

An eBook from the
IT Management & Leadership Institute

8 Key IT Career Decisions
Insights into Eight Key IT Career Decisions



Helping you Achieve your IT Career Aspirations

Key IT Career Decisions

Insights into Eight Key IT Career Decisions

When most professionals look back at their work history, they often say there were three or four primary decisions that determined the trajectory of their careers. For IT professionals, many of these types of decisions are described within this eBook. For example, the decision to stay technical versus moving toward a management position dramatically changes the conferences you attend, the advanced degrees you attain, your professional allies and foes, and your potential compensation growth. That said, there is no right or wrong answer to this question. The quality of your answer can only be judged based by the career direction you wish within your heart.

For those who decide to stay technical, another career changing question eventually finds its way into to the forefront. This decision is to specialize on a specific technology or be more a generalist. Then, if the decision is to specialize in a single technology or industry trend, what should it be.

This eBook is designed to provide food for thought for those deciding best on how to navigate their professional road ahead. The topics include:

1. An MBA or a Masters in Computer Science? It's your call.
2. Management Track vs. Staying Technical
3. Stay Technical or Become a Manger: 10 Things to Consider
4. Being a specialist or generalist: A techie's dilemma
5. Getting a Cisco Certification or a College Degree
6. Is an MBA or Masters in Computer Science worth the time and money?
7. Advantages and disadvantages of working at big versus small companies
8. Are Your Skills Transferable to Other Technologies?

The chapters contained within this eBook were written by ITML Institute founder, Eric Bloom, and originally published in his www.ITworld.com column "Your IT Career."

Chapter 1

An MBA or a Masters in Computer Science? It's your call.

Two years ago, I graduated from college with a degree in computer science from a great engineering school. Now that I have a couple of years work experience under my belt, I want to begin a part-time master's program. Should I get an MBA or a Masters in Computer Science?

My answer to you is that it depends on what you want to do professionally long term. My rationale, is that rather than looking at an advanced degree as an end in itself, look at it as a means to an end. Namely, first decide your desired professional direction and then tactically decide which advanced degree has a higher potential to get you there.

As an example, if you would like to move into the IT management ranks, an MBA may be a better route because it teaches you about leadership, budgeting, marketing, and other business/management related topics. If, however, you would like to continue on a technical path, find a degree program that expands your technical knowledge in an area that excites you, for example, database design, data security, or other specific technical area.

The reason for suggesting that if you go the technical route you should specialize, is because like it or not, we are in a world of specialization. Becoming a true technical specialist in a high demand technology can give you an enormous advantage in the job market and command higher pay for your specialized skills.

It may sound counterintuitive; I know it was to me. But specializing in an area of ongoing need, such as database administration, enterprise system architecture, and data communications, can actually make it easier to find a job than if you were a generalist with average knowledge in various technologies.

When I decided to get an MBA, I went into it with the idea that having an MBA may not necessarily help me, but not having an advanced degree would hurt me. This may sound like a terrible premise to spend the time and money required to get an advanced degree and you would be right. That said, I believe it to be true. When looking for a new job, not having an advanced degree puts you at a disadvantage when competing against people with equal experience and an advanced degree. The other side of that coin is that don't expect you will automatically get the job just because you are the one with the degree. You still have to prove yourself.

Let me leave you with one last thought. I'm very glad I earned an MBA, I gained very important knowledge that truly helped me professionally. It also unlocked doors for me that would have been permanently sealed. My MBA, however, only unlocked the door. I, like all others, had to then work very hard to open these unlocked opportunities.

Chapter 2

Management Track vs. Staying Technical

I'm currently a Java technical lead at a large financial services company. My problem is that I love being a hands-on software developer but believe I have to go into management to increase my pay. Is this true and what do you suggest?

To begin with, I wanted to answer you in my column, rather than via a personal email, because your question hit home for me. I ultimately decided to move into a management role because I found that I liked being a manager. The difficult part for me was the fear of losing my technical skill. What I didn't realize until I became a manager, is that like being a techie, being a manager requires a specific skill set that grows and matures over time. That said, as a way of trying to maintain my technical edge, I taught technical classes at a local university for almost fifteen years.

It has long been debated within the technical community whether the choice to stay technical can provide the same levels of compensation and organizational ranking as those who move into management roles.

To answer your question directly, it has been my experience that there are very few individual contributors in very few companies, technical or non-technical, who achieve salary and organizational parity with their management-oriented counterparts.

