

ACHIEVE STRATEGIC SUCCESS

With Resource Portfolio Management



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WELCOME

Dear Reader,

Welcome to your report, Achieve Strategic Success with Resource Portfolio Management. I wanted to begin with a short note introducing the background to the document you're holding in your hands.

Here at ProSymmetry we meet so many inspiring individuals from such a diverse range of amazing organizations. Around the world at conferences, webinars, trade shows and on the road, the conversations we have about the realities of today's business environment are as fascinating as they are diverse. Although we meet a wide range of people from a vast array of industries, we very often hear about the same frustrations and difficulties when it comes to resource management.

- **CEOs** tell us that their organizational strategies often fail to deliver because the wider business could not adapt fast enough to real world challenges or deploy resources where they're needed most.
- **PMOs** tell us that they often feel constrained by their software; it tends to be too inflexible and they can't answer the resource management questions posed to them by the business.
- **Resource Managers** tell us that their current tools just don't allow them to manage their resource capacity; they cannot see who's doing what, they can't easily build models of alternative resource allocation and they can't carry out 'what if' analysis.
- **Project Managers** tell us that their well laid plans often collapse when resources simply aren't available to complete tasks or when 'real world' delays and problems cause plans to fail.

When we decided to write this Whitepaper, we aimed to produce a document that would speak to the challenges of resource management and show how Tempus Resource from ProSymmetry can help. We've used Gartner's 2015 report Market Guide for Enterprise PPM Software (Donna Fitzgerald & Teresa Jones) to inform and add value to this Whitepaper by introducing cutting edge insights from the technology industry's leading analysts.

Thank you for taking the time to read this report. I'm confident that many of the issues we highlight will resonate and you will be able to gain insight into tools and techniques for solving your resource management challenges.

Best wishes,



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SYNOPSIS

Today's organizations face a wider range of challenges than ever before. Markets are interacting more dynamically; technology is changing the rules of the game; and economic, geopolitical and social shifts are bringing about unexpected developments.

The business environment is more fluid than ever before – experiencing unprecedented changes in compressed timeframes. The resulting unpredictability is altering historically relied upon resource planning and forecasting strategies. Current realities require tools and methods to rapidly alter trajectories and resource planning strategies with the essential, fundamental, need to ask "WHAT IF?" and formulate strategic resource planning options through scenario planning.

Today's CEOs and other corporate leaders must attack this challenging new environment with confidence, flexibility and agility. Rita McGrath, the author of The End of Competitive Advantage: How to Keep Your Strategy Moving as Fast as Your Business, argues "In an economy in which competitive advantages are transient, rather than sustainable, a crucial task for leaders is to create a pipeline of future advantages, which can be exploited when existing competitive positions have eroded or become commoditized."¹ More than ever, leaders need to work hard to get the most out of their resources to effectuate near term tactical objectives while also keeping an eye on the horizon to address long-term strategy. Effective resource management is critical to achieving sustainable competitive advantage in this era of transient advantages.²

This Whitepaper argues that – regardless of whether the goal is to foster innovation, drive transformation, or enhance profitability – organizations must become efficient practitioners of resource portfolio management, and to do so, a specialized toolset is required. All too often, organizations have incorrectly pursued Project Portfolio Management (PPM) systems or have been let down by inflexible resource management methods that are unable to cope with the unpredictability of today's resource management challenges. To quote Gartner, "What you want, as a portfolio or resource manager, is an optimized utilization of the resources you have, with 'just-right' commitments to get projects done and support existing applications. What you have is a tsunami of work requests to 'get it done now', some 'back-of-the-envelope' resourcing calculations and sliced-thin commitments spread out over a sea of work."

² Gunther McGrath, Rita. The End of Competitive Advantage: How to Keep Your Strategy Moving as Fast as Your Business. Hardcover. Boston: Harvard Business Review Press, 2013.



¹ The Wall Street Journal. "Why Conventional Finance Metrics Measure the Wrong." Web. June 23, 2015.



What is Resource Portfolio Management?

Resource Portfolio Management ("RPM") is a business capability that seeks to most effectively utilize resources for the delivery of strategy by matching resource supply and demand. RPM can be benchmarked and exploited in innovative ways such as scenario planning. RPM practitioners place emphasis on analyzing project carrying capacity with the intent of maximizing resource utilization in light of dynamic organizational demands.





THE INTERACTION OF RESOURCES, STRATEGY AND PORTFOLIO PLANNING

The interaction of resources, strategy and portfolio planning

"Strategies don't fail for lack of planning. They fail for lack of agility or adaptiveness. Failure to deeply understand that 'no plan survives engagement with the enemy' contributes significantly for why work can get done, but results don't get achieved."

Championship teams start with a game plan. However, by the same token, no team's plan should remain unchanged throughout the course of a game. If faced with adversity, the coach must adapt his approach to the 'real world' circumstances – even if this means temporarily casting aside the original game plan. Redeploying resources to gain advantage is key. In-game adjustments are not only necessary but essential to winning.

This same analogy applies for today's organizations. Redeploying resources to gain competitive advantage is key, and employing tools that allow for the presentation of alternative scenarios can alter an organization's competitive advantage. Being able to flexibly redeploy resources under constraints and in accordance with modern challenges is the next step in corporate evolution. Naturally, the organization should have an ultimate strategy, yet being able to adapt flexibly to the real world and its challenges is essential. With competition surfacing in more unexpected ways than ever before, modern businesses require the ability to rapidly "draw-up" options – with an eye to resources – in the face of adversity.

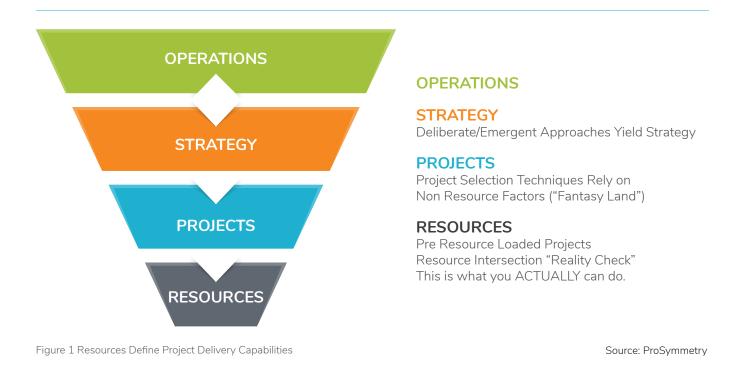




A NEED TO ALIGN RESOURCES WITH STRATEGY

"Behind every major resource allocation decision a company makes lies some calculation of what that move is worth.³"

Organizations exist for a purpose. A group of people get together to effectively coordinate their efforts and get things done.⁴ In other words, their assembly is designed to drive a common purpose – a strategy. While strategy is typically the output of both analytically derived and market driven factors, there are two primary approaches to formulating strategy⁵:



- 1. Deliberate analytical or creative⁶ processes are used to formulate strategy.
- 2. Emergent understanding of realities cause strategy to form.

³ Timothy A. Luchrman. "What's it Worth? A General Manager's Guide to Valuation." Harvard Business Review. May-June 1997. 4 Nitin Nohria. "Note on Organizational Structure." Harvard Business School Press. 1991.

⁵ Christensen, Clayton M. "Using Aggregate Project Planning to Link Strategy, Innovation, and the Resource Allocation Process." Harvard Business School Background Note 301-041. September 2000.

