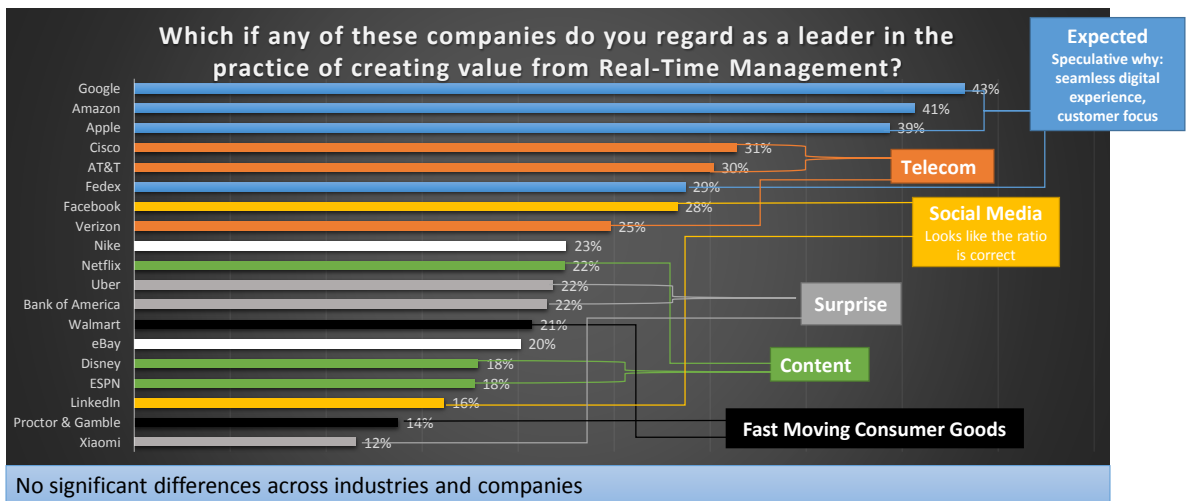
Senior Managers Seem to Be More Optimistic about the Areas Impacted by Real-Time Management Than CEOs

Production Focus	%	Customer Focus	%
IT Services	47%	Customer service	47%
Operations or Manufacturing	37%	Marketing	43%
New Product and Service Development	32%	Sales & Distribution	40%



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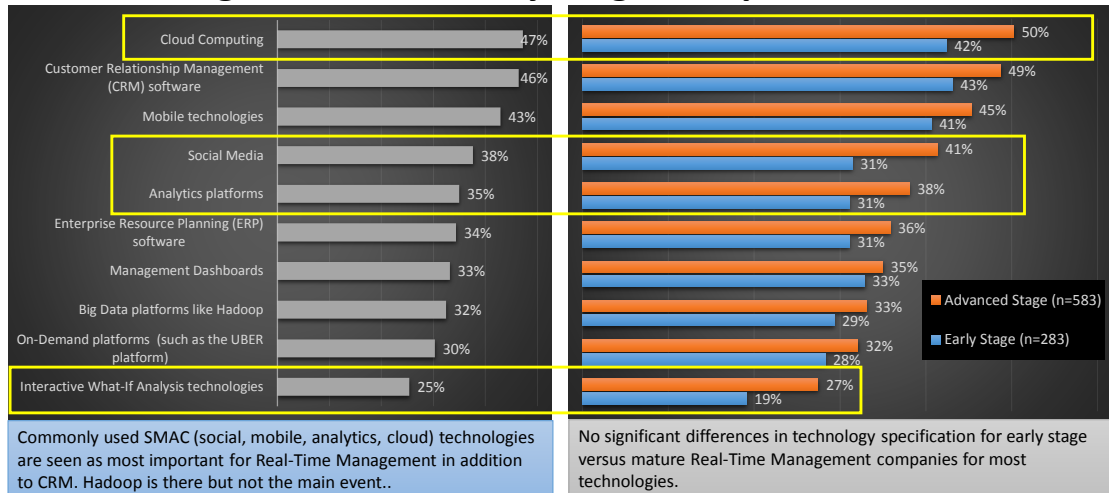
Google, Amazon and Apple are Leaders in Practice of Creating Value from Real-Time Management



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Advanced Stage Companies Think Digital Platforms (Cloud, Social Media etc.) Are More Important for Successful Real-Time Management Than Early Stage Companies



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Management Should Primarily Focus on the Customers' Needs for Real-Time Experience

- As the 'expert', it is the company's responsibility to (proactively) specify customer needs, not the customer's responsibility
- Real-Time Management is *not* about reducing data complexity in your own world only, but also about understanding the complexity of the customer's world:



"You'll have to investigate each single case specifically. There is nothing generic about it. What works in Copenhagen might not work in New York."