That said, if you are an exceptional techie and appreciated within your company, it is very possible to have equal or greater compensation than a first-line supervisor or manager. This parity, however, becomes much less likely when comparing an individual contributor to a middle-level or upper-level manager.

If you chose to stay an individual contributor, the key to maximizing your compensation is to be the very best techie you can be.

- Be a thought leader in your specific technical area.
- Be the primary contact for the company's most important software application.
- Become the company's lead expert in the technical direction in which the company is moving, for example, the development of company-wide private cloud.
- Become known as an industry leader in an industry-specific technology and become a spokesperson for your company at important industry conferences.

Next, I would like to make a distinction between working in internal IT and working in the technical Product Engineering (PE), a software group that develops software for sale or as part of an online product offering.

There is the potential to achieve VP level status as technical individual contributor within both IT and PE. However, based on my personal antidotal knowledge and not based on any specific statistical rigger, the PE type groups tend to have more VP level techies than IT groups. I think

this is true because technical products for sale often have/need senior technologists in roles that are designed to help the company's sales and marketing organizations sell the product. These roles include:

- Chief Product Architect (from a marketing perspective)
- Technical Product Spokesperson
- Product Marketing - Feature Specialist
- Pre-Sales Specialist
- Product Implementation Specialist
- . . . and other similar roles that are a blend of technology, sales, marketing, and product implementation

In closing, at the end of day, we spend almost one third of our life working. It should be something that you love to do and look forward to when you wake up in the morning. If you love being a techie and hate the idea of becoming a manager, stay a techie and become the best techie you can be. If you think becoming a manager is right for you, then work to become a great manager. All technical organizations, regardless of the industry they service, need both great techies and great technical managers.



Chapter 3

Stay Technical or Become a Manager: 10 Things to Consider

Dear Eric, I was just offered a promotion from programmer to IT manager. It feels wonderful to be asked, but I'm not sure I want to take it. Any thoughts on what I should do?

Techies go to college and/or technical schools to become technical professionals. It may be as a software developer, help desk technician, social media guru, data communication specialist, website designer, or in other technical area. Then, one day, because of the great technical work you do, your boss says that he/she wants to talk to you in his/her office and says the following:

Hi (your name goes here), you have done great work over the past couple of years and have shown some great leadership qualities. I would like to promote you to a new job that:

- You didn't go to school to learn
- Will cause your technical skills to decline
- Your current job skills are not really transferable to help you in this new position
- You have no training on many aspects of the job
- The job is open because about a year ago I promoted someone else into the job, with skills very similar to yours, who couldn't do the job, and had to be fired.

Welcome to management!

All that said, being an IT Manager is a great job for the right person. I personally loved being in IT management roles. I found it to be creative, interesting, challenging, and rewarding. IT Management, however, is not for everyone. The question is, "is it for you?"

Here are ten things to consider when deciding to accept or pass on the opportunity to become an IT/Technical Manager:

1. Does becoming a manager interest you or are you considering the job just for the potential increase in pay?
2. Do you feel you are personally ready and have the level of maturity needed to take on the responsibility of managing other professionals?
3. Do you have the professional experience to move into management or would it be best to gain more experience as an individual contributor first?
4. Do you love doing technical work to the degree that you will eventually be sorry you moved in a different professional direction?
5. Does becoming a manager excite you as a new career opportunity? If so, why?
6. Have you conceptualized the idea of, over time, replacing your technical skills with management skills?

7. What are the current issues, abilities, and obligations of the group you are being asked to manage? That said, are you setting yourself up for success or failure?
8. If you take this new management role, what will your next step be? That is to say, is this new job a stepping stone toward your long term career objective? If so, how?
9. Will this manager's role change your work/life balance? If yes, how and are you willing to accept this change in your personal life?
10. Do you think you can be successful in this new role? If yes:
 - a. How do you know you will be successful?
 - b. What will you do to help assure that success?
 - c. What if you are wrong, what then?



Chapter 4

Being a specialist or generalist: A techie's dilemma

The decision to become a specialist in a particular technical area or to be a generalist with average level skill in many technical areas may be one of the most important decisions you make in your professional life, and this is why.

The decision to specialize in a specific area or be a generalist with a wide variety of average skills is not just a dilemma for techies. It's also an issue for doctors, lawyers, software companies, training companies like mine, and in almost every other professional endeavor.