⁶ Time Bone, Steve; Saxon, Tim. "Developing Effective Technology Strategies." Research-Technology Management, Volume 43, Number 4. 1 July 2000.



The combination of the right people with the right skills, using the correct plant and equipment through effective business processes is fundamental to the delivery of the company's strategic intent.⁷ Without resources, we can't do work, we can't do projects and we can't implement strategy. In the most fundamental sense, our ability to select and deliver projects is limited exclusively by our access to qualified resources.

It is a fairly simple concept, yet it's remarkable how many organizations fail to grasp the importance of their resources. In research sponsored by the International Personnel Association, only 60% of the largest multinational corporations in the United States recognized a direct correlation between their relative success and an effective workforce.⁸

In their 2014 Global Portfolio and Program Management Survey,⁹ PWC - the business consultants - interviewed over 3,000 project professionals in more than 100 countries. Their results were striking – in the ten years the research has been carried out, resource management has remained a consistent challenge for project delivery. PWC echo the Gartner report included with this Whitepaper:

- The challenge of resource management has remained a consistent theme in the challenges related to project delivery.
- Having the right mix of resources and being able to flexibly adapt to a variety of challenges is crucial to successfully delivering programs and projects.
- Optimizing constrained resources and actively balancing demand management is required to drive successful transformation.

Source: ProSymmetry

7 Ibid.

8 Linda K. Stroh and Paula M. Caligiuri. "Global Competitiveness Depends on Effective People Management." Chemtech Volume 29, Number 2. February 1999.

9 PWC. "When will you think differently about programme delivery?" September 2014.





FROM SOFTWARE TO REAL LIFE

"People capacity planning becomes critical to ensure execution. People capacity planning is the ability to know, for example, that if you approve these 10 projects, then you will need 100 people from IT, 10 from finance, five from marketing, 15 from supply chain and 20 consultants/contractors to execute projects you've chosen to fund. It will support tracking that the required individuals are actually available and committed before the project can start."

– Gartner 2015

As both Gartner and this whitepaper point out, resource management is currently at an impasse, and the tools most widely used to deliver portfolios of work appear to be holding organizations back. Today's resource management tools are too inflexible, too abstract and too brittle. They lead to incorrect estimations about organizational capabilities, fail to help find the best solutions and give no real insight into diverse resource loading strategies. And paradoxically, the overhead PPM solutions impose on organizations usually deters decision makers from seeking answers to many of their most important resource planning questions.

Organizations need to be able to adapt and be prepared for alternative scenarios – and feel confident that they have the right resources for the right situations. In the tools most commonly used today, it's extremely difficult to actually explore the impact of resource planning options. Decision makers need immediate answers to questions such as:

- What if I cancel a project?
- What if I cancel a portfolio?
- What if I move a project out?
- What if I move a project back?
- What if I split a project?
- What if link projects together?
- What if I delay an initiative?
- When can I start a new project?
- Where do I have skill deficiencies?
- What if I move a project overseas?

- What if I hire more people?
- What if I fire existing resources?
- What if I reassign resources?
- What if I expand a project?
- What if I contract a project?
- What if I shift task timing?
- Where are resources available?
- How many proposals can we approve?
- What do I need to start a project now?
- What are my options for starting?



Given the demands of today's business environment, the drawbacks of PPM software solutions and spreadsheets are more evident than ever and can no longer be ignored. Causing breakdowns between resources, project goals and, in the end, the company's strategic vision, there's a pressing need to find an alternative. Something needs to change.





INTRODUCING TEMPUS RESOURCE

"EPPM software should include...people capacity planning to ensure that strategy can be carried out, as well as the ability to dynamically schedule smaller blocks of time from previously unidentified participants."

– Gartner 2015

As this Whitepaper has examined, there is a growing need to radically alter our existing approach to resource management – in particular its alignment with strategy. Improved software will play a key role in this change, and Tempus Resource from ProSymmetry is poised to answer the call for a solution capable of enabling Resource Portfolio Management success. From its simplified and flexible data capture capabilities, to its ground breaking scenario planning feature set, Tempus Resource offers organizations a truly transformative solution for resource management.

What is Tempus Resource?

Tempus Resource is a next generation Resource Portfolio Management solution available in the cloud or on premise. Uniquely, it provides actionable intelligence to resource managers through an array of decision support tools and cutting edge analytics. Tempus Resource is designed to minimize the overhead of managing a resource portfolio while at the same time making available real-time scenario analysis capabilities previously unavailable to decision makers. Tempus Resource is modeled on extensive voice of customer analysis, so its functionality is driven from real-world experiences – not a software engineer's illusions.

Facilitating the adaptable organization

The real power of Tempus Resource is in its modelling and 'what-if' analysis capabilities. Executives, PMOs, resource managers and other decision makers are able to build 'models' of their portfolios and ask questions of their data. These models have no effect on the actual resource forecast data and project plans, but instead provide a kind of laboratory to help uncover strategic alternatives. The decision support tools built into Tempus Resource are designed based on extensive voice of customer analysis and answer the most commonly asked questions posed to PMOs and other resource managers by executives, customers and stakeholders.

A resource manager might want to discover how pausing, splitting or delaying one project will impact resources across the organization, a program or a portfolio. They might want to discover what will happen if they lay off or onboard a certain number of contractors or what can be saved





by moving a project to a different location. Tempus Resource's models allow teams to carry out all these experiments, and shows how the interdependencies between resources and strategies interact. They could then feed these insights back to key organizational decision makers. This ability to discover tactical and or strategic alternatives is essential to formulating sustainable strategic advantage.

- Data capture is simple and easy and can be done in bulk or by project. Direct entry users can enter resource forecasts in labor, cost, FTE or % FTE.
- Flexible connectors allow for data to be imported or read in real time from sources as diverse as PPM solutions to Microsoft Excel spreadsheets to disparate Microsoft Project files.
- Scenario planning features enable strategy development through what-if analysis. Change
 project timing, split projects, alter allocations, hire/fire resources, cancel or include projects,
 program and portfolios, model divestitures and acquisitions. Tempus Resource's scenario
 planning features are game changing.
- Decision support tools and embedded heuristics give insight to common questions rapidly and without complex overhead or training.
- Access pre-developed reports to convey the state of resource allocation in your organization or leverage Tempus Resource's report writing features to convey strategic options to management.





IMPROVED RESOURCE CAPACITY PLANNING: REAL WORLD SCENARIOS

"Features likely to be useful here include decision making algorithms, scoring models, scenario planning and optimization, and resource capacity planning."

– Gartner 2015

Case Study – Director PMO

The following examples illustrate how Tempus Resource would help Frank, a PMO Director at a global financial services organization, answer the questions of and present viable strategic options to senior management. Frank's PMO is responsible for managing a portfolio of over 400 projects utilizing over 1,500 resources. Before Tempus Resource was introduced, Frank could not provide answers to senior management in a timely fashion. He relied upon a cumbersome PPM solution, a web of spreadsheets and teams of consultants to deliver strategic alternatives to management. Often, weeks would pass between inquiries from leadership and Frank's ability to respond. The value of his PMO to the organization was constantly questioned.

Once Tempus Resource was deployed and he had rapidly introduced data from his existing PPM tools, Frank immediately altered the perception of the PMO by senior management. His ability to almost instantly answer complex inquiries from management and leadership transformed Frank's relationship to the business. Frank had become not only an integral part of the decision chain but also a critical advisor to the business. Not only could Frank provide the insight demanded by management, he could develop and present strategic alternatives to management – often in live, conference room, sessions.