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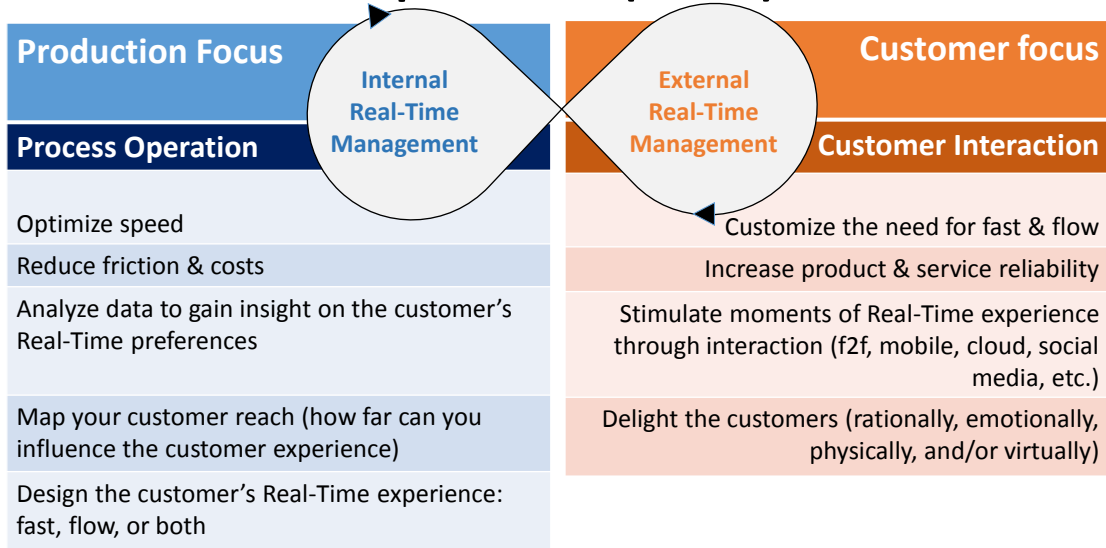
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Implications (1 of 3)

- **Stay mindful of your customers when implementing Real-Time Management : fast & flow**
 - Real-Time is more than the reduction of clock time, it is experienced and defined by the customer
 - We are in the age of the empowered customer, and empowered buyers demand a new level of attention to detail
 - Real-Time Management is not just about minimizing time, but about maximizing the digital experience
 - Customize the customer “fast & flow” experiences and design/expand the moments of engagement from start to finish

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Implications (2 of 3)



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Implications (3 of 3)

- **How to enable a seamless transition to Real-Time Management**
 - Leveraging your existing technologies for Real-Time Management and transitioning to Real-Time Management is not a tech arms race
 - Both hierarchical and egalitarian open cultures lend themselves to effective Real-Time Management
 - Real-Time Management can impact all operational areas of an enterprise
 - There is something magical about Real-Time scale perceptions that are under an hour
 - The time has come for Real-Time Management

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To Continue the Conversation..

- If you are interested in following the work of USC Marshall's Institute for Communications Technology Management (CTM), you can subscribe to receive our newsletter by visiting the CTM website at <https://marshall.usc.edu/ctm>
- If you wish to comment on our book, [The Real-Time Revolution: Transforming Your Organization to Value Customer Time](#) or join in the conversation, we have created a blog for just that purpose. www.marshall.usc.edu/faculty-research/centers-excellence/institute-communication-technology-management/real-time-revolution
- If you wish to directly reach out to Dr Omar El Sawy, Omar can be found at elsawy@marshall.usc.edu

And, most of all, thank you for your interest in our work

[Jerry Power](#)

[Tom Ferratt](#)

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Thought Leadership at the Intersection of Technology and Content



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