For individuals, this issue is this best explained in the following two statements:

- If I specialize in a specific area I'll make more money when employed (or under contract), but it will be harder for me to find a job (or new contract) because my skill is specialized in a specific area.
- If I'm a generalist, it will be easier for me to get a job because I have a number of professional skills, but my pay will be less because I'm not an expert in any particular technology.

For companies, technologies and otherwise, the questions are different but in their essence, very similar.

- If we specialize our products in a specific market area, it will be easier to get work in that area because of our specialization, but it feels like we will be leaving money on the table by not actively marketing a wider range of products and services.
- If we offer a wide range of products and services it widens our potential marketing base, but the problem is that it will be harder to win deals because we will be competing with firms that specialize in a specific area.

In both of these cases, the issue is the same, specialization tends to bring increased fees, but at the cost of a smaller potential client base.

Before providing any specific advice, I would like to say that both strategies (specialist or generalist) can bring both wild success and potential failure. That said, below are the risks related to each strategy.

- Risks of specialization includes; specializing in an area that has a declining or nonexistent market and an extreme completion in that specialty, forcing a further level of specification.

- Risks of generalization includes; losing out on potential work to specialists who have a higher level of skill, and being forced to differentiate yourself on price, thus reducing your billing rate/salary.

What I have learned, both as a technologist and a business owner, is that while specialization does reduce the size of your potential market, it increases your potential opportunities because if people mentally associate you with a specific skill or service, they will call you when that specific product or service is needed. As a generalist, this mental association, and thus the lead, is much less likely to happen.

I'll use my company as an example of this phenomenon. My company, Manager Mechanics, began as a training company teaching general new manager training. Then, because of my 20+ years of experience in IT management, it was suggested to me that we specialize in IT management training. I originally said no because as a new company we would be dramatically reducing our potential market size. I was then asked if I was getting all the new manager training business I was talking about. We'll, I said no. I was then told I'm not giving anything up because I'm not getting it anyway. I then began specializing in new IT manager training, namely, teaching techies to be managers.

The moral of this story and what I learned through this experience, which was totally counterintuitive to me, was that being specialized in one area not only makes it easier to get business in your specific specialization, but opportunistically, it also helps you get work in areas related to, but outside, your specific area of specialization.

Moving back to the technical realm, based on your personal skills, abilities, and interests, consider specializing in a specific technical area. When selecting this area, however, do your homework first to assure your selected area has the following attributes:

- You have the background and ability to be a true expert in that area
- The area is growing in popularity, not declining
- The area is not saturated with so many other specialists that you are forced to further specialize within that specialization
- It's something you love to do and want to do 100% of the time
- That you understand how to properly market your skills in this area
- . . . and lastly, that this area can provide you with the long term professional growth you desire



Chapter 5

Getting a Cisco Certification or a College Degree

Please provide advice. I want to work in the computer industry. Should I get a computer oriented college degree or my Cisco certification?

Over the past month or so I have received a number of questions on this topic. Interestingly, most of these questions referred to Cisco based certifications versus undergraduate college degrees in computer science. Thank you to all those who wrote to me with this question.

If you currently have neither a college degree nor a professional certification, such as one of the Cisco certifications, both would be of professional advantage to you in different ways and for different reasons. As a result, the one you should work on first is based upon your personal and financial ability to go to school full time for a four-year Bachelor of Science (BS) degree.

If your answer is yes and you have the opportunity to do a full time four-year degree program, then I would suggest going to college for a BS in Computer Science first. Not only will you learn an enormous amount on a wide range of technical topics, it will also give you a permanent credential that can increase your life-long earning power. Additionally, don't underestimate the great benefits of being immersed in a full time academic environment in regard to:

- The non-technical topics in your curriculum will broaden you as a person by providing insights into topics outside of your chosen professional vocation
- The people you will meet that will ultimately become professional contacts
- The wide range of personal and professional opinions and outlooks you will observe
- The power of having your university's alumni as potential employers and mentors
- Having a little fun in the process

In effect, the full time academic experience grows you as a person, increases your worldliness, and helps prepare you for both work and life in general. Then, with your degree in hand, and hopefully a job upon graduation, getting a technical certification early in your career will help you gain and illustrate specific technical proficiency. This proficiency, in turn, can help you move up more quickly within the technical ranks.

If your answer to my earlier question regarding your ability to attend college full time is no, then I suggest getting the certification first and then attending night school on a part time basis for your degree.

The reason for this rationale is that the certification will take less time and less money to achieve and as a result, you will have a marketable professional credential much sooner. Then, use your newly gained skills and credential to get the type of job that will start you on your professional technical journey.