1. We have dozens of proposed projects, how many can we do next year?

In the past, Frank would address this question only once a year. His organization had become accustomed to being able to ask this question once per year because – in their words – "this was our process." In reality, the process was a function of organizational limits. Limitations on data, systems and decision support capabilities prevented a more agile decision making process around project selection and execution given the shifting demands of the business. Tempus Resource removed this limitation. The concept of project selection – previously limited by insight and optionality around resource allocation – was shifted from a one time, reactive, process to a fluid and proactive engagement.





Proposed projects were entered either directly into Tempus Resource or other systems – including Frank's cumbersome PPM tool. Tempus Resource was used to pull all the data together and present Frank with a consolidated view of the world – including proposed projects along with those in flight. Using a combination of Tempus Resource features, Frank became adept at answering when new projects could start and how many could be initiated at any given point. In particular, the Include projects and Exclude projects features of Tempus Resources allowed Frank to layer-in projects to the existing portfolio. In effect, Frank received decision support from Tempus Resource asking "what if we do this one" and "what if we do this one" and so on.

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Source: ProSymmetry

The results of each newly included project illuminated the Delta Map view – instantaneously providing Frank and his counterparts with insight in the effects of adding each new project. If they reached a step where the data did not support a decision, they quickly used the Undo feature to back out of a step. Management now saw Frank as someone who could get things done and give them an answer. He didn't need to "spin" a response. His analysis and resulting insights were clear and concise.



2. A division director asks for options to execute a – suddenly – critical strategic project. Where can we fit in the project given all of the other projects we have in process?

It is commonplace for Frank to be approached by leadership to understand their options for project delivery. In the past, this was a contentious meeting resulting in frustrated parties on both sides. Frank was frustrated by his inability to provide the business with an answer and leadership was frustrated by not getting an answer. Tempus Resource changed this process, and allowed Frank to answer the question, live, without delay.

Frank simply launched an existing model, selected the project and launched Tempus Resource's Opportunity Map feature – a decision support tool to illuminate options for project delivery given existing constraints. With two clicks, Frank launched the Opportunity Map interface and presented his business counterpart with four (4) options along with the resulting impact on resource allocation in each case. Frank was also able to present new options by changing assumptions around resource types and resource loading.

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3. Project B absolutely needs to start next week. Can we do it?

A critical aspect to a Resource Portfolio Management solution is to "tell me something I don't know." Many of the most difficult analytical challenges posed to the PMO can be defined as being search-related. Tempus Resource provides Frank and his PMO with decision support tools that include search functionality and even search refinement. In order to know what would be needed, Frank fired up the Tempus Resource heuristics engine, which allows end users to simply ask a question. In this case, he provided Tempus Resource with the name of the project and set the start date requested by leadership. Tempus Resource immediately responded with an analytical and interactive report clearly articulating the resource gaps requiring resolution in order to start the project tomorrow.

Gap Analysis 🛔 by Administrat	or Edit																	18	18 🖬 🖻	8 8 8
		<mark>II</mark> 201	7 +	2018												-	2019	2020	2021	2022
				Subtotal	January	February	March	April	Мау	June	July	August	September	October	November	December				
(Empty)		•															2,053	2,076	2,088	2,080
Accounting •	Subtotal	5,9	68	45	173	143	185	-31	150	-64	33	121	19	-230	-169	-285	-2,470	1,421.43	8,261.57	10,000
	Jane Nguyen	1,6	17	657	139	115	86	47	100	12	29	90	54	-34	0	19	-498	-97.57	1,258.57	2,080
	Joshua Ramos	1,4	54	418	48	56	63	75	64	73	12	19	21	39	-6	-46	-25	826	1,899	2,080
	Melissa Lane	1,4	23	236	80	68	29	-12	77	0	48	97	59	-119	-46	-45	-707	-136	1,783	2,080
	Rachel Churchill	-26	7	-755	-33	-73	1	-129	-65	-75	-40	-75	-69	-56	-64	-77	-84	558	1,389	1,680
	Stewart Parsons	1,7	41	-511	-61	-23	6	-12	-26	-74	-16	-10	-46	-60	-53	-136	-1,156	271	1,932	2,080
Analyst		• 6,6	55	1,136	380	216	411	138	208	57	119	141	123	-202	-235	-220	-4,252.45	-872.28	7,363.13	9,950
Consultant		• 5,3	04	-406	249	186	175	-43	40	48	-127	-149	-62	-257	-354	-112	-2,619.3	1,722	8,123.3	9,986
Creative		• 5,7	38	-839	164	121	213	-138	90	-80	-105	-64	-111	-313	-316	-300	-2,164.35	1,425.13	8,262.22	10,065
Customer *	Subtotal	5,6	27	448	331	230	285	-102	142	45	40	125	-128	-240	-195	-85	-2,108.3	2,242.65	8,273.65	9,917
	Colin Moreno	205		-754	16	-35	-58	-150	-48	-32	-48	-42	-144	-54	-112	-47	-289	364	1,398	1,597
	Julia Lawson	1,5	17	420	96	98	123	25	67	36	10	75	67	-82	-27	-68	-987	-155	1,755	2,080
	Leah Cornish	1,5	98	417	81	11	28	64	44	52	62	44	26	-4	-31	40	-100	846	1,941	2,080
	Nathan Brown	764		-172	23	75	57	-69	14	-54	-36	-17	-109	-54	31	-33	-531.3	544.65	1,276.65	2,080
	penelope Myers	1,5		537	115	81	135	28	65	43	52	65	32	-46	-56	23	-201	643	1,903	2,080
Developer		• 4,5		74	271	225	210	-98	37	7	23	-40	-63	-1	-255	-242	-2,067.26	2,403.74	8,359.52	9,949
Executive	Subtotal	4,6		107	303	77	246	-65	103	49	99	27	-71	-87	-273	-301	-1,547.1	2,140.69	8,405.41	9,992
	Cameron Paige	743		217	-1	50	104	-56	37	54	3	-26	-37	42	46	1	128	1,358	2,088	2,080
	Harold Ross	1,5		232	104	98	108	-14	10	46	35	61	76	-100	-92	-100	-964	-315	1,768	2,080
	Heather Sharp	1,5		332	85	-7	27	88	60	50	95	6	46	-14	-23	-81	-132	714	1,905	2,080
	Julian Allen	-36		-701	17	-58	-36	-48	-18	-96	-85	-17	-133	12	-147	-92	-215	13	1,398	1,672
	Owen James	874		27	98	-6	43	-35	14	-5	51	3	-23	-27	-57	-29	-364.1	370.69	1,246.41	2,080
Investment Banker		• 4,9	46	63	417	189	325	-152	107	-83	-58	-84	-150	-165	-168	-115	-1,597.71	1,433.44	7,751.26	10,004

4. We are reducing our exposure to international projects. What happens if we delay all international initiatives until the next fiscal year?

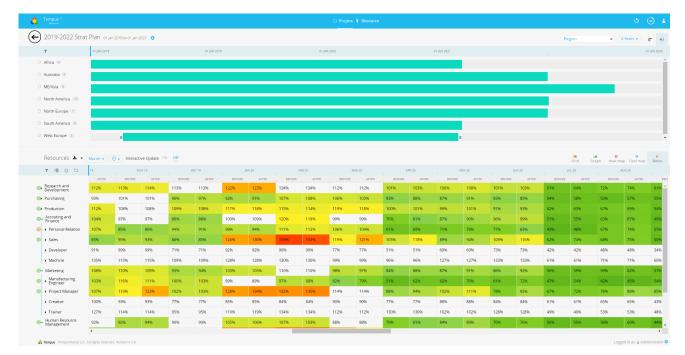
Frank has been asked this question before. In the past, management had asked for him to analyze the results of selling or eliminating a specific aspect of the business. He knew Tempus Resource could answer this question with two clicks. The same approach could be used to answer this question.





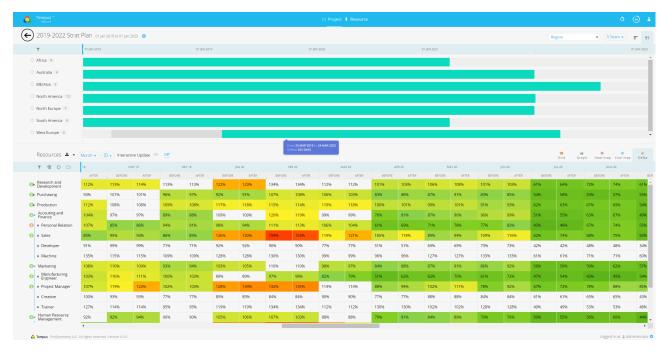
Frank launched Tempus Resource and opened an existing model. He then proceeded to roll-up all projects according to their business group association using the Strategic view feature. He selected the "Organization" attribute. Tempus Resource updated his view to show groupings of projects to enable changes in bulk.

In this case, Frank selected the International grouping. He then clicked-and-dragged the International grouping to the next fiscal year paying attention to the preview in the top, upper corner of Tempus Resource. After releasing his click, Tempus Resource recalculated – instantly – the resulting project portfolio and associated resource allocation. He turned his attention to the Delta Map view and immediately understood the results of the change. He conveyed the resulting scenario to management.









5. Project 1 is delayed because the client has decided to put work on hold. How can we make the most of this situation?

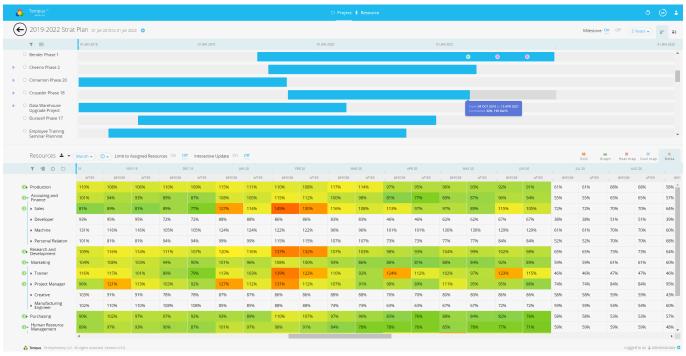
Using Tempus Resource's powerful scenario planning features, Frank simply opened up his resource portfolio model. He selected Project 1 and put it on pause using the Exclude feature. Instantly, many of the resources who'd been working on this project were freed up and could work on other projects. Frank began moving resources where they would be most effective.

Frank then explored what would happen if he reduced the project deadlines on these new, resource enriched projects. Unsurprisingly, it meant each employee ended up working close to full capacity again – due to the reduced deadlines. Frank could also use Tempus Resource's optimization tool to discover the next best resource allocation move, which helped him discover even better allocation options.









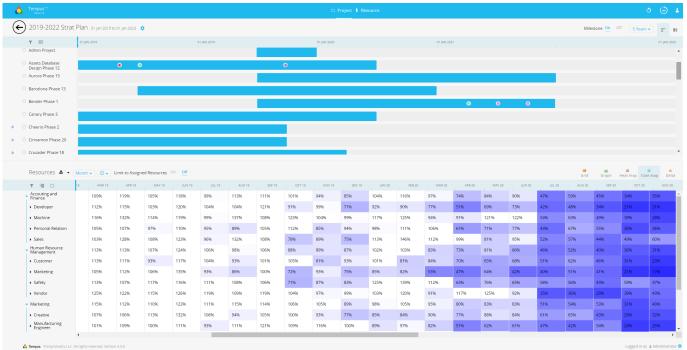












6. Can you present options for reducing headcount in the near-term? And, over the next five years, where do we have skill set deficiencies?

Frank launched Tempus Resource. He opened an existing model that contained all live data along with recent management scenarios. He clicked on the Cool Map view and scrolled into the future. From this view, He knew he could quickly provide insight into underutilized resources.

The Cool Map view indicated a sharp decrease in the need for Infrastructure and Networking resources. The results of his findings confirmed management's originally held belief that transitioning many of their systems to the cloud had altered the need for skills they had previously held as core to their business.

To evaluate longer term trends, Frank leveraged graphical and numeric displays of longer term forecast data. At the same time, Frank was able to tailor his analysis according to the perspective of different stakeholders. From within Tempus Resource, Frank could – at any time – adjust his insight into resource data using any available resource attribute (e.g., skill, role, or department).





7. Based on our assumptions and scenario plans, can you prepare a report to convey our approach to the CFO?

Tempus Resource includes a range of built-in and configurable reporting interfaces. From pre-built dashboards to configurable PivotTable reports, Tempus Resource helps its end users to convey information through powerful data visualization.

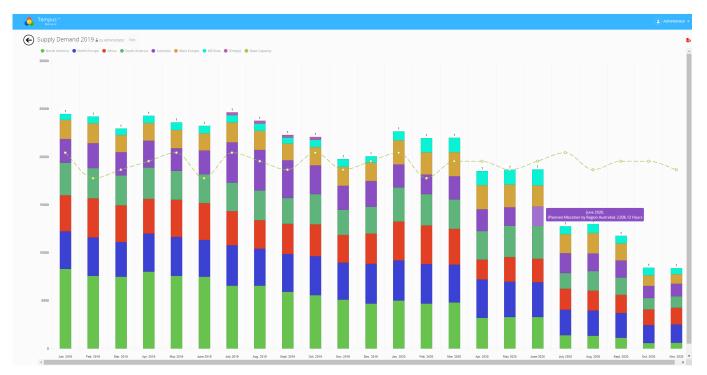
In the past, Frank relied on endless Excelbased manipulation to tell his story. While he could prepare charts and graphs to support his recommendations, it often required many days of effort. Tempus Resource changed all of this. Frank could quickly add his own custom reports to the variety of reports that are included with Tempus Resource. PivotTable-style interfaces allowed Frank to quickly drag-and-drop project and resource data to paint an accurate picture for his management. More importantly, when questions arose, he could quickly refer back to his model to drill-down and provide additional insight.

In this case, Frank could quickly address requests for reports that support his analysis. He launched Tempus Resource and opened his report library. He launched a report he had prepared from past analyses. With one click, the report loaded and included all of his scenario data along with his live resource forecast data. With two more clicks, he quickly dragged-and-dropped resource and project attributes to more finely tailor the report.