Your new professional employment and the increased income it provides should allow you to increase your life style and help fund your part-time night classes toward your B.S. degree. Also, with a little luck and/or good planning, the company you work for may provide tuition reimbursement and an employee benefit, thus, helping you fund your college classes.

I went to school nights for my Master's Degree. At least for me, night school wasn't much fun. There were many times at the end of a long workday when the last thing in the world I felt like doing was going to a night class, but I did and, for me, it was well worth it.

My hope is that if you take this second alternative, by choice or necessity, that you stick it out at night and finish your degree. Getting a B.S. degree at night generally takes more than twice as long as it does full time, but it is doable. It also feels twice as hard, because you generally have other personal and professional commitments, but once you have it, like the full-time version, it's yours forever.



Chapter 6

Is an MBA or Masters in Computer Science worth the time and money?

I have received a large number of questions on this topic over the last couple of months. Here are my thoughts and suggestions on the topic.

To begin, making the decision to move forward toward an advanced college degree brings with it years of personal commitment, large sums of money, and the opportunity cost of where your mental commitment, time and money could otherwise be spent. Because of the personal enormity of this decision on your life, please consider my thoughts to be a single data point in your decision to, or not to, move forward.

I would like to begin my answer to you by using myself as the case study. I began my career as a software developer working on business-related software. I had also decided very early in my career that even though I truly loved doing technical work (and still do), I wanted to move into the management ranks. I made this decision based on my thought that this was what everyone did, rather than any in-depth analysis and/or understanding of what I was doing.

Because of this decision, I started a part-time MBA program at night at Babson College, aggressively moved through my coursework and completed the program in about three years. For me and my chosen direction of IT management, getting my MBA was a wonderful decision. I learned about business not only from my professors, but also from my fellow students, both of which were not in technical professions. For me, given my chosen career direction, yes, an MBA was certainly worth my time, money, and occasionally sweat and tears.

If early in my career I had made a different decision, to stay technical, rather than aspire to the ranks of IT management, I would have pursued a Masters in Computer Science.

I believed then and I believe now that having an advanced degree in itself may not help you, but not having one can hurt you. The reason I say that an advanced degree won't necessarily help you is because, once hired, you still have to perform well on the job. The reason not having an advanced degree can hurt you is because when applying for a new job, you will be competing against people with Master degrees. On paper, all other things such as experience being equal, other job candidates will appear to have a higher level of professional expertise and commitment to their career than you do. In essence, having a Masters will help you open doors, but it's your ability, professional reputation, interview skills, commitment to professional excellence, and personal connections that allow you to walk through the door and get the job.

Beyond simply words on a resume, there are also other very significant reasons why a Masters degree can be of great value to you, including the following:

- The knowledge you will gain through your coursework can help you throughout your career

- The knowledge and perspective you gain by talking with your classmates
- The ability of using your newly gained knowledge to change or grow your current career path
- Assuming your Masters is from a different university than your undergraduate degree, you will have another alumni group available to you for professional networking and mentoring

The last question you may be waiting for me to answer may be is it worthwhile to get a Masters degree at all, whether it's an MBA or computer science oriented. I would like to answer that question by asking you a series of questions:

- Given your specific career goals, will a Masters degree help you get there?
- Are you in a position, both personally and professionally, to spend the time and money needed to get an advanced degree? If not now, then when and how?
- Will a Masters over-qualify you for the job you really want?
- Would you like to pursue a PhD later in life? If yes, in what area and will this Masters help you get there?
- Do you enjoy going to school or is it truly just for the degree. If it's just for the degree are you willing to grind through it until the end?

In closing, an MBA and a Masters in Computer Science are both great degrees and can serve you well if your future goals are aligned with what the degree can provide. If not, you will learn some interesting material and you will meet some interesting people, but it will not help you reach your future goals. On the other hand, if an advanced degree does align with your career goals, it can help get you get there sooner, with greater success.



Chapter 7

Advantages and disadvantages of working at big versus small companies

I'm job hunting for a new IT job. What are the advantages and disadvantages of working at a big company versus a small company?

First, thank you for your question and good luck in your job search.

There are definite advantages and disadvantages of working at large versus small companies. From a large company perspective, some key advantages are:

- IT hardware, software, process and methodology standards tend to be better defined in larger companies because they have the budgetary ability to have people on staff defining, documenting, and overseeing these standards. As a result, large companies are a great place to learn about IT best practices and IT standards in general.
- By definition, larger companies have more employees than small companies. As a result, over time as people move to other companies, you can more quickly widen your technical contacts within your geographic area.