Report 1 🛓 by Administrator Edit							T = Ø Q 🖥 🗈
T Department T Current Phase O T Resource Nar	ne 🔻 Project/Task Names 🔻 Date						
	2017	> 2018	 2019 	2020	▶ 2021	2022	Grand Total
							Planned Allocation Hours, Sum
Marketing	• 17,164	37,815	43,825.07	30,078.04	6,642.89	759	136,284
Phase 1	• 7,435	12,594	9,364.5	5,799.5	1,489	759	37,441
Ashley Daniels		1,127	1,293.5	680.5			3,101
Assets Database Design Phase 12		440	454.5	197.5			1,092
Jonah Phase 11		687	839	483			2,009
Charles Dowd	• 1,007	794	297				2,098
Colin Metcalfe	•	699	732	471			1,902
Donna Miller	•	850	760	578			2,188
Emma Hart	.	882	862	492			2,236
Jonah Phase 11		882	862	492			2,236
Jack Pierce	• 864	738	336				1,938
Jane West	* 824	801	433				2,058
Zulu Phase 10	824	801	433				2,058
Larry Walsh	• 1,742	1,540	659	733	729	335	5,738
Natalie Kerr		726	679	515			1,920
Pippa Robertson		737	629	458			1,824
Roy Garcia	• 912	751	348				2,011
Trevor Harrison	• 1,162	769	330				2,261
Warren Washington		1,449	1,672	1,067			4,188
wayne Ramos	924	731	334	805	760	424	3,978
Phase 2	 5,661 	11,103	11,082.64	6,368.41	654.96		34,870
Phase 3	 2,576 	7,967	12,645.74	9,074.87	1,481.39		33,745
Phase 4	• 1,492	6,151	10,732.19	8,835.26	3,017.55		30,228
Production	* 17,594	39,900	48,155.03	33,304.85	7,025.12	808	146,787
Phase 1	7,448	14,450	11,162.5	6,706.5	1,389	808	41,964





A LONG NEEDED EVOLUTION

For too long, organizations have failed to effectively manage the interconnection of resources and strategy – impacting their ability to formulate a sustainable competitive advantage. While often manifesting as failures in project delivery, the unfortunate truth is that the longer-term effects negatively impact organizational capacity for innovation, transformation and profitability.

Rigid and cumbersome PPM tools and webs of interconnected spreadsheets have not shown the ability to address the challenges and opportunities of resource management. This inflexibility on the part of software solutions has resulted in missed opportunities, strains in strategic execution and little actionable intelligence. While PPM tools and spreadsheets have gained widespread adoption, they fail to account for modern resource management requirements and the market is waking up to this reality.

Named by Gartner in their 2015 Market Guide for Enterprise PPM Software research report, Tempus Resource has stepped forward to solve the Resource Portfolio Management challenge.

Getting resource management right means getting strategy done right. This in turn drives the business forward towards sustainable competitive advantage. By simplifying and flexibly addressing the capture of resource forecast data, enabling rapid scenario planning and by incorporating sophisticated decision support and analytical features, Tempus Resource empowers organizations to achieve Resource Portfolio Management success.

Contact <u>ProSymmetry</u> today to discuss your organization's Resource Management needs and find out how Tempus Resource can help you achieve success.





APPENDIX A

FURTHER EVIDENCE OUTLINING THE NEED FOR RESOURCE MANAGEMENT

In Robert Cooper's "Benchmarking Best NPD Practices"¹⁰, he clearly displays the discrepancy between the best and the worst performers in context of new product development project performance. Consistently, those worst performers score lowest in resource management processes. As outlined in Figure 1, the differences between the best and worst performers are clear.

In light of this evidence, and when we factor in the challenges of employee retention, the competition amongst organizations in acquiring the best talent and the fact that people cannot be quickly replicated or replaced, it is clear that resource management is a meaningful source of competitive strategic advantage.

Much like the genesis of strategy, resource planning can be found in both reactive and proactive forms as well as combinations of the two. So, why is it critical to align resources with strategy?¹¹

First and foremost comes the issue of project delivery. Only so much can be accomplished. Even in the presence of unlimited sums of money, raw materials or expertise, resource allocation will define the quantity and quality of work that can be performed. In most companies, the strategic ambitions of management often exceed the capacity of the organization to execute the required projects.¹³ Let's be perfectly clear, strategic choices in project selection boil down to how many resources you can allocate. This statement alone highlights the importance of resources in realizing strategy.

This then intersects with how companies select and value projects and initiatives. In almost all cases, the process of selecting the projects to perform does not include the most critical aspect of the delivery process. Without considering the impact of projects on the resource pool, decision makers make a critical mistake.

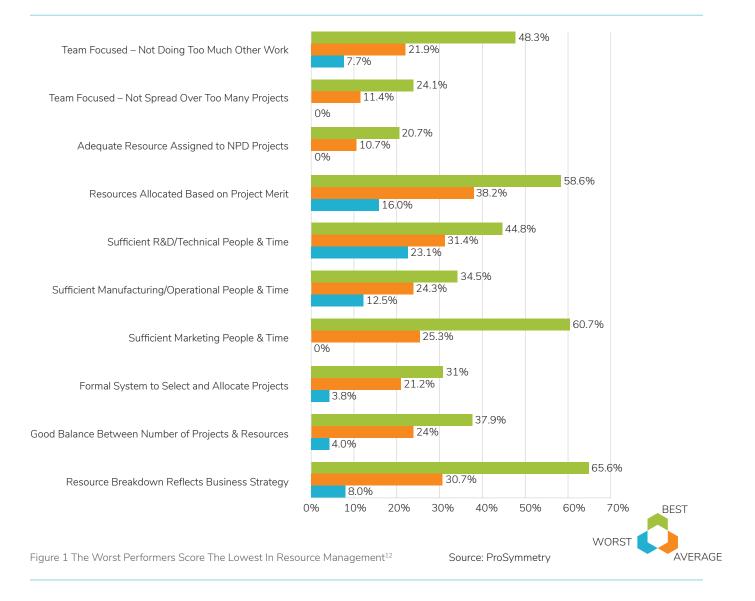


^{10, 12} Cooper, Robert G.; Edgett, Scott J.; Kleinschmidt, Elko J. "Benchmarking Best NPD Practices." Research-Technology Management, Volume 47, Number 1, 1 January 2004.

¹¹ MacMillan, Ian C.; McGrath, Rita Gunther. "Crafting R&D Project Portfolios." Research-Technology Management, Volume 45, Number 5, 1 September 2002.

¹³ Christensen, Clayton M. "Using Aggregate Project Planning to Link Strategy, Innovation, and the Resource Allocation Process." Harvard Business School Background Note 301-041, September 2000.





Selection and planning of projects should take place concurrently.¹⁴ Many companies have a better understanding of how capital and assets are allocated than they do about how resources should be allocated.¹⁵

Detailed allocation data are not required to be successful. Aggregated project data are sufficient at this point. Failure to incorporate resource planning into the project selection process has been

¹⁵ MacMillan, Ian C.; McGrath, Rita Gunther. "Crafting R&D Project Portfolios." Research-Technology Management, Volume 45, Number 5, 1 September 2002.

¹⁴ Kolisch, Rainer; Meyer, Konrad; Mohr, Roland. "Maximizing R&D Portfolio Value." Research-Technology Management, Volume 48, Number 3, May-June 2005.



shown to result in companies attempting to execute between two-times and three-times the number of projects than they have the capacity to execute.¹⁶

Of course, in reality new project requests, ideas, and proposals are fluid. They flow from many sources. Often, the decision to pursue a new project requires an immediate response. A core challenge to this facet of aligning resources with strategy has been the lack of tools capable of comparing the attractiveness of various projects vis-à-vis resource allocation.

Take the position of a manager responsible for determining which projects can be accomplished. Given the limits imposed upon him from the resourcing side of the equation, his decision calculus is naturally constrained. He knows that formulating a decision can be more easily attained by relying on less robust means of analysis primarily because those are the tools available to him. Absent a powerful resource portfolio management toolset, he would need to rely on teams of internal resources – who are not available – or external consultants who are costly and – also – not immediately available. The perceived opportunity cost of having to wait for a better answer causes the manager to destroy – not create – value for the organization.

Organizations have been aware of this capability gap for quite some time. They have relied on tools – typically of the PPM software variety – that force them into a strait jacket of project planning. With these tools, focus is placed on tasks and task relationships – the sequencing of steps – not on the most critical, expensive, and limited quantity asset essential to the success of their project and or strategy: resources. Without a focus on resources, these PPM software solutions over complicate the process and often fall apart when they clash with the real-world requirements of resource management. In other cases, resource planning is managed in a tangled web of spreadsheets. We are all too familiar with management by spreadsheet and its pitfalls. Not only is the process virtually guaranteed to end in frustration and even more spreadsheets, the results are the same – zero insight into the alignment of resources, strategy and business.

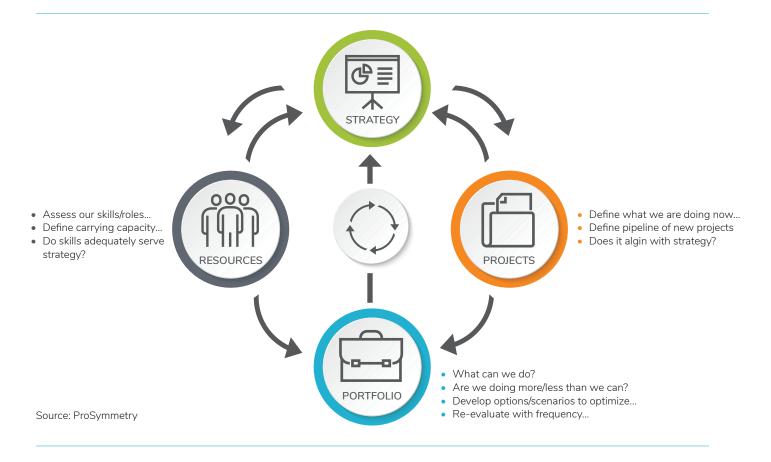
With the right tools in place, a comprehensive planning process to better exploit resource capabilities can be implemented. Keep in mind that getting better is the most important component. Managers are not expected to achieve optimality. Even in an academic sense, optimality is not achievable. The critical step is to begin the process and to continually attempt to get better.

¹⁶ Wheelwright, Steven C. and Kim B. Clark, Revolutionizing Product Development. New York: The Free Press, 1992.



APPENDIX B

'HOW-TO' IMPLEMENT A RESOURCE MANAGEMENT STRATEGY



Step 1: Identify and Document the Strategy

Start by listing the core elements of your organization's strategy. Throughout this process it is critical to consistently align resources, projects and strategy.

Step 2: Assess Organizational Carrying Capacity

What can you deliver? Understanding how many and what types of resources you have is absolutely critical. This step quantifies our carrying capacity for projects. At this stage, you should begin to quantify your organizational capabilities and just how constrained you will be when you assess your existing workload along with your new project pipeline.





Step 3: Assess What Are We Doing Now?

Next, list all projects currently underway along with high-level resource forecasts. At this point, detailed project schedules and tasks are useless. What's important is understanding the FTE-level quantification of resource allocation.

Step 4: Evaluate

With data assembled, you can now assess the reality of your delivery capabilities. Are you – already, without factoring in new projects – hopelessly over-allocated? Or – as unlikely as it may seem – drowning in excess resource capacity? We certainly doubt you have resources hanging around and twiddling their thumbs, so it's likely that you fall into the over-allocated camp.

Sub-Step 1: Review the Pipeline

Depending on the state of your resource portfolio at Step 4, you may be constrained. Talk of introducing new projects from the pipeline may be moot. You may have such resource constraints, that at this step you have to consider which projects to kill or cancel, in which case, you would continue to Sub Step 2: Develop Options. If, on the other hand, you do have capacity, you should analyze the effect of introducing new projects. With the right tools, you should be able to ask questions like "what if we do proposal A or proposal B" and so on.

Source: ProSymmetry

Sub-Step 2: Develop Options

An option is a security that grants you the right – not the obligation – to do something. By deploying the right tools, you should be able to develop options for management, which may include changing project timing, canceling or putting projects on-hold, adding new proposals to the mix, or changing how projects are resource loaded. This step is where true differentiation can take place and where the intersection of resource management and strategy can be most heavily exploited.

Step 5: Constantly Re-Evaluate

A central theme of this whitepaper is the need to be dynamic and be able to alter course quickly. Constantly re-evaluating and assessing the resource portfolio is a requirement – not an option.



¹⁷ Maximizing R&D Portfolio Value. 2005 Industrial Research Institute Inc. Kolisch, Rainer; Meyer, Konrad; Mohr, Roland.



Organizations must constantly reevaluate and develop options and ask questions. The stochastic data of projects in isolation is enough to require this step17, and when we factor in the growing demands of modern business, no organization can afford to formulate a model at the beginning of the year and just stick with it. The model must be re-evaluated with frequency and scenarios must be crafted to maximize utilization of your resource portfolio.





Research from Gartner

MARKET GUIDE FOR ENTERPRISE PPM SOFTWARE

Creating strategic change requires agility, responsiveness and unimpeded multidirectional communication. Classic PPM software, by design, is simply too hierarchical, and organizations are rapidly finding that they need a new suite of lighter weight, more-adaptive tools to help get the job done.

Key Findings

- Enterprise program and portfolio management (EPPM) solutions are about business transformation and enabling effective strategy execution. Thus, the average purchaser of this type of software is a business transformation office or an enterprise program management office (EPMO), if not the CEO directly.
- Because of the lack of visibility about the emergence of software that will support strategy execution, many organizations are still trying to force-fit their current PPM or corporate performance management tools into the job.
- With data integration getting easier every day, the challenge of integrating the data from different tools becomes less complex, allowing strategy execution and business transformation tools to be designed along different lines.
- Smaller, more-flexible solutions with higher levels of usability are critical to get people to actually want to use the software. If usage needs to be compelled, then this is an indication that the tools are the wrong ones.

Recommendations

- Strategy execution falls apart at the connection points. Supplement current PPM tools with tools, such as those in this Market Guide, that will help support better transparency of what the actual goals of the strategy are and ensure that everyone working on accomplishing those goals can share progress and knowledge.
- Failure to acknowledge and then manage interdependencies is where many business transformation efforts get into trouble. Manage interdependencies, either using an EPPM tool or using the Gartner Execution Model.





• Focus on user interface and usability in your tool selection process, to achieve a much higher level of engagement from the people committed to executing on strategy.

Market Definition

In 2014, Gartner defined and outlined the emerging EPPM market. As we continue to track this market, this description may need to evolve to call attention to the many and significant differences between these suites of tools and conventional PPM tools.

EPPM software must be natively designed to support the successful execution of an organization's strategy, not just the completion of a series of stand-alone projects. It shares many of the capabilities that IT PPM software exhibits, but is focused across the enterprise and not just on IT projects. However, tools that claim to be enterprise scale or enterprisewide do not necessarily support the holistic views that senior executives will need to ensure that strategy is indeed being delivered.