Key disadvantages of working at big companies include:

- You tend to be assigned to a specific type of technology, application, and or responsibility. As a result, it can be difficult to gain a wide range of experience and skills.
- Big companies are often criticized for having highly active office politics. If office politics are a turnoff for you or if you find them personally difficult to navigate, working within a very large IT shop can be problematic. Certainly, small companies can have office politics also, but stereotypically, they tend to be reduced in smaller firms.

Key advantages of working for a small company include:

- Because there are less people to perform needed tasks, there is a greater potential opportunity to work on a wider variety of projects and technologies.
- Smaller companies often have more of a “family” feeling than larger companies. As a result, they can be a great place to work.
- If the small company goes through dramatic growth, there is the chance to grow professionally with it.

Key disadvantages of working for a small company include:

- There is less opportunity for promotion because, due to the power of large numbers, there are less internal open positions to apply for and less internal movement in general.
- Software standards in small companies tend to be less formally defined. As a result, it's more difficult to learn industry best practices and formal industry standard methodologies.

- If you wish to move toward an IT management role, smaller companies tend to have less promotional opportunities than larger companies.

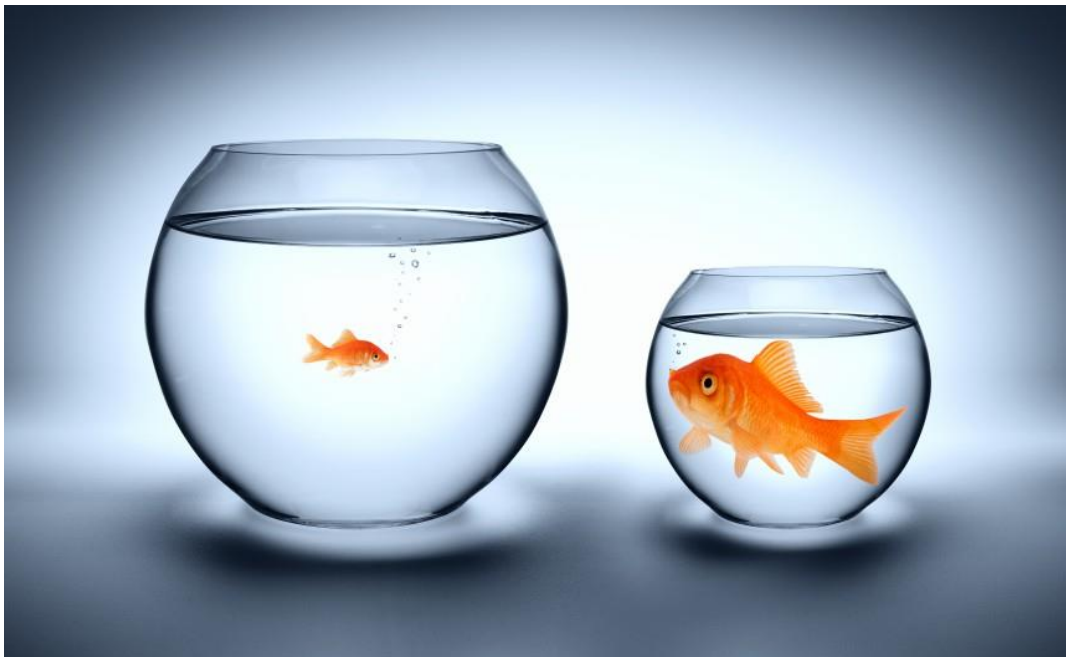
At the end of the day, both large and small companies can be great places to work and very advantageous for your career. What it comes down to is the:

- Type of company where you feel most comfortable working
- Job market and professional opportunities in your local geographic location
- Personal and professional contacts that can assist you in finding employment
- Type of company that can best take advantage of your technical skills

As one additional thought, as you move forward in your IT career, let's say ten or fifteen years forward, your prior professional experience will have an enormous impact on your future marketability. Early in people's careers they are primarily hired for their potential to provide value to the company. Professionals with many years in the workplace are generally not hired for their future potential; they are hired for their current knowledge and experience.

From a small versus large company perspective, if you have spent ten or fifteen years working in a large company, it may be very difficult for you to find employment in a smaller company. Conversely, if you have spent the majority of your career working in smaller companies, larger companies will be very reluctant to hire you because you have no large company experience.