EPPM software should include the following capabilities:

- The ability to describe strategy in a meaningful way, and then communicate that strategy to the relevant parties on an ondemand basis. Effective strategy execution is not hierarchical, and it's not position—centric. It is knowledge-centric, where the necessary knowledge changes as execution progresses.
- Business strategy must be able to be broken down into business capabilities, allowing benefits to be tracked, which will then be used to inform the next element of strategy executed. Strategy execution is a selfreinforcing feedback loop, not a linear plan.
- The ability to identify and map dependencies across the enterprise and then involve the right people at the right time to make sure everything comes together. From the point of view of strategy execution, this should be viewed as a real-time activity. Creating strategic change requires agility, responsiveness and unimpeded multidirectional communication. Classic PPM software, by design, is simply too hierarchical, and organizations are rapidly finding that they need a new suite of lighter weight, more-adaptive tools to help get the job done.
- People capacity planning to ensure that strategy can be carried out, as well as the ability to dynamically schedule smaller blocks of time from previously unidentified participants.
- Display of appropriate financial information to allow frequent modeling of alternatives. Risk and problems always dominate actual transformation and strategy execution. Conventional PPM tools don't make it easy for the people who are actually working to model alternatives.







Market Direction

The EPPM market is evolving into one where strategy execution takes on greater emphasis, with focus on supporting the individuals and teams who have accepted the responsibility for making strategic and transformative changes to their enterprises. Because, in the final analysis, this work is dynamic and emergent, the tools that are capable of supporting this work will need to focus on helping the participants stay in sync with each other across a broad and complex range of activities.¹

Part of the reason we believe this market has failed to develop as fast as we originally thought has been because too many organizations have fallen prey to what Harvard Business Review calls the five myths of strategy execution.²

- Strategy execution does not fail because objectives haven't been cascaded down the ranks. It predominantly fails because horizontal silos are busy optimizing their own versions of the truth, which is most often at cross-purposes to what anyone else is doing.
- Strategies don't fail for lack of planning. They fail for lack of agility or adaptiveness. Failure to deeply understand that "no plan survives engagement with the enemy" contributes significantly for why work can get done, but results don't get achieved.
- Strategy execution rarely fails because of lack of outbound communication. Strategy execution fails because of lack of understanding. Fifty-five percent of managers can't even name one of their organization's top five priorities, and less than one-third of senior management's direct reports believe they can connect the dots between their organization's top priorities and how they align with strategy.
- The people you praise as part of your performance system are rarely the people who actually get strategy executed. Part of the reason we continuously stress the emergent nature of strategy execution is because the people who actually make the change are generally people who are doing their work outside of the limelight. Politics, fame and glory aren't what makes change and innovation work. Commitment to results is what makes it work, and organizations generally miss supporting the people who can actually make it happen.
- The last myth according to the Harvard Business Review article is that top management is required to make things happen. The truth is that the devil is in the day-to-day "how do we make it work" details, and if everything gets escalated to top management. Decisions that are critical fall between the cracks, and for all the good work that does get done, there isn't enough to make everything come together. So if the myths about strategy execution have





stifled the current EPPM market, what capabilities are needed to be successful? Our answer would be the following:

- Transparency: Since organizations often miss the people who are really connected well enough (regardless of their position on the organization chart) to facilitate cross-functional agreement, broad-based visibility of strategy is important. This is something we believe software will be critically important in creating and supporting.
- Back-channel communication: The ability to define the informal network, which we believe software can help with, will significantly improve peer-to-peer communication.
- Better decision making: About what to fund, when to fund it and where it fits in the scheme of the entire portfolio.
- More discipline around how all the connected parts come together: To our surprise, most transformation efforts eschew the discipline of formal program management. We understand that current IT project management does not provide an example of good program management, but the discipline exists in many other areas, and it will help get multiyear initiatives carried out more completely and with a greater degree of effectiveness than what is happening now.
- Realistic workload capacity planning.

The majority of vendors in the EPPM market today have their roots in three different areas: the classic PPM market (including IT PPM), the performance management market (sometimes called "corporate performance management") and collaboration tools, such as project-based collaboration workspaces with only a small number focused natively on strategy execution.³ All of these backgrounds bring strength to their product offerings, as well as inherent biases. PPM is still centered on the project as the root unit of data, corporate performance is all about defining what to measure, and collaboration is about the dialogue and less about the details.

The EPPM market is an attempt to define the "just right" point among the three existing areas. The right product needs to be not too rigid (as differentiated from many project management software products), not too precise (as differentiated from many corporate performance management systems) and not too subjective (collaboration tools capture the dialogue, but outcomes and plans might be hard to come by). Exactly what the combined suite of capabilities is that will create the minimally viable footprint for large-scale adoption of EPPM software is still emerging, but we expect it to be some combination of:



- Strategic decision-making
- Multilevel consolidated reporting and dashboards
- Enterprise portfolio management

Market Analysis

Strategic Decision Making

As we discussed previously, strategy execution most often fails, because like everything else, "the devil is in the details." Strategy done by senior executives in their annual off-sites is a great place to start, but to then ensure its successful execution, more is required. Capturing strategy, and ensuring it is visible, available for review, and then passed on to new and different participants to ensure its successful execution, is where the EPPM toolset and the EPMO can help.

For the purposes of this Market Guide, we have chosen to break out decision support as a unique capability. How do we make decisions, how do we reach consensus and how do we capture the decisions we've made have rarely been the focus of more conventional execution and reporting tools. At this time, we have identified decision modeling and capacity modeling as two critical capabilities that would significantly help in increasing the odds of successful business transformation or strategy execution. Features likely to be useful here include decisionmaking algorithms, scoring models, (for example, including those based on the Analytical Hierarchy Process), scenario planning and optimization, and resource capacity planning.

Strategy Execution and Bidirectional Communication

Traditionally, the market for strategy software has been inexorably tied to the consulting firms that helped executives create their strategies. With the move into the new digital business age, the need for having strategy that is continuously monitored, executed, changed and adapted has shifted the focus toward interest in stand-alone software.

What does it take to implement strategy? Not surprisingly, the answer is engaged employees. With numbers showing that more than 70% of employees are currently completely disengaged, the need for something that supports what we are calling "bidirectional communication" becomes paramount.⁴ The linking of strategy formulation, which has previously been the domain of senior executives and boutique consultants with actual employees, is fundamentally changing the nature of the solutions being offered in this space. Words like "collaborative," "intuitive" and "actionable" are being used to define the process that these emerging applications are intended to support.





Features of this segment of the market include (these are a sample of possible features only):

- Strategy development support (for example goal-setting methodologies, such as Objectives and Key Results, or specific, measurable, actionable, relevant and timebound [or SMART] objectives)
- Predictive markets or multiparticipant decision tools
- Bidirectional communications support that provides visibility of strategy throughout the organization in an actionable and collaborative form (for example using visual plans linked to goals), while time-funneling the requests for clarification or backup
- The ability to delineate the contribution of each project, initiative or work effort when compared with strategy at both the planning and post execution stages
- Support for the planning of strategic change management
- Support for multiscenario planning

There is one significant potential impediment to large-scale adoption of this type of product. Topdown, hierarchical, high-ceremony companies simply don't have the culture to support adoption. Lack of employee engagement and failure of strategy execution exist today not out of ignorance, but out of a bias against changing the underlying conditions that are creating the problem. We believe that the move toward digital business in its broadest sense is pushing companies to change (or risk impacting their long-term viability), but we anticipate a large share of laggards among the very large corporations where change is the hardest.⁵

Multilevel Consolidated Reporting and Dashboards

Source system-neutral data consolidation is one of the key capabilities that all strategy execution products must have. As we discussed earlier, the data unit of the future will not be just financial or just project. Some of the data will reside in myriad source systems designed for other uses. Additionally, it's important to state that the operation of the reporting system cannot rely on compelling people to enter information that is of no use or value to them in their day-to-day jobs.

Some of this problem will be solved by the bidirectional communications patterns outlined in the strategy section, whereby people will be more involved in the process and will have a greater need to create some of the data for their own use. Another aspect of the solution will simply come from enabling a more flexible definition of what and how data can be used in reporting. For example, if





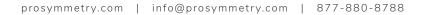
a collaborative discussion tool being used by a team shows consistent linkage between the words "problem" and "next milestone," it's entirely possible that there is a problem with the next milestone that can surface completely independently of the formal project status report. Obviously, this could lead to a number of false correlations, but big data and linguistic analysis are both fields that are continuing to evolve.

The fully mature strategy execution system will make graphic reporting easy and offers uniquely designed reports to ensure that multiple levels of management can stay current on exactly what they need to take action on. The strategy execution focus on informative dashboards and action reporting is unique. Stephen Few, a noted authority on dashboard design, said, "An effective dashboard is the product not of cute gauges, meters, and traffic lights, but rather of informed design: more science than art, more simplicity than dazzle. It is, above all else, about communication."6 We believe that the current focus on big data and customer-based design, like everything else about the EPPM market, will converge to create an expectation from purchasers that reporting software will actually deliver actionable information.

Enterprise Portfolio Management

There are many portfolio management products on the market today that a company could choose to buy as a point solution. What we believe will differentiate a more strategyexecution- oriented product from a current portfolio management tool will be the amount of collaborative, social and communication capabilities that are built into the workflow. With regard to the features required for investment handling, we believe that, in addition to the core functionality many portfolio vendors are offering today, four areas will need to be added/built up:

Business cases will need to be a living part of the portfolio. Once strategy is defined, most organizations kick off a process of soliciting specific action plans for implementing strategy. If such a thing as perfect information existed, it would be possible to formulate an action plan that asked everyone in the organization to do exactly the right thing at the right time, and the problem would be solved. Since this isn't possible, a vehicle for exploring alternative execution strategies is necessary. Until this collaborative process of exploring alternatives gets a new name, we'll continue to call it "business case development." We won't bother to enumerate all the things that are wrong with how most organizations do business cases today. Suffice it to say that a business case is a wellthought- out proposal intended to suggest a way to solve a problem. In a thoughtful culture, there will be multiple proposals of various ways the organization can realize strategy, and these various proposals will need to be analyzed





separately and together to determine the optimum path that the organization might take. To do this, the business case needs to be moved out of PowerPoint and Word, and become a more integral part of the decision process.

- People capacity planning becomes critical to ensure execution. People capacity planning is
 the ability to know, for example, that if you approve these 10 projects, then you will need
 100 people from IT, 10 from finance, five from marketing, 15 from supply chain and 20
 consultants/contractors to execute the projects you've chosen to fund. It will also support
 tracking that the required individuals are actually available and committed before the project
 can start. As organizations have continued to reduce their staff, finding people with enough
 time to do nonoperational work is becoming increasingly difficult. The capacity-planning tool
 should be a cornerstone in planning the real effort executing strategy will take.
- Getting value recognition/benefits planned and realized right might provide a great deal of
 the future data we anticipate will need to be analyzed. In the past, given that much of this is
 leading-indicator data, rather than the lagging indicator of hard financial data, data collection
 was difficult and generally required talented people to find it and decipher its meaning. The
 problem is that the old way doesn't scale and, for most companies, is simply too difficult to
 even entertain in the first place. Living in the era of big data should mean that, if we do our
 business cases right, then we will know what changes we expect to see, and we can develop
 automated ways to collect it.
- The fourth feature of an EPPM suite is interdependency tracking and program management. Using the phrase "program management" in this space might confuse buyers who will then be led to the conclusion that they can repurpose their current project management software. The answer would, of course, be "no." Good program management, unlike the linearity of conventional project management, can best be thought of as "cat herding." Every day, someone needs to be checking whether all the pieces of the puzzle fit together. There may be three or 15 simultaneous and interconnected projects going on at any one time, and each of them is making individual decisions about how to execute their piece of the mission every day, and divergence from a static plan will be the norm. Lists and schedules will be required here, but so will the features in the next category.



Representative Vendors

The vendors listed in this Market Guide do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings.

We have grouped samples of representative vendors together to indicate their main focus areas, although some vendors tools provide features that overlap more than one area.

Strategic Decision Making

Powernoodle (<u>www.powernoodle.com</u>)

ProSymmetry — Tempus Resource (www..prosymmetry.com)

Strategy Formulation and Communication

AchievIt (www.achieveit.com)

Cascade (<u>www.executestrategy.net</u>)

Decision Lens (www.decisionlens.com)

Envisio (<u>www.envisio.com</u>)

i-nexus (<u>www.i-nexus.com</u>)

OnStrategy (www.onstrategyhq.com)

Multilevel Consolidated Reporting and Dashboards

Corporater (www.corporater.com)

Synergy International Systems (www.synisys.com)

P3M Systems

Enterprise Portfolio Management

GenSight (www.gensight.com)

Sopheon (<u>www.sopheon.com</u>)

UMT360 (www.umt360.com)





Market Recommendations

The EPPM solution market we have discussed would be sitting at the very front of emergence if we chose to position it on a Gartner Market Clock. Therefore, companies that are interested in adding these capabilities to their organizations will have to be flexible. A number of established PPM vendors can point to current functionality and get close with customization, partnerships and services. It is important for users to have specific use cases that vendors can work with to demonstrate that they can meet current needs. Given the early stage of this market, EPMO leaders should seek to maintain the ability to evolve and change their EPPM solution as the market emerges.

Evidence

¹ D. Sull, R. Homkes and C. Sull, "Why Strategy Execution Unravels — and What to Do About It," Harvard Business Review, March 2015.

² Over the first half of 2015, Gartner analysts had 18% more interactions on the topic of the enterprise PMO than in the same period in 2014.

³ This information comes from Gartner market research conducted to produce Magic Quadrants, Market Guides and the PPM Hype Cycle for these segments, which includes vendor briefings, customer reference calls for each vendor and other research activities.

⁴ The Gallup organization reported that, in 2011, only 29% of employees were actively engaged in their current jobs. Fifty-four percent were not engaged, and 17% were actively disengaged. The levels of not engaged and disengaged accounted for almost two-thirds of all employees.

⁵ <u>"Digitopia: Four Scenarios for Digital Business, and What to Do Now"</u>

⁶ S. Few, "Information Dashboard Design: The Effective Visual Communication of Data," O'Reilly Media, 2006.

Source: Gartner RAS Core Research Note G00274834,

Donna Fitzgerald, Teresa Jones, 23 September 2015

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RESOURCE MANAGEMENT BIO

Donna Fitzgerald has always had a passionate interest in helping organizations get their work done. With a background in both consulting and IT she's tried to help organizations find the optimum solution for getting the right people, assigned to the right work, at the right time. During her ten years at Gartner, she covered IT resource capacity planning and demand management as well as strategy execution, and the adaptive enterprise. She was also a product manager for Oracle 's resource management software.

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Tempus Resource by ProSymmetry is the only resource management solution for mid-size to large enterprises that combines innovative 'what-if?' scenario modeling with a user-friendly, Excel-like interface for data input. Purpose-built to help resource management and planning professionals balance available resources, critical projects and future growth, Tempus Resource offers integrations with many PPM solutions and internal systems.

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