The moral of this last thought is for you think carefully on the company size and industry where you would prefer to find your initial employment. Then, once found, if you decide the company size or industry does not fit your personality, skills, or interests, make a change sooner rather than later, before you become less marketable in other professional areas.



Chapter 8

Are Your Skills Transferable to Other Technologies?

I'm a Java developer with strong database skills and have been working on the same types of software development projects for a long time. How can I use these skills to work in different ways so I can work on something new?

Thank you for your question. You have a great skill set and should be very proud of yourself. The combination of programming and database skills are not only a wonderful combination from a software development perspective, it also has the potential to pivot you into other technical areas.

From a programming perspective, your Java skills can potentially be used to move you in the following directions:

- **Big Data:** Hadoop MapReduce is an expanded version of Java, as are various other Big Data oriented technologies.
- **Mobility:** As a Java developer, your programming skills are very transferable to various mobile device development technologies. For example, expanding your programming language knowledge to include JavaScript, could pivot you into mobile device development. Yes, in many ways the only thing that Java and JavaScript have in common is the word “Java” in the name, but programming is programming. If you have a deep technical understanding of Java, learning to program in JavaScript will be very doable.
- **Instructing:** There are many technical professionals of all skills who have made the professional decision to move from practitioner to teacher. As an additional item, your database knowledge would make you more versatile because you could also provide instruction in the database area.
- **Business Analyst or Project Manager:** If you have a strong understanding of a specific business area, for example accounting systems, enjoy working with business users and/or running projects, consider moving toward a Business Analyst or Project Manager role. Also, your strong technical background would be of great value because of your understanding of the issues facing software developers.
- **IT Manager:** If you are thinking of moving into the management ranks, now may be a good time to consider it. That way, you can still be involved with software development activities, but will not have to do that actual hands-on development.
- **New application type:** By your email, I don't know in what specific area you have been programming. Whatever area it was, consider pivoting your technical skill to move to a new application area. For example, if your programming work was financial services oriented, try to move to health care type applications. In the short term, until you gain some health care business experience, it will be harder for you to find work in the health care arena than in your current industry. Once you have gained experience in your new industry you will be on your way.

From a database perspective, the same logic as pivoting your programming expertise is also true for your database skills. However, there are additional database-specific opportunities, including:

- **Production DBA:** The role of Production DBA (Database Administrator) is very different than the role of an application oriented DBA. My thought is that you naturally fall into the role of Application DBA because you are also a programmer. An Application DBA generally designs database schemas and writes stored procedures. A Production DBA is more datacenter oriented and performs tasks such as rebuilding database indexes, monitoring available disk space, and other related tasks.
- **Data Architect:** This role is increasing in demand for a number of reasons. First, increased movement toward cloud computing is fracturing companies' data models and increasing the need for internal data warehouses. Second, as more and more data is collected and stored, it needs to be properly and professionally managed.

The basic concept behind my previous suggestions is that the best way to change your professional direction is to do so using your current skills and experience as a lever to move yourself toward your new goal.



Part 9

About the IT Management & Leadership Institute

The Information Technology Management & Leadership (ITML) Institute is the governing body for two IT leadership certifications:

- **Information Technology Management and Leadership Professional (ITMLP)**
- **Information Technology Management and Leadership Executive (ITMLE)**

Over the years, hundreds of people have received ITMLP and ITMLE training, taken the exam and become certified. The knowledge they have gained and the credibility it provided has been of great value to their careers and the companies they serve.

The ITML Institute is dedicated to help IT professionals, supervisors, managers, directors and future CIOs be as successful in their management endeavors and their career advancement!

Information Technology Management and Leadership Professional (ITMLP)

The ITMLP Certification contains a collection of ten key IT topics designed to increase the effectiveness of new and would-be IT managers by widening their knowledge of IT. It includes techniques to enhance user satisfaction, providing insights into motivating technical professionals, and providing information on the use of various IT best-practices.



Information Technology Management and Leadership Executive (ITMLE)

IT executives must be more than just technical. They must have well developed people-skills, a broad business view, solid business acumen, superior communication, strong management capabilities, and exceptional leadership capacity. The ITMLE is a rigorous, down-to-earth, and practical certification program that provides a well-balanced foundation needed to bring superior competitive IT advantage to their company.



Contact today and learn how our certifications, IT Training programs and other Institute resources can be of value to you and/or your IT organization!

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